Project Manual – Volume 1 of 3
Project No. 20202.00

Northeast Metropolitan Regional Vocational High School

Wakefield, Massachusetts

BID SET

August 28, 2023

ARCHITECT
DRUMMEY ROSANE ANDERSON, INC.
260 Charles Street, Studio 300
Waltham, MA 02453

Division 00

For Trade Contractors

100% Construction Documents

Northeast Metropolitan Regional Vocational High School

Wakefield, MA

August 28, 2023

PROJECT MANUAL

TABLE OF CONTENTS

VOLUME 1

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

By CM/OPM

Document 000000	Division 00 Cover Sheet
Document 000110	Table of Contents
Section 001	Invitation to Bid
Section 002	Owner / CM Agreement, General Conditions of the Contract Section 003 – Prevailing Wage Rates
Section 004	CORI Request Form Section 005 – Tax Exempt Forms
Section 006	Northeast Metro Tech 2023-2024 School Calendar Section 007 – RFB Affidavits and Forms
Section 008	Document Computer File Transmittal Agreement Section 009 – M/WBE Documentation Forms
Section 010	Project Safety Plan Section 011 – Project Quality Plan Section 012 – CCIP Manual
Section 013	Trade Contract Conditions
Section 014	Project Start-up Information & Billing Requirements (Textura) Section 015 – Site Logistics and Site Utilization Plans
Section 016	Stormwater Pollution Prevention Plan (SWPPP) Section 017 – BIM Execution Plan
Section 018	Lean Construction Program Section 019 - Scheduling Procedures Section 020– Technology Requirements
Section 021	Trade Contract Performance and Payment Bonds Section 022 – Wakefield Example Order of Conditions
Section 023	Labor Rate Template Spreadsheet
Section 024	On-Site Fuel Usage Reporting Requirement
Section 025	Request for Information (RFI) Log 8.24.23 with RFI Responses
Exhibit B	Specific Scope of Work
Exhibit C	Project Schedule

VOLUME 2

CONTRACTING REQUIREMENTS

Document 000110	Table of Contents
Document 000115	List of Drawings
Document 003100	Available Project Information Soil Analysis Report Geotechnical Report Hazardous Material Summary Report

* Trade Bid Required

SPECIFICATIONS

DIVISION 01 - GENERAL REQUIREMENTS

Section 011100	Summary of Work
Section 011400	Work Restrictions
	CORI Requirements
Section 012200	Unit Prices
Section 012201	Unit Price Schedule
Section 012300	Alternates
Section 012400	Schedule of Values
Section 013100	Project Management and Coordination
Section 013119	Project Meetings
Section 013200	Construction Progress Documentation
Section 013300	Submittal Procedures
Section 013301	Substitution Request Form
Section 014000	Quality Requirements
Section 014523	Testing and Inspecting Services
Section 015000	Temporary Facilities and Controls
	Project Sign
Section 017329	Cutting and Patching
Section 017400	Construction Waste Management
Section 017700	Closeout Procedures
Section 017839	Project Record Documents
Section 018110	Sustainable Design Requirements
	LEED Scorecard
Section 018120	Construction Indoor Air Quality (IAQ) Management
Section 019113	General Commissioning Requirements

DIVISION 02 - EXISTING CONDITIONS

Section 023000	Subsurface Investigation
Section 024100	Demolition
Section 028213	Asbestos Abatement
Section 028313	Hazardous Materials Handling And Disposal

DIVISION 03 – CONCRETE

Section 033000	Cast-In-Place Concrete
Section 033300	Architectural Concrete
Section 034113	Precast and Prestressed Concrete Plank

DIVISION 04 – MASONRY

Section 040001 *	Masonry Work
Section 042000	Unit Masonry (part of 040001 TB)
Section 044200	Exterior Stone Cladding (part of 040001 TB)
Section 044313	Calcium Silicate Manufactured Stone (Cast Stone) (part of 040001 TB)

DIVISION 05 – METALS

Section 050001 * Miscellaneous and Ornamental Iron
Section 051200 Structural Steel Framing
Section 051500 Stud Shear Connectors
Section 052100 Steel Joist Framing
Section 053100 Steel Decking
Section 054000 Cold-Formed Metal Framing
Section 055000 Metal Fabrications (part of 050001 TB)
Section 055100 Metal Stairs and Railings (part of 050001 TB)
Section 055813 Architectural Metal Column Covers
Section 057300 Decorative Metal Railings (part of 050001 TB)

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

Section 061000 Rough Carpentry
Section 061600 Sheathing
Section 061753 Shop-Fabricated Wood Trusses
Section 064020 Interior Architectural Woodwork
Section 066400 FRP Paneling

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

Section 070001 * Waterproofing, Dampproofing and Caulking
Section 070002 * Roofing and Flashing
Section 070800 Thermal and Moisture Protection Systems Commissioning
Section 071100 Bituminous Dampproofing (part of 070001 TB)
Section 071300 Sheet Waterproofing (part of 070001 TB)
Section 071610 Crystalline Waterproofing (part of 070001 TB)
Section 072100 Thermal Insulation
Section 072700 Air Barriers (part of 070001 TB)
Section 074200 Metal Wall Panels
Section 074456 Mineral Fiber Reinforced Cementitious Panels
Section 075400 Thermoplastic Membrane Roofing (part of 070002 TB)
Section 075565 Extensive Green Roof System (part of 070002 TB)
Section 076110 Standing Seam Metal Roofing Assemblies (part of 070002 TB)
Section 076100 Sheet Metal Siding (part of 070002 TB)
Section 076200 Sheet Metal Flashing and Trim (part of 070002 TB)
Section 077100 Roof Specialties (part of 070002 TB)
Section 077200 Roof Accessories (part of 070002 TB)
Section 077273 Membrane Integrity Testing (part of 070002 TB)
Section 077700 Wall Cladding Support System
Section 078100 Applied Fireproofing
Section 078410 Penetration Firestopping
Section 078440 Fire-Resistive Joint Systems
Section 079200 Joint Sealants (part of 070001 TB)
Section 079500 Expansion Control

DIVISION 08 – OPENINGS

Section 080001 * Metal Windows

* Trade Bid Required

Section 080002 * Glass and Glazing
Section 080800 Opening Systems Commissioning
Section 081110 Hollow Metal Doors and Frames
Section 081119 Stainless-Steel Doors and Frames
Section 081400 Flush Wood Doors
Section 083110 Access Doors and Frames
Section 083310 Overhead Coiling Doors
Section 083320 Overhead Coiling Grilles
Section 083470 Interior Sound Control Door Assemblies
Section 083510 Horizontal-Sliding Accordion Fire Doors
Section 083610 Sectional Doors
Section 084110 Aluminum-Framed Entrances and Storefronts (part of 080001 TB)
Section 084410 Glazed Aluminum Curtain Walls (part of 080001 TB)
Section 084523 Fiberglass-Sandwich-Panel Assemblies (part of 080001 TB)
Section 085110 Aluminum Windows (part of 080001 TB)
Section 085610 Pass Windows (part of 080001 TB)
Section 087100 Door Hardware
Door Index
Section 088000 Glazing (part of 080002 TB)
Section 088050 Fire-Rated Glazing and Frames (part of 080001 TB)

DIVISION 09 – FINISHES

Section 090002 * Tile
Section 090003 * Acoustical Tile
Section 090005 * Resilient Floors
Section 090006 * Terrazzo
Section 090007 * Painting
Section 092110 Gypsum Board Assemblies
Section 092120 Gypsum Board Shaft-Wall Assemblies
Section 093013 Ceramic Tile (part of 090002 TB)
Section 093019 Large Format Thin Porcelain Tiling (part of 090002 TB)
Section 095100 Acoustical Ceilings (part of 090003 TB)
Section 096460 Wood Athletic Flooring
Section 096510 Resilient Flooring and Accessories (part of 090005 TB)
Section 096516 Vinyl Sheet Flooring (part of 090005 TB)
Section 096521 Rubber Tile Flooring (part of 090005 TB)
Section 096523 Rubber Stair Tread, Riser, Tile and Base (part of 090005 TB)
Section 096530 Rubber Wall Base (part of 090005 TB)
Section 096543 Linoleum Sheet Flooring (part of 090005 TB)
Section 096560 Resilient Athletic Flooring (part of 090005 TB)
Section 096600 Terrazzo Flooring (part of 090006 TB)
Section 096710 Resinous Flooring
Section 096813 Tile Carpeting
Section 096910 Access Flooring
Section 097200 Wall Coverings
Section 097703 Fiberglass Reinforced Plastic Wall Panels
Section 097730 Interior Wall Panels
Section 098120 Sprayed Acoustic Insulation
Section 098430 Sound-Absorbing Panels

Section 099000 Painting and Coating (part of 090007 TB)

DIVISION 10 – SPECIALTIES

Section 101100 Visual Display Surfaces
Section 101400 Signage
Section 102110 Toilet Compartments
Section 102120 Cubicle Curtains and Tracks
Section 102210 Wire Mesh Partitions
Section 102610 Corner Guards
Section 102800 Toilet Accessories
Section 104100 Emergency Access and Information Cabinets
Section 104313 Automatic External Defibrillators (AED)
Section 104400 Fire Protection Specialties
Section 105110 Metal Lockers
Section 109500 Vegetated Green Wall

DIVISION 11 – EQUIPMENT

Section 111200 Parking Control Equipment
Section 111300 Loading Dock Equipment
Section 113300 Retractable Stairs
Section 114000 Food Service Equipment
Section 114500 Residential Appliances
Section 115214 Large Venue Tensioned Front Projection Screen
Section 116000 Vocational Shop Equipment
Section 116133 Theatre Rigging
Section 116143 Stage Drapery
Section 116153 Stage Lighting Power and Control
Section 116163 Stage Lighting Fixtures
Section 116620 Athletic Equipment
Section 116800 Playground Equipment
Section 116833 Athletic Field Equipment
Section 118129 Facility Fall Protection

DIVISION 12 – FURNISHINGS

Section 122216 Vertical Louver Blinds
Section 122400 Shades
Section 123000 Manufactured Casework
Section 124810 Entrance Floor Mats and Frames
Section 126600 Telescoping Stands
Section 126623 Telescopic Chair Platform

DIVISION 13 - SPECIAL CONSTRUCTION

Section 133416 Bleachers
Section 133420 Pre-Engineered Building Systems

DIVISION 14 - CONVEYING EQUIPMENT

Section 140001 * Elevators
Section 142150 * Gearless Machine Room Less Traction Elevators (part of 140001 TB)

VOLUME 3

Document 000110 Table of Contents

DIVISION 21 - FIRE SUPPRESSION

Section 210000 General Requirements for Fire Protection
Section 210005 Coordination Drawing Requirements for Fire Protection
Section 210517 Sleeves and Sleeve Seals for Fire-suppression Piping
Section 210800 Fire Protection Systems Commissioning
Section 211313 Fire Protection Piping Systems
Section 212933 Controllers for Fire-Pump Drivers
Section 213113 Fire Protection Fire Pump Systems

DIVISION 22 - PLUMBING

Section 220000 General Requirements for Plumbing
Section 220005 Coordination Drawing Requirements for Plumbing
Section 220513 Common Motor Requirements for Plumbing
Section 220517 Sleeves and Sleeve Seals for Plumbing Piping
Section 220518 Escutcheons For Plumbing Piping
Section 220519 Meters and Gages for Plumbing Piping
Section 220523 Valves and Specialties for Plumbing Piping
Section 220529 Hangers and Supports for Plumbing Piping and Equipment
Section 220533 Heat Tracing for Plumbing
Section 220548.13 Vibration Controls for Plumbing Piping and Equipment
Section 220553 Identification for Plumbing Piping and Equipment
Section 220719 Plumbing Piping Insulation
Section 220800 Plumbing Systems Commissioning
Section 221116 Domestic Water Piping
Section 221123 Natural Gas Piping
Section 221123.21 Inline, Domestic-Water Pumps
Section 221316 Sanitary Waste and Vent Piping
Section 221413 Storm Drainage Piping
Section 224100 Plumbing Fixtures
Section 224500 Emergency Plumbing Fixtures
Section 226113 Compressed Air Piping
Section 226119 Compressed Air-Equipment
Section 226213 Vacuum Piping
Section 226219 Vacuum Equipment
Section 226600 Chemical Waste Systems for Laboratory Facilities

DIVISION 23 – HEATING VENTILATING AND AIR CONDITIONING

Section 230000 General Requirements for HVAC
Section 230005 Coordination Drawing Requirements for HVAC

Section 230513 Common Motor Requirements for HVAC Equipment
Section 230516 Expansion Fittings and Loops for HVAC Piping
Section 230517 Sleeves and Sleeve Seals for HVAC Piping
Section 230518 Escutcheons For HVAC Piping
Section 230523 Valves for HVAV Piping
Section 230529 Hangers And Supports for HVAC Piping and Equipment
Section 230548.13 Vibration Controls for HVAC
Section 230553 Identification For HVAC Piping and Equipment
Section 230593 Testing, Adjusting, And Balancing For HVAC
Section 230713 Duct Insulation
Section 230719 HVAC Piping Insulation
Section 230800 HVAC Systems Commissioning
Section 230910 Instrumentation and Control Equipment
Section 230923 Direct Digital Control (DDC) System for HVAC
Section 230993.11 Sequence of Operations for HVAC DDC
Section 232113 Hydronic Piping
Section 232300 Refrigerant Piping
Section 232923 Variable-Frequency Motor Controllers
Section 233113 Metal Ducts
Section 233114 Fixed Louvers
Section 233300 Air Duct Accessories
Section 233420 Destratification Fans
Section 233423 HVAC Power Ventilators
Section 233513 Dust Collection Systems
Section 233516 Mechanical Engine Exhaust System
Section 233600 Air Terminal Units
Section 233713 Grilles, Registers and Diffusers
Section 237223.19 Packaged Indoor Fixed Plate Energy Recovery Units
Section 237343.19 Outdoor, Custom Air-Handling Units
Section 238126 Split-System Air-Conditioners
Section 238129 Variable-Refrigerant-Flow HVAC Systems
Section 238216.14 Electric Resistance Air Coils
Section 238239.13 Cabinet Unit Heaters
Section 238239.19 Wall and Ceiling Unit Heaters

DIVISION 26 - ELECTRICAL

Section 260000 General Requirements for Electrical
Section 260005 Coordination Drawing Requirements for Electrical
Section 260270 Temporary Lighting and Power
Section 260280 Equipment Connections and Coordination
Section 260519 Low-Voltage Electrical Power Conductors and Cables
Section 260526 Grounding and Bonding for Electrical Systems
Section 260529 Hangers and Supports for Electrical Systems
Section 260533 Raceways and Boxes for Electrical Systems
Section 260543 Underground Ducts and Raceways for Electrical Systems
Section 260544 Sleeves and Sleeve Seals for Electrical Raceways and Cabling
Section 260553 Identification for Electrical Systems
Section 260573.13 Short-circuit Studies
Section 260573.16 Coordination Studies

Section 260573.19 Arc-Flash Hazard Analysis
Section 260800 Electrical Systems Commissioning
Section 260943.16 Digital and Wireless Network Lighting Controls
Section 260963 Theatre Dimming Installation
Section 262213 Low-Voltage Distribution Transformers
Section 262413 Switchboards
Section 262416 Panelboards
Section 262713 Electricity Metering
Section 262726 Wiring Devices
Section 262816 Enclosed Switches and Circuit Breakers
Section 262923 Variable-Frequency Motor Controllers
Section 263600 Transfer Switches
Section 264113 Lightning Protection System
Section 264313 Surge Protection Device
Section 265000 Luminaires and Accessories

DIVISION 27 - COMMUNICATIONS

Section 270800 Communications Systems Commissioning
Section 271000 Communications
Section 274101 Large Venue Audiovisual Systems
Section 274120 Classroom Speech Reinforcement Systems
Section 275115 Public Address System
Section 275313 Clock System

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

Section 280800 Electronic Safety and Security Systems Commissioning
Section 281600 Integrated Electronic Security Systems
Section 284621 Addressable Fire Alarm

DIVISION 31 – EARTHWORK

Section 311000 Site Clearing And Preparation
Section 312000 Earth Moving
Section 312500 Erosion And Sedimentation Controls

DIVISION 32 - EXTERIOR IMPROVEMENTS

Section 321216 Asphalt Paving
Section 321313 Exterior Concrete
Section 321600 Curbing
Section 321723 Pavement Markings
Section 321816 Playground Protective Surfacing
Section 321823 Synthetic Turf (part of 070002 TB)
Section 321823.13 Baseball & Softball Field Surfacing Curbing
Section 321823.39 Resilient Sport Surfacing Curbing
Section 323000 Site Improvements Curbing
Section 323100 Fencing
Section 323100 High Security Fencing
Section 323223 Segmental Retaining Wall

Section 323300 Site Furnishings
Section 323413 Pedestrian Bridges
Section 328400 Irrigation System
Section 328410 Roof Irrigation System (part of 070002 TB)
Section 329000 Planting
Section 329100 Loam And Planting Preparation
Section 329200 Turf And Grasses

DIVISION 33 – UTILITIES

Section 331000 Water Utilities
Section 333000 Sanitary Sewerage Utilities
Section 334000 Storm Drainage Utilities

END OF TABLE OF CONTENTS

NORTHEAST METRO TECH
INVITATION TO BID
DATED: 08/14/2023

TO ALL PRE-QUALIFIED BIDDERS:

Northeast Metropolitan Regional Vocational School District, the Awarding Authority, invites sealed trade bids for the demolition and construction of a new Northeast Metropolitan Regional Vocational High School (Northeast Metro Tech), located at 100 Hemlock Road, Wakefield, Massachusetts 01880 as described in the drawings and specifications prepared by Drummey Rosane Anderson, Inc. dated on or about August 28, 2023.

35 Braintree Office Hill Park
Suite 300
Braintree, MA 02184
Tel: 781.794.1404
Fax: 781.794.1405

The **Request for Bid (RFB)** documentation will be available via www.projectdog.com (**code 857399) on or after Wednesday, August 30, 2023 at 12:00 PM**. See additional information under "DRAWING AND SPECIFICATION" section below.

This package includes:
Trade Contracts for Masonry; Metal Fabrications; Waterproofing, Dampproofing and Caulking; Roofing and Flashing; Metal Windows; Glass and Glazing; Acoustical Tile; Tile; Terrazzo; Resilient Floors; Painting; Elevators, Fire Protection; Plumbing; HVAC; Electrical

TRADE-BIDS: Sealed trade bids from qualified subcontractors are invited for the sub-trades noted above. Qualified subcontractors are sub-bidders who have been prequalified by the Awarding Authority for this Project pursuant to Massachusetts General Law c.149A, Section 8 and as identified in the attached **"Northeast Metro Tech Project - Prequalified Trade Contractor List".**

Sealed bids for trade bid work for all trades listed above will be received by the Award Authority via www.Projectdog.com, until **3:00 PM on Monday, October 16, 2023**. This project is being Electronically Bid (E-Bid). All bids shall be submitted online at www.Projectdog.com . Hard copy bids will not be accepted by the Awarding Authority. Tutorials and Instructions are attached to this Invitation to Bid and online at www.projectdog.com For assistance, contact Projectdog, Inc. at (978) 499-9014, M-F 8:30AM-5PM.

All bids shall remain in effect for thirty (45) days, Saturdays, Sundays and legal holidays excluded, after the opening of bids.

REQUEST FOR INFORMATION (RFIs): All questions must be directed to Angel Khazadian of Drummey Rosane Anderson (Architect), email: akhazadian@draws.com **and** PMA Consultants (Owners Project Manager), email: northeastmetro@pmaconsultants.com. **Questions will be accepted until 4:00 PM on Friday, September 29, 2023.**

PRE-BID MEETING: A pre-bid meeting will be held virtually via **Microsoft Teams** on **Wednesday, September 13, 2023 at 12:30 PM**. Please see below for access to the virtual meeting:

Join on your computer, mobile app or room device via the link below:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_NTRjOTU5NTAtMmY1NS00NThjLWIxN2YtNTg5MGM3ODY2YmQ1%40thread.v2/0?context=%7b%22Tid%22%3a%22a7cf4c59-1218-4abc-81c7-358a90413026%22%2c%22Oid%22%3a%22d751564e-61aa-49e5-ad5d-77115b7f6f52%22%7d

Meeting ID: 255 746 752 077
Passcode: H3hm3A

Or call in by phone:

+1 872-215-6024,,305541642# United States, Chicago
Phone Conference ID: 305 541 642#

BID SECURITY: Bid security in the amount of 5% of the bid amount must accompany each Trade Sub-Bid. **Please refer to the "Projectdog Supplemental Instructions to Bidders for Electronic Bid Projects (E-Bid) & Bid Bond Affidavit" attachment.**

DRAWINGS AND SPECIFICATIONS for Trade Contract scope may be obtained from Project dog, at www.projectdog.com on or **after 12:00 PM on Wednesday, August 30, 2023.** Enter **code 857399** in the project locator box, and follow the prompts to a free downloadable Bid Set. Bid documents are made available to all bidders in electronic form at no cost. Neither Owner nor Architect/Engineer shall be responsible for full or partial sets of Bid documents, including Addenda, if any, obtained from sources other than Projectdog, Inc. Questions regarding plan distribution should be directed to Projectdog at (978) 499-9014.

Bidders may obtain one (1) full paper bid set for a refundable deposit of **$750** in the form of a certified check or money order payable to Projectdog, Inc. Bid sets may be picked up at Projectdog, Inc. at 18 Graf Rd – Unit 8, Newburyport, MA 01950, or mailed for a non-refundable shipping & handling fee of **$250** also payable to Projectdog, Inc. The full

amount of the deposit will be refunded to all responsive Bidders who return the documents to Projectdog in good condition within ten (10) days post-bid. Otherwise, the deposit shall become the property of Projectdog, Inc. Additional hard copies of the Bid documents may be purchased online.

MINORITY AND WOMEN BUSINESS PARTICIPATION GOALS: Please be advised, the minority and women business enterprise goals (MBE/WBE) for the project are identified below:

MBE: 5.8% WBE: 8.0%

Please note the Supplier Diversity Office (SDO) provided the participation goals above in July 2023 and are slightly higher from those reflected in the Owner-CM Agreement. The Owner-CM Agreement will be amended accordingly.

BONDS: Each prequalified trade subcontractor selected to execute a sub-contract with the Construction Manager will be required to furnish a performance bond and a labor and materials payment bond each in the amount of 110% of their Subcontract Price, issued by a surety company qualified to do business under the laws of the Commonwealth and shall include its costs of providing those bonds in its bid price.

Bidders are cautioned to carefully examine the contract documents relating to the requirements of the General Conditions concerning Equal Employment Opportunity, Anti-Discrimination, and Affirmative Action program of the Commonwealth of Massachusetts, as well as the requirements of the prevailing wages, which is incorporated in the Contract Documents.

The Award Authority will reject bids when required to do so by the above-referenced General Laws. In addition, the Awarding Authority reserves the right to waive any informality in bidding and to reject any and all bids if it deems it to be in the public interest to do so.

Attachments:

- Attachment A: Projectdog Electronic Bidding Instructions
- Attachment B: Projectdog Supplemental Instructions to Bidders for Electronic Bid Projects (E-Bid) & Bid Bond Affidavit
- Attachment C: NEMT Prequalified Trade Contractor List
- Attachment D: NEMT Trade Contractor Budget Estimates

Attachment A

Projectdog Electronic Bidding Instructions

Northeast Metro Tech Project
Invitation to Bid
8/14/2023

Projectdog Electronic Bidding Instructions

Preparation and Submission of Bids

Bid Forms will be posted online at www.Projectdog.com. All required Bid Forms must be completed and submitted in unrestricted PDF formatted files. The Bidder must fill-in all required fields and signatures either digitally or manually (print, fill-in, and scan to PDF).

The Bidder shall access the Projectdog.com E-Bidding System by entering the Project Code in the project locator box and then selecting "Sub E-Bid" from the project's "Project Details" page. The Bidder must enter their bid price as a numeric, whole dollar value only with no punctuation. The E-Bidding system automatically translates the numeric value into words and displays the bid price in both figures and words on the submitted bid form.

Bidders may upload ("Add File" or "Replace File"), review ("View File"), Save, submit ("Submit my E-Bid"), or retract ("Retract my E-Bid") their E-Bid at any time prior to the designated deadline. The server clock is displayed on the project's E-Bidding page and is the time of record. **Bidders must select "Submit my E-Bid" prior to the designated deadline to officially submit their E-Bid online**. Once submitted, an E-Bid cannot be edited. To modify a submitted E-Bid, Bidders must retract their submission, save any changes, and then submit the updated E-Bid. Upon submitting or retracting their E-Bid, Bidders will receive a convenience e-mail for informational purposes only. Bidders shall contact Projectdog if the email is not received.

Bidders are strongly encouraged to review their submitted E-Bid package by selecting "View My Bid Package" from the project's E-Bidding page. Uploaded files may be reviewed individually by selecting "View File". It is the Bidder's responsibility to confirm online that their E-Bid package has been submitted successfully. Timely submission of an E-Bid shall be the full responsibility of the Bidder. It is also the Bidder's responsibility to ensure that their submitted bid is 100% true, complete, and accurate.

Alternates

Each Bidder shall acknowledge Alternates by entering the dollar amount and selecting the "Add" or "Subtract" radio button necessitated by each Alternate listed in the corresponding space on the project's E-Bidding page.

If an Alternate does not involve a change in dollar value, the Bidder shall so indicate by typing "0" for the dollar value of that Alternate and by selecting the "Add" radio button in the corresponding space on the project's E-Bidding page.

Bid Security

Bid Security shall be at least five percent (5%) of the greatest possible bid amount, considering all alternates. The Bid Security in the form of a Bid Bond shall be:

a) with a surety company qualified to do business in the Commonwealth of Massachusetts and satisfactory to Owner;

b) conditional upon the faithful performance by the principal of the agreements contained in the Bid; and

c) submitted with your E-Bid online at www.Projectdog.com.

In lieu of and ONLY IN LIEU OF an insurance Bid Bond certificate submitted as outlined above (items a. through c.), a Bid Security in the form of cash, or a certified check, treasurer's, or cashier's check issued by a responsible bank or trust company and made payable to the Owner must be submitted with a completed Cash Bid Bond Affidavit form and received by the Owner before the time of bidding. In addition, the Bidder must also submit a completed Cash Bid Bond Affidavit form with their E-Bid. Download the Cash Bid Bond Affidavit form at www.Projectdog.com.

Addenda

Addenda, if issued, will be posted to the Projectdog website and shall be accompanied by e-mail notification to every individual or firm on record as having received the Bid Documents. Hard copies of addenda will not be mailed or faxed. It shall be the sole responsibility of the Contractor to ascertain the existence of any and all addenda.

If a bid is submitted prior to an Addendum being issued, the Bidder will receive an e-mail notification for informational purposes only. The Bidder must review the addendum, retract the bid, acknowledge all addenda, and re-submit the bid. If a Bidder fails to acknowledge all addenda their bid may be rejected by the Awarding Authority.

Withdrawal of Bids (Before Opening of Bids)

Any bid may be withdrawn (retracted) prior to the designated deadline by selecting "Retract My E-Bid" from the project's E-Bidding page. Upon retracting, the Bidder will receive a convenience e-mail for informational purposes only. It is the

Bidder’s responsibility to review and confirm online that their bid has been retracted successfully.

Attachment B

Projectdog Supplemental Instructions to Bidders for Electronic Bid Projects (E-Bid) & Bid Bond Affidavit

Projectdog, Inc

Supplemental Instructions to Bidders for Electronic Bid Projects (E-Bid)

Table of Contents

Page

Sign Up....2

Login....2

Logoff....2

Forgotten Password....2

Account Information....2

Project Details....3

Acquire Documents....3

Document Recipients....3

Electronic Bid (E-Bid)....4

Attachment:

Bid Bond Affidavit

© Copyright by Projectdog.com, All rights reserved.

Sign Up

Every user of Projectdog.com has a unique username and password for their account. **MANDATORY: All users must keep usernames and passwords PRIVATE and SECURE. Do not share accounts.**

1. Go to **www.Projectdog.com**.
2. Select the "Sign Up" (Fig 1).
3. Complete all required form fields and press Submit. An automatic email will be sent to the registered email.
4. Select the confirmation link in the email to complete the registration.

Fig 1

Login

1. Go to **www.Projectdog.com**.
2. Enter a registered email address and password (Fig 1).
3. Press Login.

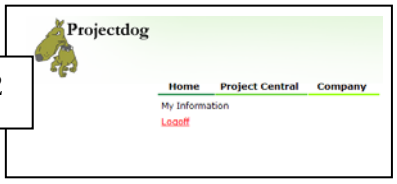


Fig 2

Logoff

1. Hover over Home (Fig 2).
2. Select "Logoff".

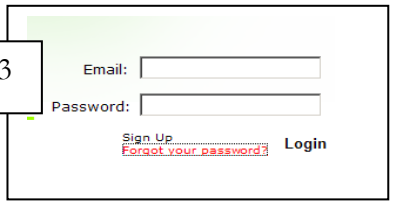


Fig 3

Forgotten Password

1. Select "Forgot your password?" (Fig 3).
2. Enter the e-mail address.
3. Select "Send Info". An automated e-mail will be sent with the password.

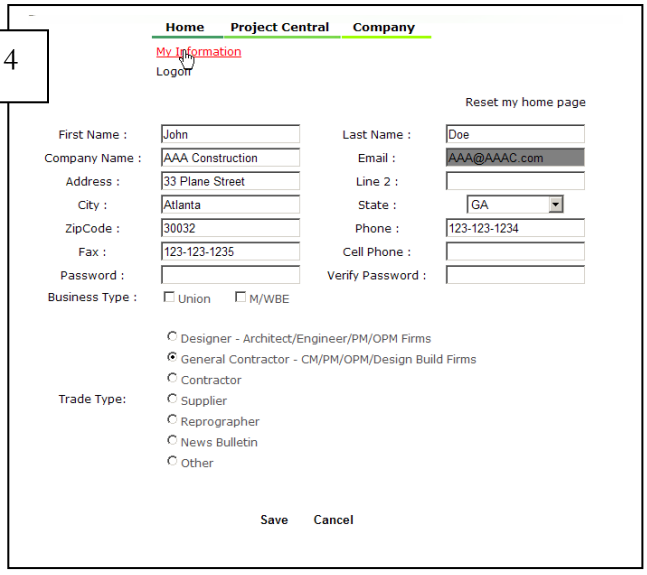


Fig 4

Account Information

View and edit user contact information. To change an email address, users must register a new account. Call Projectdog to have the old account removed.

1. Hover over Home (Fig 4).
2. Click "My Information".
3. Edit information as needed.
4. Click "Save" to finalize edits.

© Copyright by Projectdog.com, All rights reserved.

Project Details

Utilize the search page (Fig 5) or enter a Project Code (Fig 6) to view a project's "Project Details" page (Fig 7).

Fig 5

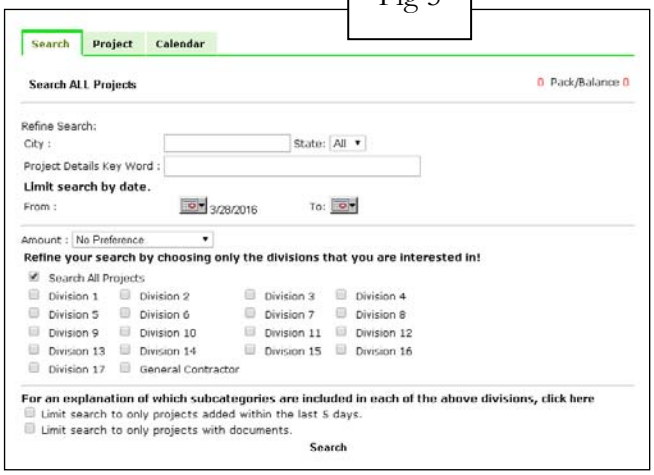
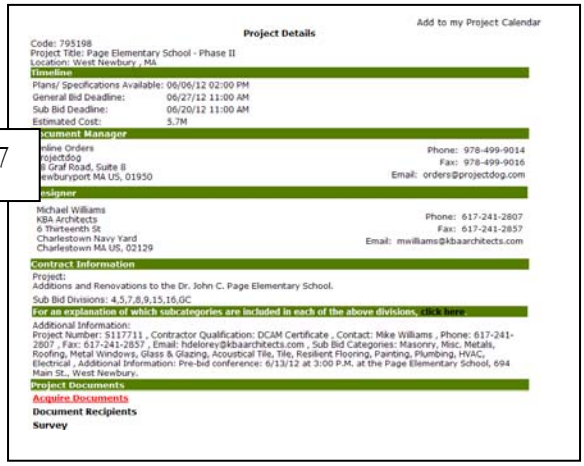


Fig 6

Fig 7



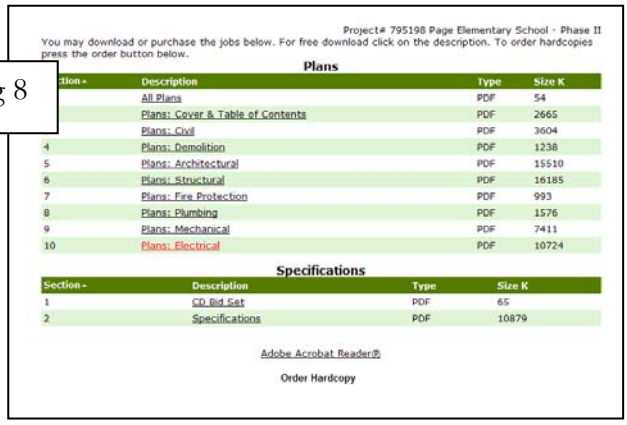
Acquire Documents

Download all project documents.

1. Click "Acquire Documents" link found on a project's "Project Details" page (Fig 7).
2. Respond to the Legal Notice after reviewing.
3. Click on any file description to open, review, or save a document (Fig 8).

   Users are automatically added to the project's "Document Recipients" list to receive update notifications upon viewing any document online.

Fig 8

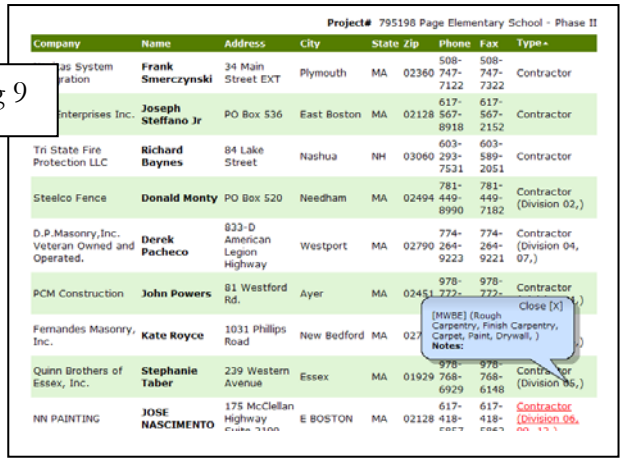


Document Recipients

Review all plan holders who have acquired documents.

1. Click "Document Recipients" link found on a project's "Project Details" page (Fig 7).
2. All potential bidders are listed and sorted by company type (Fig 9). Click on a column title to sort alphabetically.

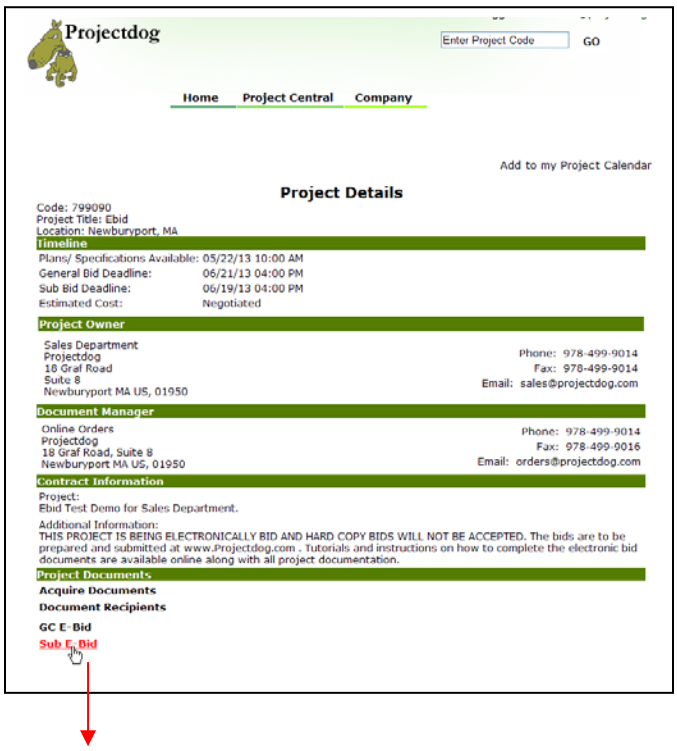
Fig 9

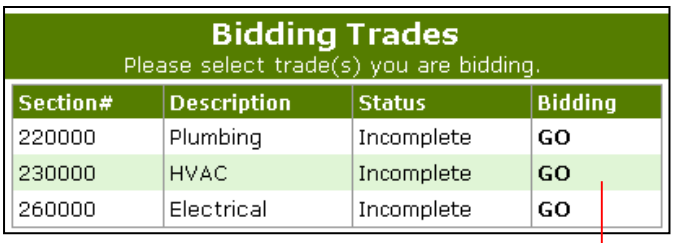


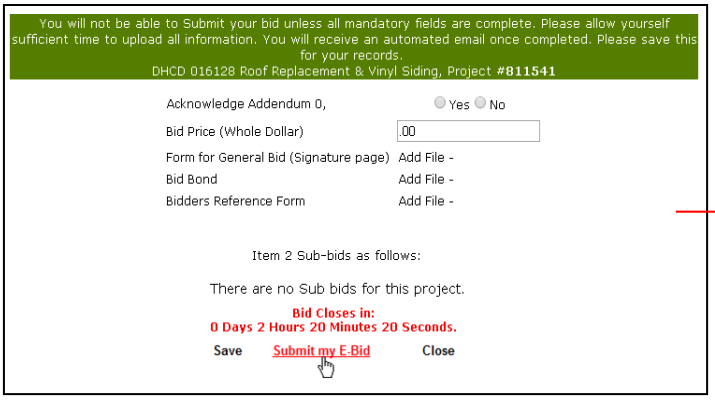
© Copyright by Projectdog.com, All rights reserved.

Electronic Bid (E-Bid)

This project is being **Electronically Bid** at www.Projectdog.com. Hard copy bids will not be accepted by the Awarding Authority. Go to www.Projectdog.com and Login with an existing account or click Sign Up to register for free. Enter a project code or search by keyword to access the "Project Details" page. Select "Acquire Documents" to download all bidding documents.







How to Submit an E-Bid

Complete and save all required forms as PDF files. Please be sure to sign all required signatures either digitally or manually.

1. Select the **GC E-Bid** or **Sub E-Bid** link located on the "Project Details" page.

   Subcontractors select a bidding trade;

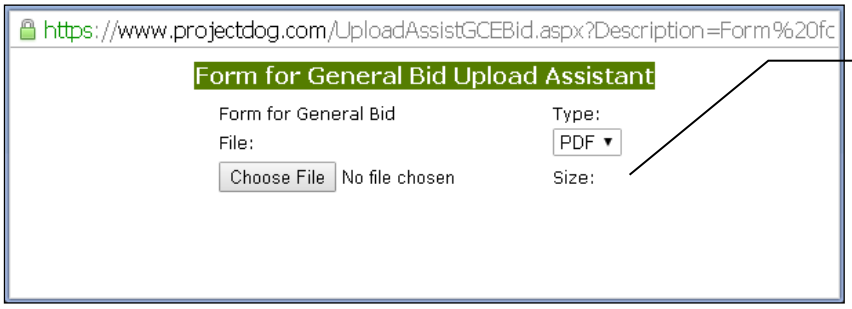
   General Contractors will not be able to submit an E-Bid until the official sub bid tabulation is released by the Awarding Authority.

2. Answer / enter / upload all required areas. Enter all dollar value amounts as a whole dollar values only.

3. Select "Submit My E-Bid." Review the submitted bid package via the "View My Bid Package" link.

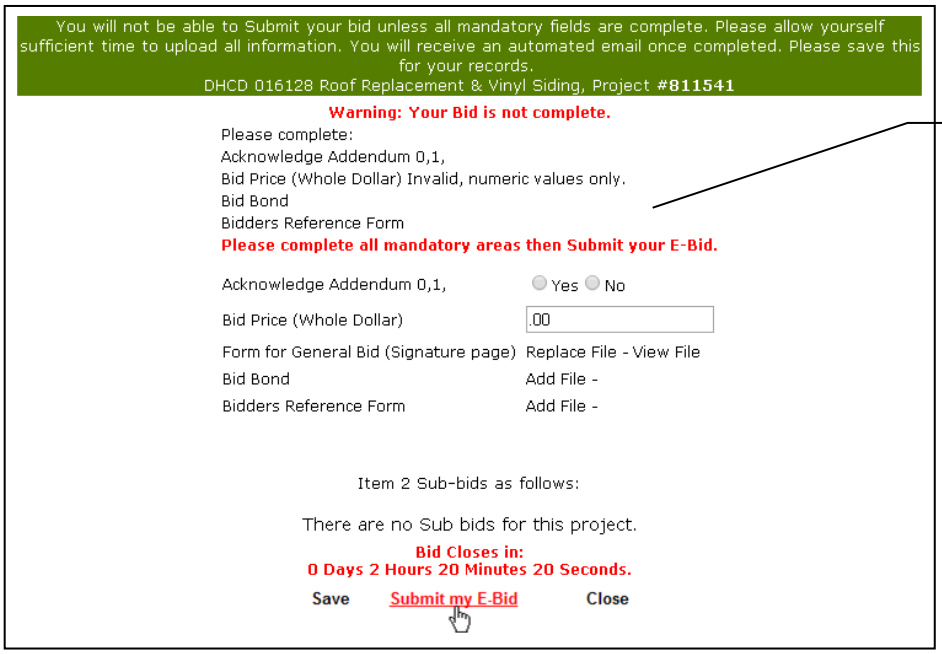
It's that simple!

© Copyright by Projectdog.com, All rights reserved.



Add File

Click "Add File" on the E-Bid page to open the Upload Assistant window. Then click "Browse" or "Choose File" to upload a PDF file.



Warning

E-Bids cannot be submitted unless all areas are complete.

Save before adding files or closing the window or E-Bid data may need to be re-entered.

Projectdog.com server time is set to industry standards at time-a.nist.gov. Bidders are encouraged to update their computer clock.

Bidders may save, submit or modify an Electronic Bid (E-Bid) at any time prior to bid close. Once submitted, a bid cannot be edited. To modify a bid the bidder must retract the bid, make any necessary changes, and then submit the bid again. Upon submitting or retracting the bidder will receive a convenience email for informational purposes only. **Bidder shall contact Projectdog if an email is not received.**

It is the bidder's responsibility to review and confirm online that a bid has been submitted and/or retracted and that the bid is 100% true, complete and accurate. All bidders are required to review their submitted E-Bid via the "View My Bid Package" link.

If a bid is submitted prior to an addendum being issued the bidder will receive an automated email for informational purposes only stating the bidder must review the addendum, retract the bid, acknowledge all addenda, and submit the bid again. If a bidder fails to acknowledge addenda their bid may be rejected by the Awarding Authority.

Once the bid deadline has closed the E-Bid links are no longer available. All E-Bids are compiled in real time upon bid close and published forthwith on the "Project Details" page titled as "List of Bids Received". Official bid tabulations are posted at the discretion of the Awarding Authority.

For additional assistance, call Projectdog at (978) 499-9014 (M-F, 9AM-5PM).

© Copyright by Projectdog.com, All rights reserved.

Bid Bond Affidavit

This document is an affidavit form that is drafted to serve as a statement wherein the person (Bidder) who signs it swears under penalty of perjury that the facts and information that are identified in this affidavit are true. **This affidavit is in lieu of an insurance Bid Bond certificate.**

Bidders submitting the Bid Bond Affidavit form and the 5% Bid Deposit in the form of cash, certified check, treasurer's or cashier's check issued by a responsible bank or trust company shall ensure that these documents are received by the Awarding Authority prior to the closing of the electronic bid.

Both the completed Bid Bond Affidavit form and the Bid Deposit shall be enclosed in a sealed envelope with the following information plainly marked on the outside:

DO NOT OPEN BEFORE: *[indicate DATE and TIME of bid opening]*

Project Name: _____
Project Number: _____
Bidder's Name: _____
Business Address: _____
Phone Number: _____

It is the Bidder's responsibility to ensure that the completed Bid Bond Affidavit form and Bid Deposit are submitted as stated above and received by the Awarding Authority prior to the closing of electronic bids. The completed Bid Bond Affidavit form must also be uploaded via the project E-bid "Bid Bond" link at www.Projectdog.com.

The Bidder understands and consents that any failure to do so whether his own or other fault may result in the rejection of said bid. The Bidder is solely responsible for the accuracy and value of the Bid Deposit. In the event that the Bid Deposit is less than the required amount as outlined in the project specifications the bid may be rejected.

Bid Deposit Amount (in figures): _____

☐ **CASH**

or

☐ **Certified, Treasurer's, or Cashier's Check**

Date: _____

Bidder's Name: _____

Business Address: _____

Signature: _____

© Copyright by Projectdog.com, All rights reserved.

Attachment C

NEMT Prequalified Trade Contractor List

PMA Consultants

Est. 1971

Northeast Metro Tech Project
Prequalified Trade Contractors List
Wakefield, MA

Firm	Trade Type	Name	E-Mail	Submitted SOQ?	Pre-Qualified?
Cheviot Corporation	Acoustical Tile	David Durfee Mai Tran	DDurfee@cheviotcorp.com mtran@cheviotcorp.com	YES	YES
H. Carr & Sons, Inc.	Acoustical Tile	Rebecca Kerwick	rebecca@hcarr.com	YES	YES
Central Ceilings	Acoustical Tile	Pre Construction	bid_invites@centralceilings.com	YES	YES
K&K Acoustical Ceilings, Inc.	Acoustical Tile	Kevin Kontos LouAnne DeMatteo	kevinkontos@kkacousticalceilings.com louanne@kkacousticalceilings.com	YES	YES
Wayne J. Griffin Electric, Inc.	Electrical	Amy Foster Lisa Morton	afoster@wjgei.com planroom@wjgei.com	YES	YES
Sullivan & McLaughlin Companies, Inc.	Electrical	Angela Lyu	alyu@sullymac.com	YES	YES
Ostrow Electric Company	Electrical	Carole Richards	crichards@ostrowelectric.com	YES	YES
LeVangie Electric Co., Inc.	Electrical	Christina Sullivan	christina@leco-contracting.com	YES	YES
Annese Electric	Electrical	Cindy Micheli	cmicheli@anneseelectric.com	YES	YES
Delta Beckwith Elevator Company	Elevator	Mike Lee	mikec.lee@delta-beckwith.com	YES	YES
Johnson Controls Fire Protection LP	Fire Protection	Margaret Hanley Edgar Sazo	margaret.hanley@jci.com esazo@simplexgrinnell.com	YES	YES
Arden Engineering Constructors, LLC	Fire Protection	Kenneth Demers	estimating@ardeneng.com	YES	YES
Rustic Fire Protection	Fire Protection	Chad Dubuc Krystal Dion	cdubuc@rusticfireprotection.com kdion@rusticfireprotection.com	YES	YES
Cogswell Sprinkler Co.,Inc.	Fire Protection	Jessica Vaillencourt	jess@cogswellsprinkler.com	YES	YES
Hampshire Fire Protection Co., LLC	Fire Protection	Karen Gill Paul DeLorie	kgill@hampshirefire.com pdelorie@hampshirefire.com	YES	YES
E.M Duggan, Inc.	Fire Protection	Srey Heng Joseph Giguere	estimating@emduggan.com jgiguere@emduggan.com	YES	YES
Aluminum & Glass Concepts, Inc.	Glass and Glazing	Christopher Murray	cmurray@aluminumandglass.com	YES	YES
Lockheed Architectural Solutions	Glass and Glazing	Debbie Rich Jacob Atteridge	drich@lockheedsolutions.com jatteridge@lockheedsolutions.com	YES	YES
Lizotte Glass, Inc.	Glass and Glazing	Peggy LeBlanc	pleblanc@lizotteglass.net	YES	YES
R & R Window Contractors, Inc.	Glass and Glazing	Tabby Smith	estimating@rrwindow.com	YES	YES
Kapiloff`s Glass	Glass and Glazing	Alan Kapiloff Kayla Farry	debbie@kapglass.com kfarry@kapiloffsglass.com	YES	YES
Chandler Architectural Products, Inc.	Glass and Glazing	Amanda Hartwig	amanda@cap-inc.net	YES	YES
A & A Window Products, Inc	Glass and Glazing	Lucy Gig	LGigliello@aawindowproducts.com	YES	YES
Harry Grodsky & Co., Inc.	HVAC	Kristen Gonsalves	kgonsalves@grodsky.com	YES	YES
E. Amanti & Sons, Inc.	HVAC	Diane Amanti	diane@eamanti.com	YES	YES
TG Gallagher	HVAC	Estimating Department	bidinvites@tggallagher.com	YES	YES
Arden Engineering Constructors, LLC	HVAC	Kenneth Demers	estimating@ardeneng.com	YES	YES
General Mechanical Contractors	HVAC	Michael Tomasino	michael@generalinc.com	YES	YES
Harold Brothers Mechanical	HVAC	Mike Smith Michele Sutton	msmith@haroldbros.com msutton@haroldbros.com	YES	YES
Patrick J Kennedy & Sons, Inc.	HVAC	Raymond Hanley	estimating@pjkennedy.com	YES	YES
E.M Duggan, Inc.	HVAC	Srey Heng Joseph Giguere	estimating@emduggan.com jgiguere@emduggan.com	YES	YES
Lighthouse Masonry, Inc.	Masonry	Jason Alves	jalves@lighthousemasonry.com	YES	YES
Empire Masonry Corp	Masonry	Kristen Hancock	khancock@empiremasonrycorp.com	YES	YES
Costa Brothers Masonry, Inc	Masonry	Lisa DaCosta Lopez	cbm@costamasonry.com	YES	YES
Fernandes Masonry, Inc,	Masonry	Vera Vadeboncoeur Victor Fernandes	Estimating@fernandesmasonry.com victor@fernandesmasonry.com	YES	YES
Commercial Masonry Corporation	Masonry	Joe Bombardier	jbombardier@commercialmasonry.com	YES	YES
Marmelo Bros. Construction	Masonry	Steven Marmelo Kristyn Correia Sandra Sousa	Stevemarmelo@hotmail.com kristyn@marmeloconstruction.com sandy@marmeloconstruction.com	YES	YES
Lockheed Architectural Solutions	Metal Windows	Debbie Rich Jacob Atteridge	drich@lockheedsolutions.com jatteridge@lockheedsolutions.com	YES	YES
Lizotte Glass, Inc.	Metal Windows	Peggy LeBlanc	pleblanc@lizotteglass.net	YES	YES
R & R Window Contractors, Inc.	Metal Windows	Tabby Smith	estimating@rrwindow.com	YES	YES
Chandler Architectural Products, Inc.	Metal Windows	Amanda Hartwig	amanda@cap-inc.net	YES	YES
A & A Window Products, Inc	Metal Windows	Lucy Gig	LGigliello@aawindowproducts.com	YES	YES
Capone Iron Corporation	Miscellaneous Metals and Ornamental Iron	Sarah Furnari	s.furnari@caponeiron.com	YES	YES
SMJ Metal Company, Inc.	Miscellaneous Metals and Ornamental Iron	Jeff Payne	jpayne@RalphsBlacksmith.com	YES	YES
Quinn Brothers of Essex, Inc.	Miscellaneous Metals and Ornamental Iron	Stephanie Taber	stephanie@quinniron.com	YES	YES
United Steel	Miscellaneous Metals and Ornamental Iron	Pam Seilhammer	pseilhammer@unitedsteel.com	YES	YES
Roman Iron Works, Inc.	Miscellaneous Metals and Ornamental Iron	Angela Scully Maddalena Abruzzese	a.scully@romanironworksinc.com maddalena.abruzzese@romanironworksinc.com	YES	YES
Select Paint and Finishes LLC	Painting	Maneejun Pinheiro	Mpinheiro@selectpaint.com	YES	YES
First Nick Companies	Painting	Alexander Kritikos	alex@firstnick.com	YES	YES
Alpha Contracting Associates, Inc.	Painting	Anthony Boutalis	Info@alpha-contracting.com	YES	YES
Bello Painting Company, Inc.	Painting	Dominic Bello	bp@bellopainting.com	YES	YES
New Generation Painting Co., Inc	Painting	Mario Rodrigues	newgenerationpainting@hotmail.com	YES	YES
King Painting, Inc	Painting	Naomi Epps	nepps@kingpaintinginc.com	YES	YES
O Byrne Painting and Contracting Inc	Painting	Patrick Byrne	pbyrnewayland@gmail.com	YES	YES
Dandis Contracting, Inc.	Painting	Patty Dandis	Pdandis@dandiscontracting.com	YES	YES
M.L. McDonald sales co.	Painting	Roger Kemmitt	rfkemmitt@mlmcdonald.com	YES	YES
Homer Contracting, Inc.	Painting	Stefanos Bouboulis	steve@homercontracting.com	YES	YES
John W. Egan Co., Inc.	Painting	Damian Rebisz	Drebisz@johnwegan.com	YES	YES
Araujo Bros Plumbing & Heating	Plumbing	Nathan Cordeiro	nathan@araujobrosplumbing.com	YES	YES
E. Amanti & Sons, Inc.	Plumbing	Diane Amanti	diane@eamanti.com	YES	YES
Grasseschi Plumbing & Heating, Inc.	Plumbing	Maureen Dupre	mdupre@grasseschi.com	YES	YES
Harold Brothers Mechanical	Plumbing	Mike Smith Michele Sutton	msmith@haroldbros.com msutton@haroldbros.com	YES	YES
Patrick J Kennedy & Sons, Inc.	Plumbing	Raymond Hanley	estimating@pjkennedy.com	YES	YES
P.J. Dionne Co., Inc.	Plumbing	Mike Dionne	mike@pjdionne.com	YES	YES
E.M Duggan, Inc.	Plumbing	Srey Heng Joseph Giguere	estimating@emduggan.com jgiguere@emduggan.com	YES	YES
Allegheny Contract Flooring Inc	Resilient Floors	David Stachura	dstachura@alleghenycontract.com	YES	YES
Ayotte & King for Tile.	Resilient Floors	David King	davidking@ayotteandking.com	YES	YES
Pavilion Floors, Inc.	Resilient Floors	Martina Langone	mlangone@pavilionfloors.com	YES	YES
Capital Carpet & Flooring Specialists, Inc.	Resilient Floors	Maureen Crozier	maureenc@capitalcarpetonline.com	YES	YES
CJM Services Inc	Resilient Floors	Betsy Polanco	betsypolanco@cjmservicesinc.com	YES	YES
Greenwood Industries, Inc.	Roofing and Flashing	Greenwood Industries	bidcoordinator@greenwood-industries.com	YES	YES
Capeway Roofing Systems, Inc	Roofing and Flashing	Kathie Rybicki	krybicki@capewayroofing.com	YES	YES
Silktown Roofing, Inc.	Roofing and Flashing	Kim Romagna Kayla Green	kim@silktownroofing.com kayla@silktownroofing.com	YES	YES
Stanley Roofing Company	Roofing and Flashing	Paul Stanley	kristen@stanleyroof.com	YES	YES
Roman Mosaic and Tile Co.	Terrazzo	Douglas Wilczek	dwilczek@romanmosaic.com	YES	YES
DePaoli Mosaic	Terrazzo	Leslie Carrio	info@depaolimosaic.com	YES	YES
Joseph Cohn and Son Tile & Terrazzo, LLC	Terrazzo	Sue Antonucci	suzanne@josephcohnandson.com	YES	YES
Select Tile, Marble & Flooring	Tile	Vincent Morano Samantha Holbrook Jim Butler	vmorano@selecttile.com sholbrook@selecttile.com jbutler@selecttile.com	YES	YES
Jantile Boston LLC	Tile	Wendy Chambers Wyat Shek	wchambers@jantileboston.com wshek@jantileboston.com	YES	YES
High Point Interiors Inc.	Tile	Cheryle Becker	cheryle@highpointinteriorsinc.com	YES	YES
Allegheny Contract Flooring Inc	Tile	David Stachura	dstachura@alleghenycontract.com	YES	YES
Ayotte & King for Tile.	Tile	David King	davidking@ayotteandking.com	YES	YES
Pavilion Floors, Inc.	Tile	Martina Langone	mlangone@pavilionfloors.com	YES	YES
Capital Carpet & Flooring Specialists, Inc.	Tile	Maureen Crozier	maureenc@capitalcarpetonline.com	YES	YES
Joseph Cohn and Son Tile & Terrazzo, LLC	Tile	Sue Antonucci	suzanne@josephcohnandson.com	YES	YES
Gleeson Powers	Waterproofing, Damproofing, Caulking	Melissa Briggs	mbriggs@gpi-firestop.com	YES	YES
Acme Waterproofing Co. Inc.	Waterproofing, Damproofing, Caulking	Debbie Oakley	doakley@acmewp.com	YES	YES
P.J. Spillane Co., Inc.	Waterproofing, Damproofing, Caulking	Ana Rossetti	arossetti@pjspillane.com	YES	YES
Superior Caulking & Waterproofing Co., Inc.	Waterproofing, Damproofing, Caulking	Annette Coyer	annette@scwi.net	YES	YES
Folan Waterproofing	Waterproofing, Damproofing, Caulking	Debbie Folan	office@folanwaterproofing.com	YES	YES
Beacon Waterproofing	Waterproofing, Damproofing, Caulking	Frank Caloiero	fcaloiero@beaconwaterproofing.com	YES	YES

Attachment D

NEMT Trade Contract Budget Estimates

NEMT Trade Contractor Budget Estimates

"X" Below All Trades Subject To Prequalification On The Project	Section #	Trade Category	Estimated Construction Cost for Subtrade
X	Div. 04	Masonry	$8,621,369
X	Div. 05	Miscellaneous and Ornamental Iron	$2,888,155
X	Div. 07	Waterproofing, Dampproofing and Caulking	$1,808,652
X	Div. 07	Roofing and Flashing	$5,371,459
X	Div. 08	Metal Windows	$7,808,658
X	Div. 08	Glass and Glazing	$703,868
X	Div. 09	Tile	$1,658,803
X	Div. 09	Terrazzo	$29,981
X	Div. 09	Acoustical Tile	$2,773,543
X	Div. 09	Resilient Floors	$2,768,411
X	Div. 09	Painting	$1,370,009
X	Div. 14	Elevators	$947,945
X	Div. 21	Fire Protection	$3,183,463
X	Div. 22	Plumbing	$8,493,254
X	Div. 23	Heating, Ventilation & Air-Conditioning	$30,021,016
X	Div. 26	Electrical	$26,333,510

AGREEMENT FOR CONSTRUCTION MANAGER AT RISK SERVICES

OWNER - CONSTRUCTION MANAGER AGREEMENT

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL PROJECT

Awarding Authority: Northeast Metropolitan Regional Vocational School District (NEMT)

This agreement ("Contract") is made as of the **25th** day of **AUGUST** in the year two thousand and **twenty one** by and between the Northeast Metropolitan Regional Vocational School District (NEMT) (the "Owner"), 100 Hemlock Road, Wakefield, MA 01880 and **Gilbane Building Company** hereinafter called the "Construction Manager or CM", with a principal place of business at **7 Jackson Walkway Providence, Rhode Island 02903**.

The terms used in this Owner - Construction Manager Agreement, are defined in the General Conditions of the Contract and in this Owner – Construction Manager Agreement.

The scope of the work is generally described as follows:

The performance of Schematic Design construction cost estimates in June/July 2021. Upon successfully securing local funding in either November 2021 or March 2022, the Owner may elect to retain the CMR for the following additional services: Design Development phase estimating, 60% and 90% Construction Document phase estimating, along with additional pre-construction services, bidding, and construction services, as described in the Contract Documents, during the design and construction of the NEMT High School Project (the "Project").

The proposed project, located at 100 Hemlock Road, Wakefield, MA includes construction of a new three-story, approximately 383,000SF vocational technical school for 1,600 students on the existing site, followed by abatement/demolition of the existing school and subsequent construction of parking and an athletic complex with outbuildings and bleachers. The current, preliminary construction phasing plan is as follows which is subject to change resulting from CMR input during design and preconstruction.

The existing school building will remain occupied for the duration of the construction effort, resulting in a plan comprised of three (3) primary phases. Phase one (1) will include an early enabling site package involving construction of a new roadway and entrance to the site along with parking and site logistic changes, and potential utility relocations as well as blasting of ledge and clearing trees. Phase one (1) will occur in the Summer of 2022, resulting in minimal disruption to the existing school. Phase two (2) will require the procurement of several early bid packages in order to reduce the overall construction duration including the release of early steel, concrete and/or site packages followed by the construction of the new school. Phase three (3) will include the abatement and demolition of the existing school which will be replaced by parking, multi-purpose fields, and athletic outbuildings.

PRELIMINARY STATEMENT

A. Pursuant to M.G.L.c. 149A the Northeast Metropolitan Regional Vocational School District (NEMT), the ("Owner") is undertaking the Construction of the NEMT High School Project (the "Project").

B. The Construction Manager ("CM") shall perform the obligations, responsibilities and liabilities of the Construction Manager under this Contract.

C. OWNER has engaged PMA Consultants, LLC (the "Project Manager"), under a separate agreement to assist OWNER in connection with the Project, as provided in M.G.L.c. 149A section 2. The Project Manager will assist the Owner in the administration and management of the Project during design and construction. The CM shall fully cooperate with the Project Manager including, but not limited to, complying with any instructions that the Project Manager may issue on OWNER's behalf.

D. OWNER has engaged the architectural firm of Drummey Rosane Anderson, Inc. (DRA), (the "Designer"), under a separate agreement to provide design services for the Project. The CM shall fully cooperate with the Designer including, but not limited to, complying with any instructions that the Designer may issue on the Project.

NOW, THEREFORE, in consideration of the mutual agreements and obligations of the parties set forth below, OWNER and the Construction Manager do hereby agree as follows:

Article 1. The Work.

1.1 The Construction Manager's Responsibilities. The CM shall perform the Work as required by the Contract Documents to construct the Project.

1.2 Site. The Site is shown in the Site Plans that accompanied the Request for Proposals for Construction Management Services issued by the Owner.

1.2.1 Site Inspection. By executing this Agreement, the CM acknowledges that it has visited the Site and has learned as much about the Site as may reasonably be learned from such an inspection. No information, which would reasonably have been obtained by such, a site inspection may serve as the basis for any change order proposal or claim for additional costs and/or additional time.

Article 2. The Contract Documents.

2.1 Contract Documents. The following documents forming the Contract, are incorporated by reference herein, and are referred to as the "Contract Documents".

- The Request for Qualifications for Construction Management Services for the Project, including amendments thereto.
- The CM's Response to the Request for Qualifications, as accepted by the Owner.
- The Request for Proposals for Construction Management Services for the Project, including

exhibits, attachments and amendments thereto.

- The Construction Manager's Proposal, as accepted by the Owner. The Owner-Construction Manager Agreement, including amendments thereto.
- The General Conditions of the Contract.
- The Plans and Specifications prepared by the Designer, including Addenda.
- All Approved Change Orders/Contract Modifications issued after execution of the Owner Construction Manager Agreement.

Article 3. Relationship of the Parties.

3.1 CM's Obligation. The CM accepts the relationship of trust and confidence between OWNER and the CM established by this Agreement and covenants with OWNER to cooperate at all times with OWNER , the Project Manager, the Designer and any other consultants or project representatives engaged or employed by OWNER , and to utilize the CM's best skill, efforts and judgment to furnish efficient business administration and supervision; to furnish at all times an adequate supply of workers and materials; and, consistent with the requirements of the Contract Documents, to perform the Work in the best way and most expeditious and economical manner consistent with the interests of OWNER and to make every reasonable effort to achieve time savings and construction efficiencies with respect to the Work. The CM, in performing its services under this Agreement, is an independent contractor and is not an agent or employee of, or a joint venture with, OWNER. The CM shall work in harmony and cooperation with the OWNER, the Project Manager, the Designer, and separate contractors and other persons or entities engaged by OWNER or otherwise employed in connection with the Project, as well as other public agencies having jurisdiction with respect to the Project.

3.2 Standard of Performance. The CM represents that it is experienced and skilled in construction of projects of the type, magnitude and complexity described in the Contract Documents, that it is familiar with the special problems and requirements of construction of the type required for the Project and in the location of the Site, and that it will furnish a complete and fully operable Project as indicated by and reasonably inferable from the Contract Documents. The CM shall perform its work in strict accordance with all applicable governmental, federal, state and local agency building codes and requirements.

Article 4. Contract Time.

4.1 Commencement Date. The CM shall begin estimating, preconstruction and construction phase services pursuant to the terms and conditions included in multiple written Notices to Proceed ("NTP") that are issued by the OWNER/Project Manager.

4.1. 1 Preconstruction Services. There will be two (2) NTPs issued for preconstruction services. The first NTP for preconstruction services shall be limited to Schematic Design construction cost estimating and will be issued within a reasonable time following contract award. The second NTP shall authorize the selected CM to proceed into the remainder of preconstruction services prior to construction and will be issued upon completion of successful local funding and project approval from the Massachusetts School Building Authority Board of Directors. It may, in OWNER's discretion, instruct the CM to begin only certain portions of the preconstruction services.

4.1. 2 Construction Services. The NTP for construction services shall be issued within a reasonable time following the execution of the GMP Amendment as defined in Paragraph 6.5, provided that, the

OWNER intends to issue several NTPs that will authorize the CM to perform the construction of enabling packages of work prior to the execution of the GMP Amendment, as necessary to support the anticipated phasing schedule in Request for Proposals. When an NTP is issued prior to the execution of the GMP Amendment, OWNER may, in its discretion, limit the scope of the NTP in whatever manner it deems appropriate.

4.2 Substantial and Final Completion. The CM shall achieve Substantial Completion of the designated phases of the work and the entire Work, in accordance with Article 4.4.1, subject to any adjustments in the Contract Time approved by OWNER in accordance with the Contract Documents (the "Substantial Completion Date"). The CM shall achieve Final Completion of the Work, no later than 60 days after Substantial Completion of the entire work. The Substantial and Final Completion Dates for the phases of work shall be subject to extensions of Time that may be approved by OWNER in accordance with the Contract Documents.

4.3 Time is of the Essence. The CM acknowledges that the times of Substantial Completion of the Work, Final Completion of the Work, any other milestones for completion of portions of construction, times for submitting proposals for contract modifications, and other times set forth in the Contract Documents are essential conditions of this Agreement.

4.4 Owner's Damages for Delay

4.4.1 Liquidated Damages Each/All Project Phases. If the CM shall neglect, fail or refuse to achieve Substantial Completion of each/all phases of the project within the Contract Time, as such time may be adjusted in accordance with the provisions of the Contract Documents, the CM shall pay OWNER the amounts set forth in this Subsection 4.4.1 below, not as a penalty, but as liquidated damages to cover certain losses, expenses and damages of OWNER for such failure to substantially complete each/all phases of the contract in a timely manner. The CM acknowledges that delay in Substantial Completion of each/any phases of the Project will cause OWNER to incur administrative, professional, rental, storage, moving, transportation and other costs in the event of such delay. Delay in Substantial Completion of each/any phase will also require OWNER to incur additional costs for compensation to the Designer, the Project Manager and other consultants or contractors for extended or additional work on the Project. In light of the difficulty of determining the costs the OWNER will incur in the event of a delay to Substantial Completion of each/any of the project's phases, the parties have agreed upon the liquidated damages stated below. The liquidated damages amounts that the OWNER may assess for not achieving Substantial Completion for the Work of the designated project phases are follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is not impacted. If Phase 2 is impacted, use Phase 2 amount).

Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day.

Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game (minimum assumed to be $750/game).

4.4.2 Except as otherwise expressly provided, none of the following shall constitute a waiver of the

CM's or its surety's obligations to pay liquidated damages or actual damages, as provided in 4.4.1:

(a) Acceptance of any portion of the Work or payment to the CM or its surety therefor;
(b) Completion of a portion of the Work or the use or occupancy of a portion of the Work by OWNER or others;
(c) OWNER is requiring or allowing the CM or its surety to complete the Work after the Substantial Completion Date has passed.

4.5 Phasing of the Work.

A summary of the anticipated construction phases for the Project is as follows:

The proposed project, located at 100 Hemlock Road, Wakefield, MA includes construction of a new three-story, approximately 383,000SF vocational technical school for 1,600 students on the existing site, followed by abatement/demolition of the existing school and subsequent construction of parking and an athletic complex with outbuildings and bleachers. The current, preliminary construction phasing plan is as follows which is subject to change resulting from CMR input during design and preconstruction.

The existing school building will remain occupied for the duration of the construction effort, resulting in a plan comprised of three (3) primary phases. Phase one (1) will include an early enabling site package involving construction of a new roadway and entrance to the site along with parking and site logistic changes, and potential utility relocations as well as blasting of ledge and clearing trees. Phase one (1) will occur in the Summer of 2022, resulting in minimal disruption to the existing school. Phase two (2) will require the procurement of several early bid packages in order to reduce the overall construction duration including the release of early steel, concrete and/or site packages followed by the construction of the new school. Phase three (3) will include the abatement and demolition of the existing school which will be replaced by parking, multi-purpose fields, and athletic outbuildings.

4.5.1 The work will be performed on a phased schedule. Each phase of construction shall have a substantial completion date that shall be mutually agreed upon between the Owner and CM at GMP execution. On or before the substantial completion date for each phase, the CM shall turn over the completed work for use and occupancy by the Owner for its intended purpose. Using the dates in the bullet list below, the CM and the Owner shall agree to a phased completion schedule that shall be incorporated into the Contract. That phased completion schedule shall be in accordance with Article 4.5.

- Phase 1 (Early Site Enabling): Complete 11/23/2022
- Phase 2A & 2B (2A: Early Superstructure Work / 2B: Construct New High School): Building Substantially Complete/Temporary Certificate of Occupancy 09/02/2025. Ready for Occupancy 12/02/2025.
- Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): Substantially Complete 07/09/2026.

4.5.2 The phased completion dates, as agreed to, shall be subject to extensions of time approved by the Owner, in the same manner as the Final Completion Date of the Entire Work may be subject to extensions of time.
4.5.3 In the event the CM fails to meet the Substantial Completion Date for each/any particular

Phase of the Work, and the Owner does not approve an extension to the phased Substantial Completion Date, the Owner shall be entitled to assess damages in accordance with Article 4.4.1, as applicable.

Article 5. Construction Manager's Services.

5.1 Preconstruction Services. Commencing upon the date of this Agreement, unless otherwise directed in a NTP issued by OWNER, the CM shall perform preconstruction services as provided in this Article and elsewhere in the Contract Documents. The CM's scope of services during the Preconstruction Phase is described in the Request for Proposals (RFP), a copy of which is incorporated by reference into this Agreement. Preconstruction services shall be considered complete when all Preconstruction Services as described in the RFP have been achieved including all sub-filed trade and subcontractor bidding services and the completion and execution of a GMP. It is expected that the CM meet on a bi-weekly (but not less than monthly) basis with the Designer, Project Manager, and/or Owner to perform live design review meetings.

5.1.1 Construction Planning. The CM shall attend regular Project meetings with OWNER, the Project Manager and the Designer. If requested by OWNER, the CM shall schedule and lead such meetings and keep (take) minutes of such meetings. The CM shall consult with OWNER, the Project Manager and the Designer concerning planning for construction of the Project. The CM shall make recommendations as to the purchase and assist in expediting the procurement of long lead items, which are required for the Project to ensure their delivery by the required dates. The CM shall review and, if appropriate, make recommendations with respect to the phasing of the Work, in conjunction with the needs of the Owner. The CM shall advise the Designer with respect to the division of the Work into subtrade categories to facilitate the development of bid and proposal packages, bidding and awarding of subcontracts, taking into consideration such factors as economies, time of performance, availability of labor and materials, and provisions for temporary facilities.

5.1.2 Construction Services. The CM's scope of services during the Construction Phase is described in the Request for Proposals, a copy of which is incorporated by reference into this Agreement.

5.2 Preconstruction and Construction Services. The CM shall perform its preconstruction and construction services, responsibilities, and obligations concurrently as necessary during the term of this Agreement.

5.2.1 Design Review. The CM shall review, on a continuous basis, the development of the Drawings, Specifications and other design documents produced by the Designer. The CM shall consult with OWNER, Project Manager and the Designer regarding the selection of materials, building systems and equipment, and shall recommend alternative solutions whenever design details impact construction feasibility, schedules, cost or quality (without, however, assuming the Designer's responsibility for design) and shall provide value engineering services to OWNER and Project Manager. Without limitation, the CM shall review the design documents for clarity, consistency, constructability, maintainability/operability and coordination among the trades, coordination between the specifications and drawings, and sequence of construction, including recommendations designed to minimize adverse affects of labor or material shortages. The CM reviews shall be provided in writing with detailed notations on the drawings and specifications and

coordinated with a detailed spreadsheet of the notations and recommended solutions in order to track the issues to final resolution. The CM shall attend meetings as necessary with the Designer, OWNER and the Project Manager in order to discuss and resolve all issues.

5.2.2 Master Development Schedule. The CM shall develop detailed project schedules, including a detailed phasing plan and logistics plan for the Work that allows the Owner to take use and occupancy of designated areas of the Work on a Phased basis, and in accordance with the milestone bid packages stated in Article 4.5 of this agreement. The CM will cooperate with the Project Manager during the development and analysis of these documents. The CM shall coordinate and integrate its Project schedules with scheduling information developed by the Project Manager and other parties. The requirements provided herein are in addition to and not in limitation of the CM's obligation to prepare and maintain the Baseline Critical Path Method (CPM) Schedule and other schedules as provided in the Contract Documents. The construction schedule shall be developed and provided to the Owner in native Primavera Scheduling software format (.XER) and contain such information as the Designer, Project Manager and OWNER require. The construction schedule shall be resource loaded for the Contractor and all subcontractors, with each resource identified by name, description, unit of measure, and calendar assignment. For each class of work included in the Contractor's schedule of values, the construction schedule shall show the percentage of completion to be obtained and the total dollar value of the work to be completed as of the first of each month until Substantial Completion. All calculations shall be on the basis of work in place, but not including the value of materials delivered but not in place. A forecast early completion date in the Contractor's schedule shall not be permissible as a basis for any additional compensation request as it is understood by all parties that the Contract value is based upon the Contractor and Subcontractor's staffing the Project through the Contractual milestone dates.

5.2.3 Cost Estimates. The CM shall provide four detailed construction cost estimates to the Owner during the Contract, as follows

(a) Within 14 calendar days (1) after CM receives the Schematic Design cost estimating documents, (2) after CM receives the Design Development Documents; (3) after CM receives 60% Complete Construction Documents; (4) after CM receives 90% Complete Construction Documents. The CM shall prepare, for the review of the Designer and the Project Manager, and approval of OWNER, detailed estimates of the Construction Cost (hereafter defined) with supporting data including but not limited to unit costs of materials, equipment and labor hours required to complete all sections of the work. Estimates are to be prepared in Uniformat II, Level 3 and CSI MasterFormat 6-digit format to Level 3 and MGLc.149 §44F (filed sub-bid) format including quantities of all materials and unit prices of labor equipment and materials as well as cost estimate for each item of work. As used herein, "Construction Cost" shall mean the total cost or, to the extent the Project is not completed, the total estimated cost of constructing the Project, including the Cost of the Work, the General Conditions Payment, General Requirements Payment, CM Contingency, and the CM Fee. The Construction Cost does not include costs of land acquisition, financing costs, Owner purchased furnishings and equipment, project manager fees or design fees. The CM shall provide value engineering analysis and recommendations during design and construction in order to maintain the limits of the project budget during design, and the Guaranteed Maximum Price (GMP), thereafter, and as requested by the Owner.

(b) The CM shall update and refine its estimate of Construction Cost at appropriate intervals agreed

to by OWNER, the Designer and the CM.

(c) Owner may, but shall not be required to, arrange for the preparation of its own periodic estimates of Construction Cost, to be performed by the Designer and/or the Project Manager. The CM shall work in good faith and in cooperation and coordination with the Project Manager and the Designer, and any other consultants involved in preparing estimates of Construction Cost, in order to reconcile any differences between cost estimates prepared by the CM and the cost estimates prepared by such other parties, to clarify assumptions upon which cost estimates are based, and otherwise to address any concerns or questions with respect to such cost estimates raised by the Designer, the Project Manager, OWNER or such other consultants in a timely manner. If the agreed-upon, reconciled estimate of Construction Cost exceeds the initial Construction Budget established by OWNER , the CM shall advise and cooperate with OWNER , the Project Manager, and the Designer in identifying, specifying, and recommending changes in, or additional specification of materials, equipment, component systems and types of construction, or other adjustments in the scope or quality of the Project (collectively, "Cost Reduction Alternatives"), including contingencies or alternative bid items, so as to facilitate revision of the design of the Project to reduce the Construction Cost so as to comply with the Owner's fixed limit of construction cost. Implementation of any Cost Reduction Alternative shall be subject to the approval of OWNER, and OWNER shall have the right, in its sole discretion, to choose which of the Cost Reduction Alternatives shall be implemented.

(d) The process and responsibilities of the CM described in this Section 5 shall also apply to any separate cost limits within the Construction Budget that have been established by OWNER for certain phases, components, or elements of the Work.

(e) In addition to the detailed cost estimates of Construction Cost required under subparagraph (a), the CM shall upon request by the Owner, provide additional cost estimating services related to value engineering and for estimating costs related to Proposed Change Orders, at no additional cost to the Owner.

5.2.4 Permits and Approvals. Consistent with the General Conditions, the CM shall assist OWNER and the Designer in identifying all governmental permits, user fees, approvals and licenses of any kind which must be obtained and be met in connection with the construction and use and occupancy of the Project The CM shall comply with all mitigation requirements in the permits that have been issued for the Project.

5.2.5.5 Progress Reports. The CM shall furnish to the Owner's Project Manager monthly reports which cover the progress of the work and which address but are not limited to: (a) compliance with the construction schedule, (b) status of shop drawings, submittals and RFIs, (c) status of MBE/WBE participation (contractual MBE/WBE and workforce hours by women & minorities), (d) status of LEED/CHPS documentation, (e) status of testing and inspection activities performed by the CM and subcontractors, (f) status of preparation and compliance with commissioning requirements, (g) status of Owner training, (h) status of change orders, (i) accounting of all costs associated with: budget holds, allowances, draws on CM contingency, back-charges, trade allowances and change orders to subcontractors & trades, and (j) other matters and costs related to the progress of work under the contract and as may be directed the Owner's Project Manager and/or the MSBA.

5.2.6 Subcontracts. Unless the Owner authorizes the CM to self-perform any of the Work during construction, or authorizes work to be completed by companies directly affiliated with the CM, all Work shall be performed by the CM pursuant to Subcontracts awarded by the CM in accordance with the General Conditions of the Contract, particularly Appendix C: Procedures for Award of Subcontracts. The CM shall perform the overall management of the effort required to solicit and prequalify, receive subbids and proposals and award subcontracts to the subcontractors who perform services hereunder, in accordance with the procedures specified in Appendix C, provided, however, that the Owner shall procure bids from Trade Contractors, as provided in Appendix C.

(a) The CM shall consult with OWNER with respect to the procurement of bids for all subcontracts. The CM understands and agrees that OWNER or the Project Manager may, to the extent described in the General Conditions of the Contract, Appendix C - Procedures for Award of Subcontracts, participate in negotiations with Subcontractors and that OWNER and its representatives shall have access to any documents submitted by all Trade Contractors and Other Subcontractors to the CM, for review as to compliance with bidding and proposal procedures and other requirements of the Contract Documents. No Subcontract or other agreement between the CM and any third party for the furnishing or supply of any labor, materials or equipment in the performance of the Work shall be entered into without OWNER's prior written approval. Such written approval by Owner may take the form of an approval of a list of subcontractors and the dollar value of the subcontracts that CM intends to execute on this Project. Standard forms of subcontract agreement for all Trade Contractors are attached to the General Conditions of the Contract. The CM shall include all costs, with respect to the procurement of bids for all subcontracts, however the Owner shall pay for reproduction costs associated with the procurement of bids for Trade Contractors. The Owner and/or Project Manager may, at their discretion, reject any proposed self-performance of work by the CM or by companies directly affiliated with the CM.

5.3 Construction Services. In accordance with the Notice to Proceed with Construction, the CM shall perform Construction Services as provided in these paragraphs and elsewhere in the Contract Documents.

5.3.1 Construction Cost Monitoring. The CM shall provide a system of Project cost monitoring and reporting and shall develop cash flow reports and forecasts in the format approved by OWNER upon the advice of Project Manager. The CM shall identify variances between actual costs and its estimated costs and shall immediately advise OWNER whenever projected costs exceed previous estimates.

5.3.2 Costs of Construction shall, in no event, exceed the Guaranteed Maximum Price that will be negotiated between CM and Owner.

5.3.3 Quality Assurance/Quality Control. In addition to the Owner's independent testing and inspection services, the CM shall be responsible for ensuring that adequate quality assurance and quality control programs are developed, implemented and enforced by the CM's staff and all Subcontractors.

5.3.4 Prevailing Wage. Work under this project is subject to the prevailing wage laws M.G.L.c. 149, s.26-27 H. The schedule for prevailing wages will be provided prior to solicitation of

subcontractor bids and the negotiation of the GMP. The CM and its subcontractors shall be responsible for anticipating the costs of future changes to the prevailing wage rates in their bid prices, provided that for change order work, the CM and the subcontractor will be entitled to apply the wage rates in effect at the time the extra work is performed.

5.3.5 CM Responsibility for Managing Construction. The CM shall be responsible for managing, coordinating, scheduling, and supervising all aspects of the construction of the Work, as described in this Agreement, the General Conditions, and all other Contract Documents.

5.4 General Requirements for Preconstruction and Construction Services

5.4.1 Design Related. CM shall provide Owner with recommendations and advice concerning design of the Project and modifications or alternatives. If the CM recognizes or discovers that any portion of the Drawings and Specifications are in error, unclear, ambiguous, or is at variance with applicable laws, the CM shall promptly notify the Designer, the Project Manager and OWNER in writing. By providing such notice, it is understood that the CM does not assume any obligations or responsibilities for the design of the Project, which obligations shall remain with the Architect. If, however, the CM proceeds with work based on Drawings and Specifications that the CM knows are in error, unclear, ambiguous, or at variance with applicable laws, without providing such notice to the Designer and the Project Manager, the CM shall bear all costs related to the correction of such work.

5.4.2 CM's Organization and Staff. The CM shall establish a table of organization and lines of communication required to carry out the requirements of this Agreement in order to organize and direct the efficient construction of the Project. A listing of the CM's key staff who will perform services directly on this Project, has been provided in CM's Proposal Exhibit 1 and is incorporated herein. All key staff shall be available for and actively participate in the performance of the services provided under the Contract Documents. Within thirty (30) days after execution of this Agreement, the CM shall furnish to OWNER a detailed organizational chart (the "Organizational Chart") for approval by OWNER. Such chart shall reflect the same persons as set forth in the Proposal unless otherwise approved by OWNER.

No substitution of any assigned and approved key staff shall be made by the CM without the prior written consent of OWNER in its reasonable discretion. Before any such substitution is made, the CM shall submit to OWNER the qualifications of any proposed replacement. The removal or replacement, without OWNER's consent, of any of the key staff listed in CM's Proposal, other than as a result of retirement, disability, death or bona fide termination of employment, shall constitute a material breach of this Agreement. In the instance where a substitution is accepted by the OWNER, the Project Manager and/or OWNER may determine an equitable reduction to the CM General Conditions. Similarly, if it is determined that the CM is not providing staffing as outlined in the General Conditions and above, the Project Manager and/or OWNER may elect to reduce the payment for General Conditions in lieu of any lump-sum monthly billing arrangements.

Article 6. Contract Price.

6.1 Contract Price.

6.1.1 OWNER shall pay to the CM the Contract Price for the CM's satisfactory performance of the Contract and completion of the Work. The "Contract Price" consists of the Preconstruction Services Fee described in Section 6.2.1, the General Conditions & General Requirements Amount described in Section 6.2.3, the Cost of the Work, as defined in Article 7, and the CM Fee as defined in Section 6.3. The total payments to the CM (the Contract Price) shall not exceed the Guaranteed Maximum Price ("GMP") to be agreed to by the Parties in a Contract Amendment, that will be negotiated after Contract execution.

6.1.2 For Change Orders or Contract Modifications authorized by the Owner pursuant to the Contract Documents, the Contract Price shall be adjusted as provided in Section 6.2.4 below and Article VII of the General Conditions and not otherwise. After the GMP has been agreed to by OWNER and the CM, any increase or decrease in the Contract Price authorized by OWNER by execution of a Change Order, shall increase or decrease the GMP, accordingly.

6.1.3 The CM's Fee Proposal, submitted on Exhibit 1, 1A, 1B, 1C and 1D, designates the contract amounts for the Pre-Construction Services Fee, the Construction Manager's Fee, the General Conditions and the General Requirements. Exhibit 1A, 1B, 1C and 1D are made part of this contract at Exhibit 1.

6.2 Contract Price Breakdown

6.2.1.1 The Owner may, after execution of the Contract, authorize the CM to spend additional amounts for testing and exploratory work, during the Pre-Construction Phase.

6.2.1.2 In the event that conditions arise that cause the Pre-Construction Services to be extended, the Owner reserves the right to negotiate a revision to the monthly amount of the Pre-Construction Services Fee, to reflect any changes in the CM's workload during the extended Pre-Construction Phase period. Those revisions may include a reduction in the value of the monthly Pre-Construction Services Fee, reflecting workload decreases or reductions in the number of the CM's personnel assigned to the Project.

6.2.3 General Conditions & General Requirements Amount. In consideration of the performance by the CM of the items of work described in the Contract Documents as General Conditions (GCs) & General Requirements (GRs), OWNER shall pay to the CM, the lump sum amount specified on Exhibit 1, for GCs/GRs. The Amount of GCs/GRs is a lump amount of The total dollar value for GC/GR Costs set forth in Exhibit 1 represents the maximum amount to be paid to the CM for all GC/GR Costs during the Project, unless Owner agrees to a Change Order that revises the cost items covered by GCs or GRs. Those revisions may include a reduction in the value of the monthly GC/GR Costs, reflecting decreases of the monthly GCs/GRs required on the Project.

6.2.4 Construction. During the Construction Period, monthly payments shall be made to the CM on account of General Conditions & General Requirements Costs. Prior to the commencement of construction services, the Owner and CM shall agree to a Schedule of Values for the payment of General Conditions & General Requirements during the Construction period.

6.2.5 General Conditions & General Requirements Mark-Up on Change Orders. The Construction Manager shall not be entitled to compensation for added General Conditions or General Requirements for additional work under a Change Order unless the Change Order results in an extension of Contract Time. In the event of a Contract Time extension via authorized Change Order, the General Conditions and General Requirements cost shall be itemized and submitted to THE OWNER for review, but shall only be considered when submitted as part of the same Change Order that modified the Contract Time.

6.2.6. General Conditions & General Requirements Breakdown. The CM shall provide a detailed breakdown of its General Conditions & General Requirements costs that complies with the cost breakdown required by the Massachusetts School Building Authority. Payments for the CM's invoices for General Conditions and General Requirements costs shall not be processed until the CM has provided a breakdown in a format that is acceptable to the OWNER and the MSBA.

6.3 Construction Manager's Fee

Construction Manager's Fee for Construction Services. In consideration of the performance of the Construction Services by the CM, OWNER shall pay to the CM a fee associated with performing the construction services in the amount identified in Exhibit 1 as CM Fee (OH&P). The Construction Manager's Fee is in the lump sum amount of Payment of the Construction Manager's Fee shall be made on a monthly basis. The amount of the monthly payments shall be determined by applying the percentage of the Cost of the Work approved for payment by OWNER , to the total amount of the Construction Manager's Fee set forth in Exhibit 1 and deducting from such value any amounts previously paid to the CM on account of the Construction Manager's Fee. OWNER and CM may alternatively agree to pay the Construction Manager's Fee based upon a fixed monthly amount, provided the cumulative amount of such monthly payments shall not exceed the Construction Manager's Fee.

6.4 No Retainage on Pre-Construction Services; Retainage on Payments During Construction.

The OWNER shall not assess retainage against the payments for the Pre-Construction Services Fee. Payment to the CM for the Cost of Work and the Construction Manager's Fee shall be subject to the procedures contained in Article VIII of the General Conditions, including a five percent (5%) retainage on monthly payments.

6.5 Guaranteed Maximum Price.

6.5.1 Upon the request of the OWNER, the CM shall submit to OWNER a proposed GMP, which shall be the sum of the estimated Cost of the Work, the Construction Contingency (hereafter defined), the General Conditions Amount, the General Requirements Amount, the CM Fee for Pre-Construction Services, and the Construction Manager's Fee. The CM shall include with the GMP proposal a written statement explaining the basis of the GMP, in form and substance satisfactory to

OWNER, which shall include at least:

(a) a list of the Project design documents upon which the GMP proposal is based;

(b) a list of GMP allowances and a statement of their basis;

(c) a list of GMP scope holds and a statement of their basis;

(d) a list of any assumptions, qualifications and clarifications made by the CM and mutually agreed upon by the Owner, the OPM and the Designer in the preparation of the GMP proposal to supplement the information contained in the Project design documents;

(e) a statement that the proposed GMP is based on the Baseline CPM Schedule and the Substantial Completion Dates for each phase of the work specified in this Agreement;

(f) the proposed GMP, including a detailed statement of the actual and estimated Cost of the Work organized in accordance with the categories of work used in the CSI (Construction Specification Institute) format with quantities, units, and unit rates, Preconstruction and Construction General Conditions & General Requirements Costs, allowances, Construction Contingency, Preconstruction Services Fee and Construction Manager's Fee and other items that comprise the GMP;

(g) a schedule of applicable alternate prices;

(h) a schedule of applicable unit prices; and

(i) the time limit for acceptance of the GMP proposal (which shall not be less than 90 days).

6.5.2 The CM shall meet with OWNER, the Owner's Project Manager and the Designer, as necessary, to review the GMP proposal and the written statement of its basis. In the event that OWNER, Owner's Project Manager, or the Designer discover any inconsistencies or inaccuracies in the GMP proposal and accompanying information, they shall promptly notify the CM, which shall make appropriate revisions thereto. OWNER may elect, in its sole discretion, to accept or not to accept the CM's GMP proposal, as such proposal may be revised by agreement with the CM and OWNER. Prior to OWNER 's acceptance of the CM's GMP proposal, the CM shall not incur any cost to be reimbursed by OWNER, except as provided in this Contract or as OWNER may specifically authorize in writing. If OWNER accepts the CM's GMP proposal, OWNER and CM shall execute and deliver within fifteen (15) days after such acceptance, an amendment to this Agreement, in form acceptable to OWNER and the CM incorporating the GMP amount into the Contract (the "GMP Amendment").

6.5.3 If OWNER does not accept the CM's GMP proposal, OWNER may elect to solicit bids or proposals for the construction of the Project from other contractors, using any solicitation method or methods chosen by OWNER, consistent with applicable laws and procedures, or, if OWNER determines that it is in its best interest to do so, OWNER may enter into negotiations for a contract with one or more of the offerors that submitted proposals in response to the Request for Proposals for this Contract. If OWNER does not accept the CM's GMP proposal within the time limit for acceptance specified in the

GMP proposal, as it may be extended by agreement of the parties, then this Contract shall terminate upon the completion of the CM's performance of the Work then in progress or upon notice from OWNER as provided in the General Conditions.

6.5.4 In the event the Contract is terminated for failure to agree to a GMP, OWNER's obligations to CM shall be limited to those provided in Article XVII, para. 2 of the General Conditions, for a Termination for Convenience.

Article 7. Cost of the Work.

7.1 Cost of the Work. The "Cost of the Work" shall mean those costs listed in this Section. Cost of the Work shall not include any item included in the General Conditions or General Requirements Costs or the CM's Fee for Pre-Construction Services or the CM's Fee for Construction Services. Costs of the work include:

7.1 .1 Subcontract Costs. Payments made by the Construction Manager to any Subcontractor in accordance with the requirements of an approved Subcontract.

7.1.2 Costs of Materials and Equipment Incorporated in the Completed Construction

(a) Costs, including transportation, of materials and equipment incorporated or to be incorporated in the completed construction, less all discounts and rebates.
(b) Costs of materials described herein which are in excess of those actually installed, but which are required to provide reasonable allowance for waste and spoilage. Unused excess materials, if any, shall be delivered to OWNER at the completion of the Work or, at OWNER's option, shall be sold by the Construction Manager. Amounts realized, if any, from such sales shall be credited to OWNER as a deduction from the Cost of the Work.

7.1.3 Costs of Work CM Self Performs. The CM's direct costs for construction work it self-performs, provided that in no event shall such work include cost items included in the General Conditions or General Requirements Costs, the CM's Fee for Pre-Construction Services or the CM's Fee for Construction Services.

7.1.4 Emergencies and Repairs to Damaged or Nonconforming Work.

The following costs incurred by the Construction Manager shall become a part of the Cost of the Work:

(a) in taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property, as provided in the General Conditions or General Requirements.
(b) in repairing damaged Work, provided that such damage did not result from the fault or negligence of the Construction Manager or the Construction Manager's personnel or any Subcontractor, and only to the extent that the cost of such repairs is not recoverable by the Construction Manager from others or the Construction Manager is not compensated therefor by insurance or otherwise.
(c) in correcting defective or nonconforming Work, provided that such defective or

nonconforming Work did not result from the fault or negligence of the Construction Manager or the Construction Manager's personnel or any Subcontractor or material supplier, and only to the extent that the cost of correcting the defective or nonconforming Work is not recoverable by the Construction Manager from third parties or the Construction Manager is not compensated by insurance or otherwise.

Any costs incurred by the CM which would otherwise be within the scope of this Subsection, but are excluded because such costs result from the fault or negligence of the CM, the CM's personnel, any Subcontractor or any other party for whom the CM is responsible, may only be charged against the Construction Contingency to the extent permitted by Paragraph 7.2.1 (e), and any such costs incurred after the Construction Contingency has been exhausted shall not be reimbursable as a Cost of the Work.

If the total cost to repair damaged, defective, or nonconforming Work attributed to CM Contingency or Holds exceeds 0.10% of the total GMP award value (Minus preconstruction), subsequent repair/rework costs will be considered to be due to negligence by the CM and shall be paid directly from the CM Fee or CM General Conditions.

7.1.5 Miscellaneous Costs of the Work

The following costs shall be included in the Cost of the Work:

(a) Subcontractor Bond premiums.
(b) Royalties and license fees paid for the use of a particular design, process or product required by the Contract Documents in accordance with the General Conditions.
(c) Other costs incurred in the performance of the Work if and to the extent approved in advance in writing by OWNER as Costs of the Work.

7.2 Construction Contingency.

7.2.1 The term "Construction Contingency" shall mean the line item included by the CM in the GMP and the Schedule of Values that is available to cover the net amount of any additional costs resulting from unforeseen conditions and events not reasonably anticipated at the time that the CM awards a Subcontract or the parties execute the GMP Amendment, as applicable, to the extent that such conditions or events do not result in or constitute a change in the Work. Examples of such unforeseen conditions and events include, but are not limited to, the following:

(a) minor concealed or unknown conditions encountered in the performance of the Work which are determined not to be materially different from those indicated in the Contract Documents;
(b) unanticipated Scope Hold cost overruns during the CM's procurement of Subcontracts or other purchases of materials or labor costs, provided that the same are not caused by the fault, negligence, or breach of contract of the CM or any Subcontractor; in the event of a scope hold overrun, total Construction Contingency funding may not exceed 30% of the initial scope hold value. Costs beyond 30% of the initial scope hold value, at the Project Manager and/or OWNER's discretion, shall only be paid directly from either the CM Fee or CM General Conditions.
(c) expediting or acceleration costs required to meet the Baseline CPM Schedule, as long as the same

are not made necessary by the fault or negligence of the CM or any Subcontractor; and

(d) such other unforeseen events and conditions as may be specified in the Contract Documents as chargeable to the Construction Contingency.

(e) additional costs associated with correction of defective or non-conforming Work, or repair of damaged work, provided that the CM shall have first used commercially reasonable efforts to recover the costs of such correction through any applicable Subcontracts (including pursuing the Subcontractors' sureties), and provided that such costs did not result from the fault, negligence or breach of contract of the CM, and only to the extent that the cost of such repair is not recoverable by the CM from others and the CM is not compensated therefor by insurance or otherwise. If the total cost to repair damaged, defective, or nonconforming Work attributed to CM Contingency or Holds exceeds 0.10% of the total GMP award value (Minus preconstruction), subsequent repair/rework costs will be considered to be due to negligence by the CM and shall be paid directly from the CM Fee or CM General Conditions.

After execution of the GMP Amendment, if the contract price of any subcontract as awarded is less than the Scope Hold amount carried for such subcontract in the GMP breakdown, the Construction Contingency shall be increased by the amount of such savings, until the combined value of all buyout underrun savings exceeds 25% of the original GMP Construction Contingency value at which point the savings shall shift to a general purpose allowance for exclusive use by the OWNER.

7.2.2 The CM shall maintain and update monthly a report describing each item that has been funded from the Construction Contingency and each item for which the CM has requested funding from the Construction Contingency, that is pending with the Owner.

7.2.3 Costs authorized to be reimbursed from the Construction Contingency by Paragraph 7.2.1 shall be paid to the CM as Cost of the Work only if and to the extent reasonably approved by OWNER. The Construction Contingency shall be reduced by the additions to the Cost of the Work resulting from the use of the Construction Contingency as authorized by Paragraph 7.2.1. In the event the CM demonstrates that it has incurred or is about to incur additional costs for unforeseen conditions or events that fall within the parameters of subparagraphs (a) through (e) of Paragraph 7.2.1, the CM shall be entitled to be paid for such costs from the Construction Contingency within the limits of the Contract.

7.2.4 Contingency Interim Return/Balance. Prior to the execution of the GMP, the CM and the OWNER shall mutually agree to a milestone schedule to target contingency balances that shall be returned to the OWNER pending the financial status of the project and assessment of risk for both the CM and the Owner. The method of contingency reductions (percentage of total contingency or specified values) shall be defined prior to the execution of the GMP. At the completion of each milestone, the CM shall credit uncommitted contingency and buyout balances to the extent they are in excess of the milestone targets established prior to the GMP. If, at the time the OWNER issues the final payment to the CM pursuant to Article VIII of the General Conditions of the Contract, there is a balance in the Construction Contingency, such balance shall be the sole property of the OWNER.

7.3 Non-Compensable Costs. Neither the Cost of the Work nor the General Conditions or General Requirements Costs shall include compensation for any of the items set forth below:

(a) Salaries, bonuses and other compensation of the Construction Manager's personnel stationed at the

Construction Manager's principal offices, or other offices, other than the site office for the Project, unless those personnel are specifically listed on Exhibit 1, 1A, 1B, 1C or 1D, or unless there is a mutual agreement between Owner and CM to include those personnel costs in either General Conditions costs or the Cost of Work.

(b) Expenses of the Construction Manager's principal offices, site office or other offices, except the site office for this Project (including, without limitation, in-house computer costs, mail, overnight, fax, reproduction, cellular telephone, local travel and other costs of doing business, services, and related expenses to maintain such offices).

(c) Overhead and general expenses of any kind, including but not limited to office or fabrication shop overhead and drafting, other than the items covered by the General Conditions or General Requirements Amounts.

(d) The CM's capital expenses, including interest on the CM's capital employed for the Work.

(e) Costs of machinery and equipment owned or rented by the CM, except as specifically provided in the Contract and approved by the Owner.

(f) Costs incurred due to the fault, negligence or breach of contract of the CM, Subcontractors, anyone directly or indirectly employed by any of them, or for whose acts any of them may be liable, including, but not limited to, death or injury to person or damage to property, the correction of damaged, defective or nonconforming Work, disposal and replacement of materials and equipment incorrectly ordered or supplied, unanticipated cost overruns incurred by the CM in the procurement of Subcontracts, materials or labor, and making good damage to property not forming part of the Work, except: (i) to the extent reimbursement is received through the recovery of insurance proceeds, or (ii) to the extent such items may be charged to the Construction Contingency with the approval of the Owner pursuant to Paragraph 7.2.1(e).

(g) Cost for purchase and maintenance of tools, materials, supplies and facilities not consumed during construction or incorporated into the Work, except as specifically provided in the Contract and approved by the Owner.

(h) Penalties, fines or costs imposed by governmental authorities in connection with, or resulting from any violation of, or noncompliance with Applicable Laws, by the Construction Manager or any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable.

(i) Any legal fees incurred by the Construction Manager, unless the same are incurred at the written direction, or with the prior written approval, of OWNER.

(j) Travel or meal expenses and personnel relocation expenses except for personnel who have been assigned to the Project.

(k) General Conditions or General Requirements Costs in excess of the total of compensation to be paid to CM for all General Conditions & General Requirements as set forth in Exhibit 1.

(1) Any cost incurred by the CM as a result of a knowing violation of or failure to comply with this Agreement or the other Contract Documents by the CM.

(m) Costs that would cause the GMP to be exceeded.

(n) Costs incurred by the CM after final payment; provided, however, that to the extent there is a balance in the Construction Contingency remaining at final payment, such Contingency shall be available to pay costs incurred during the one year period after substantial completion, but only if such Contingency would have been available, subject to reasonable approval by Office, to pay such costs had such costs been incurred prior to final payment and only if CM has satisfied Owner that it has made commercially reasonable efforts to have subcontractors and suppliers pay for costs relating to defective or incomplete work items or warrantee items.

7.4 Discounts, Rebates, Refunds and Expenses.

Cash discounts obtained on payments made by the CM shall accrue to OWNER if (a) before making the payments the CM included them in an Application for Payment and received payment therefor from OWNER, or (b) OWNER has deposited funds with the CM with which to make payments; otherwise, cash discounts shall accrue to the CM. The CM shall notify OWNER of the availability of any cash discounts so that OWNER may elect to pay or deposit such funds with the CM in order to obtain such cash discount. Such cash discounts and any other trade discounts, rebates, refunds and other amounts received from sales of surplus materials and equipment shall be credited to the Cost of the Work, and the CM shall make provisions so that they can be secured and credited accordingly. Any utility or government rebates associated with the Work are the property of the Owner.

7.5 Accounting Records

7.5.1 The Construction Manager shall check all materials, equipment and labor used on the Work, and shall keep full and detailed accounts and exercise controls as may be necessary for proper accounting and financial management under this Agreement. All books and records shall be maintained in accordance with generally accepted accounting principles, consistently applied. Without limitation, the CM shall comply with the requirements set forth in Article XI of the General Conditions. OWNER and its authorized representatives shall, upon request by OWNER, be afforded copies of, and at all times shall be afforded access to, all of the Construction Manager's records, books, correspondence, instructions, drawings, receipts, invoices, vouchers, memoranda, estimates, budgets, breakdowns, accounting data, bid proposals, cost control information and any other documents and data relating to this Agreement, including data in electronic media or any other media (collectively, "records") and the Construction Manager shall preserve all such records for a period of six years, or for such longer period as may be required by law, after Final Payment. With respect to work performed by the CM's own forces on a lump sum basis, the CM shall only be required to maintain certified payrolls, documentation required by the Supplementary Conditions for Equal Employment Opportunity, Non-Discrimination and Affirmative Action, and such other records as are required by Applicable Laws or the terms of the Contract Documents.

7.5.2 Without limitation of the foregoing, OWNER shall have the right, at any time and from time to time, upon notice to the Construction Manager, to audit the Construction Manager's records in connection with the Work at the Construction Manager's offices. The Construction Manager shall facilitate any such audit by making necessary facilities available to OWNER and its accountants or other representatives for up to two years after substantial completion of the project.

7.5.3 Subcontractors shall have the same obligations to maintain books and records and to permit audits by the Construction Manager or OWNER as are applicable to the Construction Manager under the Contract Documents.

7.5.4 If any inspection of the Construction Manager's or any Subcontractor's books, records or other documents reveals an overcharge, the Construction Manager shall pay OWNER or, at OWNER 's election, OWNER may reimburse itself by taking as a credit against future payments due the Construction Manager, an amount equal to the overcharge.

Article 8. Payments to Construction Manager.

8.1 Based upon Applications for Payment submitted by the CM, OWNER shall make payments to the CM on account of the Contract Price as provided in Article VIII of the General Conditions of the Contract, the provisions of the Owner-Construction Manager Agreement and elsewhere in the Contract Documents.

Article 9. Equal Employment Opportunity, Nondiscrimination and Affirmative Action.

9.1 The CM and all of its Subcontractors shall comply at all times and in all respects with Applicable Laws affecting or regulating employment of persons in connection with the Work, and with the provisions in the General Conditions of the Contract relating to Equal Employment Opportunity, Nondiscrimination and Affirmative Action.

Article 10. Miscellaneous Provisions.

10.1 Successors and Assigns. OWNER and the CM bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. Neither the CM nor any partner of the CM shall assign or transfer the Contract or sublet or subcontract it (other than subcontracting portions of the Work as expressly permitted by and in accordance with the Contract Documents), or otherwise transfer or assign any of its or their rights or obligations under all or any portion of the Contract Documents without the prior written consent of OWNER, which consent may be withheld by OWNER in its sole discretion, nor shall the CM or any partner of the CM assign any moneys due or to become due to it hereunder, without such prior written consent of OWNER. Any assignment of the Contract or any interest therein by the CM or any partner of the CM without the prior written approval of the OWNER, shall be void, and the assignee in such case shall acquire no rights in the Contract or in such moneys. OWNER may assign the Contract to any successor or assignee of OWNER's interests, provided that OWNER demonstrates to the reasonable satisfaction of the CM that such successor or assignee has the capability of fulfilling OWNER's obligations under the Contract.

10.2 Additional Information. Recognizing that OWNER may find it necessary during the progress of the Work to establish the current status of performance under the Contract Documents, the CM shall, without limitation of any other requirements of the Contract Documents, promptly provide upon request statements, documents or information to OWNER, the Project Manager and the Designer or others regarding the status of the Work, compliance of the Work with the Contract Documents, compliance by the CM or any Subcontractor with the Contract Documents, the names of Subcontractors or suppliers, amounts due or to become due or amounts previously paid to Subcontractors or suppliers, estimates of the portion of the Work completed and the cost of completing the Work, and such other matters within the scope of the CM's performance under the Contract Documents as OWNER may reasonably require.

10.3 Information Confidential. The CM shall treat as confidential any information relating to the Project that is specifically designated or identified by OWNER as confidential or proprietary and shall not permit the release of such information to other parties without OWNER's prior written authorization.

10.4 Governing Law. The Contract shall be governed by the laws of the Commonwealth of Massachusetts.

10.5 No Personal Liability. No member, officer, consultant, volunteer, participant, employee, agent or representative of OWNER, Project Manager or Designer shall be personally liable to the CM under any term or provision of this Contract for OWNER 's payment obligations or otherwise, or because of any breach hereof.

10.6 Conflict of Interest. The CM shall familiarize its employees assigned to perform services under this Agreement with the provisions of Chapter 268A of the Massachusetts General Laws (the Massachusetts conflict-of-interest statute). The CM acknowledges that OWNER is a "municipal agency" for purposes of the aforementioned statute and that the CM is an "interested party" for purposes of the statute. Accordingly, the CM, its employees and agents shall not offer or provide any employee of OWNER, the Project Manager, or the Designer any gift, gratuity, favor, meal, entertainment, loan or other item of monetary value. The CM warrants and represents that it currently has no interest and shall not acquire any interest, direct or indirect, which would be adverse to or conflict in any manner with the performance of its services under this Agreement or with the interest of OWNER or the Project. The CM further agrees that in the performance of this Agreement no person or entity having any such adverse or conflicting interest shall be employed or granted a subcontract. Except with OWNER's knowledge and express consent, the CM shall not engage in any activity, or accept any employment, interest or contribution that would reasonably appear to be adverse to the interests of OWNER or to compromise the CM's professional judgment with respect to the Project. The CM has a continuing obligation to divulge to OWNER all circumstances of its relationships with third parties, as well as any other interests that may have an effect on OWNER or the Project at the time of execution of this Agreement or during its performance. If OWNER believes that there is or has been a conflict of interest, or the appearance of a conflict of interest, it will so notify the CM. The CM shall make full disclosure of all material facts, and shall have a period of thirty (30) days after receipt of such notice to cure the conflict of interest or the appearance of conflict of interest, including the right to request a meeting with the OWNER to explain its position. If the conflict of interest or appearance of conflict of interest is not cured to the satisfaction of OWNER or the controversy otherwise resolved prior to expiration of such thirty (30) days period, the CM shall be deemed to be in default of this Agreement and OWNER may exercise any remedies available to it under this Agreement or applicable law.

10.7 Termination of Contract. The Contract may be terminated as provided in Article XVII of the General Conditions.

10.8 Exhibits. The following Exhibits are attached to and incorporated in this Agreement:

Exhibit 1.	CM Contract Pricing Summary
Exhibit 2.	Insurance Certificates and Bonds (may be added after contract execution and prior to construction services).
Exhibit 3.	Prevailing Wage Rates (may be added after contract execution and prior to construction services).

Article 11. Approved Subcontractors. No Trade Contractors or Other Subcontractors shall be used to perform any portions of the Work other than the work described in their subcontracts, without the prior written approval of OWNER.

Article 12. Certifications. Pursuant to M.G.L. c. 62(c), s.49 (a), the individual signing this Contract on behalf of the Construction Manager hereby certifies, under the penalties of perjury, that to the best of his or her knowledge and belief the Construction Manager has complied with any and all applicable state

and federal tax laws. The individual signing this Contract on behalf of the Construction Manager further certifies under penalties of perjury that the Construction Manager is not presently suspended or debarred from doing public construction work in the Commonwealth under the provisions of M.G.L. c. 29, s. 29F, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder and is not presently suspended or debarred from doing public construction work by any agency of the United States.

Article 13. Minority Business Enterprise and Women Business Enterprise Participation Goals and Minority/Women Workforce Utilization Percentages See Appendix A and Appendix B to the General Conditions of the Contract and Article XIII of the General Conditions of the Contract.

Article 14. Contract Execution

IN WITNESS WHEREOF, the parties have caused this instrument to be executed in triplicate as of the date set forth above.

OWNER – NEMT

Northeast

By: _____

Date: 9/28/21

Name: David DiBarri.

Title: CEO of NEMT

CONSTRUCTION MANAGER

GILBANE BUILDING CO.

By: _____

Date: 9/20/2021

Name: MICHAEL A. OBRIEN

Title: SR. VICE PRESIDENT

I certify that the amount of _____ is available for compensation to the CM for the work described in this Contract.

_____

NEMT Financial Officer

Approved as to Form:

_____

Solicitor

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL SCHOOL DISTRICT

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL PROJECT

CONSTRUCTION MANAGER AT RISK CONTRACT

GENERAL CONDITIONS OF THE CONTRACT

TABLE OF CONTENTS

ARTICLE I: DEFINITION OF TERMS

ARTICLE II: EXECUTION OF THE CONTRACT, SCOPE OF WORK, INTERPRETATION OF CONTRACT DOCUMENTS

1. **Execution**
2. **Scope of Work**
3. **Interpretation**
4. **Distribution of Work**
5. **Subcontracts**
6. **Contract Price**

ARTICLE III: CONTROL OF WORK / ADMINISTRATION OF THE CONTRACT

1. **Designer**
2. **Right of Access to Work**
3. **Inspection No Waiver**

ARTICLE IV: GENERAL PERFORMANCE OBLIGATIONS OF THE CM

1. **Review of Contract Documents and Field Conditions**
2. **Supervision and Construction Procedures; Coordination; Cutting, and Patching**
3. **Key Personnel**
4. **Labor**
5. **Notices and Permits**
6. **Excavation**
7. **Corrections to the Work; Inspection No Bar To Subsequent Corrections**
8. **School Project: No Contact with Students and CORI Reporting**
9. **Sanitary Facilities**
10. **Temporary Offices**
11. **Contract Documents and Samples at the Site**
12. **Telephones**
13. **Safety Laws, Regulations and Practices**
14. **Debris and Chemical Waste**
15. **Weather Protection**
16. **Furnishings and Equipment**
17. **Sales Tax Exemption and Other Taxes**
18. **Final Cleaning**
19. **Maintenance Data**

20. **Closeout Procedures**

ARTICLE V: MATERIALS AND EQUIPMENT

1. **Materials Generally**
2. **Shop Drawings, Product Data, and Samples**
3. **Tests**
4. **"Or Equal" Submissions**
5. **Delivery and Storage of Materials; Inspection**
6. **Defective, Damaged, Deteriorated Materials and Rejection Thereof**

ARTICLE VI: PROSECUTION AND PROGRESS

1. **Beginning, Progress Schedule, and Completion of Work**
2. **Failure to Complete Work on Time - Liquidated Damages**
3. **Delays; Statutory Provisions**
4. **Use and Occupancy Prior To Final Acceptance**
5. **Certificate of Substantial Completion, Final Completion**
6. **One Year Warranty Repair List and Inspection**

ARTICLE VII: CHANGES IN THE WORK

1. **Change Orders Generally**
2. **Methods of Computing Equitable Adjustments**
3. **Work Performed Under Protest**
4. **False Claims, Statutory Provisions Regarding Changes**

ARTICLE VIII: PAYMENT PROVISIONS

1. **Schedule of Values**
2. **Payment Liabilities of the CM**
3. **Retention of Moneys by THE OWNER**
4. **Applications for Payment**
5. **Periodic Payments (M.G. L. c. 30, s. 39K)**
6. **Termination for Failure to Complete Punchlist**
7. **Payment of Subcontractors (M.G.L.c. 30, s. 39F)**
8. **Final Payment; Release of Claims by CM**

ARTICLE IX: GUARANTEES AND WARRANTIES

1. **General Warranty**
2. **Special Guarantees and Warrantees**

ARTICLE X: MISCELLANEOUS LEGAL REQUIREMENTS

1. **CM to Be Informed**
2. **Compliance with All Laws**

ARTICLE XI: CM'S ACCOUNTING METHOD REQUIREMENTS (M.G.L. c., s. 39R)

1. **Definitions**
2. **Record Keeping**
3. **Statement of Management Controls**

4. **Annual Financial Statement**
5. **Bid Pricing Materials**

ARTICLE XII: EQUAL EMPLOYMENT OPPORTUNITY, NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM (See Appendix A.)

ARTICLE XIII: GOALS FOR PARTICIPATION BY MINORITY BUSINESS ENTERPRISES AND WOMEN BUSINESS ENTERPRISES (EXECUTIVE ORDER 390) (See Appendix B)

ARTICLE XIV: INSURANCE REQUIREMENTS

1. **Insurance Generally**
2. **CM's Commercial General Liability**
3. **Vehicle Liability**
4. **Pollution Liability**
5. **Worker's Compensation**
6. **Builder's Risk Property Coverage Insurance**
7. **Umbrella or Excess Liability Coverage**
8. **Additional Types of Insurance and Deductibles**

ARTICLE XV: INDEMNIFICATION

1. **Generally**
2. **CM's Indemnification of MSBA**
3. **Asbestos Abatement Subcontractor Indemnification**
4. **Designer's Action**
5. **Survival**

ARTICLE XVI: PERFORMANCE AND PAYMENT BONDS

1. **CM Bonds**
2. **Subcontractor Bonds**
3. **Cost of Bond Premiums**

ARTICLE XVII: TERMINATION OF THE CONTRACT

1. **Termination for Cause**
2. **Termination for Convenience**
3. **CM's Duties Upon Termination for Convenience**

ARTICLE XVIII: MISCELLANEOUS PROVISIONS

1. **No Assignment by CM**
2. **Certificate of Appropriation**
3. **Claims by Others Not Valid**
4. **No Personal Liability by Public Officials**
5. **Severability**
6. **Choice of Laws**
7. **No Waiver of Subsequent Breach**
8. **Remedies Cumulative**
9. **Notices**
10. **Interpretation of Contract – Cost of Work**

APPENDIX A -- EQUAL EMPLOYMENT OPPORTUNITY, NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM

APPENDIX B -- GOALS FOR PARTICIPATION BY MINORITY BUSINESS ENTERPRISES AND WOMEN BUSINESS ENTERPRISES

APPENDIX C -- PROCEDURES FOR AWARD OF SUBCONTRACTS

APPENDIX D – FORM OF TRADE CONTRACT

APPENDIX E – SCHEDULING SPECIFICATION

[Space Intentionally Left Blank]

ARTICLE I: DEFINITION OF TERMS

The following words shall have the following meanings as used in this Contract:

Approval: (or Approved): An approval in writing signed by the authorized signatory of THE OWNER. Depending upon the nature of the approval, the Designer or the Project Manager may, when authorized by the Owner, issue approvals on the Owner's behalf.
Architect: The architect identified in the Owner-CM Agreement, also referred to as the Designer.
As directed, as permitted, as required, as determined or words of like effect: The direction, permission, requirement or determination of the Owner unless otherwise stated in the Contract Documents. Similarly, *approved*, *acceptable*, *satisfactory* or words of like import shall mean approved by or acceptable or satisfactory to the Designer and THE OWNER.
Certificate of Use and Occupancy: A certificate signed by the Designer pursuant to the requirements of Article VI of these General Conditions of the Contract, indicating that (1) the Work has been completed in accordance with the Contract Documents, except for Punch List items, (2) certificates of inspection, testing and/or approval (including a certificate of occupancy under the Building Code), operating permits for any mechanical apparatus which may be required to permit full use and occupancy of the Work by its intended users have been delivered to THE OWNER, (3) any applicable written warranties, operating instructions and related materials have been delivered to THE OWNER, (4) completion of all required training to allow THE OWNER to fully understand and operate all new systems correctly per manufacturer's instructions and (5) the Work may be used for its intended purpose without substantial inconvenience or interference.
Change Order: (1) A written order not requiring the consent of the CM, approved by the Owner and signed by the Project Manager and designated as a Change Order, directing the CM to make changes in the Work within the general scope of the Contract.
Construction Manager, Contractor, CM and General Contractor These words are used interchangeably and mean the person, corporation or other entity with whom THE OWNER has executed the CM Contract.
Construction Manager's Key Personnel: The personnel listed in the Construction Manager's Proposal and the Owner-CM Agreement, all of whom shall be dedicated to the Project on a full time basis, unless otherwise agreed to.
Contract Documents: The documents listed in Article 2 of the Owner-CM Agreement.
Day: calendar day.
Designer: The architect or engineer identified as the Designer in the Owner-CM Agreement.
Drawings: The Drawings are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including Plans, elevations, sections, details, schedules, and diagrams.
Final Acceptance: The written determination by THE OWNER upon recommendation of the Designer, that the Work has been 100% completed, except for the CM's indemnification obligations, warranty obligations, obligations to continue to maintain insurance coverage for the time periods provided in the Contract Documents, and any other obligations which are intended to survive Final Acceptance and/or the termination of the Contract.
GMP Allowance: Also commonly referred to as an "Allowance" or "Owner Allowance". A GMP cost placeholder within the CM's Cost of the Work which is utilized for scope that is difficult to define or may be influenced by factors which cannot be anticipated by the CM. This is a budget placeholder for unknown or unclear scope with an unidentifiable risk and as such any overrun of an individual GMP Allowance shall be funded from the Owner's Construction Contingency cost account.
GMP Hold: Also commonly referred to as a "Hold" or "Scope Hold". A GMP cost placeholder within the CM's Cost of the Work which is utilized for scope that is easily defined but not yet bought out or competitively priced by the CM. This is a budget

placeholder for known scope with a calculable risk and as such any overrun of an individual scope hold is to be covered by the CM Contingency cost to the extent permitted by the Owner-CM Agreement.
Laws: All applicable statutes, regulations, ordinances, codes, laws, orders, decrees, approvals, certificates and requirements of governmental and quasi-governmental authorities.
MSBA: The Massachusetts School Building Authority which has agreed to finance a portion of the costs for the Project, which procedures require the Owner and CM to submit payment related information in a format acceptable to the MSBA.
Notice to Proceed (NTP): The written notice provided by THE OWNER to the CM which authorizes the CM to commence the Work as of a date specified therein, from which date the times specified in Article 4 of the Owner-CM Agreement are measured. THE OWNER may issue more than one NTP, for Preconstruction and Construction Services, in which case the date from which the time for completion of construction is measured shall be as stated in the appropriate NTP.
Or equal (or words of like import): Equal in the opinion of THE OWNER determined pursuant to the provisions of M.G.L. c.30, s. 39M and the provisions of the Contract.
Owner: The Northeast Metropolitan Regional Vocational School District, acting by and through its authorized employees and agents.
Owner-CM Agreement: The Owner-Construction Manager Agreement between the Owner and the CM for the Project, which is incorporated into the Contract Documents.
Plan(s): Drawing(s).
Progress Schedule: The progress schedule submitted by the CM and approved by THE OWNER in accordance with the Contract Documents.
Project: The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by separate contractors.
Project Manager: The Owner's Project Manager also referred to as the "Project Manager". identified in the Owner-CM Agreement.
Punch List: A list of items determined by THE OWNER upon the recommendation of the Designer, to be minor, incomplete or unsatisfactory work items that do not materially impair the use of the Work by THE OWNER for its intended purpose.
Clerk of Works or Owner's Representative: The on-Site representative of THE OWNER, who may be an employee of the Project Manager or may work directly for the Owner. The Clerk of Works or Owner's Representative has no authority to make changes in the work, interpret provisions of the Contract, approve or disapprove payment requests from the CM, or otherwise provide direction to the CM.
Samples: Samples are physical examples, that illustrate materials, equipment, or workmanship and establish standards by which the Work will be judged.
Schedule of Values: The schedule prepared by the CM and approved by THE OWNER pursuant to Article VIII of these General Conditions of the Contract which allocates the Contract Price to the various portions of the Work and is used as a basis for determining payments due to the CM.
Shop Drawings: Drawings, diagrams, details, schedules, and other data specially prepared for the Work by the CM or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate a portion of the Work.
Site: The land and, if any, building(s) or space within any such building(s) on which or in which the CM is to perform the Work.
Specifications: The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards, and workmanship for the Work and performance of related services.
Subcontractor: Person or entity with whom the CM or a subcontractor contracts in order to perform the Work, except as otherwise specifically provided or required herein or by Law. "Subcontractor" also means "Trade Contractor" except when otherwise specified.
Substantial Completion: "Substantial Completion" shall occur when (1) the CM fully completes the Work or substantially completes the Work, or a designated Phase thereof, so

that the value of the Work remaining to be done is, in the estimate of the Designer, less than one percent of the adjusted contract price, or (2) the CM substantially completes the Work and THE OWNER takes possession for occupancy, whichever occurs first.
Superintendent: The licensed construction supervisor who is an employee of the CM designated to be in full time attendance at the Site throughout the prosecution and progress of the Work and who shall have complete authority to act for the CM.
Trade Contractor: Subcontractors under Contract with the CM to perform the work of the trades listed in paragraph 1.1 of the Procedures for Award of Subcontracts at Appendix C, and selected under the process authorized in M.G.L. c. 149A and Section I of the aforementioned Procedures by the CM. Sometimes referred to as "Filed Subcontractor" or "Filed Sub bidder".
User Agency: Northeast Metropolitan Regional Vocation School District (NEMT).

Other terms, abbreviations and references are defined as they appear herein.

ARTICLE II: EXECUTION OF THE CONTRACT, SCOPE OF WORK, INTERPRETATION OF CONTRACT DOCUMENTS, DISTRIBUTION OF WORK, SUBCONTRACTS

1. Execution.

The execution of the Owner – CM Agreement by the CM is a representation that the CM has visited the Site, has become familiar with local conditions under which the Work is to be performed, has correlated observations at the site with requirements of the Contract Documents and is aware of requirements contained in the permits that have been/will be issued that apply to the construction of the work as well as the requirements of the MSBA, as stated in the Project Funding Agreement between the MSBA and the Owner.

2. Scope of Work.

The Work consists of all the work identified in the Contract Documents. The Work includes Pre-Construction Services the CM has agreed to provide as well as the completed construction required by the Contract Documents and includes all labor, tools, materials, supplies, equipment, permits, approvals, paperwork, calculations, submittals, and certificates necessary to develop, construct and complete the Work in accordance with all Laws, and all construction and other services required to be supervised, overseen, performed or furnished by CM or that the Contract Documents require the CM to cause to be supervised, overseen, performed or furnished. The CM shall provide and perform all of the Work, duties and obligations set forth in the Contract Documents.

3. Interpretation.

A. The Plans and Specifications and other Contract Documents are to be considered together and are intended to be mutually complementary, so that any work shown on the Plans though not specified in the Specifications, and any work specified in the Specifications though not shown on the Plans, is to be executed by the CM as a part of this Contract. Should a conflict occur in or between or among any parts of the Contract Documents that are entitled to equal preference, the better quality or greater quantity shall govern, unless THE OWNER directs otherwise. Figured dimensions shall take precedence over scaled dimensions.

B. All things that in the opinion of THE OWNER may be reasonably inferred from the Plans, Specifications and other Contract Documents are to be executed by the CM. The Designer shall determine whether the detail Plans conform to the general Plans and Contract Documents, except as may be otherwise determined by THE OWNER.

C. The tables of contents, titles, headings and marginal notes or sub-scripts contained herein are solely to facilitate references, are not intended to be construed as provisions of the Contract, and in no way affect the interpretation of the provisions to which they refer.

D. Where reference is made in the Contract Documents to publications, standards, or codes issued by associations or societies, such reference shall be interpreted to mean the current edition of such publications, standards, or codes, including revisions in effect on the date of the issuance of the RFP for the contract notwithstanding any reference to a particular date. The foregoing sentence shall not apply to the dates, if any, specified with respect to insurance policy endorsement forms.

E. In case of any conflict among the Contract Documents, unless the context clearly otherwise requires, the Contract Documents shall be construed according to the following priorities:

First Priority:	Contract Modifications, Amendments, and Change Orders
Second Priority:	Owner-CM Agreement, the General Conditions of the Contract
Third Priority:	Contract Specifications
Fourth Priority:	Contract Drawings
Fifth Priority:	CM's Proposal, as accepted by OWNER
Sixth Priority:	Owner's Request for Proposals.
Seventh Priority:	Owner's Request for Qualifications

F. All plans, general and detailed, are to be deemed a part of the Contract, and the plans and specifications and Contract are to be considered together, and are intended to be mutually complementary, so that any work shown on the plans, though not specified in the specifications, and any work specified in the specifications, though not shown on the plans, is to be executed by the CM as part of the Contract. All things which in the opinion of the Designer may reasonably be inferred from the Contract Documents are to be executed by the CM in accordance with the terms of the Contract. In the event of a conflict, CM is to assume that the Contract requires the greater quantity or quality of work, and the CM shall immediately bring to the attention of the Designer said purported conflict.

G. The CM shall refer to all of the Drawings, and to all of the sections of the Specifications, and shall perform all work reasonably inferable therefrom as being necessary to produce the indicated results. Neither THE OWNER nor the Designer assume any liability arising out of jurisdictional issues raised or claims advanced by Subcontractors, trade organizations or other interested parties based on the arrangement or manner of subdivision of the content of the Specifications and Drawings. In the event of any claim arising out of any duplication, conflict, inconsistency or discrepancy within the Specifications or on the Drawings as to the allocation of the Work among the Subcontractor the CM shall be solely responsible for resolving the claim and shall be responsible for ensuring that all of the Work is completed, regardless of where it appears in the Specifications or on the Drawings.

4. Distribution of Work.

Other than as required by M.G.L. c. 149A and any other applicable provisions of the Massachusetts General Laws and these Contract Documents, the CM shall be responsible for distributing the Work in the best interests of the Project.

5. Subcontracts

Procedures for the procurement and the award of contracts by the CM for the furnishing of labor, materials and equipment in the performance of the Work ("Subcontracts") shall be as specified in the procedures attached hereto as Appendix "C". The CM shall not replace any Subcontractor previously selected without the prior written approval of THE OWNER. The CM shall maintain and periodically update and distribute to THE OWNER, the Project Manager and the Designer a Project Directory listing the names, addresses and telephone numbers of the principal members of the staff of each Subcontractor. The principal contact and a back-up for each Subcontractor and each of their office telephone numbers, email

addresses and mobile telephone numbers, shall be indicated in the Project Directory so that such persons can be reached in emergency situations occurring beyond regular business hours.
All work shall be performed pursuant to written subcontracts. When subcontracting with Trade Contractors the CM shall use the Form for Trade Contract attached hereto as Appendix D. All subcontracts shall require the Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the CM by the terms of the Contract Documents, and to assume toward the CM all the obligations and responsibilities which the CM, by the Contract Documents, assumes toward THE OWNER. Each Subcontract shall preserve and protect the rights of THE OWNER under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights. The CM shall require each Subcontractor to enter into similar agreements with its Subcontractors. The CM shall provide to each proposed Subcontractor, prior to the execution of a Subcontract with such Subcontractor, copies of the Contract Documents to which the Subcontractor will be bound by this Paragraph.

In the event of termination of the Contract due to the default of the CM or for any other reason, THE OWNER shall have the right (but shall have no obligation) to assume, and/or accept assignment of and further assign to a general contractor or construction manager or other third party who is qualified and has sufficient resources to complete the Work, the rights of the CM under the Subcontract with such Subcontractor. In the event of such assumption or assignment by THE OWNER, the Subcontractor shall have no claim against THE OWNER or such third party for work performed by such Subcontractor or other matters arising prior to termination of the Contract, and THE OWNER or such third party, as the case may be, shall be liable only for obligations to the Subcontractor arising after such assumption or assignment.

No Subcontract, and nothing contained herein or in any Subcontract, shall be construed to create any contractual relationship between any Subcontractor and THE OWNER.

OWNER approval or acceptance of any non-trade Subcontractor does not constitute "approval" as defined in MGL Ch. 30 Sect. 39F as it relates to direct payments claims.

6. Contract Price.

The Contract Price constitutes the amount of compensation authorized to be paid to the CM for everything to be performed and furnished by the CM in connection with the Work, as provided in the Owner CM Agreement.

ARTICLE III: CONTROL OF WORK / ADMINISTRATION OF THE CONTRACT

1. Designer.

Notwithstanding anything to the contrary expressed or implied in this Contract, any of the powers, rights, and duties of the Designer may be exercised by THE OWNER, provided that THE OWNER shall be under no obligation to do so. THE OWNER may rely on the Designer for the performance and exercise of certain rights and obligations of the Owner hereunder. Except as otherwise authorized by the Owner, any Approval required to be obtained from THE OWNER hereunder shall not be valid without the signature of THE OWNER. THE OWNER may explicitly overrule in writing any action, determination or decision of the Designer should THE OWNER choose to do so, except to the extent that the same would violate applicable law. Subject to the foregoing, the Designer shall be responsible for the general administration of the Contract and shall perform the duties and exercise the rights herein conferred on the Designer. Except as otherwise specifically

provided herein, the Designer shall decide all questions which may arise as to the conduct, quantity, quality, equality, acceptability, fitness, and rate of progress of the several kinds of work and materials to be performed and furnished under this Contract, and shall decide all questions which may arise as to the interpretation of the Plans and Specifications. In the case of the death, resignation, inability or refusal of the Designer to act, or the termination of his or her or its employment, THE OWNER may appoint another person to act as Designer for the purposes of this Contract. THE OWNER shall give written notice to the CM of any such appointment.

2. Right of Access to Work.

THE OWNER, the Project Manager, and the Designer (and persons designated by them) may for any purpose enter upon the Work, the Site, and premises used by the CM, and the CM shall provide safe facilities therefor. Other contractors of THE OWNER may also enter upon the same for the purposes which may be required by their contracts or work. Any differences or conflicts which may arise between the CM and other contractors of THE OWNER with respect to their work shall be initially resolved by the Project Manager.

3. Inspection No Waiver.

No inspection by THE OWNER, the Designer, the Project Manager, or employees or agents of either of them, and no order, measurement, certificate, approval, payment order, payment, acceptance or any other action or inaction of any of them, shall operate as a waiver by THE OWNER of any provision of this Contract.

ARTICLE IV: GENERAL PERFORMANCE OBLIGATIONS OF THE CM

The CM shall complete for the Contract Price all of the Work in a proper, thorough, and workmanlike manner in accordance with the Contract Documents. Without limiting the foregoing and without limiting the CM's obligations under any other provision of the Contract Documents, the CM shall for the Contract Price perform the following general obligations:

1. Review of Contract Documents and Field Conditions.

A. Before contracting and/or commencing the Work, the CM shall carefully study the Contract Documents and carefully compare all Specifications, Plans, Drawings, figures, dimensions, lines, marks, scales, directions of the Designer, and any other information provided by THE OWNER and shall at once report to the Designer any questions, errors, inconsistencies, or omissions which the CM may discover.

B. Before commencing the Work, the CM shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the CM with the Contract Documents and shall at once report to the Designer any questions, errors, inconsistencies, or omissions.

2. Supervision and Construction Procedures; Coordination; Cutting, and Patching.

A. The CM shall supervise and direct the Work, using the CM's best skill and attention. The CM shall be solely responsible for, and shall have control over, construction means, methods, techniques, sequences and procedures, and shall be responsible for coordinating all portions of the Work under the Contract. No subcontractor shall be permitted onsite without the CM’s site superintendent or the presence of an otherwise acceptable representative from the CM as approved by THE OWNER. In no event will construction labor personnel be considered acceptable site supervision on behalf of the CM.

B. The CM shall be responsible for the proper fitting of all Work and the coordination of the operations of all trades, Subcontractors, and materialmen engaged upon the Work.

C. All necessary cutting, coring, drilling, grouting, and patching required to fit together the several parts of the Work shall be coordinated by the CM.

D. The CM shall be responsible to THE OWNER for the acts and omissions of the CM's employees, agents and Subcontractors of all tiers, and their agents and respective contractors employees, and other persons performing portions of the Work or supplying materials therefor.

E. The CM shall be responsible for the inspection of portions of the Work already performed under this Contract to determine that such portions are in proper condition to receive subsequent Work.

F. The Designer shall establish baselines and benchmarks on the Drawings for the location of the Work but all other lines and grades shall be determined by the CM. The CM shall employ a registered land surveyor to perform any engineering required for establishing grades, lines, levels, dimensions, layouts, and reference points for the trades. The CM shall be responsible for maintaining benchmarks and other survey marks and shall replace any benchmarks or survey marks that may have become disturbed or destroyed. The CM shall verify the materials shown on the Drawings before laying out the Work and shall be responsible for any error resulting from its failure to exercise this precaution.

G. Work shall be performed during regular Working Hours which, unless otherwise approved by the Owner shall be **7:00 a.m. to 5:00 p.m**. School drop off and pickup time for arrival is from 7:00 AM to 8:00 AM, and for dismissal is from 2:00 PM to 3:00 PM. These school morning drop off times and afternoon pick up times are subject to change once the new NEMT High School is turned over and in use by THE OWNER. Due to school operations, **deliveries are to be scheduled** to avoid the school arrival and dismissal times, unless otherwise specifically approved by the Owner. Deliveries requiring consistent construction traffic such as concrete, soil import/export, steel, etc. will require notification to the Owner or Project Manager two weeks prior to the first delivery to allow for communication and coordination with the Project abutters. During the preconstruction services phase, the CM shall coordinate blackout hours into the Contract Documents if requested by the Owner. If the CM desires to carry on the Work outside of regular working hours or on Saturdays, Sundays, or Massachusetts or federal holidays, the CM shall provide an on site representative to monitor and document the work at no additional cost. The CM shall also notify the Owner's on site representative with 48 hours' notice to allow satisfactory arrangements to be made for inspecting Work in progress. Any work performed during regular Working Hours or at any other time shall comply with all District Ordinances. If applicable, the additional costs incurred by the Designer, the Project Manager, the Clerk of Works and/or town employees to monitor work during extended hours, shall be paid by the CM out of Construction Contingency.

H. Work performed outside of regular Working Hours without prior notice to the Designer and/or THE OWNER shall be subject to additional inspection and testing as directed by the Designer. The Owner's costs for this inspection and testing shall be borne by the CM whether the Work is found to be acceptable or not. THE OWNER shall be entitled to issue the CM a credit to cover such cost from payments due the CM.

I. Under no circumstances will the CM its subcontractors and suppliers allow trucks to be parked or idling along any streets in the neighborhoods adjacent to the Project site.

3.<u>Key Personnel.</u>

The CM shall employ the Construction Manger's Key Personnel as defined in Article I of the General Conditions unless otherwise agreed to by THE OWNER. The Project Executive shall be the CM's senior person on Site and shall have full authority to accept communications to, make decisions for, and otherwise fully represent the CM in connection with all matters relevant to the Project. The CM's Project Manager(s) shall be responsible for one or more portions of the Work as assigned by the Project Executive. CM's Project Manager may be the designee of the Project Executive to exercise the Project Executive's

responsibilities in the CM's Project Executive's absence. The Superintendent shall be properly licensed in accordance with the Building Code. It is expected that the General Superintendent shall spend at least 1 day per week on site throughout construction of the new building. The Project Team should be consistent with the team presented in the CMR Proposal. In the event that a team member is replaced, the role should be filled with an equal party as approved by the Owner or Project Manager. In the instance where a substitution is accepted, the Owner and or Project Manager may determine that a corresponding reduction to the CM's General Conditions is required. Similarly, if it is determined that the CM is not providing staffing as outlined in the General Conditions and above, the Project Manager and/or the Owner may elect to reduce the payment for the General Conditions in lieu of any lump- sum monthly billing arrangements.

4. Labor.

A. The CM shall employ only competent workers. The CM shall enforce and shall require all its Subcontractors to enforce strict discipline and good order among their respective employees and other persons carrying out the Work. The CM shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. Whenever the Designer or THE OWNER shall notify the CM in writing that any worker is, in the Owner's opinion, incompetent, unfaithful, disorderly, or otherwise unsatisfactory, such employee shall be discharged from the Work and shall not again be employed on the Project except with the consent of THE OWNER. See Paragraph 9 of this Article.

B. The CM shall ensure that all its Subcontractors employ a sufficient number of workers to carry on the Work with all proper speed in accordance with Laws, the requirements of the Contract Documents, and the Progress Schedule.

C. The CM shall procure materials from such sources and shall manage its own forces and the forces of its Subcontractors in such a manner as will result in harmonious labor relations on the Project Site. The CM shall cause persons to be employed in the Work who will work in harmony with others so employed.

5. Notices and Permits.

A. The CM shall obtain all approvals, permits, user fees, certificates and licenses required by Law~~s~~, pay all charges and fees, and pay for or cause the appropriate Subcontractor to pay for all utilities required for the proper execution of the Work. The costs of any required permits shall be considered Cost of the Work; however, the Owner may also elect to pay these costs directly to the Town of Wakefield with no CM markup allowed. The CM shall perform the work in strict accordance with all permit requirements that have issued for the Project.

B. The CM shall comply with all Laws and shall give all notices required thereby.

C. Except as otherwise specified in this Contract, it is not the CM's responsibility to ascertain that the Contract Documents are in accordance with applicable Laws. However, if the CM observes that portions of the Contract Documents are at variance with the requirements of Laws, the CM shall promptly notify the Designer and THE OWNER in writing, and necessary changes shall be accomplished by an appropriate Contract Modification.

D. If the CM performs Work knowing it to be contrary to Laws without giving such notice to the Designer and THE OWNER, the CM shall bear full responsibility for such Work and all costs attributable thereto, including, without limitation, corrections to the Work.

6. Excavation.

The CM shall prevent by sheeting and shoring or bracing, if necessary, any caving or bulging of the sides of any excavation made by the CM, leaving sheeting and shoring in place, or if any is removed, filling solid the spaces left thereby. The CM and its subcontractor shall make efforts to excavate only as much area in a day to support work that can be completed on that day.

7. Corrections to the Work; Inspection No Bar to Subsequent Corrections.

The review of the Work by the Designer, THE OWNER or its consultants shall not relieve the CM of its responsibilities to fulfill the Contract obligations. Defective work may be rejected by the Designer, THE OWNER or its consultants whether or not such work and/or materials have been previously overlooked or misjudged by the Designer, THE OWNER or its consultants and accepted for payment. If the Work or any part thereof shall be found defective, in either materials or workmanship, at any time before the Final Acceptance of the whole Work, or during the Warranty Period, the CM shall forthwith correct such defect in a manner satisfactory to the Designer, THE OWNER or its consultants. If any material brought upon the Site for use in the Work, or selected for the same, shall be rejected by the Designer, THE OWNER or its consultants as unsuitable or not in conformity with the Contract Documents, or as damaged by casualty or deteriorated due to improper storage at the Site or to any other factor, the CM shall forthwith remove such materials from the Site. The CM shall pay for the cost of making good all work or property of other contractors or of the Owner destroyed or damaged by such removal or replacement; repair any injury, defect, omission or mistake in the Work as soon as it is discovered, finish and immediately make good any defect, omission or mistake in the Work and complete and leave the Work in perfect condition. The costs of correcting such defects or mistakes shall not be considered Cost of the Work, unless the Owner approves funding such cost as a Construction Contingency Item, as provided in Section 7.2 of the Agreement for Construction Services.

8. School Project; No Contact with Students and CORI Reporting

(A) The CM shall ensure that all the workers on the Project shall not intermingle with the student population or otherwise enter Owner-occupied premises, except with the knowledge and approval of the Owner. The principal of the School and the Owner shall have the ability to immediately stop work in an Owner-occupied area in the event such work has not been authorized in advance, or is being performed in a manner that threatens the safety of the building occupants, the building structure, or otherwise interferes with the User Agency's educational program. The CM's costs for complying with the CORI Reporting requirements shall be considered as a Cost of the Work.

(B) CORI Reporting

In accordance with G.L.c. 71 Section 38R, the Superintendent of Schools or School Principal shall require criminal offender record information ("CORI") from the criminal history systems board, relating to all workers who are scheduled to work on the Project. The Contractor and the subcontractor shall cooperate fully and immediately with a request from the Superintendent or Principal to identify the workers who may be placed in a position where they may have direct and unmonitored contact with the students. The Contractor and its subcontractors shall make every effort to notify the Architect or Project Manager at least two weeks before any workmen may be working in areas of the School occupied by students or areas to which students otherwise have access, and will provide a listing of the workmen who they anticipate will be working in those areas. The Owner shall notify the Contractor of any worker who will not be allowed to work on the Project, as a result of the CORI check. The Owner reserves the right to stop work if there has been a failure to comply with this paragraph, in which event the Contractor and subcontractors shall have no claim for damages, delays or time extensions against the Owner.

(C) The CM shall be responsible for conducting and maintaining Criminal Offender Record Information (CORI) Reporting including but not limited to: submitting completed CORI forms to the District for all tradespersons planning to be on site 2 weeks in advance of their arrival to the site, administering an identification system and granting visual credentials to cleared individuals, and maintaining a log of cleared/rejected individuals. The identification system shall be developed by the CM and approved by the Owner and should ensure that all workers and visitors to the Project can be immediately identified as authorized to be on the Project. The CM shall enforce throughout the project that all workers scheduled to work on the Project have cleared a CORI check. The CM shall review their internal CORI log on a monthly basis and request updated CORI checks at a minimum of once a year.

9. Sanitary Facilities.

The CM shall provide and maintain sanitary facilities for all persons employed on the Work, beginning with the first worker at the Site. Said facilities shall meet the following minimum requirements unless otherwise specified in Division 1 of the Specifications.

A. There shall be no fewer facilities than the number required by applicable Laws;

B. Facilities shall be kept in a clean sanitary condition at all times and shall be adequately screened to be inaccessible to flies**.**

10. Temporary Offices.

A. Except as otherwise specified in the Contract Documents, the CM shall erect the following temporary offices near the Site as directed by the Owner and shall adequately furnish and maintain them in a clean, orderly condition:
(1) A CM's field office at which CM's authorized representatives shall be present at all times while work is in progress. Instructions, notices, and other communications delivered there by the Designer or THE OWNER or the Project Manager, shall be deemed delivered to the CM. CM's trailer shall be a double wide trailer (1,600 +/- SF) that will accommodate meetings with a conference table and chairs sufficient to accommodate 18 persons at one time or as mutually agreed upon prior to the execution of the GMP.

(2) Office Trailer for the Architect/Project Manager/On-Site Rep. Such trailer shall be in close proximity to the CM's field office, shall be roughly 1600 +/- square feet in area, and shall be equipped with four offices, electric lights, heat, air conditioning, window screens, secure locking devices, and a toilet room with a working chemical toilet. Such office shall be equipped with at least the following amenities, all of which shall become the property of the CM at the conclusion of the Work:

(3) CM shall provide the Owner's office with the following:

1. Heat during cold weather below 55 degrees F.
2. One layout table, approximately 36" x 84" with two drafting stools and two drafting lamps with bulbs.
3. Eight desks (30x60 standard double pedestal steel desks with plastic laminate tops, two- drawer letter hanging file on one side, three drawer pedestal on the other side, center pencil drawer. Drawers shall lock; furnish two keys per desk.) and desk chairs (swivel type upholstered chair with arms, fully adjustable seat heights and variable back rests; five caster bases with wheels). One additional desk and one desk chair in the main area. Include one spring-mounted desk light per desk.
4. Six conference tables, each 72 by 24 inches, with plastic laminate top.
5. Eighteen straight back folding chairs with cushioned seats.

6. Six Fireproof metal file cabinets (4 drawers each) with locks, hanging frame inserts, hanging file holders and folders (50 per drawer). Drawers shall lock; furnish each cabinet with three keys.
7. One hat shelf with room for 20 hard hats.
8. Two sloped surface plan review tables, 42 by 96 inches, with raised lip at low edge.
9. Two portable full size plan rack units on casters; 12 stick capacity each. Include twelve 3 knob sticks per unit.
10. Five cordless telephones with speakerphone feature and integral answering machine.
11. One Nikon 1 J5 Mirrorless Digital Camera with 10-30mm Lens Wi-Fi Enabled Digital Camera or equal as approved by OPM. Provide compatible 64GB or greater memory card.
12. One coat rack, consisting of wall-mounted panel equipped with eight coat hooks, six 20-gallon wastepaper baskets, eight 30"x40" wall-mounted tack boards and eight 36 by 48 inch whiteboards with tray. Furnish each whiteboard with four colored markers and one eraser.
13. One exterior high quality mercury thermometer.
14. Air conditioning during weather above 75 degrees F.
15. 12-inch deep steel shelving, forty linear feet.
16. Sufficient number of electric lights (50 fc at desk level over entire area) and outlets.
17. One networkable Printer Copier Scanner. Provide letter, legal and 11 x 17 paper supply and required printer ink cartridges for the duration of the work. Include cable connections to USB port and service program with 5 ½ years parts and labor warranty with 5 ½ years onsite service with response time within 24 hours of notice. Provide technician to setup printer and printer capabilities (print, scan, fax, and other like items) on up to four owner/ rep/ clerk computers.
18. One secure wireless network router and high speed internet service (min 50 MBps), provide technician to configure.
19. One secure networked hard drive storage device with minimum 2 TB capacity, provide technician to configure.
20. Supplies: All required office supplies, including toners for all equipment, twenty visitor hard hats, twenty safety glasses, twenty safety vests.
21. One water-cooler: Provide dispenser which holds bottled water and furnishes instant hot as well as cold water, supply with flat bottom paper cups, and weekly bottle replacement for the duration of the project.
22. One refrigerator, 4.5cu ft. capacity.
23. One microwave, 0.9 cu ft. capacity counter top model.
24. One industrial quality wall-mounted first aid kit sized and supplied for 10 people.
25. One automatic coffee machine equal to 2011-02 Keurig B140 Brewing System including coffee, sugar, artificial sweetener, non-refrigerated coffee creamer, stirrers and coffee cups for the duration of the project.
26. Power strip with surge protector, and dust covers for all equipment; provide ten.
27. One 60” LED HDTV with HDMI input, to be wall-mounted in conference area by contractor’s technician.
28. Heat and Air Conditioning shall be maintained to provide an indoor air temperature of 76 degrees F at 72 inches above the floor and throughout the space during the cooling season and 70 degrees F at 30 inches above the floor during the heating season.
29. Electrical Convenience Power: Provide sufficient convenience outlets independent of the lighting, equipment power, and heating needs.
30. Offices shall be located in location approved by the Architect, shall be maintained by the CM in a clean and orderly condition, and shall be removed at not before Substantial Completion of Phase 4 of the project. The Contractor shall provide a weekly cleaning service in each office, with annual waxing. Contractor shall maintain pathways to trailers from construction site and parking area free of water, snow and ice.

31. Provide routine emergency service for office equipment specified and reasonable quantities of expendable supplies as required for job related use through the conclusion of the Work. Consumables include:
    a. Copiers, printer: toner and paper. Misc. tack-boards and whiteboards, three-hole-punch, staplers, staples, paperclips, tacks, folders, binders, labels, dividers, gel-pens, mechanical pencils with lead and eraser refills and other typical office consumables.
    b. Drinking Water: Provide bottled spring water for water dispenser in 6 gallon bottles, delivered as necessary to avoid running out, coffee for machine, and continuous stock of flat bottom cups.
    c. Lamps: bulbs and fluorescent lamps of appropriate types and wattage for the trailer fixtures.
32. 1 Computer with all applicable hardware and software, include Bluebeam Revu, and Adobe Acrobat with all read/write components, to communicate and coordinate efforts between the CM, Designer and Owner or as mutually agreed upon prior to the execution of the GMP.
33. (6) 24" LED monitors
34. (1) Wacom Intuos Large Digital Drawing Table with 3 styluses

11. Contract Documents and Samples at the Site.

Three sets of Contract Documents will be furnished to the CM by THE OWNER immediately after signing of the Contract, one of which shall be maintained at the Site for reference by authorized representatives of THE OWNER. The CM shall maintain at the Site for the use and information of THE OWNER one record copy of the Drawings, Specifications, Addenda, Change Orders, Approved Shop Drawings, Product Data, Samples, updated Progress Schedule, and all other submittals, all in good order and marked currently to record changes and selections made during construction. These shall be available to the Designer and Project Manager and shall be delivered to the Designer for submittal to THE OWNER upon completion of the Work. The Drawings, Specifications and other documents prepared by the Designer, and copies thereof furnished to the CM, are for use solely with respect to this Project. The CM shall not permit their release to other parties except as may be necessary in dealing with governmental authorities in the ordinary course of permitting and constructing the Project. Further, they are not to be used by the CM or any Subcontractor or Supplier on other projects without the specific written consent of THE OWNER and the Designer.

12. Telephones.

The CM shall provide its on-site personnel with telephones, the CM shall also provide landline telephone and data service for the Owner's Site Office.

13. Safety Laws, Regulations, and Practices.

A. The CM shall comply with all health and safety Laws applicable to the Work. Without limitation, (1) If the CM uses or stores toxic or hazardous substances it shall comply with M.G.L. c. 111F, s. 2, the "Right to Know" law and regulations promulgated by the Department of Public Health, 105 CMR 670, the Department of Environmental Protection, 310 CMR 33, and the Department of Labor and Workforce Development, 441 CMR 21; and shall post a Workplace Notice obtainable from the Department of Labor and Workforce Development. (2) The CM shall comply with the Federal Resource Conservation and Recovery Act, the Federal Comprehensive Environmental Response, Compensation and Liability Act, M.G.L. c. 21C, M.G. L. c. 21E, and any other Laws affecting toxic or hazardous materials, solid, special or hazardous waste (collectively "Hazardous Materials Laws). Should the CM discover unforeseen materials subject to Hazardous Materials Laws at the Site, the CM shall immediately notify THE OWNER of such discovery. (3) The CM shall be responsible for the

location of all utilities in connection with the Work. Without limiting the foregoing, the CM shall comply with Dig-Safe Laws. Dig-Safe is the Utility Underground Plant Damage Prevention System, 111 South Bedford Road, Burlington, MA 01803, 1-800-322-4844. The CM shall notify Dig-Safe of contemplated excavation, demolition, or explosive work in public or private ways, and in any utility company right of way or easement, by certified mail, with a copy to Department of Environmental Protection (DEP). This notice shall be given at least 72 hours prior to the work, but not more than sixty days before the work is to be done. Such notice shall state the name of the street or the route number of the way and shall include an accurate description of the location and nature of the proposed work. Dig-Safe is required to respond to the notice within 72 hours of receipt by designating the location of pipes, mains, wires or conduits at the Site. The CM shall not commence work until Dig-Safe has responded. The work shall be performed in such manner and with reasonable precautions taken to avoid damage to utilities under the surface at the work location. The CM shall provide the Superintendent with current Dig-Safe regulations, and a copy of M.G.L. c. 82, s. 40. Any costs related to the services performed by Dig-Safe shall be borne by the CM. (4) The CM shall comply with Public Law 92-596, "Occupational Safety and Health Act of 1970" (OSHA), with respect to all rules and regulations pertaining to construction, U.S. Code Title 29, sections 651 et seq. including Volume 36, numbers 75 and 105, of the Federal Register as amended, and as published by the U.S. Department of Labor. (5) The CM shall comply with M.G.L. c. 149, s. 129A, relative to shoring and bracing of trenches.

B. The CM shall take reasonable precautions to prevent damage, injury or loss to persons or property. Nothing herein shall relieve Subcontractors of their responsibility for the safety of persons and property, and for compliance with all Laws applicable to the Work and their activities in connection therewith. Without limitation, the CM shall take all reasonable precautions for the safety of, and the prevention of injury or damage to (1) all agents and employees and contractors on the Work and all other persons who may be affected thereby including the general public, (2) all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the Site, under the care custody or control of the CM or any of its Subcontractors or any contractors directly or indirectly contracting through any of them, and (3) other property at the Site or adjacent thereto, including but not limited to trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of the Work. The CM shall promptly remedy all damage or loss to any such property caused in whole or in part by the CM, any Subcontractor, or anyone directly or indirectly contracted or employed by any of them or by anyone for whose acts any of them may be liable. Without limiting the foregoing, the CM shall:

(1) post and maintain adequate danger signs and other warnings against hazards;
(2) promulgate safety regulations and give appropriate notices to THE OWNER and users of adjacent utilities and property;
(3) insure the adequate strength and safety of all scaffolding, staging and hoisting equipment, temporary shoring, bracing and tying;
(4) protect adjoining private or public property;
(5) provide barricades, temporary fences, and covered walkways required by prudent construction practices, Laws and/or the Contract Documents;
(6) furnish approved hard hats and other personal protective equipment, furnish approved first aid supplies, furnish the name of the first aid attendant, and maintain a posted list of emergency facilities;
(7) provide proper means of access to property where the existing access is cut off by the CM;
(8) maintain from the beginning of any darkness or twilight through the whole of every night sufficient lights on or near any obstruction so as to guard to protect travelers from injury from such obstruction;
(9) maintain reasonable security at the Site so as not to expose the Work and surrounding property to vandalism or malicious mischief;

(10) provide adequate fire protection procedures during the use of cutting torches, welding equipment, plumbers' torches and other flame and spark producing apparatus;
(11) take prompt action to correct any dangerous or hazardous conditions.

C. The CM shall not use or store explosives in the performance of the Work unless the CM first obtains THE OWNER's prior written approval.

D. The CM shall not permit cutting or welding in or immediately adjacent to existing property of the Owner or of anyone else without THE OWNER's prior Approval in each instance.

E. The CM shall submit a safety plan to THE OWNER and designate by notice to THE OWNER a full time responsible member of its organization at the Site whose duties shall include preventing accidents.

F. The CM shall submit to THE OWNER without delay verbal and written reports of all accidents involving bodily injury or property damage arising in connection with the Work.

G. In any emergency affecting the safety of persons or property the CM shall immediately act in the exercise of reasonable judgment to prevent threatened damage, injury, or loss. The CM shall immediately notify THE OWNER of such emergency.

H. The CM shall implement and promote a "no idling" provision in all vendor contracts for vehicles on site.

I. The CM shall issue the current site logistics plan and delivery instructions to each Vendor/Subcontractor documenting the routes in and out of the Project site as agreed upon with the Owner or Project Manager prior to commencing each phase of the Work.

14. <u>Debris and Chemical Waste.</u>

A. The CM shall not permit the accumulation of interior or exterior debris. The CM shall keep the Work area clean at all times. Without limitation, garbage shall be removed daily.

B. The CM shall properly classify and remove debris and waste from the Site and transport and dispose of it, all in accordance with Laws, employing a qualified and properly licensed transporter, at any landfill, disposal or recycling facility licensed under applicable Laws, including without limitation, hazardous materials laws. The CM shall make all arrangements and give and obtain all notices, communications, documentation, permits, certificates, and approvals necessary for said disposal from the Owner or officials in charge of such landfills, disposal or recycling facilities. The CM shall bear all fees and costs in connection with such classification, removal, transportation, disposal and storage. The CM shall not permit any storage of debris or waste except in accordance with Laws. The CM shall hold awarded Subcontractors responsible for daily clean-up and placing trash/debris directly into the site waste receptacles provided by the CM unless the Owner agrees to alternate means of trash removal.

C. The CM shall not permit any open fire on the Site.

D. Chemical Waste: Chemical waste shall be stored in corrosion resistant containers, removed from the Site, and disposed of not less frequently than monthly unless more frequently required by Laws, including without limitation hazardous materials laws, or by the Contract Documents. Disposal of chemical waste shall be performed in accordance with requirements of the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP). Fueling and lubricating of vehicles and equipment shall be conducted in a manner that affords the maximum protection against spills and evaporation. Lubricants shall be disposed of in accordance with procedures meeting all applicable Laws. The CM shall immediately notify the Designer of any hazardous materials release large enough to require reporting under applicable Laws. The CM shall be responsible for immediately cleaning up in accordance with Laws any oil or hazardous materials releases resulting from its operations. Any costs incurred in cleaning up any such releases shall be borne by the CM.

15. <u>Weather Protection (M.G.L. c. 149, s. 44G.and 44F(1).</u>

The CM shall provide "weather protection," which means temporary protection of that Work adversely affected by moisture, wind, precipitation, and cold. Weather protection shall be achieved by covering, enclosing and/or heating or cooling working areas to permit construction to be carried on during such period in accordance with the Progress Schedule and meet OSHA workplace requirements. After the building or portion thereof is completely enclosed by either permanent construction or substantial temporary materials having a resistance comparable to the specified permanent construction, the CM shall provide humidification control, heat or cooling therein to permit construction to be carried on during such period in accordance with the Progress Schedule and meet OSHA workplace requirements. The foregoing provisions do not supersede any specific requirements for methods of construction, curing of materials and the like. Such weather protection shall be consistent with the Progress Schedule, shall permit the continuous progress of the Work necessary to maintain an orderly and efficient sequence of construction operations, shall include one thermometer for every 10,000 square feet of floor space or fraction thereof or as necessary to monitor areas in which temperature sensitive work is taking place, shall be subject to the Approval of THE OWNER, and shall meet such additional requirements as may be specified by THE OWNER and by the Contract Documents.

16. Furnishings and Equipment.

When, in the opinion of the Designer, any portion of the Work is in a reasonable condition to receive fittings, furniture, or other property of the Owner not covered by this Contract, the CM shall allow THE OWNER to bring such fittings, furniture, and/or other property into such portions of the Work and shall provide all reasonable facilities and protection thereof. No such occupancy shall be construed as interfering with the provisions relating to time of completion, or as constituting an acceptance of the whole or any part of the Work. Any furniture or fittings so installed shall be placed in the Work at the risk of THE OWNER except that the CM shall be liable for damages or losses to such furniture or fittings to the extent such damages or losses arise in whole or in part from the negligence or intentional misconduct of CM, Subcontractors, their agents and/or employees, or anyone for whose acts CM is responsible. The CM shall provide for debris removal facilities at a central location on the Project, in order to provide for the disposal of debris associated with the delivery of furnishings, equipment, and technology equipment that will be delivered and installed by others.

17. Sales Tax Exemption and Other Taxes.

All building materials and supplies as well as the rental charges for construction vehicles, equipment and machinery rented exclusively for use on the Site, or while being used exclusively for the transportation of materials for the Work are entitled to an exemption from sales taxes under M.G.L. c. 64H, s. 6(f). The CM shall take all action required to obtain the benefit of such sales tax exemption. The CM shall bear the cost of any sales taxes that CM incurs in connection with the Work and THE OWNER shall not reimburse the CM for any such taxes. The exemption number assigned to the CM as an exempt purchaser shall be provided to the CM by THE OWNER upon the written request of the CM.

18. Building Systems Commissioning.

Completion of the Commissioning Agent (CxA) provided Installation Checklists and Start Up Checklists and all other related documentation provided to the CM and the CM's affected filed trade contractors and/or subcontractors will be required for the issuance of Substantial Completion of each phase of the project, as applicable. All project equipment and systems to be commissioned must be ready for CxA functional testing prior to the issuance of the Certificate of Substantial Completion for each phase of the project, as applicable.

19. Final Cleaning.

At the completion of the Work or any portion thereof, in preparation for turnover to the Owner, the CM shall remove all waste materials, rubbish, tools, equipment, electrical panels, machinery and surplus materials, and professionally clean all sight-exposed surfaces so that the Work is clean and ready for occupancy. Subsequent to installation of Owner furniture, equipment, technology equipment, and telephones, the CM shall provide such additional cleaning as may be necessary to remove any soil resulting from installation of such furniture, telephones and equipment.

20. Maintenance Data.

Subject to such additional requirements as may be provided in the Contract Documents, the CM shall compile two complete and identical binders and four ultra-portable external hard drive electronic copies of operating and maintenance data for the entire Work. The CM shall submit record maintenance data to the Designer for approval, shall submit approved maintenance data to THE OWNER, and shall instruct and train the User Agency's personnel in proper inspection and maintenance procedures. All trainings required per the Contract Documents shall be video recorded by the CM using a device of the Owner's choosing and turned over to the Owner upon completion of the Project, in an organized fashion with all videos titled appropriately. The Project will not be considered substantially complete until complete operational and maintenance manuals are submitted and approved as complete by Architect, and all required training to allow THE OWNER to fully understand and operate all new systems correctly per manufacturer's instructions is completed to the satisfaction of THE OWNER.

21. Closeout Procedures.

The CM shall take all actions and submit all items required for the issuance of the Certificate of Use and Occupancy and Final Acceptance as specified in Division 1 of the Contract Specifications.

ARTICLE V: MATERIALS AND EQUIPMENT

1. Materials Generally.

A. Unless otherwise specifically provided in the Contract Documents, the CM shall provide and pay for materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

The CM shall obtain prior written approval from THE OWNER for permission to store materials or equipment at off-site locations, to be incorporated in the Work, for which progress payments may be requested. Any and all charges for storage, inspection and verification by the Designer and THE OWNER, including insurance, shall be borne solely by the CM. In the event that Subcontractors are required to store materials off-site for longer than originally anticipated at bid, the Subcontractor must notify the CM of any additional costs to be incurred so as to afford the Owner the opportunity to identify a location for storage on Site. Failure by the Subcontractor to notify the CM of such incurred costs waives their rights to any additional compensation. Before approval for permission to store materials or equipment at off-site locations, THE OWNER may require, without limitation (i) evidence that the off-site location is properly secure, (ii) proper proof of insurance and proof of

satisfactory contractual arrangements for transportation to the site, and (iii) a certificate from the CM documenting:

1. The name of the CM, Subcontractor or Supplier that leases or owns the warehouse or other storage facility;
2. The location of such storage facility, including the storage space; i.e., the entire premises or certain areas of a warehouse giving the number of floors or portions thereof, and a certification that the CM has visited such location, verified the storage of such material or equipment therein or thereon (including confirmation that the materials or equipment are marked and segregated as provided below), and verified payment of all current storage charges;
3. The date(s) on which the material or equipment is first stored at such facility; and
4. A description of the materials or equipment stored, including quantities, types, manufacturers and other identification information, such as serial numbers,
5. Photographs of the stored material.

Such documentation shall be included in any Application for payment for which payment for off-site stored materials is requested.

The CM shall furnish to THE OWNER, not less often than once per month, a current inventory of all materials or equipment being stored at any off-site location.

The CM shall mark each sealed carton or other item with the name of the Project and THE OWNER, and all materials or equipment stored off-site shall be segregated to the extent required by the Project Manager or the Designer.

Payment for materials or equipment stored off-site shall be at the reasonable discretion of THE OWNER, taking into account the schedule requirements of the Work. Title to materials or equipment stored off-site shall be transferred at the time at which THE OWNER pays for them, free of any lien or other interest of the Supplier or any other lien or encumbrance. Notwithstanding such transfer of title, the CM shall retain sole care, custody and control of, and shall have complete responsibility for the security and protection of, all materials or equipment included in any Application for Payment which are stored at locations other than the site, and the CM assumes all risk of loss or damage to such materials or equipment, and the CM shall hold harmless THE OWNER from and against all liabilities arising out of or resulting from loss or damage, from any cause, to such materials or equipment for which payment is requested, including liens, security interests or other claims of any kind by Suppliers or other third parties relating to such materials or equipment.

B. Materials and equipment to be installed as part of the Work (both or either of which are hereinafter referred to as "materials") shall be new, unused, of recent manufacture, assembled, and used in accordance with the best construction practices. The CM shall inform itself as to, and shall comply with, the provisions of M.G.L. c. 7, s. 23A, as amended, and shall abide by the same and all applicable rules, regulations and orders made thereunder in relation to the purchase of supplies and materials in the execution of the Work, including the provisions of M.G.L. c.7, s. 22, paragraph 17 which provides that there be *"a preference in the purchase of supplies and materials, other considerations being equal, in favor, first, of supplies and materials manufactured and sold within the Commonwealth, and, second, of supplies and materials manufactured and sold elsewhere within the United States."*

2. <u>Shop Drawings, Product Data, and Samples.</u>

A. The CM shall prepare and submit to the Designer, in accordance with the Designer's requirements for "Submittal Procedures", Shop Drawings, Product Data, Samples, and such other Submittals as may be required by the Contract Documents. The Designer will review and approve or take other appropriate action upon the Contractor's submittals, but only for

the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Review and approval by the Designer of Shop Drawings, Product Data, Samples and other Submittals shall in no way relieve the CM from the requirements of the Contract Documents or from responsibility for proper fitting, coordinating, construction, and construction sequencing. The CM shall furnish to the Project Manager and the Designer such information and vouchers relative to the Work, the materials therefor, and the persons employed thereon, as the Designer shall from time to time request.

B. Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. The purpose of their submission is to demonstrate for those portions of the Work for which submittals are required the way the CM proposes to conform to the information given and the design concept expressed in the Contract Documents.

C. The CM shall review, and submit to the Designer, Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of THE OWNER or of separate contractors. Submittals made by the CM which are not required by the Contract Documents or which do not comply with the Contract Documents may be returned without action. The CM's attention is directed to the provisions of Section 4 of this Article V and to the Specifications.

D. The CM shall prepare and keep current for the Designer's approval a schedule of submittals which is coordinated with the Progress Schedule and allows the Designer reasonable time to review submittals.

E. The CM shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Designer. Such Work shall be in accordance with Approved submittals.

F. By submitting Shop Drawings, Product Data, Samples and similar submittals, the CM represents that the CM has determined and verified materials, field measurements, and field construction criteria related thereto and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

G. The CM shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Designer's approval of Shop Drawings, Product Data, Samples or similar submittals unless the CM has specifically informed the Designer in writing of such deviation at the time of submittal and the Designer has given explicit written approval to the specific deviation. The CM shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals as a result of the Designer's or THE OWNER's actions.

H. The CM shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Designer on previous submittals.

I. Informational submittals upon which the Designer is not expected to take responsive action may be so identified in the Contract Documents.

J. When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, such certification must be stamped by a registered Massachusetts professional in the discipline required. The Designer shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.

K. Materials furnished or used or employed under the Contract must be equal in quality to the samples furnished and be satisfactory to the Designer.

3. <u>Tests.</u>

A. Any material to be used in the Work may be tested or inspected at any time by the Designer with an independent testing company with the prior Approval of THE OWNER and may be rejected if it fails to comply with specified tests. THE OWNER shall pay for all testing of specified material. If the CM requests permission to use a material that was not specified, then the CM shall pay for such testing. The cost of testing of any materials that fail the testing criteria shall be borne by the CM

B. The CM shall notify the Designer and THE OWNER of the proposed sources of materials in time to permit all required testing and inspection before the material is needed for incorporation into the Work. The CM shall have no claim arising from CM's failure to designate the proposed source or to order the material in time for adequate testing and inspection. Necessary arrangements shall be made to permit the Designer to make factory, shop or other inspection of materials or equipment ordered for the Work in process of manufacture or fabrication, or in storage elsewhere than the Site.

4. "Or Equal" Submissions.

A. Where products or materials are prescribed by manufacturer name, trade name, or catalog reference, the words "or Approved equal" shall be understood to follow, except where the Owner has approved a proprietary specification as provided in G.L.c. 30 sect. 39M. An item shall be considered equal to the item so named or described if in the opinion of the Designer (a) it is at least equal in quality, durability, appearance, strength and design, (b) it performs at least equally the function imposed in the general design for the Work, and (c) it conforms substantially, even with deviations, to the detailed requirements for the items as indicated by the Specifications. Any changes in the work made necessary to accommodate products or materials substituted as an "or equal" shall be at the expense of the CM. "Approved equal" shall mean an item with respect to which Designer shall have issued a written statement to the CM to the effect that the item is, in Designer's opinion, equal within the meaning of this paragraph to that prescribed in the Contract Documents.

B. The CM shall be responsible for providing the Designer with any information and test results that the Designer reasonably requires to determine whether or not a material is equal to a material named or described in the Contract Documents.

C. Whenever the CM submits a material for approval as a substitute for a material named or described in the Contract Documents, such submission shall be made at least sixty (60) days prior to the date the materials will be used in the Work. In no event shall the CM maintain a claim for delays based upon the Designer's review of such substituted materials if the CM has failed to comply with the sixty (60) day submission requirement.

5. Delivery and Storage of Materials; Inspection.

A. Materials and equipment shall be progressively delivered to the Site so that there will be neither delay in the progress of the Work nor an undue accumulation of materials that are not to be used within a reasonable time and so that their security, quality, and fitness of the materials for the Work is preserved. CM shall prepare adequate storage and staging areas for materials and equipment delivered to the Site.

B. Materials stored off Site shall be insured and stored at the expense of the CM so as to guarantee the preservation of their security, quality and fitness for the Work. Without derogating from the CM's responsibilities in the previous sentence, when necessary to avoid deterioration or damage, material (on or off Site) shall be placed on wooden platforms or other hard clean surfaces and not on the ground and shall be properly protected.

C. Expenses for inspection of material by the Designer and/or the Project Manager personnel including travel, quarters, and subsistence shall be borne by the CM requesting the inspection of material stored beyond fifty miles from the project site, as part of the Contract Price. If the CM requests an inspection of material stored outside the Commonwealth of Massachusetts, THE OWNER will initially pay for all expenses of inspecting the material incurred by the Designer and/or the Project Manager's personnel including travel, quarters, and subsistence. THE OWNER will then give CM an invoice for those costs and the CM shall submit a credit Change Order for the amount of those expenses.

D. Stored materials either at the Site or at some other location agreed upon in writing shall be so located as to facilitate prompt inspection and even though approved before storage, may again be inspected prior to their use in the Work.

E. All storage sites shall be restored to their original condition by the CM at the CM's expense.

F. The CM shall take charge of materials for its use delivered to or in the vicinity of the place where the Work is being done, whether furnished by the Owner or otherwise; the CM shall notify the Designer as soon as any such materials are so delivered, allow them to be examined by the Designer, and furnish workers to assist therewith.

6. Defective, Damaged, or Deteriorated Materials and Rejection Thereof.

The Designer may reject materials if the Designer reasonably determines that such materials do not conform to the Contract Documents in any manner, including but not limited to materials that have become damaged or deteriorated from improper storage whether or not such materials have previously been accepted. The CM at its own expense shall remove rejected materials from the Work. No rejected material, the defects of which have been subsequently corrected, shall be used except with the written permission of the Designer. Should the CM fail to remove rejected material within a reasonable time, THE OWNER may, in addition to any other available remedies, remove and/or replace the rejected material, and deduct the cost of such removal and/or replacement from any moneys due or to become due the CM by issuing a credit change order against the GMP. No extra time shall be allowed for completion of Work by reason of such rejection. The inspection of the Work shall not relieve the CM of any of its obligations herein prescribed, and any defective Work shall be corrected. Work not conforming to the Contract Documents may be rejected notwithstanding that such Work and materials have been previously overlooked or misjudged by the Designer and accepted for payment. If the Work or any part thereof shall be found defective at any time before Final Acceptance of the whole Work, the CM shall forthwith make good such defect in a manner satisfactory to the Designer. Nothing in the Contract shall be construed as vesting in the CM any property rights in the materials used after they have been attached or affixed to the Work or the Site; but all such materials shall upon being so attached or affixed become a property of the Owner.

ARTICLE VI: PROSECUTION AND PROGRESS

1. Beginning, Progress Schedule, and Completion of Work.

A. The Contract time shall commence upon the date specified and in accordance with any conditions in the Notice to Proceed.

B. Prior to the submission of the first and every progress payment, CM shall submit to the Designer and the Project Manager for approval a progress schedule in native Primavera, Professional Version 16.2 or newer (XER) or in scheduling software that is compatible with and capable of interacting with Primavera P6, Professional Version 16.2 or newer as acceptable to the Project Manager and PDF format, which complies with the contract requirements. Upon Acceptance by THE OWNER, said schedule shall constitute the Progress Schedule. Upon submission of the monthly schedule update, the Project Manager will provide a Review Report including comments/concerns related to the overall progress of the Work and or logic of the schedule. Any outstanding comments within the Project Manager's Schedule Review shall be addressed prior to submittal of the following month's request for payment.

C. Time is of the essence of this Contract. The Work shall be completed within the time specified in the Owner-CM Agreement. Should the CM require additional time to complete the Work, the CM shall document the reasons therefor and submit a written request for an extension of time within 20 days of the occurrence of the event alleged to be the cause of the delay, as provided in this Article and in Article VII of these General Conditions of the Contract. Failure to submit said written request within the time required by the preceding

sentence shall preclude the CM from subsequently claiming any time extension due to said delay. The CM may not reserve their rights to claim delays beyond the 20 days after the occurrence of the event giving rise to the claim.

D. CM must use diligent efforts to mitigate any potential schedule impacts and must demonstrate actual impact on critical path activity to receive a contract time extension. CM acknowledges that managing day-to-day design changes, clarifications, RFIs and the like is part of CM's base scope of Work, and CM has contemplated such work in preparing its critical path schedule. CM agrees to meet with the Architect and Project Manager on a weekly basis to assist in prioritizing RFI, submittal, and Change Order responses in order to avoid potential delays or claims. CM agrees that neither the specification by CM of a "due date" or "return date" for any request for clarification, RFI or the like, nor the failure of Owner or Architect to meet any such required due date or return date, shall be grounds for a claim for adjustment of the Contract Time. Without limiting the foregoing, CM expressly agrees that due dates or return dates inserted by "default" by any computer software program shall not be binding upon Owner or Architect or be the basis for any claim for adjustment of the Contract Time.

An extension in Contract Time will not be granted unless the CM can demonstrate through an analysis of the Progress Schedule that unforeseeable causes beyond the control and without the fault or negligence of both the CM and the Subcontractors or Suppliers led to performance or completion of all or part of the Work beyond the corresponding Contract Time despite the CM's reasonable and diligent actions. Examples of such causes include: (1) acts of God or of the public enemy; (2) acts of the Owner; (3) acts of the U.S. Government or another Public Authority or Agency; (4) acts of another party in the performance of a contract with the Owner; (5) fires, floods, epidemics, pandemics, quarantine restrictions; (6) incidents with archaeological features; (7) strikes or work stoppages (aside from strikes/walkouts by any parties directly affiliated with the CM that the owner would otherwise have no affiliation with), freight embargo; (8) unusual weather and related adverse subsurface conditions, unusual meaning expectation, frequency, severity, or unseasonable; (9) a case of differing site conditions or differing reference points; (10) a case of an emergency; (11) a case of a reasonable objection to a nominated Subcontractor; (12) unusually severe shortages of construction materials from such causes as area-wide shortages, an industry-wide strike, or a natural disaster affecting all feasible sources of supply; (13) delays, as itemized in this paragraph, to Subcontractors or Suppliers arising from unforeseeable causes beyond the control and without fault or negligence of both the CM and those Subcontractors or Suppliers; An extension in Contract Time, if any granted, shall be the CM's sole and exclusive remedy for any delay, disruption, interference, or hindrance and associated costs, however caused, resulting from causes contemplated in this paragraph.

E. If, in the opinion of THE OWNER, the CM fails to comply with the Progress Schedule, due to reasons that are within the reasonable ability of the CM to control, THE OWNER may but shall not be required to give the CM written notice of such failure and five days to cure the same. Unless the CM shall within that five days take all necessary steps to do so, including, if THE OWNER requires, increasing its forces, equipment and plant and continue to do so until, in the opinion of the Designer or Project Manager the failure is corrected, THE OWNER may at the CM's expense and without terminating this Contract employ and direct

the labors of existing or such additional forces, equipment and plant as may in the Designer's or Project Manager's opinion be necessary to insure the completion of the Work or such part thereof within the time specified in the Contract Documents or at the earliest possible date thereafter. THE OWNER may exercise its rights under this Article at any time and from time to time without waiving any of its rights under this Contract, at law or in equity, including, without limitation, the right to deem this Contract terminated or to order the CM to discontinue the Work at any time thereafter. The CM shall continue to perform the remaining Work under this Contract even if THE OWNER elects to have another contractor perform a portion of the Work under this Article.

F. THE OWNER shall deduct the cost of any actions THE OWNER takes under this Article from any amount then due or which might have become due to the CM under this Contract had the CM performed as required. On demand, the CM shall pay THE OWNER any amount by which the cost of completing all or any portion of the Work exceeds the amount attributable to that Work under the Contract Documents. THE OWNER shall have no obligation to obtain competitive bids or the lowest cost for completing the Work or any part thereof. THE OWNER's election to complete all or part of the Work shall not release the CM from any liability for failure to complete the Work as the Contract Documents require, and shall not entitle the CM to a claim for an increase in the Contract Price or an extension of the time for completing the Work.

G. The CM shall be responsible for submission of a weekly schedule forecasting the progress of upcoming work, the schedule shall forecast work at a minimum of two (2) weeks and a maximum of six (6) weeks. The schedule shall be representative of the approved progress schedule in which the logic and work breakdown structures (WBS's) are maintained. CM shall comply with Appendix E – Scheduling Specification.

2. <u>Failure to Complete Work on Time - Liquidated Damages.</u>

A. If liquidated damages are specified in the Owner - CM Agreement, THE OWNER has determined that its damages as a result of CM's failure to complete the Work to the point at which it qualifies for the issuance of a Certificate of Substantial Completion will be difficult or impracticable to ascertain. Accordingly, if the Work is not substantially completed by the date specified in this Contract, including Phased Completion dates when specified, or by any extended date approved by the Owner, the CM shall pay to THE OWNER the sum designated as liquidated damages in the Contract. Such moneys shall be paid as liquidated damages, not as a penalty, to cover losses and expenses to THE OWNER and/or the User Agency resulting from the fact that the Work is not substantially completed on time.

B. THE OWNER may recover such liquidated damages by deducting the amount thereof from any moneys due or that might become due the CM, and if such moneys shall be insufficient to cover the liquidated damages, then the CM or the Surety shall pay to THE OWNER the amount due.

C. Permitting the CM to continue and finish the Work or any portion of it after the time fixed in the Contract for its completion shall not be deemed as a waiver of any of the Owner's rights hereunder, at law or in equity.

D. Liquidated damages or a portion thereof may be waived by THE OWNER at the Owner's sole discretion.

E. Failure by THE OWNER to specify a sum as liquidated damages in the Owner-CM Agreement, or the insertion of "N/A" or "none" in the space provided therein for liquidated damages, shall not be deemed a waiver of THE OWNER's right to recover actual damages arising from the CM's failure to complete the Work on time.

F. The liquidated damaged that the Owner may assess for not achieving Substantial Completion for the NEMT High School Project is:

Phase 1 (Early Site Enabling):
$0 per calendar day (if Phase 2 is not impacted. If Phase 2 is impacted, use Phase 2 amount).

Phase 2A & 2B (2A: Early superstructure work / 2B: Construct new high school):
$10,110.00 per calendar day.

Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking):
$4,781.00 per calendar day plus costs for student bussing for each missed home football game (minimum assumed to be $750/game).

3. Delays; Time Extensions, No Damages for Delay Statutory Provisions (M.G.L. c. 30, s. 39O).

A. Notwithstanding any provision of this Contract to the contrary, except as otherwise provided by law as set forth in paragraph B below, the CM shall not be entitled to an increase in the Contract Price or to receive damages on account of any hindrances or delays, avoidable or unavoidable; but if any delay occurs that is caused in the opinion of THE OWNER, by parties or events beyond the reasonable ability of the CM to control, the CM shall be entitled to an extension of time. Delays caused by suppliers, subcontractors and sub-subcontractors shall be considered to be within the control of the CM. The length of the extension shall be sufficient in the opinion of THE OWNER for the CM to complete the Work.

B. The CM may be entitled to an extension of time if the CM can demonstrate to the reasonable satisfaction of THE OWNER, upon the recommendation of the Designer and the Project Manager, that the critical path schedule for the Project has been adversely impacted by events of delay that are beyond the reasonable ability of the CM to control, and that the CM cannot revise its critical path schedule to eliminate the need for a time extension; provided however that THE OWNER and CM are entitled to share the "float" time in the CPM schedule if the utilization of such time avoids a time extension. Should the CM require additional time to complete the work, it shall document its reasons therefor and request an extension of time at the time the alleged delay occurred, as provided in this Article. Failure to notify the Owner of any delay in writing within twenty days from the date the event arose that caused such delay, shall preclude the CM from requesting and obtaining a time extension due to said delay. Requests for extensions of time shall be submitted as a Change Order request to the Owner.

C. No extension of time shall be granted because of seasonal variations in temperature, humidity or precipitation, which conditions shall be wholly at the risk of the CM, whether occurring within the time originally scheduled for completion or within the period of any extension granted. There shall be no increase in the Contract Sum on account of any additional costs of operations or conditions resulting therefrom.

D. (1) Extension of Time. Upon a timely and proper request, the CM shall be entitled to an appropriate extension of time to complete the Project should any hindrances, suspensions, interruptions or delays to the critical path schedule result from one or more of the following circumstances:

(i) failure of THE OWNER to provide the CM with a Notice to Proceed in a timely manner;

(ii) failure of THE OWNER or Designer, to act, respond, or provide approvals to the CM within 20 days of receipt of a written request from the CM for action or direction; provided, that if THE OWNER or Designer requires additional time to prepare a response, THE OWNER and/or Designer shall have 20 additional days to provide a response to the CM;

(iii) issuance by THE OWNER of Change Orders or Contract Modifications;

(iv) encountering unanticipated special wastes or historical or archaeological resources;

(v) encountering unanticipated subsurface conditions differing from those anticipated from the information provided prior to construction;

(vi) inability of the CM to obtain the required permits and/or jurisdictional approvals despite the best efforts of the CM to obtain such permits and/or approvals;

(vii) failure of THE OWNER to provide the CM with exclusive physical and legal access to the project site in a timely manner to permit the work to proceed in accordance with the schedule;

(viii) action by any court or public agency, unless such action is due to the fault of the CM;

(ix) actions of other contractors employed by THE OWNER;

(x) fire, flood, severe weather conditions, unavoidable casualties and strikes;

(xi) any other cause beyond the reasonable ability of the CM to control which THE OWNER determines justifies an extension of time.

E. The CM's estimates of the extension of time must be accompanied by a detailed analysis identifying each action(s) or additional work item(s) which caused the delay and also identifying exactly which items along the critical path were impacted or delayed. Accumulating the amount of time required to complete a series of additional work items or delays and adding this time to the original Contract Time will not be considered justification for an extension of time. In order to justify an extension of Contract Time, the CM must prove that the critical path for construction has been impacted by circumstances beyond the control of the CM.

F. If a suspension, delay, interruption or failure to act of THE OWNER increases the cost of performance to any Subcontractor, that Subcontractor shall have the same rights against the CM with respect to such increase as the CM shall have against THE OWNER by virtue of (a) and (b) of M.G.L. c. 30, s. 39O set forth below, but nothing in provisions (a) and (b) shall alter any other rights which the CM or the Subcontractor may have against each other. As used in the statutory language of (a) and (b) below, "contract" means this Contract, "general contractor" means the CM and "Awarding Authority" means THE OWNER:

"*(a) The Awarding Authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the Awarding Authority; provided, however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the Awarding Authority to act within the time specified in this contract, the Awarding Authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the general contractor on such increase; and provided further, that the Awarding Authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions.*

(*b) The general contractor must submit the amount of a claim under provision (a) to the Awarding Authority in writing as soon as practicable after the end of the suspension, delay, interruption or failure to act and, in any event, not later than the date of final payment under this contract and except for costs due to a suspension order, the Awarding Authority shall not approve any costs in the claim incurred more than twenty days before the general contractor notified the Awarding Authority in writing of the act or failure to act involved in the claim."*

G. No Damages for Delay. Except as provided in Paragraph F, when THE OWNER issues a written order suspending the work, as provided in Paragraph F, the CM shall have no claim for damages of any kind against THE OWNER on account of any delay in the commencement or performance of any of the work or any delay or suspension of any portion of the Work, whether such delay is caused by THE OWNER, the Designer, or otherwise.

4. Use and Occupancy Prior to Final Acceptance.

A. THE OWNER and the User Agency will cooperate with the CM with respect to the completion of the Work by taking such reasonable steps as may be possible to avoid interference with the CM's Work provided that they do not interfere with the proper functioning of the existing campus.

B. Use and occupancy of any part of the Work prior to Final Acceptance by THE OWNER shall not relieve the CM from maintaining the required payment and performance bonds and insurance (to the extent that insurance is required to be maintained after Substantial Completion) required by this Contract.

5. Certificate of Substantial Completion, Final Completion.

A. When a phase of the Work, or portion thereof which THE OWNER agrees to accept separately, has reached the state of Substantial Completion, the CM shall develop, with the participation of the Designer and THE OWNER, the monetized Punch List identifying those items of unfinished or unacceptable Work that remain to be performed or corrected under the Contract.

B. Before each phase of the Work shall be deemed completed to the point where it is ready for the issuance of a Certificate of Substantial Completion and a Certificate of Final Completion, the CM shall comply with all the requirements designated in the Contract.

C. Completion of the Commissioning Agent (CxA) provided Installation Checklists and Start Up Checklists and all other related documentation provided to the CM and the CM's affected filed trade contractors and/or subcontractors will be required for the issuance of Substantial Completion of each phase of the project, as applicable. All project equipment and systems to be commissioned must be ready for CxA functional testing prior to the issuance of the Certificate of Substantial Completion for each phase of the project, as applicable.

6. One-Year Warranty Repair List and Inspection.

Approximately 30 days prior to the expiration of the comprehensive one-year warranty period required by Article IX, the CM shall schedule an appointment with THE OWNER for a re-inspection of the Work with THE OWNER and User Agency, and shall thereafter inspect the work at the time scheduled. Based on this inspection and on prior inspections, THE OWNER and/or User Agency shall issue a "Warranty Repair List" of items to be corrected by the CM. The CM shall make the repairs and/or replacements listed within 30 days of the issuance of the Warranty Repair List unless otherwise agreed by THE OWNER in writing.

ARTICLE VII: CHANGES IN THE WORK

1. Change Orders Generally.

A. No changes in the Work, the Contract Price, the Substantial and Final Completion dates, or any other provision of an Approval by THE OWNER of the Contract Documents shall be made in absence of a Change Order as defined in Article I of these General Conditions of the Contract, directing the CM to perform such changes. Any request for a change in the provisions of this Contract submitted by the CM must be made in writing and in accordance with the provisions of this Contract. A Change Order Request shall be submitted to the Designer, and a copy shall simultaneously be submitted to the Project Manager.

B. A request for a change in the provisions of this Contract may originate with THE OWNER, the CM, or the Designer. The request must be made in writing and in accordance with the provisions of this Contract. When the CM believes that an event or circumstance gives rise to an adjustment in the Contract Price and/or the Contract Time it shall submit a request for a change order to the Designer and simultaneously to the Project Manager, in accordance with the contract. The CM cannot reserve its rights to request additional time or costs at a later date.

C. Prior to the approval of a Change Order, THE OWNER, through the Designer or the Project Manager, may issue a written directive to the CM (sometimes called a Notice to

Proceed or a Proposed Change Order) instructing the CM to make changes in the Work within the scope of the Contract, including but not limited to, changes in: (1) the Plans and Specifications; (2) the method or manner of performance of the Work; (3) the Owner-furnished facilities, equipment, materials, services or Site; (4) the schedule for performance of the Work.

D. The CM shall immediately perform any changes in the work that are ordered by THE OWNER.

E. Whenever a Change Order or written directive issued under Paragraph C will cause a change in the CM's cost or the time required to perform the Work, the CM or THE OWNER may request an adjustment in the Contract Price. Such request shall be in writing and shall be submitted by the party making such claim to the other party before commencement of the pertinent work or as soon thereafter as possible.

F. THE OWNER and the CM shall negotiate in good faith an agreement on an equitable adjustment in the Contract Price, pursuant to the methods described in the following Paragraph 2, and/or time if appropriate, before commencement of the pertinent work or as soon thereafter as is possible. In the absence of an agreement for an equitable adjustment, THE OWNER shall determine the costs attributable to the change and provide the CM with a written notice to that effect, in which event the CM may follow the procedure described in Paragraph 3. Work Performed under Protest.

G. During the negotiation of an equitable adjustment in the Contract Price, the CM shall, if requested, provide THE OWNER with all cost, pricing data and any other information or documentation used by it in computing the amount of the equitable adjustment, and the CM shall certify that the pricing data used was accurate, complete, current and reasonable. If THE OWNER subsequently determines that the data submitted by the CM was incomplete, incorrect, not current, or unreasonable, THE OWNER may exclude such data from consideration under the equitable adjustment request.

H. Whenever the Construction Manager is entitled or believes it is entitled to a Change Order adjusting the Contract Price, the Construction Manager shall maintain separate accounts (by job order or other suitable accounting procedure) of all costs incurred and attributable to such work. The Construction Manager shall maintain a computerized accounting system, acceptable to THE OWNER, in which current information as to the status of all such work is maintained. The Construction Manager shall maintain such contemporaneous records as are necessary to provide a clear distinction between the costs of all Change Order Work and proposed Change Order Work, and the costs of other Work.

I. Notwithstanding any provisions in the Contract Documents to the contrary, no additional General Conditions or General Requirements Cost shall be due for any Change Order or portion of a Change Order resulting from or attributable to:

1. Increases in the cost of GMP Allowance or GMP Hold items;
2. Substitutions of equipment or materials which are functionally similar to equipment or materials specified in the Contract Documents.

J. In the event wherein a Subcontractor provides a Change Order price quote that is not acceptable to the Owner, Designer, and/or Project Manager, the Owner may direct the Subcontractor (through the CM) to proceed on a not-to-exceed Time & Materials basis. Not withstanding a major change in scope, the price shall not increase from the original quote, regardless of what the Time & Materials basis costs total to.

2. <u>Methods of Computing Equitable Adjustments.</u>

A. Equitable adjustments in the Contract Price shall be determined according to one of the following methods, or a combination thereof, as determined by THE OWNER:
(1) fixed price basis, provided that the fixed price shall be inclusive of items listed in (3) (a) through (d) below and shall be computed in accordance with those provisions;

(2) estimated lump sum basis to be adjusted in accordance with Contract unit prices or other agreed upon unit prices, provided that the unit prices shall be inclusive of all costs related to such equitable adjustment;
(3) time and materials basis to be subsequently adjusted on the basis of actual costs (but subject to a predetermined "not to exceed limit") calculated as follows:

(a) the direct cost (or credit) for labor at the prevailing wage rates established for this Contract pursuant to M.G.L. c. 149, s 26-27H, and the direct cost for material and use of equipment. Equipment rates shall be in accordance with the Equipment Watch Blue Book value. Equipment valued at less than $1,000 shall be considered a "tool of the trade" and not considered a direct cost of the work. Vehicles used to transport workers to the site but not directly engaged in the work being performed shall not be considered a direct cost of the work;
(b) plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 30% of the total labor rate computed in accordance with subparagraph (a) above;
(c) plus an allowance equal to 15% of the amount of (a) above for General Conditions, General Requirements, overhead, superintendence, fee, and profit. For that portion of the change order costs in paragraph (a) that the CM self performs, the CM shall retain the 15% allowance. For that portion of the change order costs that a subcontractor performs, the CM shall pay the subcontractor 10% of the allowance to cover the subcontractor's overhead, superintendence, fee and profit and the CM shall retain the remaining 5%. Where sub-subcontractors are used, the CM shall define how the 10% subcontractor allowance shall be divided amongst lower tier sub-subcontractors, in no event shall the total allowance paid by the Owner exceed 15% of the direct costs. Additional charges within change orders for items such as PM time, foreman time (shop or field), supervision, as-builts/CAD time, cleanup, small tools, remobilizations, travel, warranty, and/or safety will not be entertained as those are already owned and required as part of the project or encapsulated within the Overhead and profit markups.
(d) plus the actual direct premium cost of payment and performance bonds required of CM and Trade Subcontractors for this Contract.
(e) The CM shall be responsible for tracking the Work and notifying the Owner or Project Manager in advance as to when the Work will start/complete, and the location(s) of the Work. Upon completion of the work, the CM shall submit the Time and Material Reports via a Change Order to the Owner or Project Manager for review and approval. The Time and Material Report is required to be submitted in a standardized form for each Subcontractor/Contractor that contains the following:

- **I.** Report/Slip number, date of the work, number of workers (with specific names & labor classification).
- **II.** Full name, signature, and date from the CM staff member who monitored and recorded the Work.
- **III.** Full name, signature, and date from the Owner or Project Manager who monitored and recorded the Work.
- **IV.** A check box or cover letter indicating "Owner or Project Manager has been notified in advance of the work, and CM has shown the Owner or Project Manager where work has started/completed each day".
- **V.** Where possible, photos of the corresponding work documenting the progress.

(f) Reports/Slips submitted excluding any of the information listed above may be deemed unacceptable for funding of the Change Order through a GMP Allowance or Owner Contingency at the Owner or Project Managers discretion.

B. If the net change is an addition to the Contract Price, it shall include the CM's overhead, superintendence and profit. For any change that does not include labor performed or materials installed in the project, there will be no markup for the CM's or Subcontractor's

overhead, superintendence, and profit, even though there may be a net increase in the Contract Price. Charges for small tools known as "tools of the trade" and company vehicles are not to be computed in the amount of any change in the Contract Price.

C. Adjustment to the amounts of Subcontracts made under the provisions of the Procedure for Award of Subcontracts shall not be considered Change Orders and shall not entitle the CM to any adjustments for overhead, profit, and superintendence, although THE OWNER may require that such Contract adjustments be processed on standard Change Order and equitable adjustment forms. Similarly, THE OWNER may require that line item transfers between GMP cost accounts, including Construction Contingency, GMP Holds and GMP Allowances, be processed on standard Change Order and equitable adjustment forms as deemed acceptable the Owner or Project Manager.

D. In the event Work owned within the Contract Documents is removed from the Project, The CM shall be required to issue a credit to the Owner or Project Manager through a proposed Change Order at a value deemed acceptable by the Owner or Project Manager. Credit Change Orders shall include a five percent (5%) profit credit from the CM and the Subcontractor(s) associated with the Change Order.

E. In the event that a Subcontractor attempts to use NECA pricing, NECA-1 pricing is to be used as "worst-case" and is only allowed for cost proposals less than $35,000. For cost proposals exceeding $35,000, the Owner or Project Manager may not allow the Subcontractor to use NECA pricing.

3. <u>Work Performed Under Protest.</u>

The CM agrees to perform all Work as directed by THE OWNER, and if THE OWNER determines that certain Work that the CM believes to be or to warrant a Change Order under this Article does not represent a change in the Work, the CM shall perform said Work. The CM shall be deemed to have concurred with THE OWNER's determination as aforesaid unless the CM shall perform Work under protest in compliance with the following sub-paragraphs (1) and (2) below:

(1) If the CM claims compensation for a change in the Work that is not deemed by THE OWNER to be a change or to warrant additional compensation as claimed by the CM, the CM shall on or before the first working day following the commencement of any such work or the sustaining of any such damage submit to THE OWNER a written statement of the nature of such work or claim. The CM shall not be entitled to additional compensation for any work performed or damage sustained for which written notice is not given within the time limit specified in the preceding sentence, even though similar in character to work or damage with respect to which notice is timely given.

(2) On or before the second working day after the commencement of such work or the sustaining of such damage, and daily thereafter, the CM shall file to the extent possible with the Clerk of Works, the Designer, and the Project Manager, itemized statements of the details and costs of such work performed or damage sustained. The CM shall submit Daily Time and Materials Reports to record all labor and material used. If the CM fails to submit such statements, then the CM shall not be entitled to later pursue a claim against Owner for additional compensation for any such work or damages.

4. <u>False Claims, Statutory Provisions Regarding Changes.</u>

A. Criminal Penalties: The CM's attention is directed to M.G.L. c. 30, s. 39I which provides criminal penalties for unauthorized deviations from the Plans and Specifications, and to M.G.L. c. 30, s. 39J and M.G.L. c. 7, s. 42E-42I. The CM's attention is also directed to M.G.L. 266, s. 67B which provides criminal penalties for false claims by Contractor under this Contract:

"Whoever makes or presents to any employee, department, agency or public instrumentality of the commonwealth, or of any political subdivision thereof, any claim upon or against any

department, agency, or public instrumentality of the commonwealth, or any political subdivision thereof, knowing such claim to be false, fictitious, or fraudulent, shall be punished by a fine of not more than ten thousand dollars or by imprisonment in the state prison for not more than five years, or in the house of correction for not more than two and one-half years, or both."

B. Differing Site Conditions (M.G.L. c. 30, s. 39N): "*If, during the progress of the work, the contractor or the Awarding Authority discovers that the actual subsurface or latent physical conditions encountered at the Site differ substantially or materially from those shown on the plans or indicated in the contract documents either the contractor or the contracting authority may request an equitable adjustment in the contract price of the contract applying to work affected by the differing Site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a contractor, or upon its own initiative, the contracting authority shall make an investigation of such physical conditions, and, if they differ substantially or materially from those shown on the plans or indicated in the contract documents or from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the plans and contract documents and are of such a nature as to cause an increase or decrease in the cost of performance of the work or a change in the construction methods required for the performance of the work which results in an increase or decrease in the cost of the work, the contracting authority shall make an equitable adjustment in the contract price and the contract shall be modified in writing accordingly."*

C. Timely Decision By THE OWNER (M.G.L. c. 30, s. 39P): *"Every contract subject to section thirty-nine M of this chapter or section forty-four A of chapter one hundred forty-nine which requires the Awarding Authority, any official, its architect or engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, shall require that the decision be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the Awarding Authority, the official, architect or engineer shall, within thirty days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty day period and the date by which the decision will be made."*

ARTICLE VIII: PAYMENT PROVISIONS

1. <u>Schedule of Values.</u>

Before submission of the first request for payment under this Contract, the CM shall submit to THE OWNER a Schedule of Values (SOV) for its approval, which shall include all preconstruction activities as well as all construction activities and shall be in sufficient detail to reflect the various preconstruction activities and the major components of each construction trade (with relevant Subcontractors as well as MBE/WBEs noted), including breakdown by MSBA budget codes, quantities when requested, aggregating the GMP with detail for the Holds, Allowances and Contingency and divided so as to facilitate payments for work under each section of the Specifications. The schedule shall be prepared in such form and supported by such data to substantiate its accuracy as THE OWNER may require. When Approved by THE OWNER, it shall constitute the Schedule of Values and shall be used only as a basis for the CM's requests for payments and credits, the first of which payments shall not be made until such Schedule of Values is approved by THE OWNER. If the MSBA requires any revisions to the format of the Schedule of Values, the CM and the Owner shall make the revisions. The Schedule of Values shall clearly identify both retainage (+/-) values for that period, and the aggregate retainage value for each line item. Upon OWNER and MSBA approval of the SOV, no revisions shall be allowed until and unless a written request for a

revision to the SOV is submitted by the CM to the OWNER and the OWNER provides written approval of the requested revision.

2. Payment Liabilities of CM.

A. The CM shall pay to THE OWNER all expenses, losses and damages, as determined by THE OWNER, incurred in consequence of any default, defect, omission or mistake of the CM or his employees or Subcontractors or the making good thereof.

B. If the Work (or a portion thereof) is not substantially completed and the CM has not satisfied the requirements for the issuance of a Certificate of Substantial Completion by the date specified in the Contract, the CM shall pay to the Owner liquidated damages as provided in the Contract.

3. Retention of Moneys by THE OWNER.

A. THE OWNER may keep any moneys which would otherwise be payable at any time hereunder, and apply the same, or so much as may be necessary therefor, to (1) THE OWNER 's expenditures for the CM's account, (2) to secure THE OWNER's remedies against the CM for the CM's breach of its obligations under this Contract or the breach of any person performing any part of the Work and (3) the payment of any expenses, losses or damages incurred by THE OWNER as a result of the failure of the CM to perform its obligations hereunder. THE OWNER may retain, until all claims are settled, such moneys as THE OWNER estimates to be the fair value of THE OWNER's claims against the CM, and of all claims for labor performed or furnished and for materials used or employed in or in connection with the Work and for the rental of vehicles, appliances and equipment employed and for the employment of substitute contractors and labor in connection with the Work filed in accordance with M.G.L. c. 30, s. 39A and s. 39F. THE OWNER may make such settlements and apply thereto any moneys retained under this Contract. The OWNER shall be under no obligation to release any retainage monies until substantial completion is achieved.

4. Applications for Payment.

A. The CM shall, once in each month submit to THE OWNER an application for payment for its periodic payment estimate, showing the total amount of Work done to the time of such estimate and the value thereof as approved by THE OWNER. It shall be the sole responsibility of the CM to deliver or cause to be delivered to the Designer said periodic estimate, in proper form, approved as provided above and arithmetically correct, and signed by the Designer and the Project Manager, if requested by the Owner. All periodic estimates shall contain such certifications and other evidence supporting the CM's right to payment as THE OWNER may require, including without limitation, forms THE OWNER may require, establishing that title to the equipment or materials is unencumbered and has been transferred to THE OWNER. The CM shall include in such periodic estimate only such materials as are incorporated in the Work, except as provided in paragraph C below. THE OWNER shall retain five percent of such estimated value as part security for the completion of the Work and shall pay to the CM while carrying on the Work the balance not retained as aforesaid, subject to the Approval of THE OWNER after deducting therefrom all previous payments and all sums to be kept under the provisions of this Contract, provided that the Owner shall not assess retainage against applications for payment for the CM’s Preconstruction Services Fee.

B. Each periodic payment estimate shall constitute the CM's representation that (1) the payment then requested to be disbursed has been incurred by the CM on account of the Work and is justly due to Subcontractors or, to the CM in the case of other Work performed by the CM on account thereof, (2) the materials, supplies and equipment for which Application for Payment is being submitted have been installed or incorporated into the Work or have been

stored at the Site or at such off Site storage locations as THE OWNER shall have Approved, (3) the materials, supplies and equipment are insured in accordance with the provisions of this Contract, (4) the materials, supplies and equipment are owned by the owner and are not subject to any liens or encumbrances, (5) the Work which is the subject of such periodic estimate has been performed in accordance with the Contract Documents and (6) that all due and payable bills with respect to the Work have been paid to date and shall be paid from the proceeds of such periodic estimate. The CM's attention is directed to the criminal penalties for false claims.

C. The CM may include in a periodic payment estimate the value of materials or equipment delivered at the Site (or at some location agreed to in writing by THE OWNER) only upon delivery to THE OWNER of: (1) an acceptable transfer of title on the form provided by THE OWNER; (2) written certification by the CM (or applicable subcontractor) on the form provided by THE OWNER that the CM (or the Subcontractor which executed the transfer of title) is the lawful owner and that the materials or equipment are free from all encumbrances, accompanied by receipted invoices or other acceptable proof of encumbrance-free ownership if such proof is deemed necessary by THE OWNER; (3) a stored materials insurance binder that covers the materials for which payment is requested, that names the Owner as an insured party should the stored materials be subjected to any casualty, loss, or theft prior to their inclusion in the Work. The material(s) or equipment must, in the judgment of the Designer (1) meet the requirements of the Contract, including prior drawing, product data, and sample approval, (2) be ready for use, and (3) be properly stored by the CM and be adequately protected until incorporated into the Work.

D. THE OWNER may make changes in any periodic payment estimate submitted by the CM and the payment due shall be computed in accordance with the changes so made.

E. No certificate for payment and no progress payment shall constitute acceptance of Work that is not in accordance with the Contract Documents.

F. The CM and all Subcontractors furnishing labor on this Contract agree to furnish certified payroll reports, OSHA certification, apprentice cards, and proof of permits at no additional expense to THE OWNER on a monthly basis. THE OWNER may at all reasonable times audit such reports.

G. With every application for payment (including initial, draft, pencil, etc. versions), the CM shall submit an updated construction schedule with the requirements set forth in Appendix E- Scheduling Specification of the General Conditions of the Contract. The data date set forth within said construction schedule shall be coordinated before submission with the Owner's Project Manager.

5. Periodic Payments

THE OWNER shall make payment to the CM in accordance with M.G.L. c. 30 sect. 39K, which provides as follows:

"Within fifteen days after receipt from the CM at the place designated by the Owner, if such a place is so designated, of a periodic estimate requesting payment of the amount due for the preceding month, the Owner shall make a periodic payment to the CM for the work performed during the preceding month and for the materials not incorporated in the work but delivered and suitably stored at the site (or at some location agreed upon in writing) to which the CM has title or to which a trade contractor has title and has authorized the CM to transfer title to the Owner less (1) a retention based on its estimate of the fair value of its claims against the CM and less (2) a retention not exceeding five percent of the approved amount of the periodic payment. After the receipt of a periodic estimate requesting final payment and within sixty-five days after (a) the contractor fully completes the work or substantially completes the work so that the value of the work remaining to be done is, in the estimate of the Owner, less than one percent of the adjusted contract price, or (b) the CM substantially completes the work and the Owner takes possession for occupancy, whichever occurs first, the Owner shall pay the CM the entire balance due on the Contract less a

retention based on its estimate of the fair value of its claims against the CM and the cost of completing the incomplete and unsatisfactory work."

THE OWNER may make changes in any periodic payment estimate submitted by the CM and the payment due on said periodic payment estimate shall be computed in accordance with the change so made, but such changes or any requirement for a corrected periodic payment estimate shall not affect the due date for the periodic payment or the date for the commencement of interest charges on the amount of the periodic payment computed in accordance with the changes made, as provided herein; provided, that THE OWNER may, within seven days after receipt, return to the CM for correction, any periodic estimate which is not in the required form or which contains computations not arithmetically correct and, in that event, the date of receipt of such periodic payment estimate shall be the date of receipt of the corrected periodic estimate in proper form and with arithmetically correct computations. The date of receipt of a periodic payment estimate received on a Saturday shall be the first working day thereafter.

All periodic payment estimates shall be submitted to THE OWNER as provided herein, and the date of receipt by THE OWNER or its designee shall be marked on the payment estimate. All periodic estimates shall be based on the Schedule of Values and shall be submitted in form satisfactory to the Designer and the Project Manager.

6. Termination for Failure to Complete Punchlist

Notwithstanding the provisions of this section, at any time after the value of the work remaining to be done is, in the estimation of THE OWNER, less than 1 percent of the adjusted contract price, or THE OWNER has determined that the CM has substantially completed the work and THE OWNER has taken possession for occupancy, THE OWNER in conjunction with the Designer may send to the CM a complete and final punchlist of all incomplete and unsatisfactory work items, including, for each item on the punchlist, a good faith estimate of the fair and reasonable cost of completing such item. The CM shall then complete all such work items within 30 days of receipt of such list or before the contract completion date, whichever is later. If the CM fails to complete all incomplete and unsatisfactory work items within 45 days after receipt of such items furnished by THE OWNER or before the contract completion date, whichever is later, subsequent to an additional 14 days' written notice to the CM, THE OWNER may terminate the contract and complete the incomplete and unsatisfactory work items and charge the cost of same to the CM and such termination shall be without prejudice to any other rights or remedies THE OWNER may have under the contract. THE OWNER shall note any such termination in the evaluation form to be filed by THE OWNER pursuant to the provisions of section 44D of chapter 149.

7. Payment of Subcontractors (M.G.L. c. 30, s. 39F).

The CM shall make payments to Subcontractors in accordance with M.G.L c.30, s. 39F which is quoted in this section below. For the purposes of this Contract, the word "forthwith" appearing in paragraph 1(a) of the quoted provision shall be deemed to mean "within five (5) business days." As used in the statutory language of M.G.L. c. 30. S. 39F outlined below, "general contract" means this Contract, "general contractor" means the CM and "Awarding Authority" means THE OWNER.

"1(a) Forthwith after the general contractor receives payment on account of a periodic estimate, the general Contractor shall pay to each subcontractor the amount paid for the labor performed and the materials furnished by that subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.

(b) Not later than the sixty-fifth day after each subcontractor substantially completes his work in accordance with the Plans and Specifications, the entire balance due under the subcontract less amounts retained by THE OWNER as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the subcontractor; and the Awarding Authority shall pay that amount to the general contractor. The general contractor shall forthwith pay to the subcontractor the full amount received from the Awarding Authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.

(c) Each payment made by the Awarding Authority to the general contractor pursuant to subparagraphs (a) and (b) of this paragraph for the labor performed and the materials furnished by a subcontractor shall be made to the general contractor for the account of that subcontractor; and the Awarding Authority shall take reasonable steps to compel the general contractor to make each such payment to each such subcontractor. If the Awarding Authority has received a demand for direct payment from a subcontractor for any amount which has already been included in a payment to the general contractor or which is to be included in a payment to the general contractor for payment to the subcontractor as provided in subparagraphs (1) and (2) the Awarding Authority shall act upon the demand as provided in this section.

(d) If, within seventy days after the subcontractor has substantially completed the subcontract work, the subcontractor has not received from the general contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount retained by the Awarding Authority as the estimated cost of completing the incomplete and unsatisfactory items of work, the subcontractor may demand direct payment of that balance from the Awarding Authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the Awarding Authority, and a copy shall be delivered to or sent by certified mail to the general contractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract work. Any demand made after substantial completion of the subcontract work shall be valid even if delivered or mailed prior to the seventieth day after the subcontractor has substantially completed the subcontract work. Within ten days after the subcontractor has delivered or so mailed the demand to the Awarding Authority and delivered or so mailed a copy to the general contractor, the general contractor may reply to the demand. The reply shall be by a sworn statement to or sent by certified mail to the Awarding Authority and a copy shall be delivered to or sent by certified mail to the subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor and of the amount due for each claim made by the general contractor against the subcontractor.

(e) Within fifteen days after receipt of the demand by the Awarding Authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the Awarding Authority shall make direct payment to the subcontractor of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount (i) retained by the Awarding Authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the general contractor in the sworn reply; provided that the Awarding Authority shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by subparagraph (d). The Awarding Authority shall make further direct payments to the subcontractor forthwith after the removal of the basis for deduction from direct payments made as provided in parts (i) and (ii) of this subparagraph.

(f) The Awarding Authority shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of subparagraph (5) in an interest-bearing joint account in the names of the general contractor and the subcontractor in a bank in Massachusetts selected by the Awarding Authority or agreed upon by the general contractor and the

subcontractor and shall notify the general contractor and the subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the general contractor and the subcontractor or as determined by decree of a court of competent jurisdiction.

(g) All direct payments and all deductions from demands for direct payments deposited in an interest bearing account or accounts in a bank pursuant to subparagraph (6) shall be made out of amounts payable to the general contractor at the time of receipt of a demand for direct payment from a subcontractor and out of amounts which later become payable to the General contractor and in the order of receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the Awarding Authority to the general contractor to the extent of such payment.

(h) The Awarding Authority shall deduct from payments to a General contractor amounts which, together with the deposits in interest bearing accounts pursuant to subparagraph (6) are sufficient to satisfy all unpaid balances of demands for direct payment received from subcontractors. All such amounts shall be earmarked for such direct payments, and the subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the general contractor.

(i) If the subcontractor does not receive payment as provided in subparagraph (1) or if the general contractor does not submit a periodic estimate for the value of the labor or materials performed or furnished by the subcontractor and the subcontractor does not receive payment for same when due less the deductions provided for in subparagraph (1), the subcontractor may demand direct payment by following the procedure in subparagraph (4) and the general contractor may file a sworn reply as provided in that same subparagraph. A demand made after the first day of the month following that for which the subcontractor performed or furnished the labor and materials for which the subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the general contractor. Thereafter the Awarding Authority shall proceed as provided in subparagraph (e), (f), (g) and (h)."

(2) Any assignment by a subcontractor of the rights under this section to a surety company furnishing a bond under the provisions of section twenty-nine of chapter one hundred forty-nine shall be invalid. The assignment and subrogation rights of the surety to amounts included in a demand for direct payment which are in the possession of the Awarding Authority or which are on deposit pursuant to subparagraph (6) shall be subordinate to the rights of all subcontractors who are entitled to be paid under this section and who have not been paid in full.

(3) "subcontractor" as used in this section (I) for contracts awarded as provided in sections forty-four A to forty-four L, inclusive, of chapter one hundred forty-nine shall mean a person who files a sub-bid and received a subcontract as a result of that filed sub-bid or who is approved by the Awarding Authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the general contractor, (ii) for contracts awarded as provided in paragraph (1) of section thirty-nine M of chapter thirty shall mean a person approved by the Awarding Authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the general contractor, and (iii) for contracts with the commonwealth not awarded as provided in sections forty-four A to forty-four L, inclusive, of chapter one hundred forty-nine shall also mean a person contracting with the general contractor to supply materials used or employed in a public works project for a price in excess of five thousand dollars.

(4) A general contractor or a subcontractor shall enforce a claim to any portion of the amount of a demand for direct payment deposit as provided in subparagraph (6) by a petition in equity in the superior court against the other and the bank shall not be a necessary party. A subcontractor shall enforce a claim for direct payment or a right to require a deposit as provided in subparagraph (6) by a petition in equity in the superior court against the Awarding Authority and the general contractor shall not be a necessary party. Upon motion of any party the court shall advance for speedy trial any petition filed as

provided in this paragraph. Sections fifty-nine and fifty-nine B of chapter two hundred thirty-one shall apply to such petitions. The court shall enter an interlocutory decree upon which execution shall issue for any part of a claim found due pursuant to sections fifty-nine and fifty-nine B and, upon motion of any party, shall advance for speedy trial the petition to collect the remainder of the claim. Any party aggrieved by such interlocutory decree shall have the right to appeal therefrom as from a final decree. The court shall not consolidate for trial the petition of any subcontractor with the petition of one or more subcontractors or the same general Contract unless the court finds that a substantial portion of the evidence of the same events during the course of construction (other than the fact that the claims sought to be consolidated arise under the same general contract) is applicable to the petitions sought to be consolidated and that such consolidation will prevent unnecessary duplication of evidence. A decree in any such proceeding shall not include interest on the disputed amount deposited in excess of the interest earned for the period of any such deposit. No person except a subcontractor filing a demand for direct payment for which no funds due the general contractor are available for direct payment shall have a right to file a petition in court of equity against the Awarding Authority claiming a demand for direct payment is premature and such subcontractor must file the petition before the Awarding Authority has made a direct payment to the subcontractor and has made a deposit of the disputed portion as provided in part (iii) of subparagraph (5) and in subparagraph (6).

(5) In any petition to collect any claim for which a subcontractor has filed a demand for direct payment the court shall, upon motion of the general contractor, reduce by the amount of any deposit of a disputed amount by the Awarding Authority as provided in part (iii) of subparagraph (5) and in subparagraph (6) any amount held under a trustee writ or pursuant to a restraining order or injunction."

8. <u>Final Payment; Release of Claims by CM.</u>

Upon Final Acceptance of the Work the CM shall be entitled to payment of the balance of the Contract Price. Final payment shall be as provided in this Article above and in accordance with any process set forth in the Contract Documents. The CM agrees to execute a Certificate of Final Inspection, Release (with CM's own exceptions listed thereon) and Acceptance as a condition precedent to Final Payment. The acceptance by the CM of the Final Payment made as aforesaid, or the execution of the Certificate of Final Acceptance by the CM, shall constitute a release of THE OWNER, the Designer, the Project Manager and every member and agent of any of them, from all claims of and liability to the CM for anything done or furnished for or relating to the Work, or for any act or neglect of THE OWNER, the Designer, the Project Manager, or of any person relating to or affecting the Work, except the claim against THE OWNER for the remainder, if any there be, of the amounts claimed to be due. Final Acceptance shall not relieve CM of the requirements of any of the provisions of this Contract, to the extent that the same are intended to survive Final Acceptance.

ARTICLE IX. GUARANTEES AND WARRANTIES

1. <u>General Warranty</u>.

If at any time during the period of one (1) year from the date the Owner accepts the Work as Substantially Complete, any part of such Work shall in the reasonable opinion of THE OWNER be defective in either materials or workmanship, or require replacing or repairing, or damage to other property of the Owner is caused by any defect in the Work, THE OWNER shall notify the CM in writing to make the required repairs or replacements and repair such damage. If the CM shall neglect to commence such repairs or replacements to the satisfaction of THE OWNER within ten (10) days from the date of the giving of such notice, then THE OWNER may employ other persons to make the same. In the case of an emergency, the Owner may direct the CM to perform guaranty work in a shorter period of

time and the Owner may undertake any immediate actions and incur reasonable costs to preserve the safety of the building or its occupants. The CM agrees, upon demand, to pay to THE OWNER all amounts which it expends for such repairs, replacements, and/or damages. During this one-year guarantee period any corrective work shall be performed under all the applicable terms of this Contract, and if Change Orders are issued in accordance with the terms of this Contract, the CM shall be entitled to compensation for special insurance, as required. This one-year guarantee shall not limit any express guaranty or warranty provided elsewhere in the Contract.

2. Special Guarantees and Warranties.

A. The CM's obligation to correct Work as set forth in paragraph 1 above is in addition to, and not in substitution of, such guarantees or warranties as may be required in the various sections of the Specifications.

B. Guarantees and warranties required in the various sections of the Specifications must be delivered to the Designer before final payment to the CM may be made, or in the case of guarantees and warranties which originate with a subcontractor's section of the Work, before final payment for the amount of that subtrade or for the phase of Work to which the guarantee or warranty relates.

C. The failure to deliver a required guarantee or warranty shall constitute a failure to fully complete the Work in accordance with the Contract Documents.

ARTICLE X: MISCELLANEOUS LEGAL REQUIREMENTS.

1. CM to be Informed.

The CM shall inform itself of all existing and future Laws in any manner affecting those engaged or employed in the Work, or the materials used or employed in the Work, or in any way affecting the conduct of the Work, and of all orders and decrees of bodies or tribunals having any applicable jurisdiction or authority over the Work.

2. Compliance with all Laws.

The CM shall cause all persons employed in the performance of the Work to comply with, all existing and future Laws, including but not limited to those set forth below:

A. Corporate Disclosures. The CM, if a foreign corporation, shall comply with M.G.L. c. 181, s.3 and s. 5, and M.G.L. c. 30, s.39L.

B. Veterans Preference. In the employment of mechanics and apprentices, teamsters, chauffeurs, and laborers in the performance of Work in the Commonwealth, preference shall first be given to citizens of the Commonwealth who have been residents of the Commonwealth for at least six months at the commencement of their employment and who are veterans as defined M.G.L. c.4, s.7 (34), and who are qualified to perform the work to which the employment relates; and secondly, to citizens of the Commonwealth generally who have been residents of the Commonwealth for at least six months at the commencement of their employment, and if they cannot be obtained in sufficient numbers, then to citizens of the United States.

C. Prevailing Wages. The CM shall comply with M.G.L. c. 149, s. 26- 27H. The prevailing wage schedule is found in Exhibit 3 to the Owner-CM Agreement, listing the prevailing minimum wage rates that must be paid to all workers employed in the Work. THE OWNER is not responsible for any errors, omissions, or misprints in the said schedule. Such Schedule shall continue to be the minimum rate wages payable to workers employed in the Work throughout the term of this Contract, subject to the exceptions provided in M.G.L c.149, s. 26-27H. The CM shall not have any claim for extra compensation from the Owner if the actual wages paid to workers employed in the Work exceeds the rates listed on the schedule or as otherwise provided by law. The

CM shall cause a copy of said Schedule to be kept in a conspicuous place at the Site during the term of the Contract. If reserve police officers are employed by the CM, they shall be paid the prevailing wage of regular police officers. (See M.G.L c.149, s.34B).

D. Payroll Records and Statement of Compliance. The CM shall comply and shall cause its Subcontractors to comply with Massachusetts General Law c. 149, s. 27B, which requires that a true and accurate record be kept of all persons employed on the a project for which the prevailing wage rates have been provided. The CM and all Subcontractors shall keep these records and preserve them for a period of six years from the date of completion of the Contract. Such records shall be open to inspection by any authorized representative of the Owner at any reasonable time, and as often as may be necessary. The CM shall, and shall cause its Subcontractors to, submit weekly copies of their weekly payroll records to THE OWNER. In addition, the CM and each Subcontractor shall furnish to the Executive Department of Labor within fifteen days after completion of its portion of the Work a signed statement in the form required by THE OWNER.

STATEMENT OF COMPLIANCE

I, _____ (Name of Signatory Party), _____ (Title), do hereby state that I pay or supervise the payment of the persons employed by _____ (Contractor or Subcontractor) on the _____ (Building or Project) and that all mechanics and apprentices, teamsters, chauffeurs, and laborers employed on said project have been paid in accordance with wages determined under the provisions of G.L.c. 149, §26 and 27.

Signature: _____

Title: _____

The above mentioned copies of payroll records and statement of compliance shall be available for inspection by any interested party filing a written request to the Contractor for such inspections (G.L.c. 149, §27B).

E. Vehicle operators. If the Director of the Department of Labor and Workforce Development has established a Schedule of wage rates to be paid to the operators of trucks, vehicles or equipment for the Work, the CM shall be obligated to pay such operators at least the minimum wage rate contained on such Schedule. (See M.G.L. c.149, s.26-27H).

F. Eight Hour Day. The CM shall comply with M.G.L. c. 149, s. 30, 34 and 34A which provide that no laborer, workman, mechanic, foreman or inspector working within the Commonwealth in the employ of the CM, subcontractor or other person doing or contracting to do the whole or part of the Work shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of extraordinary emergency.

G. Timely Payment of Wages. The CM shall comply with, and shall cause its Subcontractors to comply with M.G.L. c. 149, s. 148 which requires the weekly or biweekly payment of employees within six days of the end of the pay period during which wages were earned if employed for five or six days of a calendar week, and within other periods of time under certain circumstances as set forth therein.

H. Lodging, etc. The CM shall comply with, and shall cause its Subcontractors to comply with, M.G.L. c. 149, s. 25 which provides that every employee under this Contract shall lodge, board and trade where and with whom he elects, and neither the CM nor his agents or employees shall, either directly or indirectly, require as a condition of the employment of any person that the employee shall lodge, board or trade at a particular place or with a particular person.

I. Truck Rates. The use by the CM of trucks or other motor vehicles hired from either common or contract motor carriers in the course of performance of this Contract is subject to

such minimum rates and charges, and rules and regulations as may from time to time be promulgated by the Department of Public Utilities of the Commonwealth of Massachusetts or other agency of the State or Federal government which may be authorized by law to set rates or otherwise regulate the use of such vehicles. The CM expressly assumes the risk of any additional expense that may arise by reason of any change in such minimum rates and charges, and rules and regulations, and shall be entitled to no additional compensation or reimbursement by reason thereof.

ARTICLE XI: CM'S ACCOUNTING METHOD REQUIREMENTS (M.G.L. c. 30, s. 39R)

1. Definitions.

The words defined herein shall have the meaning stated below whenever they appear in this Article XI:

--"Contractor" means the CM.

--"Contract" means any Contract awarded, which is for an amount or estimated amount greater than one hundred thousand dollars.

--"Independent Certified Public Accountant" means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his/her residence or principal office and who is in fact independent. In determining whether an accountant is independent with aspect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant's independence shall not be confined to the relationships existing in connection with the filing of reports with THE OWNER.

--"Records" means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.

--"Audit", when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepted accounting principles and auditing standards for the purpose of expressing a certified opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons, or other person or persons primarily responsible for the financial and operational policies and practices of the Contractor.

Accounting terms, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.

2. Record Keeping.

A. The Contractor shall make, and keep for at least six years after final payment, books, records, and accounts that in reasonable detail accurately and fairly reflect the transactions and dispositions of the Contractor.

B. Until the expiration of six years after final payment, the Inspector General, and THE OWNER, shall have the right to examine any books, documents, papers or records of the Contractor and Subcontractors that directly pertain to, and involve transactions relating to the Contractor and Subcontractors. Any request for a change in the provisions of this Contract submitted by the CM must be made in writing and in accordance with the provisions of this Contract.

C. The Contractor shall describe any change in the method of maintaining records or recording transactions which materially affects any statements filed with THE OWNER including the date of the change and reasons therefor, and shall accompany said description with a letter from the Contractor's independent certified public accountant approving or otherwise commenting on the changes.

D. The Contractor represents that it has, prior to the execution of the Contract, filed a statement of management on internal accounting controls as set forth in Section 3 below.

E. The Contractor represents that it has, prior to the execution of the Contract, filed an audited financial statement for the most recent completed fiscal year as set forth in section 4 below and will continue to file such statement annually during the term of the Contract.

3. Statement of Management Controls.

A. The Contractor shall file with THE OWNER a statement of management as to whether the system of internal accounting controls of the Contractor and its subsidiaries reasonably assures that:

(1) transactions are executed in accordance with management's general and specific authorization;

(2) transactions are recorded as necessary to: (a) to permit preparation of financial statements in conformity with generally accepted accounting principles, and (b) to maintain accountability for assets;

(3) access to assets is permitted only in accordance with management's general or specific authorization; and

(4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

B. The Contractor shall file with THE OWNER a statement prepared and signed by an independent certified public accountant, stating that the accountant has examined the statement of management on internal accounting controls, and expressing an opinion as to:

(1) whether the representations of management in response to subparagraph 3 above are consistent with the results of management's evaluation of the system of internal accounting controls; and

(2) whether such representations of management are reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statement.

4. Annual Financial Statement.

A. Every Contractor awarded a contract shall annually file with THE OWNER during the term of the Contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report.

B. The office of Inspector General and THE OWNER shall have the right to enforce the provisions of this Article. A. Contractor's failure to satisfy any of the requirements of this section may be grounds for debarment pursuant to M.G.L. c. 149, s. 44C.

5. Bid Pricing Materials.

The Contractor shall save the written calculations, pricing information, and other data that the Contractor used to calculate the bid or other cost quotations that are presented that induced THE OWNER to enter into this Contract (the "Bid Pricing Materials") and to establish the Guaranteed Maximum Price for the Project.

ARTICLE XII: EQUAL EMPLOYMENT OPPORTUNITY, NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM.

This Contract includes all provisions of the "Equal Employment Opportunity, Non-Discrimination, and Affirmative Action Program" appearing in Appendix A to these General Conditions of the Contract attached hereto and incorporated herein by reference.

ARTICLE XIII: GOALS FOR PARTICIPATION BY MINORITY BUSINESS ENTERPRISES AND WOMEN BUSINESS ENTERPRISES

This Contract includes all provisions of Massachusetts Supplier Diversity Office's Construction Reform program relating to Goals for Participation by Minority Business Enterprises and Women Business Enterprises attached appearing in Appendix B to these General Conditions of the Contract attached hereto and incorporated herein by reference.

ARTICLE XIV: INSURANCE REQUIREMENTS –

1. Insurance Generally.

A. The CM shall purchase and maintain the insurance of the type and limits listed in this Article with respect to the operations as well as the completed operations of this Contract. This insurance shall be provided at the CM's expense and shall be in full force and effect for the full term of the Contract or for such longer period as this Article requires.

B. All policies shall be written on an occurrence basis and be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth with a financial strength rating of A- or better assigned by AM Best Company, or equivalent rating assigned by a similar rating agency acceptable to the Owner or as otherwise acceptable to the Owner.

C. CM shall submit three originals of each certificate of insurance, acceptable to the Owner, simultaneously with the execution of this Contract. Certificates shall show each type of insurance, insurance company, policy number, amount of insurance, deductibles and/or self-insured retentions, and policy effective and expiration dates. Certificates shall show the Massachusetts School Building Authority (hereinafter "Authority"), the Owner and anyone else that the Owner may request as additional insureds as to all policies of liability insurance. Certificates shall specifically note the following:

a. that the automobile liability, umbrella liability and pollution liability policies include the Owner and the Authority as additional insureds;

b. that all policies include the coverage and endorsements in accordance with the terms and conditions as required by this construction contract;

c. that none of the coverages shall be cancelled, terminated, or materially modified unless and until thirty (30) days prior notice is given in writing to the Owner and the Authority;.

d. CM shall submit updated certificates prior to the expiration of any of the policies referenced in the certificates so that the Owner shall at all times possess certificates indicating current coverage.

D. The CM shall file one certified complete copy of all policies and endorsements with the Owner within sixty (60) days after Contract award. If the Owner or the Authority is damaged by the CM's failure to maintain such insurance and to comply with the terms of this Article, then the CM shall be responsible for all costs and damages to the Owner and the Authority attributable thereto.

E. Termination, cancellation, or material modification of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given to Owner, and the Authority to the extent that the Authority is an additional insured, at least thirty (30) days prior to the effective date thereof, which shall be expressed in said notice.

F. The CM is responsible for the payment of any and all deductibles under all of the insurance required below unless the Owner and the Authority specifically provide a written waiver to the CM.

2. <u>CM's Commercial General Liability.</u>

A. The CM shall purchase and maintain general liability coverage on the ISO form CG 00 01 or equivalent, including products and completed operations, on an occurrence basis. The form must be amended to state that the aggregate limit applies on a per location/per project basis. The policy shall provide the following minimum coverage to protect the CM from claims with respect to the operations performed by CM and any employee, subcontractor, or supplier, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Bodily Injury &	$1,000,000	each occurrence
Property Damage	$2,000,000	general aggregate, per project
Products & Completed Operations	$1,000,000	annual aggregate
Personal & Advertising Injury	$1,000,000	each occurrence
Medical Expenses	$5,000	

B. This policy shall include coverage relating to explosion, collapse, and underground property damage.

C. This policy shall include contractual liability coverage.

D. The completed operations coverage shall be maintained for a period of three (3) years after Substantial Completion and acceptance by the Owner. The CM shall provide renewal certificates of insurance to the Owner as evidence that this coverage is being maintained.

E. If the Work includes work to be performed within fifty (50) feet of a railroad, any exclusion for liability assumed under contract for work within fifty (50) feet of a railroad shall be deleted.

F. This policy shall include the Authority, the Owner and anyone else requested by the Owner as additional insureds via endorsements CG 20 10 for ongoing operations and CG 20 37 for completed operations. This policy shall be primary and non-contributory with respect to any other insurance available to additional insureds.

G. The policy shall include endorsement CG 24 04, a Waiver of Subrogation in favor of the Owner and the Authority.

3. <u>Vehicle Liability.</u>

A. The CM shall purchase and maintain the following minimum coverage with respect to the operations of any owned, non-owned, and hired vehicles including trailers used in the performance of the work, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Bodily Injury & Property Damage $1,000,000 combined single limit

B. The policy shall include a CA 99 48 Broadened Pollution Endorsement. If specified in Section 8 below, the CM, if hauling contaminants and/or pollutants, must adhere to Sections 29 and 30 of the Motor Carrier Act of 1980, which shall contain coverage Form MCS-90.

C. The policy shall name the Owner and the Authority as additional insureds.

D. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

4. Contractor's Pollution Liability.

The CM shall purchase and maintain coverage for bodily injury and property damage resulting from liability arising out of pollution related exposures such as asbestos abatement, lead paint abatement, tank removal, removal of contaminated soil, etc. The insurance policy shall cover the liability of the CM during the process of removal, storage, transport and disposal of hazardous waste and contaminated soil and/or asbestos abatement. The policy shall include coverage for on-Site and off-Site bodily injury and loss of, damage to, or loss of use of property, directly or indirectly arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gas, waste materials or other irritants, contaminants or pollutants into or upon the land, the atmosphere or any water course or body of water, whether it be gradual or sudden and accidental. The policy shall also include defense and clean-up costs. The Owner and the Authority shall be named as additional insureds and coverage must be on an occurrence basis. The amount of coverage shall be as follows unless a higher amount is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Limit of liability	$1,000,000 per occurrence $2,000,000 aggregate

5. Worker's Compensation.

A. The CM shall provide the following coverage in accordance with M.G.L. c.149 §34A and c.152 as amended, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the higher coverage:

Workers' Compensation	Statutory limits
Employer's Liability	$ 500,000 each accident $ 500,000 disease per employee $ 500,000 disease policy aggregate

6. Builder's Risk/ Installation Floater/Stored Materials.

Owner may purchase and maintain coverage against loss or damage to the Work included in this Contract and SDI. If purchased by Owner, such coverage shall be on an "all risks" or equivalent form and will include a waiver of subrogation in favor of CM for loss or damage that occurs during the term of the Project. Owner will be responsible for the payment of any deductible under such coverage.

If Owner requires the CM to purchase and maintain coverage against loss or damage to the Work the following requirements will apply:

A. The CM shall purchase and maintain coverage against loss or damage on all Work included in this Contract in an amount equal to the GMP. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, terrorism ("certified" and "non-certified"), collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's, Program Manager's and CM's services and expenses required as

a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or $10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in **C**. below.

B. When Work will be completed on existing buildings owned by the Owner, the CM shall provide an installation floater, in the full amount of the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's, Program Manager's and CM's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or $10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in **C**. below.

C. The CM shall maintain insurance on delivered and/or stored material designated to be incorporated in the Work against fire, theft or other hazards. Any loss or damage of whatever nature to such material while stored at some approved off Site location shall be forthwith replaced by the CM at no expense to the Owner or the Authority.

D. The policy or policies shall specifically state they are for the benefit of and payable to the Authority, the Owner, the CM, subcontractors and all persons furnishing labor or labor and materials for the Contract Work, as their interests may appear. The policy or policies shall list the Authority, the Owner, the CM, and Subcontractors of any tier as named insureds.

E. Coverage shall include any costs for work performed by the Designer or any consultant as the result of a loss experienced during the term of this Contract.

F. Coverage shall include permission for temporary occupancy and a Waiver of Subrogation in favor of the Owner and the Authority.

G. Coverage shall be maintained until final acceptance by Owner of the Work and final payment has been made.

H. A loss under the property insurance shall be adjusted by CM as fiduciary and made payable to the Contractor as fiduciary for the insureds. CM shall pay the subcontractors their just shares of insurance proceeds received by the CM and shall require subcontractors to make payments to their sub-subcontractors in similar manner.

7. <u>Umbrella Coverage.</u>

The CM shall provide Umbrella Coverage in form at least as broad as primary coverages required by Sections 2, 3 and 5 of this Article in the following amount unless a higher amount is specified in Section 8 below in which case the CM shall provide the higher amount: $25,000,000.

8. <u>Additional Insurance Requirements</u>

The CM shall provide such other and/or additional types and/or amounts of insurance as may be set forth below:

ARTICLE XV: INDEMNIFICATION

1. Generally.

The CM shall indemnify, defend (with counsel acceptable to Owner) and hold harmless, the Owner, the Designer, the Owner's Project Manager, and their officers and agents from and against all claims arising out of or resulting from the performance of the work, including, but not limited to labor performed or furnished and materials used or employed for the work; to inventions, patents and patent rights used in and in doing the work, unless such patent infringement is due to a product or process specified by the Owner; to injuries to any person or damage to any property in connection with the work or in consequence of any improper materials, implements or labor used or employed therein; and to any act, omission or neglect of the CM and its employees and its subcontractors and employees; to the extent such claims are caused or alleged to be caused by the acts or omissions of the CM, a subcontractor, anyone directly or indirectly employed by them or anyone for whom the CM is responsible. To the extent legally permissible, the CM shall ensure that all subcontractors are similarly bound to the Owner as provided for in this Article. The indemnification obligations are notwithstanding any insurance requirements and no insurance provision shall excuse any indemnification requirement.

2. CM's Indemnification of The MSBA

To the fullest extent permitted by law, the CM and its contractors and subcontractors hereby agree to indemnify, defend and hold harmless, the Massachusetts School Building Authority ("Authority") and its officers and employees from and against all claims, damages, liabilities, injuries, costs, fees, expenses, or losses, including, without limitation, reasonable attorney's fees and costs of investigation and litigation, whatsoever which may be incurred by the Authority arising out of or resulting from the performance or nonperformance of the work performed by the CM, or its contractors and subcontractors, provided that such claims, damages, liabilities, injuries, costs, fees, expenses, or losses are alleged to be caused in whole, or in part, by an act or omission of any of the CM, contractors, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

3. Asbestos Abatement Subcontractor Indemnification

The CM shall obtain an indemnification agreement from the Asbestos Abatement Subcontractor that provides as follows: The Asbestos Abatement subcontractor shall assume full responsibility and liability for the compliance with all applicable Federal, State and local regulations pertaining to work practices, hauling and disposal of asbestos-containing material and protection of workers and visitors to the site, and persons occupying areas adjacent to the site. The CM shall hold the Owner and the Architect harmless for failure to comply with any applicable work, hauling, disposal, safety, health or other regulation on the part of himself, his employees or his subcontractors.

4. Designer's Actions.

The obligations of the CM under Section 1 above shall not extend to the liability of the Designer, its agents or employees, arising out of (i) the preparation or approval of maps, Drawings, opinions, reports, surveys Change Orders, designs or Specifications, or (ii) the giving of or the failure to give directions or instructions by the Designer, its agents to employees provided such giving or failure to give is the primary cause of the injury or damage.

5. Survival.

The provisions of this Article XV are intended to survive Final Acceptance and/or any termination of this Contract.

ARTICLE XVI: PERFORMANCE AND PAYMENT BONDS

1. CM Bonds.

A. The CM shall provide performance and payment (labor and materials) bonds in the form attached, executed by a surety licensed by the Commonwealth of Massachusetts Division of Insurance. Each such bond shall be in the amount of the GMP.

B. If at any time prior to final payment to the CM, the Surety:
-is adjudged bankrupt or has made a general assignment for the benefit of its creditors;
-has liquidated all assets and/or has made a general assignment for the benefit of its creditors;
-is placed in receivership;
-otherwise petitions a state or federal court for protection from its creditors; or
-allows its license to do business in Massachusetts to lapse or be revoked;
then the CM shall, within 21 days of any such action listed above, provide THE OWNER with new performance and payment bonds as described in Paragraph A above. Such bonds shall be provided solely at the CM's expense.

2. Subcontractor Bonds.

A. Trade Contractors shall provide payment and performance bonds to the CM and the Subcontractors shall include the premiums for those bonds in their Sub-Trade Bids.
B. If the CM requires subcontractors other than Trade Contractors to provide the CM with payment and performance bonds for the full amount of their respective Subcontracts, then the costs for said bonds shall be the responsibility of the CM.
C. Irrespective of whether the CM requests payment and performance bonds from their respective Subcontractors, the CM understands that if the Subcontractor defaults or is terminated, the CM shall have full responsibility for all costs and expenses related to said default or termination.

3. Cost of Bond Premiums.

The costs of bond premiums for bonds provided by the Trade Contractors and subcontractors shall be considered Costs of the Work.

ARTICLE XVII: TERMINATION OF CONTRACT

1. Termination for Cause.

A. THE OWNER may without prejudice to any other right or remedy terminate this Contract for cause if any of the following defaults shall occur and not be cured within seven (7) days after the giving of written notice thereof by the Owner to the CM:
(1) The CM has filed a petition, or a petition has been filed against the CM with its consent, under any federal or state law concerning bankruptcy, reorganization, insolvency or relief from creditors, or if such a petition is filed against the CM without its consent and is not dismissed within sixty (60) days; or if the CM is generally not paying its debts as they become due; or if the CM becomes insolvent; or if the CM consents to the appointment of a receiver, trustee, liquidate, custodian or the like of the CM or of all or any substantial portion of its assets and such appointment or possession is not terminated within sixty (60) days; or if the CM makes an assignment for the benefit of creditors;
(2) The CM refuses or fails, except in cases for which extension of time is provided under this Contract, to supply enough properly skilled workers or proper materials to perform its obligations under this Contract, or the Owner has determined that the rate of progress required for the timely completion of the Work is not being met;
(3) The CM fails to make prompt payment to Subcontractors or for materials, equipment, or labor;
(4) All or a part of the Work has been abandoned;
(5) The CM has sublet or assigned all or any portion of the Work, the Contract, or claims thereunder, without the prior written consent of the Owner, except as expressly permitted in this Contract;
(6) The CM has failed to comply with Laws;
(7) The CM fails to maintain, or provide to offer evidence of the insurance or bonds required by this Contract, or
(8) The CM has failed to perform the Work or any portion thereof as required by this Contract or has otherwise breached any material provision of this Contract.

B. THE OWNER shall give the CM written notice of such termination for cause, but the giving of notice of such termination shall not be a condition precedent or subsequent to the termination's effectiveness. In the event of such termination, and without limiting any other available remedies, THE OWNER may, at its option:
(1) hold the CM and its sureties liable in damages for a breach of Contract;
(2) notify the CM to discontinue all work, or any part thereof, and the CM shall discontinue all work, or any part thereof, as the Owner may designate;
(3) complete the Work, or any part thereof, and charge the expense of completing the Work or part thereof, to the CM;
(4) require the surety or sureties to complete the Work and perform all of the CM's obligations under this Contract.
(5) take such other lawful action as is deemed by THE OWNER to be in its best interest.

If THE OWNER elects to complete all or any portion of the Work as specified in (3) above, it may take possession of all materials, equipment, tools, machinery, implements at or near the Site owned by the CM and finish the Work at the CM's expense by whatever means THE OWNER may deem expedient; and the CM shall cooperate at its expense in the orderly transfer of the same to a new contractor or to THE OWNER as directed by THE OWNER. In such case THE OWNER shall not make any further payments to the CM until the Work is completely finished. The Owner shall not be liable for any depreciation, loss or damage to said materials, machinery, implements or tools during said use and the CM shall be solely responsible for their removal from the Site after the Owner has no further use for them. Unless so removed within fifteen days after notice to the CM to do so, they may be sold at public auction, after publication of notice thereof at least twice in any newspaper published in the county where the Work is being performed, and the proceeds credited to the CM’s account; or they may, at the option of THE OWNER, be stored at the CM’s expense subject to a lien for the storage charges.

C. Damages and expenses incurred under paragraph B above shall include, but not be limited to, costs for the Designer's and Project Manager’s extra services required, as reasonably

determined by THE OWNER, to successfully inspect and administer the construction through final completion of the Work.

D. Expenses charged under paragraph B above may be deducted and paid by THE OWNER out of any moneys then due or to become due the CM under this Contract.

E. All sums, damages, and expenses incurred by the Owner to complete the Work shall be charged to the CM. In case the damages and expenses charged are less than the sum that would have been payable under this Contract if the same had been completed by the CM, the CM shall be entitled to receive the difference. In case such expenses shall exceed the said sum, the CM shall pay the amount of the excess to the Owner.

2. Termination For Convenience.

A. THE OWNER may terminate this Contract for convenience even though the CM is not in default by giving notice to the CM specifying in said notice the date of termination.

B. In case of such termination without cause, the CM shall be paid:
(1) all sums due and owing under this Contract through the date of termination, including any retainage withheld to the date of termination, less any amount which THE OWNER determines is necessary to correct or complete the Work performed to the date of termination; plus (2) a reasonable sum to cover the expenses which CM would not have incurred but for the early termination of the Contract, such as demobilization of the work force, restocking charges, and termination fees payable to Subcontractors.

C. Lost profits shall not be payable. The payment provided in paragraph B above shall be considered to fully compensate the CM for all claims and expenses and those of any consultants, Subcontractors, and suppliers, directly or indirectly attributable to the termination.

3. CM's Duties Upon Termination For Convenience.

Upon termination of this Contract for convenience as provided in Section 2 of this Article, the CM shall: (1) stop the Work; (2) stop placing orders and Subcontracts in connection with this Contract; (3) cancel all existing orders and Subcontracts; (4) surrender the Site to THE OWNER in a safe condition; (5) transfer to THE OWNER all materials, supplies, work in process, appliances, facilities, equipment and machinery of this Contract, and all plans, Drawings, Specifications and other information and documents used in connection with this Contract.

ARTICLE XVIII: MISCELLANEOUS PROVISIONS

1. Written Approval of Assignment by CM.

The CM shall not assign by power of attorney or otherwise, or sublet or subcontract, the Work or any part thereof, without the previous written consent of THE OWNER and shall not, either legally or equitably, assign any of the moneys payable under this Contract, or CM's claims hereunder, except with the written consent of THE OWNER, whether said assignment is made before, at the time of, or after the execution of the Contract. The CM shall remain responsible for satisfactory performance of all Work sublet or assigned complying with all applicable requirements of the Contract.

2. Certificate of Appropriation.

This paragraph applies to contracts for construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public work by any District costing more than the amount set forth in M.G.L. c.44, § 31C.

This Contract shall not be deemed to have been made until the Disctrict accountant or other officer of the Disctrict having similar duties has certified thereon that an appropriation

in the amount of this Contract is available therefor and than an officer or agent of the Disctrict , District, or awarding authority has been authorized to execute said Contract and approve all requisitions and change orders. No order to the Contractor for a change in or addition to the work, whether in the form of a drawing, plan, detail, or any other written instruction, unless it is an order which the Contractor is willing to perform without any increase in the Contract price, shall be deemed to be given until the Disctrict accountant, or other officer of the awarding authority having similar duties, has certified thereon that an appropriation in the amount of such order is available therefore; but such certificate shall not be construed as an admission by the awarding authority of its liability to pay for such work. The certificate of the Disctrict accountant or other officer of the awarding authority having similar duties, that an appropriation in the amount of this Contract, or in the amount of such order, is available shall bar any defense by the awarding authoirty on the grounds of insufficient appropriation.

3. Claims by Others Not Valid.

No person other than the CM and the surety on any bond given pursuant to the terms of this Contract shall acquire any interest in this Contract or any claim against THE OWNER hereunder, and no claim by any other person against Owner shall be valid except as provided in M.G.L. c. 30, s. 39F of the General Laws.

4. No Personal Liability of Public Officials.

No public official, employee, or agent of THE OWNER shall have any personal liability for the obligations of THE OWNER set forth in this Contract.

5. Severability.

The provisions of this Contract are severable, and if any of these provisions shall be held unconstitutional or unenforceable by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the other provisions of this Contract.

6. Choice of Laws.

This Contract shall be governed by the laws of the Commonwealth of Massachusetts for all purposes. All proceedings under this Contract or related to the Project shall be brought in the courts of the Commonwealth of Massachusetts.

7. No Waiver of Subsequent Breach.

No waiver of any breach or obligation of this Contract shall constitute a waiver of any other or subsequent breach or obligation.

8. Remedies Cumulative.

All remedies of THE OWNER provided in this Contract shall be construed as cumulative and may be exercised simultaneously or in any order as determined by THE OWNER in its sole discretion. THE OWNER shall also be entitled as of right to specific performance and equitable relief including the right to an injunction against any breach of any of the provisions of this Contract

9. Notices.

Notices to the CM shall be deemed given when hand delivered or emailed to the CM's temporary field office at or near the Site or when deposited in the U.S. mail addressed to the

CM at the CM's address specified in the Owner-CM Agreement, or when delivered by courier to either location. Unless otherwise specified in writing by THE OWNER, notices and deliveries to THE OWNER shall be effective only when delivered to THE OWNER at the address specified in the Owner-CM Agreement and date-stamped at the reception desk or for which a receipt has been signed by the agent or employee designated by THE OWNER to receive official notices.

10. Interpretation of Contract – Cost of Work.

(A) Wherever these General Conditions or the Agreement for Construction Manager at Risk Services uses words to the effect that the CM shall be responsible for incurring costs on the Project, it is understood that, except where the language used otherwise indicates, such costs shall be considered a Cost of Work under Paragraph 7.1 of the Agreement for Construction Manager at Risk Services, unless they fall within Non-Compensable Costs described in Paragraph 7.3 of said Agreement.

(B) Likewise, wherever the General Conditions or the Agreement for Construction Manager at Risk Services uses words to the effect that the Owner may assess costs against the CM, it is understood that such assessment shall ordinarily take the form of a credit change order that reduces the GMP, except where the language used otherwise indicates.

APPENDIX A:

EQUAL EMPLOYMENT OPPORTUNITY, NON-DISCRIMINATION AND AFFIRMATIVE ACTION

Since this contract is considered a state-assisted construction contract, the provisions of Appendix A shall apply:

(Statutory reference: M.G.L. c.151B; Executive Order No. 526 and ANF Bulletin #14).

I. Definitions

For purposes of this contract,

"Minority" means a person who meets one or more of the following definitions:

(a) American Indian or Native American means: all persons having origins in any of the original peoples of North America and who are recognized as an Indian by a tribe or tribal organization.
(b) Asian means: all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian sub-continent, or the Pacific Islands, including, but not limited to China, Japan, Korea, Samoa, India, and the Philippine Islands.
(c) Black means: all persons having origins in any of the Black racial groups of Africa, including, but not limited to, African-Americans, and all persons having origins in any of the original peoples of the Cape Verdean Islands.
(d) Eskimo or Aleut means: all persons having origins in any of the peoples of Northern Canada, Greenland, Alaska, and Eastern Siberia.
(e) Hispanic means: all persons having their origins in any of the Spanish-speaking peoples of Mexico, Puerto Rico, Cuba, Central or South America, or the Caribbean Islands.

"State construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility, or a contract for the construction, reconstruction, alteration, remodeling or repair of a public work undertaken by a department, agency, board, or commission of the commonwealth.

"State assisted construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility undertaken by a political subdivision of the commonwealth, or two or more political subdivisions thereof, an authority, or other instrumentality and whose costs of the contract are paid for, reimbursed, grant funded, or otherwise supported, in whole or in part, by the commonwealth.

II. Equal Opportunity, Non-Discrimination and Affirmative Action

During the performance of this Contract, the Contractor and all subcontractors (hereinafter collectively referred to as "the Contractor") for a state construction contract or a state assisted construction contract, for him/herself, his/her assignees and successors in interest, agree to comply with all applicable equal employment opportunity, non-discrimination and affirmative action requirements, including but not limited to the following:

In connection with the performance of work under this contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability, shall not discriminate in the selection or retention of subcontractors, and shall not discriminate in the procurement of materials and rentals of equipment.

The aforesaid provision shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment advertising, layoff or termination; rates of pay or other forms of compensation; conditions or privileges of employment; and selection for apprenticeship or on-the-job training opportunity. The Contractor shall comply with the provisions of chapter 151B of the Massachusetts General Laws, as amended, and all other applicable anti-discrimination and equal opportunity laws, all of which are herein incorporated by reference and made a part of this Contract.

The Contractor shall post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Massachusetts Commission Against Discrimination setting forth the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151B).

In connection with the performance of work under this contract, the Contractor shall undertake, in good faith, affirmative action measures to eliminate any discriminatory barriers in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. Such affirmative action measures shall entail positive and aggressive measures to ensure non-discrimination and to promote equal opportunity in the areas of hiring, upgrading, demotion or transfer, recruitment, layoff or termination, rate of compensation, apprenticeship and on-the-job training programs. A list of positive and aggressive measures shall include, but not be limited to, advertising employment opportunities in minority and other community news media; notifying minority, women and other community-based organizations of employment opportunities; validating all job specifications, selection requirements, and tests; maintaining a file of names and addresses of each worker referred to the Contractor and what action was taken concerning such worker; and notifying the administering agency in writing when a union with whom the Contractor has a collective bargaining agreement has failed to refer a minority or woman worker. These and other affirmative action measures shall include all actions required to guarantee equal employment opportunity for all persons, regardless of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. One purpose of this provision is to ensure to the fullest extent possible an adequate supply of skilled tradesmen for this and future Commonwealth public construction projects.

III. Minority and Women Workforce Participation

Pursuant to his/her obligations under the preceding section, the Contractor shall strive to achieve on this project the labor participation goals contained herein. Said participation goals shall apply in each job category on this project including but not limited to bricklayers, carpenters, cement masons, electricians, ironworkers, operating engineers and those classes of work enumerated in Section 44F of Chapter 149 of the Massachusetts General Laws. The participation goals for this project shall be 15.3% for minorities and 6.9% for women. The participation goals, as set forth herein, shall not be construed as quotas or set-asides; rather, such participation goals will be used to measure the progress of the Commonwealth's equal opportunity, non-discrimination and affirmative action program. Additionally, the participation goals contained herein should not be seen or treated as a floor or as a ceiling for the employment of particular individuals or group of individuals.

IV. Liaison Committee

At the discretion of the agency that administers the contract for the construction project there may be established for the life of the contract a body to be known as the Liaison Committee. The Liaison Committee shall be composed of one representative each from the agency or agencies administering the contract for the construction project, hereinafter called the administering agency, a representative from the Office of Affirmative action, and such other representatives as may be designated by the administering agency.

The Contractor (or his/her agent, if any, designated by him/her as the on-site equal employment opportunity officer) shall recognize the Liaison Committee as an affirmative action body, and shall establish a continuing working relationship with the Liaison Committee, consulting with the Liaison Committee on all matters related to minority recruitment, referral, employment and training.

V. Reports and Records

The Contractor shall prepare projected workforce tables on a quarterly basis when required by the administering agency. These shall be broken down into projections, by week, of workers required in each trade. Copies shall be furnished one week in advance of the commencement of the period covered, and also, when updated, to the administering agency and the Liaison Committee when required.

The Contractor shall prepare weekly reports in a form approved by the administering agency, unless information required is required to be reported electronically by the administering agency, the number of hours worked in each trade by each employee, identified as woman, minority, or non-minority. Copies of these shall be provided at the end of each such week to the administering agency and the Liaison Committee.

Records of employment referral orders, prepared by the Contractor, shall be made available to the administering agency on request.

The Contractor will provide all information and reports required by the administering agency on instructions issued by the administering agency and will permit access to its facilities and any books,

records, accounts and other sources of information which may be determined by the administering agency to effect the employment of personnel. This provision shall apply only to information pertinent to the Commonwealth's supplementary non-discrimination, equal opportunity and access and opportunity contract requirements. Where information required is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the administering agency and shall set forth what efforts he has made to obtain the information.

VI. Access to Work Site

A designee of the administering agency and a designee of the Liaison Committee shall each have a right to access the work site.

VII. Solicitations for Subcontracts, and for the Procurement of Materials and Equipment

In all solicitations either by competitive bidding or negotiation made by the Contractor either for work to be performed under a subcontract or for the procurement of materials or equipment, each potential subcontractor or supplier shall be notified in writing by the Contractor of the Contractor's obligations under this contract relative to non-discrimination and equal opportunity.

VIII. Sanctions

Whenever the administering agency believes the General or Prime Contractor or any subcontractor may not be operating in compliance with the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151B), the administering agency may refer the matter to the Massachusetts Commission Against Discrimination ("Commission") for investigation.

Following the referral of a matter by the administering agency to the Massachusetts Commission Against Discrimination, and while the matter is pending before the MCAD, the administering agency may withhold payments from contractors and subcontractors when it has documentation that the contractor or subcontractor has violated the Fair Employment Practices Law with respect to its activities on the Project, or if the administering agency determines that the contractor has materially failed to comply with its obligations and the requirements of this Section. The amount withheld shall not exceed a withhold of payment to the General or Prime Contractor of 1/100 or 1% of the contract award price or $5,000, whichever sum is greater, or, if a subcontractor is in non-compliance, a withhold by the administering agency from the General Contractor, to be assessed by the General Contractor as a charge against the subcontractor, of 1/100 or 1% of the subcontractor price, or $1,000 whichever sum is greater, for each violation of the applicable law or contract requirements. The total withheld from any one General or Prime Contractor or subcontractor on a Project shall not exceed $20,000 overall. No withhold of payments or investigation by the Commission or its agent shall be initiated without the administering agency providing prior notice to the Contractor.

If, after investigation, the Massachusetts Commission Against Discrimination finds that a General or Prime Contractor or subcontractor, in commission of a state construction contract or state-

assisted construction contract, violated the provisions of the Fair Employment Practices Law, the administering agency may convert the amount withheld as set forth above into a permanent sanction, as a permanent deduct from payments to the General or Prime Contractor or subcontractor, which sanction will be in addition to any such sanctions, fines or penalties imposed by the Massachusetts Commission Against Discrimination:

No sanction enumerated under this Section shall be imposed by the administering agency except after notice to the General or Prime Contractor or subcontractor and an adjudicatory proceeding, as that term is used, under Massachusetts General Laws Chapter 30A, has been conducted.

IX. Severability

The provisions of this section are severable, and if any of these provisions shall be held unconstitutional by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the remaining provisions.

X. Contractor's Certification

A bidder for a state construction contract or state assisted construction contract will not be eligible for award of the contract unless such bidder has submitted to the administering agency the following certification, which will be incorporated into the resulting contract:

CONTRACTOR'S CERTIFICATION

_____certifies that they:

(Contractor Name)

1. Will not discriminate in their employment practices;
2. Intend to use the following listed construction trades in the work under the contract

_____

_____; and

3. Will make good faith efforts to comply with the minority employee and women employee workforce participation ratio goals and specific affirmative action steps contained herein; and
4. Are in compliance with all applicable federal and state laws, rules, and regulations governing fair labor and employment practices; and
5. Will provide the provisions of the "Supplemental Equal Employment Opportunity, Non-

Discrimination and Affirmative Action Program" to each and every subcontractor employed on the Project and will incorporate the terms of this Section into all subcontracts and work orders entered into on the Project.

6. Agree to comply with all provisions contained herein.

_____

(Signature of authorized representative of Contractor) Date

_____

(Printed name of authorized representative of Contractor)

XI. Subcontractor Requirements

Prior to the award of any subcontract for a state construction contract or a state assisted construction contract, regardless of tier, the Prime or General Contractor shall provide all prospective subcontractors with a complete copy of this Section entitled "Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program" and will incorporate the provisions of this Section by reference into any and all contracts or work orders for all subcontractors providing work on the Project. In order to ensure that the said subcontractor's certification becomes a part of all subcontracts under the prime contract, the Prime or General Contractor shall certify in writing to the administering agency that it has complied with the requirements as set forth in the preceding paragraph.

APPENDIX B to the General Conditions of the Contract

Goals for Participation by Minority Business Enterprises and Woman Business Enterprises

The following provisions are included in the General Conditions of the Contract between THE OWNER and the Construction Manager.

A. Affirmative Marketing Participation Goals:

The goals below were established by the Division of Capital Asset Management and Maintenance (DCAMM) and the Supplier Diversity Office (SDO) and require a reasonable representation of both MBE and WBE firms:

Construction Participation:
MBE goal: 4.2%
WBE goal: 8.8%

All documentation submitted in connection with MBE/WBE credit must be true, accurate and correct to the best of your knowledge. Your signature on any MBE/WBE goal-related document means that you have read and understand it. Any false claims for MBE/WBE credit are subject to the Massachusetts False Claims Act and any applicable civil or criminal penalties as determined by the Massachusetts Attorney General's Office. [1]

B. MBE/WBE Participation Credit:

1. MBE and WBE participation goals are not interchangeable.
2. Participation credit is only given for actual contract work performed by currently certified MBE, WBE or M/WBE firm.
3. If the firm awarded the contract is itself currently certified as a MBE/WBE, 100% participation credit will be given for the work performed.
4. If the prime contractor is not a certified firm, it shall only receive credit for the portion of work completed by the certified firm.
5. MBE/WBE participation credit will be given to a supplier **only** if they are regularly engaged in sales of equipment or supplies to the construction industry from an established place of businesses and bear the risk of loss for product sold prior to delivery to a customer.
6. A contractor can count only 10% of the contract price towards an MBE or WBE goal on DCAMM projects.
7. These overall annual MBE and WBE participation goals apply to the awarded construction cost amount.

C. Establishing MBE/WBE Status:

[1] *See generally,* MG.L. c. 12, §§5A-5O, inclusive.

1. A business will be eligible for participation credit only if it has been certified by the Supplier Diversity Office (SDO) as a minority business enterprise (MBE) or a woman business enterprise (WBE).
2. Certification as a MBE/WBE **by any other agency other than SDO <u>does not</u>** confer the status to the firm for the purposes of contract participation credit.
3. Participation credit shall only be given to firms which are certified at the time of contract award
4. A firm currently being initially reviewed as part of the certification process cannot be used by a contractor towards MBE/WBE participation credit.

D. <u>Performance of Contract Work by MBE/WBEs:</u>

1. Only currently certified MBE/WBE firms count towards participation goals. If during the course of a contract, a SDO certified MBE/WBE firm is decertified their participation credit will be counted up until the date of decertification
2. An awarding authority will not grant MBE/WBE participation credit unless the contract work is actually completed by a certified SDO MBE/WBE firm. No credit will be given for work done by others or for work not on a MBE/WBE schedule of participation.
3. Once a letter of intent and a MBE/WBE letter of participation are approved, a contractor may not perform this same work using its own staff without the prior express written prior approval of the Awarding Authority.
4. The Contractor shall monitor the performance of MBE/WBE Work to ensure that each scheduled MBE/WBE performs its own work with its own workforce.
5. The Contractor and each MBE/WBE subcontractor shall provide the Awarding Authority with all information and documentation necessary to ascertain whether an MBE/WBE has performed its own MBE/WBE Work with its own personnel, tools and equipment.
6. Failure to submit documentation to the Awarding Authority shall establish conclusively for giving MBE/WBE participation credit under this Contract that such MBE/WBE did not perform such work.

E. <u>Notification of Changes in MBE/WBE Work:</u>

If during the performance of a contract, a contractor determines or has reason to believe that:

1. A scheduled MBE/WBE is unable or unwilling to perform its MBE/WBE Work;
2. There has been or will be a change in any MBE/WBE Work; or
3. That the Contractor will be unable to meet the MBE/WBE participation goal(s) for the Contract for any reason.

Then he/she shall immediately notify the Awarding Authority in writing. Any notice of a change in MBE/WBE Work shall include a revised Schedule of MBE/WBE Participation, and additional or amended Letters of Intent and related subcontracts, as needed.

F. <u>Good Faith Efforts Needed to Support Changes/Reduction of MBE/WBE Participation Goals:</u>

If there is a change or reduction in any MBE/WBE Work which will result in the Contractor failing to meet the MBE/WBE participation goal(s), then he/she shall undertake a diligent, good faith effort to make up the shortfall as follows:

1. The Contractor shall identify all items of the Work remaining to be performed under the Contract that they made available for subcontracting to MBE/WBEs along with that which was not along with reasons why.
2. The Contractor shall send written notices to all MBE/WBEs ready, willing and able to perform such work. The contractor will provide the Awarding Authority with documentation identifying: (i) each MBE/WBE solicited, and (ii) each MBE/WBE listed in the SDO directory under the applicable trade category that was not solicited and the reasons why. The Contractor shall also advise the Awarding Authority of the dates that notices were sent and provide a copy of the written notice(s) sent.
3. The Contractor shall make reasonable efforts to follow up on the written notices, including telephone calls or personal visits in order to determine with certainty whether the MBE/WBEs were interested in performing the work. Phone logs or other documentation must be submitted to the Awarding Authority upon request.
4. The Contractor shall make documented reasonable efforts to assist MBE/WBEs that need assistance in obtaining insurance, bonds, or lines of credit in order to perform work under the Contract. Supporting documentation will be provided to the Awarding Authority upon request.
5. The Contractor shall provide the Awarding Authority with a statement of the response received from each MBE/WBE solicited, including the reason for rejecting any MBE/WBE who submitted a proposal.
6. The Contractor shall take any additional measures including, without limitation, placing advertisements in appropriate media and trade association publications announcing the Contractor's interest in obtaining proposals from MBE/WBEs, and/or sending written notification to MBE/WBE economic development assistance agencies, trade groups and other organizations notifying them of the project and of the work available to be subcontracted by the Contractor to MBE/WBEs.

If the Contractor is unable to meet the MBE/WBE participation goals for this Contract after complying fully with each of the above requirements and is otherwise in full compliance with the terms of this provision, the Awarding Authority may reduce the MBE/WBE participation goals for this Contract to the extent that such goals cannot be achieved.

G. <u>Suspension of Payment and/or Performance for Noncompliance:</u>

If a reduction of MBE/WBE goals was given but sufficient good faith efforts (see above) were not documented, then after proper written notice, the Awarding Authority has the discretion to:

1. Suspend payment to the Contractor of an amount equal to the value of the work which was to have been performed by an MBE/WBE pursuant to the Contractor’s Schedule of MBE/WBE Participation but which was not so performed, in order to ensure that sufficient Contract funds will be available if liquidated damages are assessed;

2. Suspend the Contractor's performance of this Contract in whole or in part.

Notice Required Prior to Suspension: The Awarding Authority shall give the Contractor prompt written notice of any action taken and shall give the Contractor and any other interested party, including any MBE/WBEs, an opportunity to present evidence to it that the Contractor is in compliance with the requirements, or that there is some justifiable reason for waiving the requirements in whole or in part. The Awarding Authority may invite SDO to participate in these proceedings

If, based on a totality of the circumstances, it can be shown that all reasonable steps were taken and that the Contractor is in full compliance with the requirements of this Attachment, or that the Contractor has met or will meet the MBE/WBE participation goals for this Contract, the Awarding Authority shall release any funds withheld and lift any related suspension of the Contractor's performance.

H. Liquidated Damages; Termination

If payment by the Awarding Authority or performance by the Contractor is suspended, and if the breach cannot be cured or that same contractor fails to take all reasonable and immediate efforts to comply with the MBE/WBE participation goals set forth in this Contract, subject to the notice provisions above:

1. The Awarding Authority may terminate this Contract; or
2. The Awarding Authority may retain from final payment to the Contractor, as liquidated damages, an amount equal to the difference between:
    a. The total of the MBE/WBE participation goals set forth in this Contract, and;
    b. The amount of MBE/WBE participation credit earned by the Contractor for MBE/WBE Work performed under this Contract minus the cost to restore the loss to the Awarding Authority.
3. Any liquidated damages will be assessed separately for MBE and WBE participation.

Discretionary Option to Review Any Additional Mitigating Evidence Prior to Final Decision: Before exercising its rights and remedies, the Awarding Authority may but is not required to give the Contractor and any other interested party a final opportunity to present evidence that the Contractor is in compliance with the requirements or that there is some justifiable reason for waiving the requirements of this Attachment in whole or in part. The Awarding Authority may invite SDO to participate in these proceedings.

APPENDIX C to the General Conditions of the Contract

PROCEDURES FOR AWARD OF SUBCONTRACTS

Pursuant to M.G.L. c.149 A, the Owner is required to develop a process consistent with legal requirements for the selection of subcontractors for construction manager at risk projects. This process is described in these Procedures for Award of Subcontracts (the "Procedures"). The Procedures are divided into three parts. The first part describes the prequalification and procurement of "Trade Contractors", which, for the purposes of the Procedures, shall mean the subcontractors performing work in trade categories covered by Section 44F of Chapter 149. The second part describes the prequalification and procurement of all subcontractors that are not Trade Contractors. The third part addresses additional procurement matters.

For the purposes of the Procedures, the term Project shall mean the specific construction project to which the Procedures are being applied; the term CM shall mean the construction manager at risk selected by the Owner to construct the Project; the term Designer shall mean the firm (and its subconsultants) selected by THE OWNER to design; the term Project Manager shall refer to the firm serving as Project Manager on the project; and the term Applicant shall mean any firm that submits a response pursuant to the Procedures.

I. Trade Contractors

1. Applicability of Procedures

1.1 Subcontracts Subject to Trade Contract Procedures. The procedures set forth in Sections 2 and 3 below shall govern the award of subcontracts by the CM for the furnishing of labor, materials, and equipment in the performance of the categories of work listed below whenever the estimated construction cost of such category of work exceeds $20,000:

a. Roofing and Flashing;
b. Metal windows;
c. Waterproofing, Damp-proofing and Caulking;
d. Miscellaneous and Ornamental Iron;
e. Lathing and Plastering;
f. Acoustical Tile;
g. Marble;
h. Tile;
i. Terrazzo;
j. Resilient Floors;
k. Glass and Glazing;
l. Painting;
m. Plumbing;
n. Heating, Ventilating, and Air-Conditioning;
o. Electrical work;
p. Elevators;
q. Masonry work;
r. Fire Protection Sprinkler System; and
s. Any other categories of work for which the Awarding Authority deems if necessary or convenient to receive sub-bids.

The subcontractors performing these trades are referred to throughout the Contract Documents as "Trade Contractor(s)." Contracts for work in these categories of work where the estimated cost of such work exceeds $25,000 are referred to as "trade contracts."

2. Qualification of Trade Contractors

2.1 Prequalification Committee. Owner shall establish a prequalification committee ("the Prequalification Committee") consisting of four members. They shall include two representatives of THE OWNER, a representative of the Designer, and a representative of the CM. The Prequalification Committee shall conduct the prequalification of trade contractors as set forth in Sections 2 and 3 of the Procedures. The CM will provide assistance to the Prequalification Committee in the exercise of its responsibilities under the Procedures, including assistance from CM staff.

If the CM proposes to perform Trade Subcontract work or other Subcontract Work with its own forces, the CM's representative on the Prequalification Committee shall abstain from participation in any review of the CM's own proposal.

Three members of the Prequalification Committee shall constitute a quorum for the purposes of conducting the Prequalification Committee's official business.

2.2 Request for Qualifications. THE OWNER shall issue a request for qualifications ("RFQ") for each category of work listed in Section 1.1 if such work is required on the Project. The RFQ shall be placed on the COMMBUYS web site; advertised in a newspaper of general circulation in the area of the Project and in the *Central Register* established under Massachusetts General Laws, Chapter 9, Section 20, and in such additional media as THE OWNER and the Prequalification Committee may deem appropriate at least fourteen (14) calendar days before the deadline for Applicants to submit a Statement of Qualifications (SOQ) in response to the RFQ. All interested Trade Contractors shall be eligible to respond to the RFQ and participate in the prequalification process. The CM firm may submit its qualifications to bid on trade contract work provided that the CM customarily performs the work for which it submits its qualifications and does so with employees on its own payroll, and provided that the CM meets all the requirements of the selection process. THE OWNER shall prepare the RFQ in a form consistent with the requirements of M.G.L. c. 149A and in consultation with the Prequalification Committee and the CM. The RFQ shall contain a form or forms (individually or collectively, THE OWNER "Statement of Qualifications" or "SOQ") requiring the information necessary for the Prequalification Committee to determine if the Applicant is qualified to perform the category of work for which it seeks prequalification on the Project. The RFQ shall include, at a minimum:

a. the date, time, and place for submission;
b. relevant information about the project and the bidding process;
c. the specific criteria for trade contractor prequalification and selection;
d. a statement indicating that the RFQ will be used to prequalify trade contractors that will be invited to submit a bid; and
e. that the responders' names are to be posted, but that there shall be no public opening of responses.

2.2 Prequalification Criteria. The Prequalification Committee shall evaluate the information submitted by each Applicant on its Statement of Qualifications, the results of reference checks performed by the Prequalification Committee and/or the CM, and any other information required or obtained by the Prequalification Committee. The following subparagraphs enumerate the legally required categories to be used by the Prequalification Committee in evaluating the Applicants, the subcategories of information within each category, and the specific point allocation required for prequalification within each category. Applicants must achieve an overall score of 70 or greater and must also achieve the minimum required points within each category in order to be deemed prequalified. Applicants that do not achieve both the minimum scores within each category and do not achieve an overall score of 70 or above shall not be deemed prequalified.

a. Management Experience (50 points, minimum of 25 required for approval)

i) Business owners - The name, title, years with firm of the owner(s) of the business

ii) Management personnel - The names, title, education and construction experience, years with firm, and list of projects completed by all management personnel.
iii) Similar project experience - The project name(s), description, description of scope, original trade contract sum, final trade contract sum with explanation, and date completed of similar projects.
iv) Terminations – A list of any projects on which the trade contractor was terminated or failed to complete the work.
v) Lawsuits – A list of commercial lawsuits in which the trade contractor is a defendant or defendant-in-counterclaim with regard to construction contracts within the last 3 years. The lawsuits shall not include any actions that primarily involve personal injury or workers 'compensation claims, or where the sole cause of action involves the trade contractor's exercise of its rights for direct payment under the law.
vi) Safety record – The three-year history of the trade contractor's workers' compensation experience modifier.

b. References (30 points; minimum of 15 required for approval)

~~i)~~ Client references - For all projects listed in clause (iii) of Management experience above, including the project name, client's name, current client contact person, with contact's email address, telephone #, office address and fax number.
ii) Credit references - A minimum of five credit references from key suppliers, vendors and banks. Include name of current contact person, with contact's email address, telephone #, office address and fax number.
iii) Public project record – A list of all completed public building construction projects as defined in section 44A of chapter 149 during the past three five years with client's name, current client contact person, with contact's email address, telephone #, office address and fax number.

c. Capacity to Complete Projects – (20 points; minimum of 10 required for approval)
i) Annual revenue for prior three fiscal years. There shall be no requirement for submission of financial statements.
ii) Revenue under contract for next three fiscal years.

d. Commitment Letter – (mandatory no points assigned)
Mandatory commitment letters from surety companies or authorized agents stating that payment and performance bonds at 110% of the estimated trade contract value will be provided to the applicant if it is the successful bidder. The surety company providing the commitment letter must be licensed to do business in the Commonwealth and appear on the United States Treasury Department Circular 570.

e. Certificate of Eligibility – (mandatory, no points assigned)
All SOQs submitted after January 1, 2006 must include a certificate of eligibility from DCAMM listing the Applicant as currently certified as a subcontractor in the scope of work for which the Applicant is submitting its SOQ.

f. Update Statement – (mandatory, no points assigned)
All SOQs submitted after January 1, 2006 must include a fully completed and current DCAMM Update Statement prepared by the Applicant.

Applicants that are certified by the Massachusetts State Office of Minority and Women Business Enterprise ("SOMWBA") as either a Minority Business Enterprise, a Women Business Enterprise or a Minority/Women Business Enterprise and provide documentation of current SOMWBA certification with their SOQ will have an additional 5 points added to their overall score.

If the Applicant is a joint venture, the Applicant must submit a copy of the joint venture agreement, signed by each member, and the joint venture agreement must clearly identify, for each member of the joint venture, such member's proportionate share or interest in the

financial or other benefits, risks or liabilities of the venture ("joint venture interest"). One member of the joint venture must have a joint venture interest greater than fifty (50) percent ("the Lead Venturer"). The requirements for prequalification in 2.3 a-f above shall be met by each member of the joint venture; and the bonding requirements of 2.3 d above shall be met by the Lead Venturer or by the joint venture as an entity. A joint venture prequalified by the Prequalification Committee must obtain a Certificate of Eligibility from DCAMM prior to the time bids are filed and must submit the Joint Venture's Certificate of Eligibility with its bid.

Joint ventures must be submitted for consideration by the Prequalification Committee. Following the deadline for submission of SOQs for a specific category of work, joint ventures for that category of work which were not submitted to the Prequalification Committee may not bid on that category of work, except that two firms both of whom were independently prequalified by the Prequalification Committee for that category of work, may form a joint venture to bid that category of work without further consideration by the Prequalification Committee provided the Joint Venture has been DCAMM Certified prior to submitting its bid and submits the Joint Venture's Certificate of Eligibility with its bid.

2.4 Deliberations of the Prequalification Committee. The Prequalification Committee shall consider each SOQ submitted based on the criteria set forth in Paragraph 2.3 above. The Prequalification Committee shall require that all mandatory submissions are submitted by the Applicant and apply a numerical scoring system, with both the minimum point scores for each category, and a score of 70 out of a possible 100 overall points, required to be prequalified. The Prequalification Committee shall prepare a written record of the evaluation of each Applicant.

The scoring system shall provide for the assigning of scores as follows. The Prequalification Committee shall first consider whether the Applicant has met the requirements of Subparagraphs d, e and f, bonding commitment letter, certificate of eligibility and update statement. If the Applicant has satisfied those criterion, it shall be awarded up to 100 points using the criteria listed above. Applicants that do not meet the requirements of Subparagraphs d, e and f shall not be presented to the Prequalification Committee for consideration.

Any Applicant that fails to achieve either an overall score of at least 70 or that fails to achieve the minimum required points within each category shall be deemed not to be prequalified for the category of work for which the Applicant sought prequalification. If it is determined at any time during the evaluation process, that an Applicant has willfully supplied materially false or misleading information in its application or otherwise, the Applicant may be eliminated from further consideration for prequalification for the Project and, in the discretion of the Owner, for any other projects requiring prequalification under these Procedures.

The decision of the Prequalification Committee shall be final and not subject to appeal except on the grounds of fraud or collusion. An Applicant firm's prequalification score shall be made available to that Applicant firm only and only upon request. An Applicant firm's score shall not be a public record as defined in M.G.L. c. 4, §7 and shall not be open to the public inspection to the fullest extent possible under the law.

A list of the Applicants that have been determined by the Prequalification Committee to be prequalified and therefore eligible to bid shall be posted at the offices of THE OWNER listing the firms by trade categories. Applicants shall also be notified of the Prequalification Committee's determination on prequalification by mail at the address furnished by each Applicant.

The Prequalification Committee reserves the right to reopen the prequalification process for any category of work before it has completed its evaluation of firms that previously submitted SOQs and/or to hold multiple rounds of prequalification for any given category of work. In either case, any Applicant that has submitted a complete SOQ shall not be required to submit another one, although any Applicant not prequalified may elect to amend its SOQ prior to the latest deadline for submitting information for the trade contract for which the Applicant seeks to be prequalified.

No person or firm suspended or debarred pursuant to Massachusetts General Laws Chapter 29, Section 29F, or Chapter 149, Section 44C, or disqualified pursuant to Chapter 7, Section 38D, or which has been debarred by the Federal Government shall be determined to be qualified to compete for a trade contract or any other contract or subcontract to be issued on the Project. If any Applicant determined to be qualified to perform one or more trade contracts is subsequently suspended or debarred pursuant to such laws, the qualification of such Applicant shall be rescinded and such Applicant shall be notified of such action and eliminated from the list of prequalified bidders.

2.5 Determinations to Remain in Effect. The Prequalification Committee's determinations as to which Applicants are prequalified shall remain in effect, subject to the following provisions of this Section 2.5, for the duration of the Project. Upon receipt at any time of additional information deemed material and significant by the Prequalification Committee regarding a previously prequalified Applicant's qualifications or responsibility, including, but not limited to, compliance with any minimum prequalification requirements, the Prequalification Committee may determine, that the Applicant is not qualified to perform the applicable trade contract(s) for the Project. In such event, the Prequalification Committee shall notify the Applicant of its determination, and inform the Applicant of any information on which the Prequalification Committee's determination is based that was not furnished by the Applicant.

3. Bidding

3.1 Requests for Bids. A request for bids ("RFB") will be issued for each trade contract subject to Sections 2 and 3 of these Procedures. The RFB will only be issued to the Trade Contractors appearing on the list of prequalified Applicants for the applicable trade contract determined pursuant to Section 2 above. The RFB shall include at least the following attachments:

a. the date, time and place for submission of responses to the request for bids. All Trade Contractor bids will be submitted and opened at THE OWNER's Bid Room;

b. fully detailed drawings and specifications by class of work in accordance with paragraph (a) of Subsection 1 of Section 44F of Chapter 149 of the Massachusetts General Laws (i.e., separate specification sections for the trades listed in Paragraph 1.1 above) which shall provide for full competition for each item of material to be furnished under the contract as set forth under subsection (b) of M.G.L. c.30, §39M;

c. a detailed definition o the Trade Contractor's scope of work, including alternates and unit price items, if any, within that scope of work;

d. a project schedule indicating the planned sequence and duration of each trade contractor's work;

e. list of the Trade Contractors prequalified for the work covered by the RFB;

f. a Trade Contractor bid form, that shall require, without limitation, a listing of price, addenda, alternates and unit price items, if any, for the trade work; certification that the trade contractor will perform the complete trade work with employees on his own payroll, except for work customarily performed by sub-trade subcontractors within the trade; and the names of all sub-trade subcontractors to be used if awarded the trade contract and each sub-trade contract sum; to the extent applicable, an identification by the Trade Contractor that it is a MBE or WBE or a list of the MBEs and/or WBEs proposed to be used by the Trade Contractor;

g. an affidavit of tax compliance that must be executed by all bidders;

h. an affidavit of prevailing wage compliance pursuant to M.G.L. c. 149, §§ 26 and 27 that must be executed by all bidders;

i. a non-collusion affidavit that must be executed by all bidders;

j. a requirement that a bidder post a 5% bid bond from a surety company licensed to do business in the Commonwealth and whose names appears on U.S. Treasury Department Circular 570; but the bid bond shall be returned to the bidder if the bidder is not selected as the Trade Contractor;

k. a budget for the project, and the budget amount for the trade contract scope of work as provided in the project guaranteed maximum price, if available, or as provided in the most recent budget for the project;

l. a requirement that a bidder submit a current Certificate of Eligibility issued by DCAMM to the Trade Contractor showing that the Trade Contractor is certified for the trade category for which the bid is submitted.

m. A requirement that a bidder submit a completed Update Statement with its bid; and

n. a Trade Contractor agreement form as set forth in M.G.L. c. 149A, §8 (k).

The prequalified Trade Contractors shall submit bids in compliance with the requirements of the Request for Bids package.

3.2 Bid Opening, Award, Rejection and Negotiation of Bids. THE OWNER shall open bids publicly. Bids for each trade shall be: a) accepted only from firms appearing on the list of prequalified firms described in Paragraph 2.4 for such trade; b) submitted as set forth in the RFB, and c) opened publicly. Any bid which does not include the bid bond or affidavits required pursuant to law or any response in which the information requested is incomplete, conditional, or obscure or which contains any additions not required in the request for bids package shall be rejected. The trade contract for each trade shall be awarded to the lowest prequalified bidder except that THE OWNER reserves the right to reject the bids of any and all Trade Contractors if: a Trade Contractor is not eligible to submit a bid; if the bid does not represent the bid of a person competent to perform the work specified; or if less than three such bids were received and the prices are not reasonable for acceptance without further negotiation or competition. In addition, if fewer than three responsive bids are received for any trade category and the lowest bid exceeds the estimated cost for the work, the CM shall attempt to negotiate an acceptable price with the lowest prequalified bidder. If the negotiations are unsuccessful, the construction manager shall terminate negotiations with the lowest prequalified bidder and shall initiate negotiations with the trade contractor who was the second lowest prequalified bidder. If the CM is unsuccessful in negotiating an acceptable price with the lowest prequalified bidder and second lowest prequalified bidder, the CM, on behalf of and with the consent of the public agency, shall solicit additional bids utilizing the procedures for selection of subcontractors who are not trade contractors, set out below and in M.G.L. c. 149A, § 8 (j).

3.3 Trade Contract Execution. Each trade contractor selected to perform work on the Project shall return an executed trade contract including the required performance and payment bonds and insurance certificate to the CM within 10 business days of receipt of the trade contract from the CM. The trade contract shall be the trade contract agreement required by law.

II. Other Subcontracts

1. Applicability of Procedures

Subcontracts Subject to Procedures for Other Subcontracts. The process set forth in this Section II Procedures shall apply to the procurement of subcontracts and subcontractors that are not subject to the provisions of Section I above, specifically subcontractors that are not Trade Contractors, and where the subcontract scope of work has an estimated value that is equal to or exceeds $25,000.

2. Prequalification and Procurement

2.1 Subcontract Other than Trade Contracts with an Estimate Cost equal to or greater than $25,000. For Subcontracts that are not trade contracts with an estimated cost equal to or greater than $25,000, the CM shall submit to THE OWNER for its approval the qualifications which it believes a subcontractor must have to perform the work of the subcontract and a list of a minimum of three (3) subcontracting firms, and preferably at least five (5) subcontracting firms, which the CM believes meet the qualifications. The CM shall submit information in a form and content satisfactory to the Prequalification Committee concerning the qualifications and responsibility of the proposed subcontractors and, when relevant, how the selection will further the CM's compliance with its Project MBE and WBE participation goals. The CM firm may submit its qualifications to bid on subcontract work provided that the CM customarily performs the work for which it submits its qualifications and does so with employees on its own payroll, and provided that the CM meets all the requirements of the selection process. The Prequalification Committee may eliminate firms from the list of firms submitted by the CM, and the Prequalification Committee may add firms to the list submitted by the CM. The CM must add the firms requested by the Prequalification Committee to the list if the firms are acceptable to the CM. If the firms the Prequalification Committee requested be added are not acceptable to the CM based upon qualifications, ability or for any other reason, the CM must advise the Prequalification Committee of its objections and the basis for the objections in writing. If the Prequalification Committee determines that the CM's objections to THE OWNER requested firm(s) are valid then the requested firms will not be added to the list, otherwise the firm(s) will be added.

The CM will invite all subcontractors on the approved list to submit bids for the subcontract work, using forms and procedures approved by THE OWNER. The bids shall be based on detailed bidding information developed by the CM for the subcontract work. The CM will submit to THE OWNER a list of bids submitted for each subcontract and with the list will indicate the bidder it recommends be selected to be awarded a subcontract. The CM shall, along with its submission, provide a written explanation as to the reasons for its selection and recommendation. The CM's recommendation will be based on relevant factors including, but not limited to, price, quality of work, and MBE and/or WBE participation. THE OWNER approval is required before a subcontract can be awarded by the CM to a subcontractor, which approval shall not be unreasonably withheld provided the selection will not have an adverse effect on meeting project goals including, but not limited to, price, quality of work, schedule and/or MBE/WBE participation. In no event will the selection of a subcontractor affect the GMP agreed to by the CM.

The CM may, with the approval of THE OWNER, reject the proposals for a subcontract and either resolicit that scope of work or negotiate with one or more of the firms that submitted the rejected proposals. Such rejection may be based on the proposal being too high compared to the amount carried in the GMP for that scope of work or upon any other basis approved by THE OWNER.

2.3 Subcontracts with an Estimated Cost Less Than $25,000. Subcontracts with an estimated cost less than $25,000, and subcontracts for the supply of materials or equipment not including performance of labor in construction at the Project site, regardless of the estimated cost, may be awarded by the CM using any method selected by the CM with the approval of THE OWNER.

III. Other Procurement Provisions

1. Emergencies

1.1 In case of an emergency, THE OWNER or the CM, with the prior approval of DCAMM, may award a contract for such work as is necessary to preserve or protect the health or safety of persons or property on the basis of such competitive bids or proposals as it can reasonably obtain in time to respond to the emergency and without public advertisement or opening of bids or proposals; or the CM may perform such work with its own forces.

2. Termination of Contracts

2.1 Termination of Trade Contracts and Other Subcontracts. If a trade contract, or other subcontract, is terminated in whole or in part by the CM after the subcontractor commences work but prior to completion of the work covered by such trade contract or other subcontract on account of breach or default by the trade contractor or other subcontractor, or for other reasons in the public interest approved by THE OWNER, the CM may engage a replacement subcontractor using any method selected by the CM and approved by THE OWNER, or may perform the affected work with its own forces, as necessary to preserve, protect, or complete the work without following these procedures and without public advertisement or opening of bids or proposals. The termination of a trade or other subcontractor prior to completion of its work shall not be the basis for an increase in the GMP.

3. Miscellaneous Provisions

3.1 Procurement Records. The Prequalification Committee and the CM shall ensure that THE OWNER has a complete set of the following records:

a. All RFQs issued pursuant to Section 2 of these Procedures, including all addenda.

b. All SOQs and other information furnished to or otherwise obtained by the Prequalification Committee and the CM concerning qualification of each Applicant responding to an RFQ including any references or scoring obtained or generated in connection with the SOQs.

c. All RFBs issued by the CM to prequalified Trade Contractors pursuant to Section 3 of these Procedures.

d. All bids received from such Trade Contractors in response to such RFBs.

e. All solicitations for bids or proposals issued by the CM to firms other than Trade Contractors.

f. All bids and proposals received by the CM from such firms in response to such solicitations.

g. All contracts awarded pursuant to these procedures.

h. All other written documents required pursuant to the terms of these Procedures.

i. All other documents referring or relating to the evaluation of qualifications, proposals or bids, including but not limited to, all notes (to the extent included in Project files), memoranda, correspondence and meeting minutes, whether formal or informal, in either electronic media or hard copy.

THE OWNER shall retain copies of such records for a period of six (6) years from the date of final payment under the contract to which such records relate. The Secretary of Administration and Finance and the Inspector General of the Commonwealth shall have access to all such records at any time upon reasonable notice.

3.2 Severability. If any provision of these Procedures shall be determined to be invalid or unenforceable, the remaining provisions of the Procedures shall remain in full force and effect.

3.3 Time. The periods of time within which any party is required to act under the terms of these procedures when described in terms of "days" shall, unless otherwise specified, mean calendar days (and not business days), except that if the last day of any such time period falls on a Saturday, Sunday, or legal holiday in Massachusetts, the period of time during which the required action must be taken will be extended to the next following business day.

APPENDIX D

Form of Trade Contract

FORM FOR TRADE CONTRACT BETWEEN CONSTRUCTION MANAGER AND TRADE CONTRACTOR

THIS AGREEMENT made this _____ day of _____ 20____, by and between

a corporation organized and existing under the law of _____
a partnership consisting of _____
an individual doing business as _____
hereinafter called the "Construction Manager or CM" and

_____
a corporation organized and existing under the laws of _____
a partnership consisting of _____
an individual doing business _____
hereinafter called the "Trade Contractor",

WITNESSETH that the CM and the Trade Contractor for the considerations hereafter named, agree as follows:

1. The Trade Contractor agrees to furnish all labor and materials required for the completion of all work specified in Section No. _____
of the Specifications for _____
(Name of Sub-trade)
and the Plans referred to therein and addenda No. _____, _____, _____and
_____ for the _____
_____
(complete title of project and project no. taken from the title page of the Specifications)
all as prepared by _____.
(Name of Designer or Engineer)

All work shall be in accordance with the (project) all as prepared by _____ designer. All work shall be in accordance with the contract documents listed on Exhibit A; and the detailed Scope of Work listed on Exhibit B. The CM agrees to pay the Trade Contractor as full payment for all the work in Exhibit B, the sum of $_____. This price includes the following alternates (and other items set forth in the sub-bid):
Alternate No(s) _____, _____, _____,
_____, _____, _____, _____.

(a) The Trade Contractor agrees to be bound to the CM by the terms of the hereinbefore described Plans, Specifications (including all general conditions stated therein) and addenda No. _____, and _____, and _____, and to assume to the CM all the obligations and responsibilities that the CM by those documents assumes to
the _____ hereinafter called
(Public Agency)
the "Public Agency", except to the extent that provisions contained therein are by their terms or by law applicable only to the CM.

(b) The CM agrees to be bound to the Trade Contractor by the terms of the hereinbefore described documents and to assume to the Trade Contractor all the obligations and responsibilities that the Public Agency by the terms of the hereinbefore described documents assumes to the CM, except to the extent that provisions contained therein are by their terms or by law applicable only to the Public Agency.

2. The CM agrees to begin, prosecute and complete the entire work specified by the Public Agency in an orderly manner so that the Trade Contractor will be able to begin, prosecute and complete the work described in this Trade Contract; and, in consideration thereof, upon notice from the CM, either oral or in writing, the Trade Contractor agrees to begin, prosecute and complete the work described in this Trade Contract in an orderly manner in accordance with the Project Schedule attached as Exhibit C as it may be reasonably modified from time to time by agreement of the CM and the Trade Contractor.

3. The Trade Contractor agrees to furnish to the CM on execution of this Trade Contractor Agreement and prior to commencing the work, evidence of workmen's compensation insurance as required by law and evidence of public liability and property damage insurance of the type and in limits required to be furnished to the Public Agency by the CM.

4. The CM agrees that no claim for services rendered or materials furnished by the CM to the Trade Contractor shall be valid unless written notice thereof is given by the CM to the Trade Contractor during the first ten (10) days of the calendar month following that in which the claim originated.

5. The Trade Contractor Agreement is contingent upon the execution of an amendment to the contract between the CM and the Public Agency for the work of the Trade Contractor.

6. If the Trade Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if he should fail to make prompt payment to sub-trade subcontractors for material or labor, or persistently disregard laws, ordinances or the instructions of the CM, or otherwise be guilty of a substantial violation of any provision of the contract, then the CM may, without prejudice to any other right or remedy and after giving the Trade Contractor and his surety seven days' written notice, terminate the employment of the Trade Contractor and take possession of the premises and of all materials, tools, and appliances thereon and finish the work by whatever method he may deem expedient. In such case the Trade Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the trade contract price shall exceed the expense of finishing the work including compensation for additional architectural, managerial and administrative services, such excess shall be paid to the Trade Contractor. If such expense shall exceed such unpaid balance, the Trade Contractor shall pay the difference to the CM. The CM and Trade Contractor shall have the right to seek damages for breach of this Trade Contract without terminating this Trade Contract or ceasing performance hereunder.

7. The following exhibits are incorporated into their subcontract:

Exhibit A: Contract Documents

Exhibit B: Detailed Scope of Work

Exhibit C: Project Schedule

IN WITNESS WHEREOF, the parties hereto have executed this agreement the day and year first above-written.

SEAL ATTEST

_____ _____

(Name of Trade Contractor)

By: _____

SEAL ATTEST

_____ _____

(Name of CM)

By: _____

APPENDIX E

SCHEDULE SPECIFICATION

1.1 DESCRIPTION

A. This Appendix specifies the general requirements and procedures for preparing and submitting contract schedules to the Owner and/or Owner's Project Manager (OPM), for review and acceptance.

B. Acceptance of the construction schedule by OPM shall not relieve the contractor from compliance with the requirements of the Contract Documents, sequence of work and times or result in the approval of any variation from the Contract Documents.

C. Refer to Article 4 – GENERAL PERFORMANCE OBLIGATIONS OF THE CM – of the General Conditions for requirements associated with working hours (2.G)

D. Refer to Article 6 – PROSECUTION AND PROGRESS of the General Conditions for requirements associated with contract time, delay, and extension of time.

E. Refer to Article 8 – PAYMENT PROVISIONS of the General Conditions for requirements associated with submitting Applications for Payment.

F. Refer to section 1.4.C of this Appendix for the specific software requirements.

1.2 SCHEDULE GLOSSARY

A. The terms used in this Appendix or elsewhere in the Contract Documents shall have the meanings as referenced in Article 1 of the General Conditions. Other terms used in this Appendix shall have the meanings assigned to them elsewhere in the contract documents, and if not assigned and where the context will permit, as used or defined in Massachusetts General Laws (M.G.L.).

1.3 CONTRACTOR'S SCHEDULER REQUIREMENTS

A. The name of the contractor's Project Scheduler, together with his/her qualifications, shall be submitted to the Owner/OPM for approval. The Project Scheduler shall have a minimum of four [4] years of project Critical Path Method (CPM) scheduling experience using Primavera-P6, three [3] years of which shall be on projects of similar scope and value of this project. This person shall develop and maintain all aspects of Work on all requirements in this Appendix as well as all others that relate to planning, scheduling, coordination and reporting of the project status. This arrangement is designed to promote the expeditious development, review, monitoring, reporting, recovery efforts, proposal schedules and the overall progress of the work.

1.4 CONSTRUCTION SCHEDULE REQUIREMENTS

A. The contractor's approach to prosecution of the Work shall be disclosed to the Owner/OPM by submission of the computerized construction schedule required in this Appendix. These requirements are in addition to, and not in limitation of, requirements imposed in other sections.

B. The contractor shall submit, as part of the Baseline and monthly construction schedule submittal(s), an electronic file (.XER) of the schedule containing the complete construction schedule data and files in compliance with the requirements of this Appendix. The schedule submittals to also include various PDF versions of the schedule (for those without scheduling software) and a detailed Narrative.

C. **Software Requirements** – The contractor may submit to the Owner/OPM , for approval, a request to use alternative scheduling software.

- Contracts between $3 million and $10 million – MS Project and or Oracle Primavera P6, V15.1 or higher, or similarly compatible and functional critical path method software.
- Contracts over $10 million – must be Oracle Primavera P6, V15.1 or higher.

D. **Primavera P6 Settings** – All P6 schedules must comply with the P6 settings depicted in Attachment B.

E. No later than seven (7) days of the execution of the contract, a scheduling meeting will be held with the Architect, the Owner/OPM and the Owner/OPM's Scheduling Consultant if required, and shall be attended by the contractor and their project scheduler. At this meeting, the requirements of this Appendix will be reviewed and the approach to project scheduling will be confirmed. During this session, the contractor shall present the Draft Baseline-Rev 0 schedule to the Owner/OPM of the work to be performed by the contractor and its subcontractors that includes but not limited to:

1. Planned approach to complete project, preferred phasing if different from suggested,
2. A listing of all key submittals with an initial priority rating for each; permitting, third party items, required meetings with utilities,
3. Discuss the critical path, schedule coding, calendars, holidays, any night work and the details of the Narrative,
4. A summary of the most difficult schedule challenges the contractor is anticipating and how it plans to manage and control those challenges,
5. This will be an interactive session, and the contractor shall answer all questions that the Owner/OPM may have,
6. The contractor also has the responsibility to incorporate the Subcontracts and Suppliers input into the schedule for activity durations, logic ties, constraint dates and overall subcontractor work duration.

F. In preparing the Baseline-Rev 0 schedule submittal, the contractor has the responsibility to request clarification from the Owner/OPM on any areas of the schedule which reflect the contractor's interpretations of, or variations from, the requirements of the contract documents.

G. The contractor is advised that its schedules and reports, as specified herein, will be an integral part of the Owner/OPM's management program. The contractor's schedules will be used by the Owner/OPM to monitor project progress, plan the level-of-effort by its own work forces and consultants, and as a critical decision-making tool. Accordingly, the contractor shall ensure that it complies fully with the requirements specified herein and that its schedules are both timely and accurate throughout the life of the project.

The utilization of secondary schedules (those other than the Baseline-Rev 0 Schedule or monthly schedule updates) is prohibited. The contractor's schedules shall be used by the Architect and the Owner/OPM for the following purposes as well as any other purpose where the issue of time is relevant, the contractor must prepare and plan the CPM with the following considerations:

1. Communicate to the Owner/OPM the contractor's current plan for performing and completing the Work,
2. Identify scope and paths that are critical to the timely completion of the Work,
3. Identify upcoming activities on the critical path(s),
4. Evaluate the best course of action for recovering schedule delays,
5. Basis for analyzing the time impact of changes in the Work,
6. Identify when submittals will be submitted by the contractor for the Architect's review,
7. Document the actual construction and progress of the Work,
8. Evaluate resource requirements of the contractor and sub-contractors,
9. Facilitate efforts to complete the Work in a timely manner,
10. Assign responsibility for performing specific activities,
11. Identify access and availability of Work areas,
12. Identify look-ahead activities and planning,
13. Contractor plan for phased or total takeover by the Owner,
14. Identify Owner Activities and their coordination with phased turnover to or takeover by the Owner.

H. The Baseline-Rev 0 construction schedule shall clearly define the prosecution of the Work from the execution of the contract to Final Completion by using CPM activities for, but not limited to: submittal preparation, reviews, resubmissions and approval, Milestones, Architect/Engineer furnished items, material and equipment, interfaces with other contractors, Public Utilities, permitting, testing, start-up and commissioning, deliveries, construction activities, Final Inspection, Certificate of Occupancy, required inspections by Authorities Having Jurisdiction (AHJ), Punch List, Substantial Completion, Final Completion, user training, and move-in CPM Activities. Logic ties shall be realistic to show the contractor's Work sequencing and separately define all requisite Architect, third party and Owner tasks.

I. **Contractor agrees to:**

1. Present to the Owner/OPM its scheduling and execution of the Work.
2. Not utilize schedules different from those submitted to the OPM or any subcontractor for performance or coordination of the Work.
3. Submit schedules that accurately reflect the intent or reasonable expectations of the contractor and its subcontractors.

J. Default construction data is not allowed. Actual start and finish dates shall not be automatically updated by default mechanisms that may be included in the CPM scheduling software systems. Actual start and finish dates and remaining duration on the CPM schedule shall match those dates provided from the contractor’s back up paperwork (i.e. daily reports, delivery slips, etc.).

K. The contractor shall not artificially improve its construction schedule by revising schedule logic, relationships, or shortening planned activity durations. Planned or Original Durations of Baseline-Rev 0 must be maintained in all monthly schedule updates and are not allowed to be changed. Any duration changes should be reflected in the “remaining duration” field.

L. Contractor's failure to submit a Baseline-Rev 0 construction schedule to the Owner/OPM shall be a breach of Contract. In the event the contractor fails, refuses or neglects to

comply with the requirements set forth within this Appendix E, the Owner may elect any of the following: (a) no payment will be made for the General Condition, (b) prepare alternate construction schedules, as may be suitable under the circumstances, and deduct from the Contract Price all related costs by Change Order, (c) entitle the Owner to the damages afforded for misrepresentation or fraud by these contract documents or applicable law. Continued failure of the contractor to perform in accordance with the requirements of this Appendix E will be reason to place the contractor in default of his obligation and payment of General Condition cost will be withheld until in compliance as set forth in Massachusetts General Law (MGL) Chapter 149, s. 29.

M. "Pull Planning" - The Contractor shall plan for conducting "Pull Planning" sessions throughout the Construction Phase(s) of the Project. The Contractor, utilizing appropriate qualified staff, shall develop and engage key personnel from the Contractor's team as well all relevant subcontractors and stakeholders in proper, collaborative and formal "Pull Planning" sessions throughout the construction phase(s). The Pull Planning sessions will be conducted to ensure that the Contractor's CPM Baseline and Monthly Progress Schedules properly reflects the scope and work sequences required to achieve the interim and contractual milestones and that the work is properly planned for in the schedule, and reflects realistic and achievable logic and durations. At a minimum, the "Pull Planning Sessions" will be conducted at:

- Three (3) Months after the start of the Mechanical, Electrical and Plumbing subcontractors construction work.
- Six (6) months prior to each Substantial Completion Milestone(s)
- Three (3) months prior to each Substantial Completion Milestone(s)
- At the end of each month that the Contractor's Monthly Progress Schedule is behind schedule to the Contractor's baseline and milestone schedule(s)

It is the intent of the Pull Planning sessions to optimize the planning and scheduling process and to enhance the likeliness of the Project's schedule success for completion of the Milestone(s).

1.5 USE OF FLOAT

A. Contract float is not for the exclusive use or benefit of either the Owner or the contractor, but must be used in the best interest of completing the project within the Contract Time. If the dates in any construction schedule Submittal forecast has any slippage or overrun of the Contract Times, the contractor shall indicate such slippage or overrun by reporting negative contract float.

B. Sequestering of float shall be cause for non-acceptance of the contractor's schedule submittal. In the event that float sequestering is identified, the schedule shall be revised appropriately. The contractor shall not utilize the following:

1. Float suppression techniques in the construction schedule, including but not limited to interim dates imposed by the contractor other than Contract Time(s) and Milestone(s),
2. Inclusion of activities or constraints in a path or chain leading to a Contract Milestone which are unrelated to the work as stated and specified in the contract documents,
3. Activity durations or sequences deemed by the Owner/OPM to be unreasonable in whole or in part,

4. Preferential Sequencing;
5. Artificial Activity Durations,
6. Misrepresentation of work hours specified in project calendars.

C. All Contract Time(s) and Milestones shall be imposed, coded and separately identified in all construction schedule Submittals in conformance with the Milestone(s) and Contract Time(s) set forth in the contract documents. The contractor shall impose no other date constraints in the construction schedule, unless an explanation of their basis is provided and is acceptable to the Owner.

D. If the Contractor is delayed in performing the work, the contractor shall absorb any related delay, disruption, interference, hindrance, extension or acceleration, however caused, until all contract float is consumed. The contractor shall work cooperatively with the Owner/OPM, Architect, adjacent contractors, and third parties, to identify and implement to the maximum extent possible, no-cost measures to recover all schedule delays, regardless of the cause of the delays. One example of such measures is no-cost re-sequencing of work activities.

E. Extensions of time for performance of the work required under the General Conditions pertaining to equitable time adjustment will only be considered to the extent that the equitable time adjustment for activities affected by any condition or event which entitles the contractor to a time extension, exceed the Contract float.

1.6 ACTIVITY REQUIREMENTS

A. Activity durations shall equate to the Work Days required to complete the work included in each activity. Activities shall be in sufficient detail, breakout distinct classes of work (e.g. CSI Divisions/Sections or equivalent) and work in separate areas or locations, as specified by the Owner/OPM.

B. Activity durations greater than thirty (30) calendar days should be kept to a minimum, and must be approved by the Owner/OPM, except in the case of non-construction activities such as mobilization, procurement of materials, and delivery of equipment. Submittal review activities shall be twenty (20) calendar days unless different review times are specified in other sections of the contract documents.

C. Activities shall be assigned consistent descriptions, identification codes and sort codes. Sort code organization shall: (a) be subject to the Owner/OPM's prior consent; (b) group activities using meaningful organizations defined by contractor and the Owner/OPM; and (c) designate lead responsibility for each activity. The contractor shall include specific schedule activity identification codes in its daily field reports when describing the items of work performed.

D. Schedule Activity Identification numbers and their corresponding descriptions and representative scopes shall not be changed between the Baseline and any subsequent progress updates to ensure consistency in comparisons and analysis of progress and scope.

E. The Work Breakdown Structure (WBS) shown below shall be utilized to the fullest extent possible.

-Project
    -Milestones
        -Contractual Milestones

-Submittals & Procurement
-Prepare & Submit
-Review & Approve
-Fabrication and Delivery
-Construction
-Phase/Location/Area
-Preconstruction
-Construction Activities
-Inspections/Certification
- Testing, Start-up and Commissioning
-Closeout

E. Activity Codes – The schedule shall include but not be limited to the following activity codes:

1. Submittal
2. Review/Approval
3. Procurement/Fabrication
4. Delivery
5. Construction/Installation
6. Change Order
7. Milestone
8. Responsibility
9. Areas
10. Construction Phasing
11. Testing, Start-up and Commissioning

F. Activities shall be broken down to a sufficient level of detail to avoid the use of lags. The contractor shall seek approval and provide justification for the use of logic 'lags.' 'Negative lags' are not allowed.

G. Project specific settings for Primavera (P6) will be reviewed at the schedule meeting.

H. Contractor to include trade holidays in working Calendars.

1.7 SCHEDULE "PDF" REPORTS

A. Schedule Submittals shall include PDF reports of schedules reflecting the info/layout per Project Manager preference.

B. Look-Ahead Reports shall display the activities planned at the closing (i.e. data, cut-off) date that covers the next four (4) weeks. The utilization of look-ahead or look-back schedules that do not directly utilize the monthly schedule updates is prohibited. The Look Ahead Report shall be submitted for each schedule and progress meeting.

1.8 NARRATIVES

The schedule Narrative is a component of the construction schedule submittal. Each narrative shall list the activities on each Critical Path and compare Early Dates and Late Dates for activities designating contract times.

The schedule narrative shall communicate to the Owner/OPM the contractor's current plan for performing and completing the work.

A. Baseline narratives shall include details regarding:

1. The use of construction equipment and resources,
2. Basis and assumptions for activity durations and logic,
3. Compliance with winter weather requirements and adverse weather,
4. Any non-work days and multiple calendars applied to the activities,
5. Identify activity work items and paths that are critical to the timely completion of the work,
6. Plan and approach to sequencing of the work,
7. Schedule coding and abbreviations used in the contract schedule,
8. Calendars.

B. Monthly Schedule Update Narratives shall include details regarding:

1. Identify activity work items and paths that are critical to the timely completion of the work,
2. Explanation of Work that couldn't be performed in the previous period,
3. Upcoming activities that the Owner needs to be aware of,
4. Critical submittals by the contractor for the Architect's review,
5. Any potential/future/pending changes in access to or availability of Work areas,
6. Upcoming phased or total takeover by User. Overview of construction and changes since the last submittal and discussion of potential and actual delays,
7. Changes in activities, Calendar and Logic.

C. TIA/Recovery Narratives shall include details regarding:

1. Proposed courses of action for recovering any schedule delays,
2. Any significant change to resources for completed, current, and forecasted Work,
3. Plan and approach to sequencing of the Work,
4. Revised calendar and Logic,
5. Recovery Plan and contractor Initiated Revisions.

D. For each monthly schedule update submittal, the narrative shall respond to previous update review comments from the Owner/OPM, recap progress and days gained or lost versus the previous monthly update schedule, describe changes in resources to be used on remaining work and identify delays, their extent and causes. Each narrative also shall itemize and explain changes in activities, calendar, and logic ties, schedule recovery plans and contractor-initiated revisions.

E. Each narrative shall certify that the contractor has not been delayed, as of the data date, by any act, error or omission of the Owner, except as otherwise specifically stated in the narrative or identified in a claim submitted in accordance with the General Conditions of the contract. If the contractor fails to comply, then any determination made by the Owner will be binding on the contractor.

1.9 ADVERSE WEATHER PLANNING

A. The schedule submittal to the Owner/OPM must include planning for adverse weather. Planning for adverse weather is the strategy used to develop a schedule that produces reasonable and historically consistent early start dates. It is reasonable to conclude that adverse weather conditions will be expected for a specific project in a specific location during a specific time frame.

B. The contractor's project schedule must reflect the following non-work days due to adverse weather as an allowance for severe weather planning.

NUMBER OF ANTICIPATED ADVERSE WEATHER DAYS PER MONTH (16 total)

JAN	FEB	MAR	APR	MAY	JUN
4	4	2	1	0	0
JUL	AUG	SEP	OCT	NOV	DEC
0	0	0	1	1	3

1.10 BASELINE SCHEDULE SUBMITTAL

A. The schedule meeting shall be held no later than seven (7) Days after the execution of the contract, as defined in this Appendix, section 1.4.E.

B. The Baseline-Rev 0 schedule shall reflect the work as awarded and shall purposely exclude any Delays, Change Orders, "or equal" materials, equipment and substitutions of any kind. Additionally, the contractor is to ensure that the schedule submission is in complete conformance with the intent of the contract documents.

C. The Baseline-Rev 0 schedule shall be submitted to the Owner with the first Application for Payment. *(see General Conditions Article VIII section 1 for Schedule of Values requirements that are in addition to the requirements set within this Appendix)*

D. Each schedule Submittal to the Owner/OPM shall include an electronic file (.XER) with the contractor's schedule data files, a narrative and PDF copies of the schedule and reports.

E. Once the Baseline-Rev 0 schedule is returned to the contractor as "Accepted as Submitted" or "Accepted as Noted", it shall become the *As-Planned* (or Baseline) schedule of record. Once established, the *Baseline Schedule* shall be used as the basis for monthly schedule update submittals.

F. The Baseline-Rev 0 schedule shall incorporate the contractor's best estimate of the activities and logic ties required to perform the work within the limits of the contract times.

G. The contractor shall uniquely identify the Baseline schedule submittal and monthly schedule updates by using the filename nomenclature that identifies the schedule clearly.

1.11 MONTHLY SCHEDULE UPDATES

The Monthly Schedule Update shall be reviewed by the Owner/OPM to determine disposition.

A. **MONYHLY SCHEDULE UPDATE SUBMITTAL**

1. The monthly schedule update includes but is not limited to the following:

   a. Actual start dates;
   b. Remaining duration values;
   c. Actual completion dates;
   d. Activity physical percent completion value;
   e. Out of Sequence for current updated period.

2. The Owner/OPM and the contractor shall utilize the accepted monthly schedule update to monitor construction against the baseline.

3. In the event that issues or changes or re-sequencing of work is required, the contractor shall prepare a Draft schedule for the Owner/OPM to review.

4. The contractor shall uniquely identify each Progress Schedule Submittal by using a numbering convention similar to that used on technical Submittals. Resubmissions shall be assigned the corresponding Submittal number and the letter A, or B, or C, etc., and shall fully address all the Owner/OPM's review comments and objections on the previous Submittal.

5. If the contractor fails to fully resolve all of the Owner/OPM's review comments and objections to the satisfaction of the Owner/OPM within thirty (30) calendar days from the date of the disposition, the Owner shall withhold General Condition payments until resolved.

6. Disposition for the monthly schedules updates as defined by the Owner/OPM is one of the following:

    a. Accepted as Submitted
    b. Accepted with Comments
    c. Not Accepted
    d. For Information Only
    e. Revise and Resubmit

7. Monthly schedule update submittals must be accompanied with a detail narrative as per paragraph 1.8.

8. If any of the required schedule submissions in this Appendix are returned to the contractor for corrections or revisions, they shall be resubmitted, along with an electronic file, for acceptance within ten (10) calendar days after the return.

9. Before Final Payment is made to the contractor, an as-built schedule shall be submitted to the Owner for record.

B. SCHEDULE RECOVERY

Should the construction fall behind the contractual milestones by 20 calendar days for reasons other than those that are excusable within the terms of the contract, the contractor shall implement a plan to recover the schedule. This recovery schedule must detail how impacts will be mitigated through the use of activity re-sequencing, adding additional crews, longer work hours, extra work days, etc., at no cost to the Owner.

C. TIME IMPACT ANALYSIS (TIA) SUBMITTAL

Any contractor request for adjustment in Contract Time and Contract Price will not be evaluated unless (a) the contractor, using the procedures in this Appendix and the Contract, shows that conditions justifying adjustments in Contract Time and/or Contract Price have arisen, and (b) the contractor's analysis is verifiable through an independent review of the Time Impact Analysis (TIA) by the Owner/OPM.

Determination and extension of the Contract Time will be in accordance with the General Conditions Article VI. In order for the impact to be considered, the contractor shall demonstrate that the critical path was adversely affected.

1. The contractor shall submit to the Owner/OPM a TIA illustrating the influence of each change or impact to the current contractual Milestones.

2. Each TIA shall include a fragnet demonstrating how the change issue or event impacts the last accepted monthly schedule update and critical path.

3. A meeting between the contractor and the Owner/OPM Project staff shall be held to thoroughly review, analyze, and resolve each alleged impact.

4. The TIA shall include:

   a. A detailed narrative which clearly describes the events causing the impact,
   b. Documentation substantiating and supporting the impact,
   c. Detailed CPM schedules (both electronic and hard copies) clearly delineating the impact to the critical path,
   d. Documents showing impacts caused by any third party and any force majeure; and
   e. Any additional information reasonably requested by the Owner/OPM that is needed to perform the review of the contractor submitted TIA.

5. The extension of Contract Time shall be considered only if the contractor is able to demonstrate merit of the impact to the critical path using Window Analysis Methodology (as defined in AACE Recommended Practices #29R-03, Forensic Schedule Analysis), or other similar methodology acceptable to the Owner/OPM.

6. The contractor's failure, refusal or neglect to comply with the requirements specified in this Appendix shall be reasonable evidence that the contractor is not prosecuting the work with due diligence. If faced with such a situation, the Owner may:

   a. Direct alternate schedule recovery - if in the judgment of the Owner it appears that the contractor cannot complete their work within the scheduled time, then the contractor shall work overtime, additional shifts or adopt such other procedures as may be necessary to restore adherence to the schedule. The full cost of any such recovery efforts shall be borne by the contractor, and/or

   b. The Owner can withhold liquidated damages, as provided in the General Conditions Article VI Section 2.

D. **DELAY PROVISIONS**

1. Determination and extension of Contract Time will be in accordance with Article VI, of the General Conditions and this Appendix.

2. When change orders or delays in contract time are experienced by the contractor and the contractor requests an Extension of Contract Time, a meeting between the contractor and the Owner/OPM shall be held to thoroughly review, analyze, and resolve each alleged delay. The contractor shall submit to the Owner/OPM written Time Impact Analysis (TIA) illustrating the influence of each change or delay on the current Completion Milestones. Each Time Impact Analysis shall include a 'fragnet' demonstrating how the contractor proposes to incorporate the change order or delay into the next monthly schedule update. This fragnet must be incorporated in a copy of latest accepted schedule update. A fragnet is defined as a sequence of new activities and/or activity revisions that are proposed to be added to the existing schedule to demonstrate the influence of delay and the method for incorporating delays and impacts into the schedule as they are encountered.

3. The contractor shall work cooperatively with the Owner, adjacent contractors, and third parties, to identify and implement to the maximum extent possible, no-cost measures to recover all schedule delays, regardless of the cause of the delays. One example of such measures is no-cost re-sequencing of Work activities.

   The contractor shall be required to, at no extra cost to the Owner, prepare and submit a recovery schedule which displays how the contractor intends to reschedule those activities, in order to regain compliance with the Contract Time or Milestones. The contractor will also submit a narrative, which shall describe the cause of schedule slippage and actions taken to recover schedule within the shortest reasonable time (e.g., re-sequencing of Work activities, hiring of additional labor, use of additional construction equipment, expediting of deliveries, etc.).

4. Schedule recovery will be excused if the contractor requests and demonstrates entitlement to an extension in Contract Time, in writing, due to delay(s) not within the control of the Contractor, and the Owner concurs schedule recovery is not required at that time.

   Any contractor request for adjustment in Contract Time and Contract Price will not be evaluated unless (a) the contractor, using the procedures in this Appendix and the contract, shows that conditions justifying adjustments in Contract Time and/or Contract Price have arisen, and (b) the contractor's analysis is verifiable through an independent review by the Owner/OPM of the Time Impact Analysis.

5. In the event the Owner/OPM is unable to return any monthly schedule update as "Accepted or Accepted as Noted," and the effect of delays on contract time and contract price need evaluation, both the Owner/OPM and contractor shall employ the Baseline-Rev 0 Schedule and not any *unapproved* monthly schedule updates submittals for such evaluations.

   a. The extension of Contract Time shall be considered only if the contractor demonstrates via the timely submittal of a detailed schedule analysis and Time Impact Analysis by using the contemporaneous window Analysis methodology or other similar methodology acceptable to the Owner. The analysis shall include: a) a detailed narrative which clearly describes the events causing the delay and the resulting impacts to the project schedule; b) documentation substantiating and supporting the delay; c) detailed CPM schedules (both electronic and hard copies) clearly delineating the delay; d) showing delays caused by any third party and any force majeure delays; and e) any additional information reasonably requested by the Owner/OPM, in order to enable the Owner/OPM to perform a timely and informed analysis of the request for extension of Contract Time.

1.12 SCHEDULE OF VALUES

A. Work to be performed by the contractor and its subcontractors that:

1. Depicts the allocation of costs for items in proportion to the scope of work as reflected in the contractor’s bid. The individual items in the schedule of values should not exceed $50K unless approved by the Owner/OPM.
2. Depicts each individual trade contract, non-trade contract, general contractor costs and other traditional labor, material and services and related costs customarily

provided by the general contractor and shall be individually and separately detailed by division number and other appropriate identification of the work in the schedule of values.

3. Schedule of Values should be submitted within 15 days after execution of the contract.

END OF APPENDIX

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS

that_____

_____

_, as Principal, and

_____

_____,as Surety,

are held and firmly bound unto the Awarding Authority, in the sum of

_____

lawful money of the United States to be paid to the Awarding Authority, for which payments, well and truly to be made, we bind ourselves, our respective heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the said Principal has made a contract with the Awarding Authority bearing date of

_____ 200_, for the construction of _____

_____(Project),

Now the condition of this obligation is such that if the Principal shall well and truly keep and perform all the undertakings, covenants, agreements, terms and conditions of said contract and any extensions thereof that may be granted by the Awarding Authority, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly keep and perform all the alterations, changes or additions to said contract that may hereafter be made, notice to the surety of such modifications, alterations, changes or additions being hereby waived, then this obligation shall become null and void; otherwise it shall remain in full force and effect.

In the event that the contract is abandoned by the Contractor, or is terminated by the Awarding Authority, said surety hereby further agrees that said surety shall, if requested in writing by the Awarding Authority, take such action as is necessary to complete said contract.

In witness whereof we hereunto set our hands and seals this ____ day of _____, 200_.

By Principal: _____ [Seal]

By Surety: _____ [Seal]

Address: _____

Surety Agent: _____ [Seal] Address: _____

Telephone: _____

CERTIFICATE AS TO CORPORATE PRINCIPAL
(PERFORMANCE BOND)

I, _____, certify that I am the _____ of the corporation named a principal in the within bond; that _____who signed said Bond on behalf of the Principal was then _____ of said corporation and I know his signature and his signature thereon is genuine; and that said Bond was duly signed, sealed and attested for and on behalf of said corporation by authority of its governing body.

Signed: _____ [Seal]

Date: _____, 200_

END OF PERFORMANCE BOND

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that _____

_____

_____as

principal, and _____

as surety, are held and firmly bound unto the Awarding Authority in the sum of _____

_____

lawful money of the United States of America, to be paid to the Awarding Authority, for which payment, well and truly to be made, we bind ourselves, our respective heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said principal has made a contract with the Awarding Authority under date of _____, 200_,

for: _____

Now the condition of this obligation is such that if the principal shall promptly pay for all labor performed or furnished and for all materials used or employed in said contract and in any and all duly authorized modifications, alterations, extensions of time, changes or additions to said contract that may hereafter be made, notice to the surety of such modifications, alterations, extensions of time, changes or additions being hereby waived, the foregoing to include any other purposes of items set out in, and to be subject to, the provision of Massachusetts General Laws (Ter. Ed.), Chapter 30, Section 39A, and Chapter 149, Section 29 as amended, then this obligation shall become null and void; otherwise it shall remain in full force and effect.

In witness whereof we hereunto set our hands and seals this ____ day of _____, 200_.

By Principal: _____ [Seal]

By Surety: _____

Address: _____

Surety Agent: _____ [Seal]

Address: _____

Telephone: _____

CERTIFICATE AS TO CORPORATE PRINCIPAL
(LABOR AND MATERIAL BOND)

I, _____, certify that I am the _____

of the corporation named as principal in the within bond; that _____ who signed said Bond on behalf of the Principal was then _____ of said corporation and I know his signature and his signature thereon is genuine; and that said Bond was duly signed, sealed and attested for and on behalf of said corporation by authority of its governing body.

Signed: _____ [Seal]

Date: _____, 200_

END OF LABOR AND MATERIAL PAYMENT BOND

SECTION 007343

WAGE RATE REQUIREMENTS

PART 1 - GENERAL

1.1 APPLICABLE LAWS

A. Provisions of the Contract Documents shall be subject to applicable provisions of law, including, without limitation, the Commonwealth of Massachusetts statutes relating to prevailing wages, record keeping and reporting.

1. All applicable provisions of law are a part of this Contract.
2. Incorrect citations of statutes in this Document shall not relieve Contractor of its obligations under law. In case of a conflict between the Contract Documents and applicable statutes, the provisions of law shall govern.

1.2 PREVAILING WAGE RATES

A. Wage Rates: The minimum rates of wages to be paid to mechanics and apprentices, chauffeurs, teamsters and laborers shall be set forth in the schedule of rates and wages determined by the Massachusetts Department of Labor and Workforce Development, which schedule is appended to this Document and made a part of the Contract, in accordance with and subject to the provisions of M.G.L. Chapter 149, Section 26 and 27, as amended.

1. The Wage Determination Schedule provided to the Architect and Awarding Authority by governmental authorities is included in the Project Manual. The Architect and Awarding Authority do not guarantee the accuracy of the schedule, and every bidder and contractor shall be responsible for ascertaining the prevailing wages in the area where the work will be performed.

B. Payment Insurance: In accordance with M.G.L. Chapter 149, Section 34A, the Contractor shall, before commencing performance of the Contract, provide by insurance for the payment of compensation and the furnishing of other benefits under M.G.L. Chapter 152 “Worker’s Compensation” to all persons to be employed under the Contract, and the Contractor shall continue such insurance in full force and effect during the term of the Contract.

1. Sufficient proof of compliance with this Document must be furnished at the time of execution of this Contract.

2. Failure to provide and continue in force such insurance as aforesaid shall be deemed a material breach of Contract and shall operate as an immediate termination thereof. The attention of the Contractor is directed to that portion of M.G.L. Chapter 149, Section 34A, which provides that whoever violates any of its provisions shall be punished by a fine of not more than one hundred dollars or by imprisonment for six months, or both; and, in addition, any Contractor who violates any provision of this Document shall be prohibited from contracting, directly or indirectly, with the Commonwealth or any political subdivision thereof for the construction, alteration, demolition, maintenance or repair of, or addition to, any public works or public building for a period of two years from the date of conviction of said violation.

C. Records: Every contractor and subcontractor working under the terms of any contract for the construction on this project shall file weekly payroll records with the Awarding Authority in the form described in M.G.L. Chapter 149, Sections 26 and 27B, and as amended by Section 174 of Chapter 110 of the Acts of 1993. A copy of the “Statement of Wage Rate Compliance Form” is included in the Project Manual.

1. The Attorney General's Office, after conducting an investigation and hearing, can order work halted on public works projects, if it finds prevailing wage violations.
2. Any delays and costs incurred by the Awarding Authority associated with a stop work order for prevailing wage violation will be borne solely by the General Contractor.

D. Statement of Compliance: The Contractor and each Subcontractor shall furnish to the Office of the Attorney General and to the Awarding Authority, within 15 days after completion of its portion of the work, fully completed and certified copies of a "Statement of Wage Rate Compliance" certifying compliance with wage and benefit provisions of M.G.L. Chapter 149, Sections 26 and 27, and as amended by Section 331 of Chapter 110 of the Acts of 1993. A copy of the "Statement of Wage Rate Compliance" form is included with Weekly Payroll Report & Statement of Compliance.

END OF
SECTION

WEEKLY PAYROLL RECORDS REPORT
& STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c. 149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form has been printed on the reverse of this page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

In addition, every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority. For every week in which an apprentice is employed, a photocopy of the apprentice's identification card must be attached to the payroll report. Once collected, the awarding authority is also required to preserve those records for three years.

In addition, each such contractor, subcontractor, or public body shall furnish to the awarding authority directly, within fifteen days after completion of its portion of the work a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

_____, 20_____

I,_____,_____
(Name of signatory party) (Title)

do hereby state:

That I pay or supervise the payment of the persons employed by _____ on the _____
(Contractor, subcontractor or public body) (Building or project)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty nine of the General Laws.

Signature _____

Title _____

MAURA HEALEY
Governor

KIM DRISCOLL
Lt. Governor

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

As determined by the Director under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H

LAUREN JONES
Secretary

MICHAEL FLANAGAN
Director

Awarding Authority: Northeast Metropolitan Regional Vocational High School

Contract Number:

City/Town: WAKEFIELD

Description of Work: ANNUAL UPDATE TO JOB ID: 20220511-004

Job Location: 100 Hemlock Road, Wakefield MA

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- **The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor.** For multi-year CM AT RISK projects, the awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. The annual update requirement is not applicable to 27F "rental of equipment" contracts. **The updated wage schedule must be provided to all contractors, including general and sub-contractors, working on the construction project.**
- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or a sub-contractor.
- Apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentices must keep their apprentice identification card on their persons during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **Any apprentice not registered with DAS regardless of whether they are registered with another federal, state, local, or private agency must be paid the journeyworker's rate.**
- Every contractor or subcontractor working on the construction project must submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. For a sample payroll reporting form go to http://www.mass.gov/dols/pw.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Contractors must obtain the wage schedules from awarding authorities. Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may file a complaint with the Fair Labor Division of the office of the Attorney General at (617) 727-3465.

Issue Date: 04/05/2023 **Wage Request Number:** 20230404-072U

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT *TEAMSTERS JOINT COUNCIL NO. 10 ZONE B*	12/01/2021	$35.95	$13.41	$16.01	$0.00	$65.37
(3 AXLE) DRIVER - EQUIPMENT *TEAMSTERS JOINT COUNCIL NO. 10 ZONE B*	12/01/2021	$36.02	$13.41	$16.01	$0.00	$65.44
(4 & 5 AXLE) DRIVER - EQUIPMENT *TEAMSTERS JOINT COUNCIL NO. 10 ZONE B*	12/01/2021	$36.14	$13.41	$16.01	$0.00	$65.56
ADS/SUBMERSIBLE PILOT *PILE DRIVER LOCAL 56 (ZONE 1)*	08/01/2020	$103.05	$9.40	$23.12	$0.00	$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR *LABORERS - ZONE 1*	12/01/2022	$43.93	$9.10	$17.57	$0.00	$70.60
	06/01/2023	$44.93	$9.10	$17.57	$0.00	$71.60
	12/01/2023	$46.18	$9.10	$17.57	$0.00	$72.85
For apprentice rates see "Apprentice- LABORER"						
AIR TRACK OPERATOR (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$43.33	$9.35	$17.82	$0.00	$70.50
	06/01/2023	$44.33	$9.35	$17.82	$0.00	$71.50
	12/01/2023	$45.58	$9.35	$17.82	$0.00	$72.75
	06/01/2024	$47.06	$9.35	$17.82	$0.00	$74.23
	12/01/2024	$48.53	$9.35	$17.82	$0.00	$75.70
	06/01/2025	$50.03	$9.35	$17.82	$0.00	$77.20
	12/01/2025	$51.53	$9.35	$17.82	$0.00	$78.70
	06/01/2026	$53.08	$9.35	$17.82	$0.00	$80.25
	12/01/2026	$54.58	$9.35	$17.82	$0.00	$81.75
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. *HEAT & FROST INSULATORS LOCAL 6 (BOSTON)*	12/01/2020	$38.10	$12.80	$9.45	$0.00	$60.35
ASPHALT RAKER *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
ASPHALT RAKER (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$42.83	$9.35	$17.82	$0.00	$70.00
	06/01/2023	$43.83	$9.35	$17.82	$0.00	$71.00
	12/01/2023	$45.08	$9.35	$17.82	$0.00	$72.25
	06/01/2024	$46.56	$9.35	$17.82	$0.00	$73.73
	12/01/2024	$48.03	$9.35	$17.82	$0.00	$75.20
	06/01/2025	$49.53	$9.35	$17.82	$0.00	$76.70
	12/01/2025	$51.03	$9.35	$17.82	$0.00	$78.20
	06/01/2026	$52.58	$9.35	$17.82	$0.00	$79.75
	12/01/2026	$54.08	$9.35	$17.82	$0.00	$81.25
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.63	$14.25	$16.05	$0.00	$83.93
	06/01/2023	$54.88	$14.25	$16.05	$0.00	$85.18
	12/01/2023	$56.13	$14.25	$16.05	$0.00	$86.43
	06/01/2024	$57.43	$14.25	$16.05	$0.00	$87.73
	12/01/2024	$58.88	$14.25	$16.05	$0.00	$89.18
	06/01/2025	$60.18	$14.25	$16.05	$0.00	$90.48
	12/01/2025	$61.63	$14.25	$16.05	$0.00	$91.93
	06/01/2026	$62.93	$14.25	$16.05	$0.00	$93.23
	12/01/2026	$64.38	$14.25	$16.05	$0.00	$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.63	$14.25	$16.05	$0.00	$83.93
	06/01/2023	$54.88	$14.25	$16.05	$0.00	$85.18
	12/01/2023	$56.13	$14.25	$16.05	$0.00	$86.43
	06/01/2024	$57.43	$14.25	$16.05	$0.00	$87.73
	12/01/2024	$58.88	$14.25	$16.05	$0.00	$89.18
	06/01/2025	$60.18	$14.25	$16.05	$0.00	$90.48
	12/01/2025	$61.63	$14.25	$16.05	$0.00	$91.93
	06/01/2026	$62.93	$14.25	$16.05	$0.00	$93.23
	12/01/2026	$64.38	$14.25	$16.05	$0.00	$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER *LABORERS - ZONE 1*	12/01/2022	$43.93	$9.10	$17.57	$0.00	$70.60
	06/01/2023	$44.93	$9.10	$17.57	$0.00	$71.60
	12/01/2023	$46.18	$9.10	$17.57	$0.00	$72.85
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$43.33	$9.35	$17.82	$0.00	$70.50
	06/01/2023	$44.33	$9.35	$17.82	$0.00	$71.50
	12/01/2023	$45.58	$9.35	$17.82	$0.00	$72.75
	06/01/2024	$47.06	$9.35	$17.82	$0.00	$74.23
	12/01/2024	$48.53	$9.35	$17.82	$0.00	$75.70
	06/01/2025	$50.03	$9.35	$17.82	$0.00	$77.20
	12/01/2025	$51.53	$9.35	$17.82	$0.00	$78.70
	06/01/2026	$53.08	$9.35	$17.82	$0.00	$80.25
	12/01/2026	$54.58	$9.35	$17.82	$0.00	$81.75
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
BOILER MAKER *BOILERMAKERS LOCAL 29*	01/01/2023	$47.37	$7.07	$20.31	$0.00	$74.75
	01/01/2024	$48.12	$7.07	$20.60	$0.00	$75.79

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *BOILERMAKER - Local 29*

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	$30.79	$7.07	$13.22	$0.00	$51.08
2	65	$30.79	$7.07	$13.22	$0.00	$51.08
3	70	$33.16	$7.07	$14.23	$0.00	$54.46
4	75	$35.53	$7.07	$15.24	$0.00	$57.84
5	80	$37.90	$7.07	$16.25	$0.00	$61.22
6	85	$40.26	$7.07	$17.28	$0.00	$64.61
7	90	$42.63	$7.07	$18.28	$0.00	$67.98
8	95	$45.00	$7.07	$19.32	$0.00	$71.39

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	$31.28	$7.07	$13.22	$0.00	$51.57
2	65	$31.28	$7.07	$13.22	$0.00	$51.57
3	70	$33.68	$7.07	$14.23	$0.00	$54.98
4	75	$36.09	$7.07	$15.24	$0.00	$58.40
5	80	$38.50	$7.07	$16.25	$0.00	$61.82
6	85	$40.90	$7.07	$17.28	$0.00	$65.25
7	90	$43.31	$7.07	$18.28	$0.00	$68.66
8	95	$45.71	$7.07	$19.32	$0.00	$72.10

Notes:

Apprentice to Journeyworker Ratio:1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) *BRICKLAYERS LOCAL 3 (LYNN)*	02/01/2023	$60.35	$11.49	$22.34	$0.00	$94.18
	08/01/2023	$62.40	$11.49	$22.34	$0.00	$96.23
	02/01/2024	$63.65	$11.49	$22.34	$0.00	$97.48
	08/01/2024	$65.75	$11.49	$22.34	$0.00	$99.58
	02/01/2025	$67.05	$11.49	$22.34	$0.00	$100.88
	08/01/2025	$69.20	$11.49	$22.34	$0.00	$103.03
	02/01/2026	$70.55	$11.49	$22.34	$0.00	$104.38
	08/01/2026	$72.75	$11.49	$22.34	$0.00	$106.58
	02/01/2027	$74.15	$11.49	$22.34	$0.00	$107.98

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *BRICK/PLASTER/CEMENT MASON - Local 3 Lynn*

Effective Date - 02/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$30.18	$11.49	$22.34	$0.00	$64.01
2	60	$36.21	$11.49	$22.34	$0.00	$70.04
3	70	$42.25	$11.49	$22.34	$0.00	$76.08
4	80	$48.28	$11.49	$22.34	$0.00	$82.11
5	90	$54.32	$11.49	$22.34	$0.00	$88.15

Effective Date - 08/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$31.20	$11.49	$22.34	$0.00	$65.03
2	60	$37.44	$11.49	$22.34	$0.00	$71.27
3	70	$43.68	$11.49	$22.34	$0.00	$77.51
4	80	$49.92	$11.49	$22.34	$0.00	$83.75
5	90	$56.16	$11.49	$22.34	$0.00	$89.99

Notes:

Apprentice to Journeyworker Ratio:1:5

BULLDOZER/GRADER/SCRAPER *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

CAISSON & UNDERPINNING BOTTOM MAN *LABORERS - FOUNDATION AND MARINE*	12/01/2022	$43.73	$9.35	$17.97	$0.00	$71.05
	06/01/2023	$44.73	$9.35	$17.97	$0.00	$72.05
	12/01/2023	$45.98	$9.35	$17.97	$0.00	$73.30
	06/01/2024	$47.46	$9.35	$17.97	$0.00	$74.78
	12/01/2024	$48.93	$9.35	$17.97	$0.00	$76.25
	06/01/2025	$50.43	$9.35	$17.97	$0.00	$77.75
	12/01/2025	$51.93	$9.35	$17.97	$0.00	$79.25
	06/01/2026	$53.48	$9.35	$17.97	$0.00	$80.80
	12/01/2026	$54.98	$9.35	$17.97	$0.00	$82.30

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING LABORER *LABORERS - FOUNDATION AND MARINE*	12/01/2022	$42.58	$9.35	$17.97	$0.00	$69.90
	06/01/2023	$43.58	$9.35	$17.97	$0.00	$70.90
	12/01/2023	$44.83	$9.35	$17.97	$0.00	$72.15
	06/01/2024	$46.31	$9.35	$17.97	$0.00	$73.63
	12/01/2024	$47.78	$9.35	$17.97	$0.00	$75.10
	06/01/2025	$49.28	$9.35	$17.97	$0.00	$76.60
	12/01/2025	$50.78	$9.35	$17.97	$0.00	$78.10
	06/01/2026	$52.33	$9.35	$17.97	$0.00	$79.65
	12/01/2026	$53.83	$9.35	$17.97	$0.00	$81.15
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING TOP MAN *LABORERS - FOUNDATION AND MARINE*	12/01/2022	$42.58	$9.35	$17.97	$0.00	$69.90
	06/01/2023	$43.58	$9.35	$17.97	$0.00	$70.90
	12/01/2023	$44.83	$9.35	$17.97	$0.00	$72.15
	06/01/2024	$46.31	$9.35	$17.97	$0.00	$73.63
	12/01/2024	$47.78	$9.35	$17.97	$0.00	$75.10
	06/01/2025	$49.28	$9.35	$17.97	$0.00	$76.60
	12/01/2025	$50.78	$9.35	$17.97	$0.00	$78.10
	06/01/2026	$52.33	$9.35	$17.97	$0.00	$79.65
	12/01/2026	$53.83	$9.35	$17.97	$0.00	$81.15
For apprentice rates see "Apprentice- LABORER"						
CARBIDE CORE DRILL OPERATOR *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
CARPENTER *CARPENTERS -ZONE 2 (Eastern Massachusetts)*	03/01/2023	$45.78	$8.68	$19.97	$0.00	$74.43

Apprentice - *CARPENTER - Zone 2 Eastern MA*

Effective Date - 03/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$22.89	$8.68	$1.73	$0.00	$33.30
2	60	$27.47	$8.68	$1.73	$0.00	$37.88
3	70	$32.05	$8.68	$14.78	$0.00	$55.51
4	75	$34.34	$8.68	$14.78	$0.00	$57.80
5	80	$36.62	$8.68	$16.51	$0.00	$61.81
6	80	$36.62	$8.68	$16.51	$0.00	$61.81
7	90	$41.20	$8.68	$18.24	$0.00	$68.12
8	90	$41.20	$8.68	$18.24	$0.00	$68.12

Notes:

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80
Step 1&2 $30.71/ 3&4 $36.93/ 5&6 $56.82/ 7&8 $63.06

Apprentice to Journeyworker Ratio:1:5

CARPENTER WOOD FRAME *CARPENTERS-ZONE 3 (Wood Frame)*	04/01/2023	$24.16	$7.21	$4.80	$0.00	$36.17
All Aspects of New Wood Frame Work						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *CARPENTER (Wood Frame) - Zone 3*

Effective Date - 04/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$14.50	$7.21	$0.00	$0.00	$21.71
2	60	$14.50	$7.21	$0.00	$0.00	$21.71
3	65	$15.70	$7.21	$0.00	$0.00	$22.91
4	70	$16.91	$7.21	$0.00	$0.00	$24.12
5	75	$18.12	$7.21	$3.80	$0.00	$29.13
6	80	$19.33	$7.21	$3.80	$0.00	$30.34
7	85	$20.54	$7.21	$3.80	$0.00	$31.55
8	90	$21.74	$7.21	$3.80	$0.00	$32.75

Notes:

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80
Step 1&2 $17.86/ 3&4 $20.22/ 5&6 $27.57/ 7&8 $29.94

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING *BRICKLAYERS LOCAL 3 (LYNN)*	01/01/2023	$49.45	$12.75	$22.74	$0.87	$85.81
	07/01/2023	$50.59	$12.75	$22.74	$0.87	$86.95
	01/01/2024	$51.73	$12.75	$22.74	$0.87	$88.09

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *CEMENT MASONRY/PLASTERING - Eastern Mass (Lynn)*

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.73	$12.75	$15.49	$0.00	$52.97
2	60	$29.67	$12.75	$22.74	$0.87	$66.03
3	65	$32.14	$12.75	$22.74	$0.87	$68.50
4	70	$34.62	$12.75	$22.74	$0.87	$70.98
5	75	$37.09	$12.75	$22.74	$0.87	$73.45
6	80	$39.56	$12.75	$22.74	$0.87	$75.92
7	90	$44.51	$12.75	$22.74	$0.87	$80.87

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$25.30	$12.75	$15.49	$0.00	$53.54
2	60	$30.35	$12.75	$22.74	$0.87	$66.71
3	65	$32.88	$12.75	$22.74	$0.87	$69.24
4	70	$35.41	$12.75	$22.74	$0.87	$71.77
5	75	$37.94	$12.75	$22.74	$0.87	$74.30
6	80	$40.47	$12.75	$22.74	$0.87	$76.83
7	90	$45.53	$12.75	$22.74	$0.87	$81.89

Notes:

Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.

Apprentice to Journeyworker Ratio:1:3

CHAIN SAW OPERATOR *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$54.68	$14.25	$16.05	$0.00	$84.98
	06/01/2023	$55.95	$14.25	$16.05	$0.00	$86.25
	12/01/2023	$57.23	$14.25	$16.05	$0.00	$87.53
	06/01/2024	$58.55	$14.25	$16.05	$0.00	$88.85
	12/01/2024	$60.03	$14.25	$16.05	$0.00	$90.33
	06/01/2025	$61.36	$14.25	$16.05	$0.00	$91.66
	12/01/2025	$62.83	$14.25	$16.05	$0.00	$93.13
	06/01/2026	$64.16	$14.25	$16.05	$0.00	$94.46
	12/01/2026	$65.64	$14.25	$16.05	$0.00	$95.94
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
COMPRESSOR OPERATOR *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$35.08	$14.25	$16.05	$0.00	$65.38
	06/01/2023	$35.90	$14.25	$16.05	$0.00	$66.20
	12/01/2023	$36.72	$14.25	$16.05	$0.00	$67.02
	06/01/2024	$37.57	$14.25	$16.05	$0.00	$67.87
	12/01/2024	$38.52	$14.25	$16.05	$0.00	$68.82
	06/01/2025	$39.37	$14.25	$16.05	$0.00	$69.67
	12/01/2025	$40.32	$14.25	$16.05	$0.00	$70.62
	06/01/2026	$41.18	$14.25	$16.05	$0.00	$71.48
	12/01/2026	$42.13	$14.25	$16.05	$0.00	$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DELEADER (BRIDGE) *PAINTERS LOCAL 35 - ZONE 2*	01/01/2023	$56.06	$8.65	$23.05	$0.00	$87.76
	07/01/2023	$57.26	$8.65	$23.05	$0.00	$88.96
	01/01/2024	$58.46	$8.65	$23.05	$0.00	$90.16
	07/01/2024	$59.66	$8.65	$23.05	$0.00	$91.36
	01/01/2025	$60.86	$8.65	$23.05	$0.00	$92.56

Apprentice - *PAINTER Local 35 - BRIDGES/TANKS*

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$28.03	$8.65	$0.00	$0.00	$36.68
2	55	$30.83	$8.65	$6.27	$0.00	$45.75
3	60	$33.64	$8.65	$6.84	$0.00	$49.13
4	65	$36.44	$8.65	$7.41	$0.00	$52.50
5	70	$39.24	$8.65	$19.63	$0.00	$67.52
6	75	$42.05	$8.65	$20.20	$0.00	$70.90
7	80	$44.85	$8.65	$20.77	$0.00	$74.27
8	90	$50.45	$8.65	$21.91	$0.00	$81.01

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$28.63	$8.65	$0.00	$0.00	$37.28
2	55	$31.49	$8.65	$6.27	$0.00	$46.41
3	60	$34.36	$8.65	$6.84	$0.00	$49.85
4	65	$37.22	$8.65	$7.41	$0.00	$53.28
5	70	$40.08	$8.65	$19.63	$0.00	$68.36
6	75	$42.95	$8.65	$20.20	$0.00	$71.80
7	80	$45.81	$8.65	$20.77	$0.00	$75.23
8	90	$51.53	$8.65	$21.91	$0.00	$82.09

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

DEMO: ADZEMAN *LABORERS - ZONE 1*	12/01/2022	$43.33	$9.10	$17.57	$0.00	$70.00
	06/01/2023	$44.33	$9.10	$17.57	$0.00	$71.00
	12/01/2023	$45.58	$9.10	$17.57	$0.00	$72.25

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"						
DEMO: BACKHOE/LOADER/HAMMER OPERATOR *LABORERS - ZONE 1*	12/01/2022	$44.33	$9.10	$17.57	$0.00	$71.00
	06/01/2023	$45.33	$9.10	$17.57	$0.00	$72.00
	12/01/2023	$46.58	$9.10	$17.57	$0.00	$73.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS *LABORERS - ZONE 1*	12/01/2022	$44.08	$9.10	$17.57	$0.00	$70.75
	06/01/2023	$45.08	$9.10	$17.57	$0.00	$71.75
	12/01/2023	$46.33	$9.10	$17.57	$0.00	$73.00
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER *LABORERS - ZONE 1*	12/01/2022	$44.33	$9.10	$17.57	$0.00	$71.00
	06/01/2023	$45.33	$9.10	$17.57	$0.00	$72.00
	12/01/2023	$46.58	$9.10	$17.57	$0.00	$73.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR *LABORERS - ZONE 1*	12/01/2022	$44.08	$9.10	$17.57	$0.00	$70.75
	06/01/2023	$45.08	$9.10	$17.57	$0.00	$71.75
	12/01/2023	$46.33	$9.10	$17.57	$0.00	$73.00
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER *LABORERS - ZONE 1*	12/01/2022	$43.33	$9.10	$17.57	$0.00	$70.00
	06/01/2023	$44.33	$9.10	$17.57	$0.00	$71.00
	12/01/2023	$45.58	$9.10	$17.57	$0.00	$72.25
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER *PILE DRIVER LOCAL 56 (ZONE 1)*	08/01/2020	$68.70	$9.40	$23.12	$0.00	$101.22
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER *PILE DRIVER LOCAL 56 (ZONE 1)*	08/01/2020	$49.07	$9.40	$23.12	$0.00	$81.59
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) *PILE DRIVER LOCAL 56 (ZONE 1)*	08/01/2020	$73.60	$9.40	$23.12	$0.00	$106.12
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) *PILE DRIVER LOCAL 56 (ZONE 1)*	08/01/2020	$103.05	$9.40	$23.12	$0.00	$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
DRAWBRIDGE OPERATOR (Construction) *DRAWBRIDGE - SEIU LOCAL 888*	07/01/2020	$26.77	$6.67	$3.93	$0.16	$37.53
ELECTRICIAN *ELECTRICIANS LOCAL 103*	03/01/2023	$59.23	$13.00	$21.63	$0.00	$93.86

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *ELECTRICIAN - Local 103*

Effective Date - 03/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$23.69	$13.00	$0.71	$0.00	$37.40
2	40	$23.69	$13.00	$0.71	$0.00	$37.40
3	45	$26.65	$13.00	$16.13	$0.00	$55.78
4	45	$26.65	$13.00	$16.13	$0.00	$55.78
5	50	$29.62	$13.00	$16.63	$0.00	$59.25
6	55	$32.58	$13.00	$17.13	$0.00	$62.71
7	60	$35.54	$13.00	$17.63	$0.00	$66.17
8	65	$38.50	$13.00	$18.13	$0.00	$69.63
9	70	$41.46	$13.00	$18.62	$0.00	$73.08
10	75	$44.42	$13.00	$19.13	$0.00	$76.55

Notes: :

App Prior 1/1/03; 30/35/40/45/50/55/65/70/75/80

Apprentice to Journeyworker Ratio:2:3***

ELEVATOR CONSTRUCTOR *ELEVATOR CONSTRUCTORS LOCAL 4*	01/01/2022	$65.62	$16.03	$20.21	$0.00	$101.86

Apprentice - *ELEVATOR CONSTRUCTOR - Local 4*

Effective Date - 01/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$32.81	$16.03	$0.00	$0.00	$48.84
2	55	$36.09	$16.03	$20.21	$0.00	$72.33
3	65	$42.65	$16.03	$20.21	$0.00	$78.89
4	70	$45.93	$16.03	$20.21	$0.00	$82.17
5	80	$52.50	$16.03	$20.21	$0.00	$88.74

Notes:

Steps 1-2 are 6 mos.; Steps 3-5 are 1 year

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER *ELEVATOR CONSTRUCTORS LOCAL 4*	01/01/2022	$45.93	$16.03	$20.21	$0.00	$82.17

For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$42.83	$9.35	$17.82	$0.00	$70.00
	06/01/2023	$43.83	$9.35	$17.82	$0.00	$71.00
	12/01/2023	$45.08	$9.35	$17.82	$0.00	$72.25
	06/01/2024	$46.56	$9.35	$17.82	$0.00	$73.73
	12/01/2024	$48.03	$9.35	$17.82	$0.00	$75.20
	06/01/2025	$49.53	$9.35	$17.82	$0.00	$76.70
	12/01/2025	$51.03	$9.35	$17.82	$0.00	$78.20
	06/01/2026	$52.58	$9.35	$17.82	$0.00	$79.75
	12/01/2026	$54.08	$9.35	$17.82	$0.00	$81.25
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY *OPERATING ENGINEERS LOCAL 4*	11/05/2022	$48.67	$14.25	$16.05	$0.00	$78.97
	05/01/2023	$49.91	$14.25	$16.05	$0.00	$80.21
	11/01/2023	$51.15	$14.25	$16.05	$0.00	$81.45
	05/01/2024	$52.39	$14.25	$16.05	$0.00	$82.69
	11/01/2024	$53.68	$14.25	$16.05	$0.00	$83.98
	05/01/2025	$55.12	$14.25	$16.05	$0.00	$85.42
	11/01/2025	$56.41	$14.25	$16.05	$0.00	$86.71
	05/01/2026	$57.85	$14.25	$16.05	$0.00	$88.15
	11/01/2026	$59.14	$14.25	$16.05	$0.00	$89.44
	05/01/2027	$60.57	$14.25	$16.05	$0.00	$90.87
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY *OPERATING ENGINEERS LOCAL 4*	11/01/2022	$50.22	$14.25	$16.05	$0.00	$80.52
	05/01/2023	$51.47	$14.25	$16.05	$0.00	$81.77
	11/01/2023	$52.72	$14.25	$16.05	$0.00	$83.02
	05/01/2024	$53.97	$14.25	$16.05	$0.00	$84.27
	11/01/2024	$55.27	$14.25	$16.05	$0.00	$85.57
	05/01/2025	$56.72	$14.25	$16.05	$0.00	$87.02
	11/01/2025	$58.02	$14.25	$16.05	$0.00	$88.32
	05/01/2026	$59.47	$14.25	$16.05	$0.00	$89.77
	11/01/2026	$60.77	$14.25	$16.05	$0.00	$91.07
	05/01/2027	$62.22	$14.25	$16.05	$0.00	$92.52
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY *OPERATING ENGINEERS LOCAL 4*	11/01/2022	$24.31	$14.25	$16.05	$0.00	$54.61
	05/01/2023	$25.05	$14.25	$16.05	$0.00	$55.35
	11/01/2023	$25.78	$14.25	$16.05	$0.00	$56.08
	05/01/2024	$26.51	$14.25	$16.05	$0.00	$56.81
	11/01/2024	$27.27	$14.25	$16.05	$0.00	$57.57
	05/01/2025	$28.12	$14.25	$16.05	$0.00	$58.42
	11/01/2025	$28.88	$14.25	$16.05	$0.00	$59.18
	05/01/2026	$29.73	$14.25	$16.05	$0.00	$60.03
	11/01/2026	$30.49	$14.25	$16.05	$0.00	$60.79
	05/01/2027	$31.34	$14.25	$16.05	$0.00	$61.64
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER *ELECTRICIANS LOCAL 103*	03/01/2023	$59.23	$13.00	$21.63	$0.00	$93.86
For apprentice rates see "Apprentice- ELECTRICIAN"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIRE ALARM REPAIR / MAINTENANCE / COMMISSIONING *ELECTRICIANS*	03/01/2023	$48.34	$13.00	$19.01	$0.00	$80.35
LOCAL 103						
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER)	12/01/2022	$43.54	$14.25	$16.05	$0.00	$73.84
OPERATING ENGINEERS LOCAL 4	06/01/2023	$44.56	$14.25	$16.05	$0.00	$74.86
	12/01/2023	$45.57	$14.25	$16.05	$0.00	$75.87
	06/01/2024	$46.63	$14.25	$16.05	$0.00	$76.93
	12/01/2024	$47.81	$14.25	$16.05	$0.00	$78.11
	06/01/2025	$48.87	$14.25	$16.05	$0.00	$79.17
	12/01/2025	$50.04	$14.25	$16.05	$0.00	$80.34
	06/01/2026	$51.10	$14.25	$16.05	$0.00	$81.40
	12/01/2026	$52.28	$14.25	$16.05	$0.00	$82.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	12/01/2022	$25.23	$9.35	$17.82	$0.00	$52.40
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	06/01/2023	$25.98	$9.35	$17.82	$0.00	$53.15
	12/01/2023	$25.98	$9.35	$17.82	$0.00	$53.15
	06/01/2024	$27.01	$9.35	$17.82	$0.00	$54.18
	12/01/2024	$27.01	$9.35	$17.82	$0.00	$54.18
	06/01/2025	$28.09	$9.35	$17.82	$0.00	$55.26
	12/01/2025	$28.09	$9.35	$17.82	$0.00	$55.26
	06/01/2026	$29.21	$9.35	$17.82	$0.00	$56.38
	12/01/2026	$29.21	$9.35	$17.82	$0.00	$56.38
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
FLOORCOVERER	03/01/2022	$49.93	$8.68	$20.27	$0.00	$78.88
FLOORCOVERERS LOCAL 2168 ZONE I						

Apprentice - *FLOORCOVERER - Local 2168 Zone I*

Effective Date - 03/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.97	$8.68	$1.79	$0.00	$35.44
2	55	$27.46	$8.68	$1.79	$0.00	$37.93
3	60	$29.96	$8.68	$14.90	$0.00	$53.54
4	65	$32.45	$8.68	$14.90	$0.00	$56.03
5	70	$34.95	$8.68	$16.69	$0.00	$60.32
6	75	$37.45	$8.68	$16.69	$0.00	$62.82
7	80	$39.94	$8.68	$18.48	$0.00	$67.10
8	85	$42.44	$8.68	$18.48	$0.00	$69.60

Notes: Steps are 750 hrs.
% After 10/1/17; 45/45/55/55/70/70/80/80 (1500hr Steps)
Step 1&2 $32.94/ 3&4 $39.66/ 5&6 $60.32/ 7&8 $67.10

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FORK LIFT/CHERRY PICKER *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.63	$14.25	$16.05	$0.00	$83.93
	06/01/2023	$54.88	$14.25	$16.05	$0.00	$85.18
	12/01/2023	$56.13	$14.25	$16.05	$0.00	$86.43
	06/01/2024	$57.43	$14.25	$16.05	$0.00	$87.73
	12/01/2024	$58.88	$14.25	$16.05	$0.00	$89.18
	06/01/2025	$60.18	$14.25	$16.05	$0.00	$90.48
	12/01/2025	$61.63	$14.25	$16.05	$0.00	$91.93
	06/01/2026	$62.93	$14.25	$16.05	$0.00	$93.23
	12/01/2026	$64.38	$14.25	$16.05	$0.00	$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GENERATOR/LIGHTING PLANT/HEATERS *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$35.08	$14.25	$16.05	$0.00	$65.38
	06/01/2023	$35.90	$14.25	$16.05	$0.00	$66.20
	12/01/2023	$36.72	$14.25	$16.05	$0.00	$67.02
	06/01/2024	$37.57	$14.25	$16.05	$0.00	$67.87
	12/01/2024	$38.52	$14.25	$16.05	$0.00	$68.82
	06/01/2025	$39.37	$14.25	$16.05	$0.00	$69.67
	12/01/2025	$40.32	$14.25	$16.05	$0.00	$70.62
	06/01/2026	$41.18	$14.25	$16.05	$0.00	$71.48
	12/01/2026	$42.13	$14.25	$16.05	$0.00	$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) *GLAZIERS LOCAL 35 (ZONE 2)*	01/01/2023	$45.56	$8.65	$23.05	$0.00	$77.26
	07/01/2023	$46.76	$8.65	$23.05	$0.00	$78.46
	01/01/2024	$47.96	$8.65	$23.05	$0.00	$79.66
	07/01/2024	$49.16	$8.65	$23.05	$0.00	$80.86
	01/01/2025	$50.36	$8.65	$23.05	$0.00	$82.06

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *GLAZIER - Local 35 Zone 2*

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$22.78	$8.65	$0.00	$0.00	$31.43
2	55	$25.06	$8.65	$6.27	$0.00	$39.98
3	60	$27.34	$8.65	$6.84	$0.00	$42.83
4	65	$29.61	$8.65	$7.41	$0.00	$45.67
5	70	$31.89	$8.65	$19.63	$0.00	$60.17
6	75	$34.17	$8.65	$20.20	$0.00	$63.02
7	80	$36.45	$8.65	$20.77	$0.00	$65.87
8	90	$41.00	$8.65	$21.91	$0.00	$71.56

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$23.38	$8.65	$0.00	$0.00	$32.03
2	55	$25.72	$8.65	$6.27	$0.00	$40.64
3	60	$28.06	$8.65	$6.84	$0.00	$43.55
4	65	$30.39	$8.65	$7.41	$0.00	$46.45
5	70	$32.73	$8.65	$19.63	$0.00	$61.01
6	75	$35.07	$8.65	$20.20	$0.00	$63.92
7	80	$37.41	$8.65	$20.77	$0.00	$66.83
8	90	$42.08	$8.65	$21.91	$0.00	$72.64

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

HOISTING ENGINEER/CRANES/GRADALLS *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.63	$14.25	$16.05	$0.00	$83.93
	06/01/2023	$54.88	$14.25	$16.05	$0.00	$85.18
	12/01/2023	$56.13	$14.25	$16.05	$0.00	$86.43
	06/01/2024	$57.43	$14.25	$16.05	$0.00	$87.73
	12/01/2024	$58.88	$14.25	$16.05	$0.00	$89.18
	06/01/2025	$60.18	$14.25	$16.05	$0.00	$90.48
	12/01/2025	$61.63	$14.25	$16.05	$0.00	$91.93
	06/01/2026	$62.93	$14.25	$16.05	$0.00	$93.23
	12/01/2026	$64.38	$14.25	$16.05	$0.00	$94.68

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *OPERATING ENGINEERS - Local 4*

Effective Date - 12/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	$29.50	$14.25	$0.00	$0.00	$43.75
2	60	$32.18	$14.25	$16.05	$0.00	$62.48
3	65	$34.86	$14.25	$16.05	$0.00	$65.16
4	70	$37.54	$14.25	$16.05	$0.00	$67.84
5	75	$40.22	$14.25	$16.05	$0.00	$70.52
6	80	$42.90	$14.25	$16.05	$0.00	$73.20
7	85	$45.59	$14.25	$16.05	$0.00	$75.89
8	90	$48.27	$14.25	$16.05	$0.00	$78.57

Effective Date - 06/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	$30.18	$14.25	$0.00	$0.00	$44.43
2	60	$32.93	$14.25	$16.05	$0.00	$63.23
3	65	$35.67	$14.25	$16.05	$0.00	$65.97
4	70	$38.42	$14.25	$16.05	$0.00	$68.72
5	75	$41.16	$14.25	$16.05	$0.00	$71.46
6	80	$43.90	$14.25	$16.05	$0.00	$74.20
7	85	$46.65	$14.25	$16.05	$0.00	$76.95
8	90	$49.39	$14.25	$16.05	$0.00	$79.69

Notes:

Apprentice to Journeyworker Ratio:1:6

HVAC (DUCTWORK) *SHEETMETAL WORKERS LOCAL 17 - A*	02/01/2023	$55.31	$14.11	$26.64	$2.83	$98.89
	08/01/2023	$57.01	$14.11	$26.64	$2.83	$100.59
	02/01/2024	$58.71	$14.11	$26.64	$2.83	$102.29
	08/01/2024	$60.46	$14.11	$26.64	$2.83	$104.04
	02/01/2025	$62.21	$14.11	$26.64	$2.83	$105.79
	08/01/2025	$64.06	$14.11	$26.64	$2.83	$107.64
	02/01/2026	$66.01	$14.11	$26.64	$2.83	$109.59
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (ELECTRICAL CONTROLS) *ELECTRICIANS LOCAL 103*	03/01/2023	$59.23	$13.00	$21.63	$0.00	$93.86
For apprentice rates see "Apprentice- ELECTRICIAN"						
HVAC (TESTING AND BALANCING - AIR) *SHEETMETAL WORKERS LOCAL 17 - A*	02/01/2023	$55.31	$14.11	$26.64	$2.83	$98.89
	08/01/2023	$57.01	$14.11	$26.64	$2.83	$100.59
	02/01/2024	$58.71	$14.11	$26.64	$2.83	$102.29
	08/01/2024	$60.46	$14.11	$26.64	$2.83	$104.04
	02/01/2025	$62.21	$14.11	$26.64	$2.83	$105.79
	08/01/2025	$64.06	$14.11	$26.64	$2.83	$107.64
	02/01/2026	$66.01	$14.11	$26.64	$2.83	$109.59

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING -WATER) *PIPEFITTERS LOCAL 537*	03/01/2023	$63.43	$12.50	$20.80	$0.00	$96.73
	09/01/2023	$65.18	$12.50	$20.80	$0.00	$98.48
	03/01/2024	$66.98	$12.50	$20.80	$0.00	$100.28
	09/01/2024	$68.78	$12.50	$20.80	$0.00	$102.08
	03/01/2025	$70.58	$12.50	$20.80	$0.00	$103.88
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC *PIPEFITTERS LOCAL 537*	03/01/2023	$63.43	$12.25	$20.80	$0.00	$96.48
	09/01/2023	$65.18	$12.25	$20.80	$0.00	$98.23
	03/01/2024	$66.98	$12.25	$20.80	$0.00	$100.03
	09/01/2024	$68.78	$12.25	$20.80	$0.00	$101.83
	03/01/2025	$70.58	$12.25	$20.80	$0.00	$103.63
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS *LABORERS - ZONE 1*	12/01/2022	$43.93	$9.10	$17.57	$0.00	$70.60
	06/01/2023	$44.93	$9.10	$17.57	$0.00	$71.60
	12/01/2023	$46.18	$9.10	$17.57	$0.00	$72.85
For apprentice rates see "Apprentice- LABORER"						
HYDRAULIC DRILLS (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$43.33	$9.35	$17.82	$0.00	$70.50
	06/01/2023	$44.33	$9.35	$17.82	$0.00	$71.50
	12/01/2023	$45.58	$9.35	$17.82	$0.00	$72.75
	06/01/2024	$47.06	$9.35	$17.82	$0.00	$74.23
	12/01/2024	$48.53	$9.35	$17.82	$0.00	$75.70
	06/01/2025	$50.03	$9.35	$17.82	$0.00	$77.20
	12/01/2025	$51.53	$9.35	$17.82	$0.00	$78.70
	06/01/2026	$53.08	$9.35	$17.82	$0.00	$80.25
	12/01/2026	$54.58	$9.35	$17.82	$0.00	$81.75
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
INSULATOR (PIPES & TANKS) *HEAT & FROST INSULATORS LOCAL 6 (BOSTON)*	09/01/2022	$53.85	$13.80	$17.14	$0.00	$84.79

Apprentice - *ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Boston*

Effective Date - 09/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$26.93	$13.80	$12.42	$0.00	$53.15
2	60	$32.31	$13.80	$13.36	$0.00	$59.47
3	70	$37.70	$13.80	$14.31	$0.00	$65.81
4	80	$43.08	$13.80	$15.25	$0.00	$72.13

Notes:
Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER *IRONWORKERS LOCAL 7 (BOSTON AREA)*	03/16/2023	$52.72	$8.35	$26.70	$0.00	$87.77
	03/16/2024	$53.97	$8.35	$26.70	$0.00	$89.02

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *IRONWORKER - Local 7 Boston*

Effective Date - 03/16/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$31.63	$8.35	$26.70	$0.00	$66.68
2	70	$36.90	$8.35	$26.70	$0.00	$71.95
3	75	$39.54	$8.35	$26.70	$0.00	$74.59
4	80	$42.18	$8.35	$26.70	$0.00	$77.23
5	85	$44.81	$8.35	$26.70	$0.00	$79.86
6	90	$47.45	$8.35	$26.70	$0.00	$82.50

Effective Date - 03/16/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$32.38	$8.35	$26.70	$0.00	$67.43
2	70	$37.78	$8.35	$26.70	$0.00	$72.83
3	75	$40.48	$8.35	$26.70	$0.00	$75.53
4	80	$43.18	$8.35	$26.70	$0.00	$78.23
5	85	$45.87	$8.35	$26.70	$0.00	$80.92
6	90	$48.57	$8.35	$26.70	$0.00	$83.62

Notes:

Apprentice to Journeyworker Ratio:1:4

JACKHAMMER & PAVING BREAKER OPERATOR *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
LABORER *LABORERS - ZONE 1*	12/01/2022	$43.18	$9.10	$17.57	$0.00	$69.85
	06/01/2023	$44.18	$9.10	$17.57	$0.00	$70.85
	12/01/2023	$45.43	$9.10	$17.57	$0.00	$72.10

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *LABORER - Zone 1*

Effective Date - 12/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$25.91	$9.10	$17.57	$0.00	$52.58
2	70	$30.23	$9.10	$17.57	$0.00	$56.90
3	80	$34.54	$9.10	$17.57	$0.00	$61.21
4	90	$38.86	$9.10	$17.57	$0.00	$65.53

Effective Date - 06/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$26.51	$9.10	$17.57	$0.00	$53.18
2	70	$30.93	$9.10	$17.57	$0.00	$57.60
3	80	$35.34	$9.10	$17.57	$0.00	$62.01
4	90	$39.76	$9.10	$17.57	$0.00	$66.43

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$42.58	$9.35	$17.82	$0.00	$69.75
	06/01/2023	$43.58	$9.35	$17.82	$0.00	$70.75
	12/01/2023	$44.83	$9.35	$17.82	$0.00	$72.00
	06/01/2024	$46.31	$9.35	$17.82	$0.00	$73.48
	12/01/2024	$47.78	$9.35	$17.82	$0.00	$74.95
	06/01/2025	$49.28	$9.35	$17.82	$0.00	$76.45
	12/01/2025	$50.78	$9.35	$17.82	$0.00	$77.95
	06/01/2026	$52.33	$9.35	$17.82	$0.00	$79.50
	12/01/2026	$53.83	$9.35	$17.82	$0.00	$81.00

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *LABORER (Heavy & Highway) - Zone 1*

Effective Date - 12/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$25.55	$9.35	$17.82	$0.00	$52.72
2	70	$29.81	$9.35	$17.82	$0.00	$56.98
3	80	$34.06	$9.35	$17.82	$0.00	$61.23
4	90	$38.32	$9.35	$17.82	$0.00	$65.49

Effective Date - 06/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$26.15	$9.35	$17.82	$0.00	$53.32
2	70	$30.51	$9.35	$17.82	$0.00	$57.68
3	80	$34.86	$9.35	$17.82	$0.00	$62.03
4	90	$39.22	$9.35	$17.82	$0.00	$66.39

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER: CARPENTER TENDER *LABORERS - ZONE 1*	12/01/2022	$43.18	$9.10	$17.57	$0.00	$69.85
	06/01/2023	$44.18	$9.10	$17.57	$0.00	$70.85
	12/01/2023	$45.43	$9.10	$17.57	$0.00	$72.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: CEMENT FINISHER TENDER *LABORERS - ZONE 1*	12/01/2022	$43.18	$9.10	$17.57	$0.00	$69.85
	06/01/2023	$44.18	$9.10	$17.57	$0.00	$70.85
	12/01/2023	$45.43	$9.10	$17.57	$0.00	$72.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER *LABORERS - ZONE 1*	12/01/2022	$43.33	$9.10	$17.57	$0.00	$70.00
	06/01/2023	$44.33	$9.10	$17.57	$0.00	$71.00
	12/01/2023	$45.58	$9.10	$17.57	$0.00	$72.25
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	06/01/2024	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$42.83	$9.35	$17.82	$0.00	$70.00
	06/01/2023	$43.83	$9.35	$17.82	$0.00	$71.00
	12/01/2023	$45.08	$9.35	$17.82	$0.00	$72.25
	06/01/2024	$46.56	$9.35	$17.82	$0.00	$73.73
	12/01/2024	$48.03	$9.35	$17.82	$0.00	$75.20
	06/01/2025	$49.53	$9.35	$17.82	$0.00	$76.70
	12/01/2025	$51.03	$9.35	$17.82	$0.00	$78.20
	06/01/2026	$52.58	$9.35	$17.82	$0.00	$79.75
	12/01/2026	$54.08	$9.35	$17.82	$0.00	$81.25
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: MULTI-TRADE TENDER *LABORERS - ZONE 1*	12/01/2022	$43.18	$9.10	$17.57	$0.00	$69.85
	06/01/2023	$44.18	$9.10	$17.57	$0.00	$70.85
	12/01/2023	$45.43	$9.10	$17.57	$0.00	$72.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER *LABORERS - ZONE 1*	12/01/2022	$43.18	$9.10	$17.57	$0.00	$69.85
	06/01/2023	$44.18	$9.10	$17.57	$0.00	$70.85
	12/01/2023	$45.43	$9.10	$17.57	$0.00	$72.10
This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$42.83	$9.35	$17.82	$0.00	$70.00
	06/01/2023	$43.83	$9.35	$17.82	$0.00	$71.00
	12/01/2023	$45.08	$9.35	$17.82	$0.00	$72.25
	06/01/2024	$46.56	$9.35	$17.82	$0.00	$73.73
	12/01/2024	$48.03	$9.35	$17.82	$0.00	$75.20
	06/01/2025	$49.53	$9.35	$17.82	$0.00	$76.70
	12/01/2025	$51.03	$9.35	$17.82	$0.00	$78.20
	06/01/2026	$52.58	$9.35	$17.82	$0.00	$79.75
	12/01/2026	$54.08	$9.35	$17.82	$0.00	$81.25
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
MARBLE & TILE FINISHERS *BRICKLAYERS LOCAL 3 - MARBLE & TILE*	02/01/2023	$46.25	$11.49	$20.37	$0.00	$78.11
	08/01/2023	$47.89	$11.49	$20.37	$0.00	$79.75
	02/01/2024	$48.89	$11.49	$20.37	$0.00	$80.75
	08/01/2024	$50.57	$11.49	$20.37	$0.00	$82.43
	02/01/2025	$51.61	$11.49	$20.37	$0.00	$83.47
	08/01/2025	$53.33	$11.49	$20.37	$0.00	$85.19
	02/01/2026	$54.41	$11.49	$20.37	$0.00	$86.27
	08/01/2026	$56.17	$11.49	$20.37	$0.00	$88.03
	02/01/2027	$57.29	$11.49	$20.37	$0.00	$89.15

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *MARBLE & TILE FINISHER - Local 3 Marble & Tile*

Effective Date - 02/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$23.13	$11.49	$20.37	$0.00	$54.99
2	60	$27.75	$11.49	$20.37	$0.00	$59.61
3	70	$32.38	$11.49	$20.37	$0.00	$64.24
4	80	$37.00	$11.49	$20.37	$0.00	$68.86
5	90	$41.63	$11.49	$20.37	$0.00	$73.49

Effective Date - 08/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$23.95	$11.49	$20.37	$0.00	$55.81
2	60	$28.73	$11.49	$20.37	$0.00	$60.59
3	70	$33.52	$11.49	$20.37	$0.00	$65.38
4	80	$38.31	$11.49	$20.37	$0.00	$70.17
5	90	$43.10	$11.49	$20.37	$0.00	$74.96

Notes:

Apprentice to Journeyworker Ratio:1:3

MARBLE MASONS,TILELAYERS & TERRAZZO MECH *BRICKLAYERS LOCAL 3 - MARBLE & TILE*	02/01/2023	$60.37	$11.49	$22.31	$0.00	$94.17
	08/01/2023	$62.42	$11.49	$22.31	$0.00	$96.22
	02/01/2024	$63.67	$11.49	$22.31	$0.00	$97.47
	08/01/2024	$65.77	$11.49	$22.31	$0.00	$99.57
	02/01/2025	$67.07	$11.49	$22.31	$0.00	$100.87
	08/01/2025	$69.22	$11.49	$22.31	$0.00	$103.02
	02/01/2026	$70.57	$11.49	$22.31	$0.00	$104.37
	08/01/2026	$72.77	$11.49	$22.31	$0.00	$106.57
	02/01/2027	$74.17	$11.49	$22.31	$0.00	$107.97

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile*

Effective Date - 02/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$30.19	$11.49	$22.31	$0.00	$63.99
2	60	$36.22	$11.49	$22.31	$0.00	$70.02
3	70	$42.26	$11.49	$22.31	$0.00	$76.06
4	80	$48.30	$11.49	$22.31	$0.00	$82.10
5	90	$54.33	$11.49	$22.31	$0.00	$88.13

Effective Date - 08/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$31.21	$11.49	$22.31	$0.00	$65.01
2	60	$37.45	$11.49	$22.31	$0.00	$71.25
3	70	$43.69	$11.49	$22.31	$0.00	$77.49
4	80	$49.94	$11.49	$22.31	$0.00	$83.74
5	90	$56.18	$11.49	$22.31	$0.00	$89.98

Notes:

Apprentice to Journeyworker Ratio:1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MECHANICS MAINTENANCE *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MILLWRIGHT (Zone 1) *MILLWRIGHTS LOCAL 1121 - Zone 1*	01/02/2023	$47.27	$8.58	$21.57	$0.00	$77.42

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *MILLWRIGHT - Local 1121 Zone 1*

Effective Date - 01/02/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	$26.00	$8.58	$5.72	$0.00	$40.30
2	65	$30.73	$8.58	$17.93	$0.00	$57.24
3	75	$35.45	$8.58	$18.98	$0.00	$63.01
4	85	$40.18	$8.58	$20.01	$0.00	$68.77

Notes: Step 1&2 Appr. indentured after 1/6/2020 receive no pension, but do receive annuity. (Step 1 $5.72, Step 2 $6.66)
Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:4

MORTAR MIXER *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
OILER (OTHER THAN TRUCK CRANES,GRADALLS) *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$24.37	$14.25	$16.05	$0.00	$54.67
	06/01/2023	$24.94	$14.25	$16.05	$0.00	$55.24
	12/01/2023	$25.51	$14.25	$16.05	$0.00	$55.81
	06/01/2024	$26.11	$14.25	$16.05	$0.00	$56.41
	12/01/2024	$26.77	$14.25	$16.05	$0.00	$57.07
	06/01/2025	$27.37	$14.25	$16.05	$0.00	$57.67
	12/01/2025	$28.03	$14.25	$16.05	$0.00	$58.33
	06/01/2026	$28.62	$14.25	$16.05	$0.00	$58.92
	12/01/2026	$29.29	$14.25	$16.05	$0.00	$59.59
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
OILER (TRUCK CRANES, GRADALLS) *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$29.57	$14.25	$16.05	$0.00	$59.87
	06/01/2023	$30.27	$14.25	$16.05	$0.00	$60.57
	12/01/2023	$30.96	$14.25	$16.05	$0.00	$61.26
	06/01/2024	$31.68	$14.25	$16.05	$0.00	$61.98
	12/01/2024	$32.48	$14.25	$16.05	$0.00	$62.78
	06/01/2025	$33.20	$14.25	$16.05	$0.00	$63.50
	12/01/2025	$34.00	$14.25	$16.05	$0.00	$64.30
	06/01/2026	$34.72	$14.25	$16.05	$0.00	$65.02
	12/01/2026	$35.52	$14.25	$16.05	$0.00	$65.82
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
OTHER POWER DRIVEN EQUIPMENT - CLASS II *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PAINTER (BRIDGES/TANKS) *PAINTERS LOCAL 35 - ZONE 2*	01/01/2023	$56.06	$8.65	$23.05	$0.00	$87.76
	07/01/2023	$57.26	$8.65	$23.05	$0.00	$88.96
	01/01/2024	$58.46	$8.65	$23.05	$0.00	$90.16
	07/01/2024	$59.66	$8.65	$23.05	$0.00	$91.36
	01/01/2025	$60.86	$8.65	$23.05	$0.00	$92.56

Apprentice - *PAINTER Local 35 - BRIDGES/TANKS*

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$28.03	$8.65	$0.00	$0.00	$36.68
2	55	$30.83	$8.65	$6.27	$0.00	$45.75
3	60	$33.64	$8.65	$6.84	$0.00	$49.13
4	65	$36.44	$8.65	$7.41	$0.00	$52.50
5	70	$39.24	$8.65	$19.63	$0.00	$67.52
6	75	$42.05	$8.65	$20.20	$0.00	$70.90
7	80	$44.85	$8.65	$20.77	$0.00	$74.27
8	90	$50.45	$8.65	$21.91	$0.00	$81.01

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$28.63	$8.65	$0.00	$0.00	$37.28
2	55	$31.49	$8.65	$6.27	$0.00	$46.41
3	60	$34.36	$8.65	$6.84	$0.00	$49.85
4	65	$37.22	$8.65	$7.41	$0.00	$53.28
5	70	$40.08	$8.65	$19.63	$0.00	$68.36
6	75	$42.95	$8.65	$20.20	$0.00	$71.80
7	80	$45.81	$8.65	$20.77	$0.00	$75.23
8	90	$51.53	$8.65	$21.91	$0.00	$82.09

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) * * If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.*PAINTERS LOCAL 35 - ZONE 2*	01/01/2023	$46.96	$8.65	$23.05	$0.00	$78.66
	07/01/2023	$48.16	$8.65	$23.05	$0.00	$79.86
	01/01/2024	$49.36	$8.65	$23.05	$0.00	$81.06
	07/01/2024	$50.56	$8.65	$23.05	$0.00	$82.26
	01/01/2025	$51.76	$8.65	$23.05	$0.00	$83.46

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PAINTER Local 35 Zone 2 - Spray/Sandblast - New*

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$23.48	$8.65	$0.00	$0.00	$32.13
2	55	$25.83	$8.65	$6.27	$0.00	$40.75
3	60	$28.18	$8.65	$6.84	$0.00	$43.67
4	65	$30.52	$8.65	$7.41	$0.00	$46.58
5	70	$32.87	$8.65	$19.63	$0.00	$61.15
6	75	$35.22	$8.65	$20.20	$0.00	$64.07
7	80	$37.57	$8.65	$20.77	$0.00	$66.99
8	90	$42.26	$8.65	$21.91	$0.00	$72.82

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.08	$8.65	$0.00	$0.00	$32.73
2	55	$26.49	$8.65	$6.27	$0.00	$41.41
3	60	$28.90	$8.65	$6.84	$0.00	$44.39
4	65	$31.30	$8.65	$7.41	$0.00	$47.36
5	70	$33.71	$8.65	$19.63	$0.00	$61.99
6	75	$36.12	$8.65	$20.20	$0.00	$64.97
7	80	$38.53	$8.65	$20.77	$0.00	$67.95
8	90	$43.34	$8.65	$21.91	$0.00	$73.90

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT) *PAINTERS LOCAL 35 - ZONE 2*	01/01/2023	$45.02	$8.65	$23.05	$0.00	$76.72
	07/01/2023	$46.22	$8.65	$23.05	$0.00	$77.92
	01/01/2024	$47.42	$8.65	$23.05	$0.00	$79.12
	07/01/2024	$48.62	$8.65	$23.05	$0.00	$80.32
	01/01/2025	$49.82	$8.65	$23.05	$0.00	$81.52

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint*

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$22.51	$8.65	$0.00	$0.00	$31.16
2	55	$24.76	$8.65	$6.27	$0.00	$39.68
3	60	$27.01	$8.65	$6.84	$0.00	$42.50
4	65	$29.26	$8.65	$7.41	$0.00	$45.32
5	70	$31.51	$8.65	$19.63	$0.00	$59.79
6	75	$33.77	$8.65	$20.20	$0.00	$62.62
7	80	$36.02	$8.65	$20.77	$0.00	$65.44
8	90	$40.52	$8.65	$21.91	$0.00	$71.08

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$23.11	$8.65	$0.00	$0.00	$31.76
2	55	$25.42	$8.65	$6.27	$0.00	$40.34
3	60	$27.73	$8.65	$6.84	$0.00	$43.22
4	65	$30.04	$8.65	$19.06	$0.00	$57.75
5	70	$32.35	$8.65	$19.63	$0.00	$60.63
6	75	$34.67	$8.65	$20.20	$0.00	$63.52
7	80	$36.98	$8.65	$20.77	$0.00	$66.40
8	90	$41.60	$8.65	$21.91	$0.00	$72.16

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, NEW) *	01/01/2023	$45.56	$8.65	$23.05	$0.00	$77.26
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.*PAINTERS LOCAL 35 - ZONE 2*	07/01/2023	$46.76	$8.65	$23.05	$0.00	$78.46
	01/01/2024	$47.96	$8.65	$23.05	$0.00	$79.66
	07/01/2024	$49.16	$8.65	$23.05	$0.00	$80.86
	01/01/2025	$50.36	$8.65	$23.05	$0.00	$82.06

Apprentice - *PAINTER - Local 35 Zone 2 - BRUSH NEW*

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$22.78	$8.65	$0.00	$0.00	$31.43
2	55	$25.06	$8.65	$6.27	$0.00	$39.98
3	60	$27.34	$8.65	$6.84	$0.00	$42.83
4	65	$29.61	$8.65	$7.41	$0.00	$45.67
5	70	$31.89	$8.65	$19.63	$0.00	$60.17
6	75	$34.17	$8.65	$20.20	$0.00	$63.02
7	80	$36.45	$8.65	$20.77	$0.00	$65.87
8	90	$41.00	$8.65	$21.91	$0.00	$71.56

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$23.38	$8.65	$0.00	$0.00	$32.03
2	55	$25.72	$8.65	$6.27	$0.00	$40.64
3	60	$28.06	$8.65	$6.84	$0.00	$43.55
4	65	$30.39	$8.65	$7.41	$0.00	$46.45
5	70	$32.73	$8.65	$19.63	$0.00	$61.01
6	75	$35.07	$8.65	$20.20	$0.00	$63.92
7	80	$37.41	$8.65	$20.77	$0.00	$66.83
8	90	$42.08	$8.65	$21.91	$0.00	$72.64

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT) *PAINTERS LOCAL 35 - ZONE 2*	01/01/2023	$43.62	$8.65	$23.05	$0.00	$75.32
	07/01/2023	$44.82	$8.65	$23.05	$0.00	$76.52
	01/01/2024	$46.02	$8.65	$23.05	$0.00	$77.72
	07/01/2024	$47.22	$8.65	$23.05	$0.00	$78.92
	01/01/2025	$48.42	$8.65	$23.05	$0.00	$80.12

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PAINTER Local 35 Zone 2 - BRUSH REPAINT*

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$21.81	$8.65	$0.00	$0.00	$30.46
2	55	$23.99	$8.65	$6.27	$0.00	$38.91
3	60	$26.17	$8.65	$6.84	$0.00	$41.66
4	65	$28.35	$8.65	$7.41	$0.00	$44.41
5	70	$30.53	$8.65	$19.63	$0.00	$58.81
6	75	$32.72	$8.65	$20.20	$0.00	$61.57
7	80	$34.90	$8.65	$20.77	$0.00	$64.32
8	90	$39.26	$8.65	$21.91	$0.00	$69.82

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$22.41	$8.65	$0.00	$0.00	$31.06
2	55	$24.65	$8.65	$6.27	$0.00	$39.57
3	60	$26.89	$8.65	$6.84	$0.00	$42.38
4	65	$29.13	$8.65	$7.41	$0.00	$45.19
5	70	$31.37	$8.65	$19.63	$0.00	$59.65
6	75	$33.62	$8.65	$20.20	$0.00	$62.47
7	80	$35.86	$8.65	$20.77	$0.00	$65.28
8	90	$40.34	$8.65	$21.91	$0.00	$70.90

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$42.58	$9.35	$17.82	$0.00	$69.75
	06/01/2023	$43.58	$9.35	$17.82	$0.00	$70.75
	12/01/2023	$44.83	$9.35	$17.82	$0.00	$72.00
	06/01/2024	$46.31	$9.35	$17.82	$0.00	$73.48
	12/01/2024	$47.78	$9.35	$17.82	$0.00	$74.95
	06/01/2025	$49.28	$9.35	$17.82	$0.00	$76.45
	12/01/2025	$50.78	$9.35	$17.82	$0.00	$77.95
	06/01/2026	$52.33	$9.35	$17.82	$0.00	$79.50
	12/01/2026	$53.83	$9.35	$17.82	$0.00	$81.00
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
PANEL & PICKUP TRUCKS DRIVER *TEAMSTERS JOINT COUNCIL NO. 10 ZONE B*	12/01/2021	$35.78	$13.41	$16.01	$0.00	$65.20
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) *PILE DRIVER LOCAL 56 (ZONE 1)* For apprentice rates see "Apprentice- PILE DRIVER"	08/01/2020	$49.07	$9.40	$23.12	$0.00	$81.59
PILE DRIVER *PILE DRIVER LOCAL 56 (ZONE 1)*	08/01/2020	$49.07	$9.40	$23.12	$0.00	$81.59

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PILE DRIVER - Local 56 Zone 1*

Effective Date - 08/01/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.54	$9.40	$23.12	$0.00	$57.06
2	60	$29.44	$9.40	$23.12	$0.00	$61.96
3	70	$34.35	$9.40	$23.12	$0.00	$66.87
4	75	$36.80	$9.40	$23.12	$0.00	$69.32
5	80	$39.26	$9.40	$23.12	$0.00	$71.78
6	80	$39.26	$9.40	$23.12	$0.00	$71.78
7	90	$44.16	$9.40	$23.12	$0.00	$76.68
8	90	$44.16	$9.40	$23.12	$0.00	$76.68

Notes:

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80
Step 1&2 $34.01/ 3&4 $41.46/ 5&6 $62.80/ 7&8 $69.25

Apprentice to Journeyworker Ratio:1:5

PIPEFITTER & STEAMFITTER *PIPEFITTERS LOCAL 537*	03/01/2023	$63.43	$12.25	$20.80	$0.00	$96.48
	09/01/2023	$65.18	$12.25	$20.80	$0.00	$98.23
	03/01/2024	$66.98	$12.25	$20.80	$0.00	$100.03
	09/01/2024	$68.78	$12.25	$20.80	$0.00	$101.83
	03/01/2025	$70.58	$12.25	$20.80	$0.00	$103.63

Apprentice - *PIPEFITTER - Local 537*

Effective Date - 03/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$25.37	$12.25	$8.55	$0.00	$46.17
2	45	$28.54	$12.25	$20.80	$0.00	$61.59
3	60	$38.06	$12.25	$20.80	$0.00	$71.11
4	70	$44.40	$12.25	$20.80	$0.00	$77.45
5	80	$50.74	$12.25	$20.80	$0.00	$83.79

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$26.07	$12.25	$8.55	$0.00	$46.87
2	45	$29.33	$12.25	$20.80	$0.00	$62.38
3	60	$39.11	$12.25	$20.80	$0.00	$72.16
4	70	$45.63	$12.25	$20.80	$0.00	$78.68
5	80	$52.14	$12.25	$20.80	$0.00	$85.19

Notes:

** 1:3; 3:15; 1:10 thereafter / Steps are 1 yr.
Refrig/AC Mechanic **1:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:17;9:20;10:23(Max)

Apprentice to Journeyworker Ratio:**

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PIPELAYER *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
PIPELAYER (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$42.83	$9.35	$17.82	$0.00	$70.00
	06/01/2023	$43.83	$9.35	$17.82	$0.00	$71.00
	12/01/2023	$45.08	$9.35	$17.82	$0.00	$72.25
	06/01/2024	$46.56	$9.35	$17.82	$0.00	$73.73
	12/01/2024	$48.03	$9.35	$17.82	$0.00	$75.20
	06/01/2025	$49.53	$9.35	$17.82	$0.00	$76.70
	12/01/2025	$51.03	$9.35	$17.82	$0.00	$78.20
	06/01/2026	$52.58	$9.35	$17.82	$0.00	$79.75
	12/01/2026	$54.08	$9.35	$17.82	$0.00	$81.25
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
PLUMBERS & GASFITTERS *PLUMBERS & GASFITTERS LOCAL 12*	02/26/2023	$65.19	$14.07	$18.36	$0.00	$97.62
	09/03/2023	$66.94	$14.07	$18.36	$0.00	$99.37
	03/03/2024	$68.74	$14.07	$18.36	$0.00	$101.17
	09/01/2024	$70.54	$14.07	$18.36	$0.00	$102.97
	03/02/2025	$72.34	$14.07	$18.36	$0.00	$104.77

Apprentice - *PLUMBER/GASFITTER - Local 12*

Effective Date - 02/26/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	$22.82	$14.07	$6.63	$0.00	$43.52
2	40	$26.08	$14.07	$7.52	$0.00	$47.67
3	55	$35.85	$14.07	$10.24	$0.00	$60.16
4	65	$42.37	$14.07	$12.04	$0.00	$68.48
5	75	$48.89	$14.07	$13.85	$0.00	$76.81

Effective Date - 09/03/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	$23.43	$14.07	$6.63	$0.00	$44.13
2	40	$26.78	$14.07	$7.52	$0.00	$48.37
3	55	$36.82	$14.07	$10.24	$0.00	$61.13
4	65	$43.51	$14.07	$12.04	$0.00	$69.62
5	75	$50.21	$14.07	$13.85	$0.00	$78.13

Notes:

** 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr
Step4 with lic$69.00, Step5 with lic$76.87

Apprentice to Journeyworker Ratio:**

PNEUMATIC CONTROLS (TEMP.) *PIPEFITTERS LOCAL 537*	03/01/2023	$63.43	$12.00	$20.80	$0.00	$96.23
	09/01/2023	$65.18	$12.00	$20.80	$0.00	$97.98
	03/01/2024	$66.98	$12.00	$20.80	$0.00	$99.78
	09/01/2024	$68.78	$12.00	$20.80	$0.00	$101.58
	03/01/2025	$70.58	$12.00	$20.80	$0.00	$103.38

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
PNEUMATIC DRILL/TOOL OPERATOR *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$42.83	$9.35	$17.82	$0.00	$70.00
	06/01/2023	$43.83	$9.35	$17.82	$0.00	$71.00
	12/01/2023	$45.08	$9.35	$17.82	$0.00	$72.25
	06/01/2024	$46.56	$9.35	$17.82	$0.00	$73.73
	12/01/2024	$48.03	$9.35	$17.82	$0.00	$75.20
	06/01/2025	$49.53	$9.35	$17.82	$0.00	$76.70
	12/01/2025	$51.03	$9.35	$17.82	$0.00	$78.20
	06/01/2026	$52.58	$9.35	$17.82	$0.00	$79.75
	12/01/2026	$54.08	$9.35	$17.82	$0.00	$81.25
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
POWDERMAN & BLASTER *LABORERS - ZONE 1*	12/01/2022	$44.18	$9.10	$17.57	$0.00	$70.85
	06/01/2023	$45.18	$9.10	$17.57	$0.00	$71.85
	12/01/2023	$46.43	$9.10	$17.57	$0.00	$73.10
For apprentice rates see "Apprentice- LABORER"						
POWDERMAN & BLASTER (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$43.58	$9.35	$17.82	$0.00	$70.75
	06/01/2023	$44.58	$9.35	$17.82	$0.00	$71.75
	12/01/2023	$45.83	$9.35	$17.82	$0.00	$73.00
	06/01/2024	$47.31	$9.35	$17.82	$0.00	$74.48
	12/01/2024	$48.78	$9.35	$17.82	$0.00	$75.95
	06/01/2025	$50.28	$9.35	$17.82	$0.00	$77.45
	12/01/2025	$51.78	$9.35	$17.82	$0.00	$78.95
	06/01/2026	$53.33	$9.35	$17.82	$0.00	$80.50
	12/01/2026	$54.83	$9.35	$17.82	$0.00	$82.00
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
POWER SHOVEL/DERRICK/TRENCHING MACHINE *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.63	$14.25	$16.05	$0.00	$83.93
	06/01/2023	$54.88	$14.25	$16.05	$0.00	$85.18
	12/01/2023	$56.13	$14.25	$16.05	$0.00	$86.43
	06/01/2024	$57.43	$14.25	$16.05	$0.00	$87.73
	12/01/2024	$58.88	$14.25	$16.05	$0.00	$89.18
	06/01/2025	$60.18	$14.25	$16.05	$0.00	$90.48
	12/01/2025	$61.63	$14.25	$16.05	$0.00	$91.93
	06/01/2026	$62.93	$14.25	$16.05	$0.00	$93.23
	12/01/2026	$64.38	$14.25	$16.05	$0.00	$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PUMP OPERATOR (CONCRETE) *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.63	$14.25	$16.05	$0.00	$83.93
	06/01/2023	$54.88	$14.25	$16.05	$0.00	$85.18
	12/01/2023	$56.13	$14.25	$16.05	$0.00	$86.43
	06/01/2024	$57.43	$14.25	$16.05	$0.00	$87.73
	12/01/2024	$58.88	$14.25	$16.05	$0.00	$89.18
	06/01/2025	$60.18	$14.25	$16.05	$0.00	$90.48
	12/01/2025	$61.63	$14.25	$16.05	$0.00	$91.93
	06/01/2026	$62.93	$14.25	$16.05	$0.00	$93.23
	12/01/2026	$64.38	$14.25	$16.05	$0.00	$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$35.08	$14.25	$16.05	$0.00	$65.38
	06/01/2023	$35.90	$14.25	$16.05	$0.00	$66.20
	12/01/2023	$36.72	$14.25	$16.05	$0.00	$67.02
	06/01/2024	$37.57	$14.25	$16.05	$0.00	$67.87
	12/01/2024	$38.52	$14.25	$16.05	$0.00	$68.82
	06/01/2025	$39.37	$14.25	$16.05	$0.00	$69.67
	12/01/2025	$40.32	$14.25	$16.05	$0.00	$70.62
	06/01/2026	$41.18	$14.25	$16.05	$0.00	$71.48
	12/01/2026	$42.13	$14.25	$16.05	$0.00	$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER *TEAMSTERS 42 - J.G. MacLeallan (Wakefield)*	05/01/2022	$29.00	$12.00	$7.00	$0.00	$48.00
	05/01/2023	$29.25	$12.00	$7.00	$0.00	$48.25
	05/01/2024	$29.50	$12.00	$7.00	$0.00	$48.50
	05/01/2025	$30.00	$12.00	$7.00	$0.00	$49.00
	05/01/2026	$30.50	$12.00	$7.00	$0.00	$49.50
RECLAIMERS *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RIDE-ON MOTORIZED BUGGY OPERATOR *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ROLLER/SPREADER/MULCHING MACHINE *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg) *ROOFERS LOCAL 33*	02/01/2023	$48.53	$12.78	$20.20	$0.00	$81.51
	08/01/2023	$50.03	$12.78	$20.20	$0.00	$83.01
	02/01/2024	$51.28	$12.78	$20.20	$0.00	$84.26
	08/01/2024	$52.78	$12.78	$20.20	$0.00	$85.76
	02/01/2025	$54.03	$12.78	$20.20	$0.00	$87.01
	08/01/2025	$55.53	$12.78	$20.20	$0.00	$88.51
	02/01/2026	$56.78	$12.78	$20.20	$0.00	$89.76

Apprentice - *ROOFER - Local 33*

Effective Date - 02/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.27	$12.78	$5.59	$0.00	$42.64
2	60	$29.12	$12.78	$20.20	$0.00	$62.10
3	65	$31.54	$12.78	$20.20	$0.00	$64.52
4	75	$36.40	$12.78	$20.20	$0.00	$69.38
5	85	$41.25	$12.78	$20.20	$0.00	$74.23

Effective Date - 08/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$25.02	$12.78	$5.59	$0.00	$43.39
2	60	$30.02	$12.78	$20.20	$0.00	$63.00
3	65	$32.52	$12.78	$20.20	$0.00	$65.50
4	75	$37.52	$12.78	$20.20	$0.00	$70.50
5	85	$42.53	$12.78	$20.20	$0.00	$75.51

Notes: ** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1
Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.
(Hot Pitch Mechanics' receive $1.00 hr. above ROOFER)

Apprentice to Journeyworker Ratio:**

ROOFER SLATE / TILE / PRECAST CONCRETE *ROOFERS LOCAL 33*	02/01/2023	$48.78	$12.78	$20.20	$0.00	$81.76
	08/01/2023	$50.28	$12.78	$20.20	$0.00	$83.26
	02/01/2024	$51.53	$12.78	$20.20	$0.00	$84.51
	08/01/2024	$53.03	$12.78	$20.20	$0.00	$86.01
	02/01/2025	$54.28	$12.78	$20.20	$0.00	$87.26
	08/01/2025	$55.78	$12.78	$20.20	$0.00	$88.76
	02/01/2026	$57.03	$12.78	$20.20	$0.00	$90.01

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- ROOFER"						
SHEETMETAL WORKER *SHEETMETAL WORKERS LOCAL 17 - A*	02/01/2023	$55.31	$14.11	$26.64	$2.83	$98.89
	08/01/2023	$57.01	$14.11	$26.64	$2.83	$100.59
	02/01/2024	$58.71	$14.11	$26.64	$2.83	$102.29
	08/01/2024	$60.46	$14.11	$26.64	$2.83	$104.04
	02/01/2025	$62.21	$14.11	$26.64	$2.83	$105.79
	08/01/2025	$64.06	$14.11	$26.64	$2.83	$107.64
	02/01/2026	$66.01	$14.11	$26.64	$2.83	$109.59

Apprentice - *SHEET METAL WORKER - Local 17-A*

Effective Date - 02/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	42	$23.23	$14.11	$6.13	$0.00	$43.47
2	42	$23.23	$14.11	$6.13	$0.00	$43.47
3	47	$26.00	$14.11	$11.90	$1.54	$53.55
4	47	$26.00	$14.11	$11.90	$1.54	$53.55
5	52	$28.76	$14.11	$12.88	$1.65	$57.40
6	52	$28.76	$14.11	$13.13	$1.65	$57.65
7	60	$33.19	$14.11	$14.54	$1.83	$63.67
8	65	$35.95	$14.11	$15.52	$1.94	$67.52
9	75	$41.48	$14.11	$17.48	$2.16	$75.23
10	85	$47.01	$14.11	$18.94	$2.36	$82.42

Effective Date - 08/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	42	$23.94	$14.11	$6.13	$0.00	$44.18
2	42	$23.94	$14.11	$6.13	$0.00	$44.18
3	47	$26.79	$14.11	$11.90	$1.58	$54.38
4	47	$26.79	$14.11	$11.90	$1.58	$54.38
5	52	$29.65	$14.11	$12.88	$1.70	$58.34
6	52	$29.65	$14.11	$13.13	$1.70	$58.59
7	60	$34.21	$14.11	$14.54	$1.89	$64.75
8	65	$37.06	$14.11	$15.52	$2.00	$68.69
9	75	$42.76	$14.11	$17.48	$2.23	$76.58
10	85	$48.46	$14.11	$18.94	$2.45	$83.96

Notes:
Steps are 6 mos.

Apprentice to Journeyworker Ratio:1:4

SPECIALIZED EARTH MOVING EQUIP < 35 TONS *TEAMSTERS JOINT COUNCIL NO. 10 ZONE B*	12/01/2021	$36.24	$13.41	$16.01	$0.00	$65.66
SPECIALIZED EARTH MOVING EQUIP > 35 TONS *TEAMSTERS JOINT COUNCIL NO. 10 ZONE B*	12/01/2021	$36.53	$13.41	$16.01	$0.00	$65.95

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SPRINKLER FITTER *SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1*	03/01/2023	$66.20	$10.90	$23.20	$0.00	$100.30
	10/01/2023	$67.95	$10.90	$23.20	$0.00	$102.05
	03/01/2024	$69.75	$10.90	$23.20	$0.00	$103.85
	10/01/2024	$71.55	$10.90	$23.20	$0.00	$105.65
	03/01/2025	$73.35	$10.90	$23.20	$0.00	$107.45

Apprentice - *SPRINKLER FITTER - Local 550 (Section A) Zone 1*

Effective Date - 03/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	$23.17	$10.90	$9.70	$0.00	$43.77
2	40	$26.48	$10.90	$9.70	$0.00	$47.08
3	45	$29.79	$10.90	$9.70	$0.00	$50.39
4	50	$33.10	$10.90	$9.70	$0.00	$53.70
5	55	$36.41	$10.90	$9.70	$0.00	$57.01
6	60	$39.72	$10.90	$11.20	$0.00	$61.82
7	65	$43.03	$10.90	$11.20	$0.00	$65.13
8	70	$46.34	$10.90	$11.20	$0.00	$68.44
9	75	$49.65	$10.90	$11.20	$0.00	$71.75
10	80	$52.96	$10.90	$11.20	$0.00	$75.06

Effective Date - 10/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	$23.78	$10.90	$9.70	$0.00	$44.38
2	40	$27.18	$10.90	$9.70	$0.00	$47.78
3	45	$30.58	$10.90	$9.70	$0.00	$51.18
4	50	$33.98	$10.90	$9.70	$0.00	$54.58
5	55	$37.37	$10.90	$9.70	$0.00	$57.97
6	60	$40.77	$10.90	$11.20	$0.00	$62.87
7	65	$44.17	$10.90	$11.20	$0.00	$66.27
8	70	$47.57	$10.90	$11.20	$0.00	$69.67
9	75	$50.96	$10.90	$11.20	$0.00	$73.06
10	80	$54.36	$10.90	$11.20	$0.00	$76.46

Notes: Apprentice entered prior 9/30/10:
40/45/50/55/60/65/70/75/80/85
Steps are 850 hours

Apprentice to Journeyworker Ratio:1:3

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
STEAM BOILER OPERATOR *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TELECOMMUNICATION TECHNICIAN *ELECTRICIANS LOCAL 103*	03/01/2023	$47.38	$13.00	$19.63	$0.00	$80.01

Apprentice - *TELECOMMUNICATION TECHNICIAN - Local 103*

Effective Date - 03/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	$21.32	$13.00	$0.65	$0.00	$34.97
2	45	$21.32	$13.00	$0.65	$0.00	$34.97
3	50	$23.69	$13.00	$15.20	$0.00	$51.89
4	50	$23.69	$13.00	$15.20	$0.00	$51.89
5	55	$26.06	$13.00	$15.58	$0.00	$54.64
6	60	$28.43	$13.00	$15.96	$0.00	$57.39
7	65	$30.80	$13.00	$16.34	$0.00	$60.14
8	70	$33.17	$13.00	$16.73	$0.00	$62.90
9	75	$35.54	$13.00	$17.11	$0.00	$65.65
10	80	$37.90	$13.00	$17.48	$0.00	$68.38

Notes:

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TERRAZZO FINISHERS *BRICKLAYERS LOCAL 3 - MARBLE & TILE*	02/01/2023	$59.29	$11.49	$22.34	$0.00	$93.12
	08/01/2023	$61.34	$11.49	$22.34	$0.00	$95.17
	02/01/2024	$62.59	$11.49	$22.34	$0.00	$96.42
	08/01/2024	$64.69	$11.49	$22.34	$0.00	$98.52
	02/01/2025	$65.99	$11.49	$22.34	$0.00	$99.82
	08/01/2025	$68.14	$11.49	$22.34	$0.00	$101.97
	02/01/2026	$69.49	$11.49	$22.34	$0.00	$103.32
	08/01/2026	$71.69	$11.49	$22.34	$0.00	$105.52
	02/01/2027	$73.09	$11.49	$22.34	$0.00	$106.92

Apprentice - *TERRAZZO FINISHER - Local 3 Marble & Tile*

Effective Date - 02/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$29.65	$11.49	$22.34	$0.00	$63.48
2	60	$35.57	$11.49	$22.34	$0.00	$69.40
3	70	$41.50	$11.49	$22.34	$0.00	$75.33
4	80	$47.43	$11.49	$22.34	$0.00	$81.26
5	90	$53.36	$11.49	$22.34	$0.00	$87.19

Effective Date - 08/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$30.67	$11.49	$22.34	$0.00	$64.50
2	60	$36.80	$11.49	$22.34	$0.00	$70.63
3	70	$42.94	$11.49	$22.34	$0.00	$76.77
4	80	$49.07	$11.49	$22.34	$0.00	$82.90
5	90	$55.21	$11.49	$22.34	$0.00	$89.04

Notes:

Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER *LABORERS - FOUNDATION AND MARINE*	12/01/2022	$46.58	$9.35	$17.97	$0.00	$73.90
	06/01/2023	$47.58	$9.35	$17.97	$0.00	$74.90
	12/01/2023	$48.83	$9.35	$17.97	$0.00	$76.15
	06/01/2024	$50.31	$9.35	$17.97	$0.00	$77.63
	12/01/2024	$51.78	$9.35	$17.97	$0.00	$79.10
	06/01/2025	$53.28	$9.35	$17.97	$0.00	$80.60
	12/01/2025	$54.78	$9.35	$17.97	$0.00	$82.10
	06/01/2026	$56.33	$9.35	$17.97	$0.00	$83.65
	12/01/2026	$57.83	$9.35	$17.97	$0.00	$85.15

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TEST BORING DRILLER HELPER *LABORERS - FOUNDATION AND MARINE*	12/01/2022	$42.70	$9.35	$17.97	$0.00	$70.02
	06/01/2023	$43.70	$9.35	$17.97	$0.00	$71.02
	12/01/2023	$44.95	$9.35	$17.97	$0.00	$72.27
	06/01/2024	$46.43	$9.35	$17.97	$0.00	$73.75
	12/01/2024	$47.90	$9.35	$17.97	$0.00	$75.22
	06/01/2025	$49.40	$9.35	$17.97	$0.00	$76.72
	12/01/2025	$50.90	$9.35	$17.97	$0.00	$78.22
	06/01/2026	$52.45	$9.35	$17.97	$0.00	$79.77
	12/01/2026	$53.95	$9.35	$17.97	$0.00	$81.27
For apprentice rates see "Apprentice- LABORER"						
TEST BORING LABORER *LABORERS - FOUNDATION AND MARINE*	12/01/2022	$42.58	$9.35	$17.97	$0.00	$69.90
	06/01/2023	$43.58	$9.35	$17.97	$0.00	$70.90
	12/01/2023	$44.83	$9.35	$17.97	$0.00	$72.15
	06/01/2024	$46.31	$9.35	$17.97	$0.00	$73.63
	12/01/2024	$47.78	$9.35	$17.97	$0.00	$75.10
	06/01/2025	$49.28	$9.35	$17.97	$0.00	$76.60
	12/01/2025	$50.78	$9.35	$17.97	$0.00	$78.10
	06/01/2026	$52.33	$9.35	$17.97	$0.00	$79.65
	12/01/2026	$53.83	$9.35	$17.97	$0.00	$81.15
For apprentice rates see "Apprentice- LABORER"						
TRACTORS/PORTABLE STEAM GENERATORS *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.05	$14.25	$16.05	$0.00	$83.35
	06/01/2023	$54.29	$14.25	$16.05	$0.00	$84.59
	12/01/2023	$55.53	$14.25	$16.05	$0.00	$85.83
	06/01/2024	$56.81	$14.25	$16.05	$0.00	$87.11
	12/01/2024	$58.25	$14.25	$16.05	$0.00	$88.55
	06/01/2025	$59.53	$14.25	$16.05	$0.00	$89.83
	12/01/2025	$60.97	$14.25	$16.05	$0.00	$91.27
	06/01/2026	$62.25	$14.25	$16.05	$0.00	$92.55
	12/01/2026	$63.69	$14.25	$16.05	$0.00	$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT *TEAMSTERS JOINT COUNCIL NO. 10 ZONE B*	12/01/2021	$36.82	$13.41	$16.01	$0.00	$66.24
TUNNEL WORK - COMPRESSED AIR *LABORERS (COMPRESSED AIR)*	12/01/2022	$54.81	$9.35	$18.42	$0.00	$82.58
	06/01/2023	$55.81	$9.35	$18.42	$0.00	$83.58
	12/01/2023	$57.06	$9.35	$18.42	$0.00	$84.83
	06/01/2024	$58.54	$9.35	$18.42	$0.00	$86.31
	12/01/2024	$60.01	$9.35	$18.42	$0.00	$87.78
	06/01/2025	$61.51	$9.35	$18.42	$0.00	$89.28
	12/01/2025	$63.01	$9.35	$18.42	$0.00	$90.78
	06/01/2026	$64.56	$9.35	$18.42	$0.00	$92.33
	12/01/2026	$66.06	$9.35	$18.42	$0.00	$93.83
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) *LABORERS (COMPRESSED AIR)*	12/01/2022	$56.81	$9.35	$18.42	$0.00	$84.58
	06/01/2023	$57.81	$9.35	$18.42	$0.00	$85.58
	12/01/2023	$59.06	$9.35	$18.42	$0.00	$86.83
	06/01/2024	$60.54	$9.35	$18.42	$0.00	$88.31
	12/01/2024	$62.01	$9.35	$18.42	$0.00	$89.78
	06/01/2025	$63.51	$9.35	$18.42	$0.00	$91.28
	12/01/2025	$65.01	$9.35	$18.42	$0.00	$92.78
	06/01/2026	$66.56	$9.35	$18.42	$0.00	$94.33
	12/01/2026	$68.06	$9.35	$18.42	$0.00	$95.83
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR *LABORERS (FREE AIR TUNNEL)*	12/01/2022	$46.88	$9.35	$18.42	$0.00	$74.65
	06/01/2023	$47.88	$9.35	$18.42	$0.00	$75.65
	12/01/2023	$49.13	$9.35	$18.42	$0.00	$76.90
	06/01/2024	$50.61	$9.35	$18.42	$0.00	$78.38
	12/01/2024	$52.08	$9.35	$18.42	$0.00	$79.85
	06/01/2025	$53.58	$9.35	$18.42	$0.00	$81.35
	12/01/2025	$55.08	$9.35	$18.42	$0.00	$82.85
	06/01/2026	$56.63	$9.35	$18.42	$0.00	$84.40
	12/01/2026	$58.13	$9.35	$18.42	$0.00	$85.90
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) *LABORERS (FREE AIR TUNNEL)*	12/01/2022	$48.88	$9.35	$18.42	$0.00	$76.65
	06/01/2023	$49.88	$9.35	$18.42	$0.00	$77.65
	12/01/2023	$51.13	$9.35	$18.42	$0.00	$78.90
	06/01/2024	$52.61	$9.35	$18.42	$0.00	$80.38
	12/01/2024	$54.08	$9.35	$18.42	$0.00	$81.85
	06/01/2025	$55.58	$9.35	$18.42	$0.00	$83.35
	12/01/2025	$57.08	$9.35	$18.42	$0.00	$84.85
	06/01/2026	$58.63	$9.35	$18.42	$0.00	$86.40
	12/01/2026	$60.13	$9.35	$18.42	$0.00	$87.90
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL *TEAMSTERS JOINT COUNCIL NO. 10 ZONE B*	12/01/2021	$36.24	$13.41	$16.01	$0.00	$65.66
WAGON DRILL OPERATOR *LABORERS - ZONE 1*	12/01/2022	$43.43	$9.10	$17.57	$0.00	$70.10
	06/01/2023	$44.43	$9.10	$17.57	$0.00	$71.10
	12/01/2023	$45.68	$9.10	$17.57	$0.00	$72.35
For apprentice rates see "Apprentice- LABORER"						
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) *LABORERS - ZONE 1 (HEAVY & HIGHWAY)*	12/01/2022	$42.83	$9.35	$17.82	$0.00	$70.00
	06/01/2023	$43.83	$9.35	$17.82	$0.00	$71.00
	12/01/2023	$45.08	$9.35	$17.82	$0.00	$72.25
	06/01/2024	$46.56	$9.35	$17.82	$0.00	$73.73
	12/01/2024	$48.03	$9.35	$17.82	$0.00	$75.20
	06/01/2025	$49.53	$9.35	$17.82	$0.00	$76.70
	12/01/2025	$51.03	$9.35	$17.82	$0.00	$78.20
	06/01/2026	$52.58	$9.35	$17.82	$0.00	$79.75
	12/01/2026	$54.08	$9.35	$17.82	$0.00	$81.25
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
WASTE WATER PUMP OPERATOR *OPERATING ENGINEERS LOCAL 4*	12/01/2022	$53.63	$14.25	$16.05	$0.00	$83.93
	06/01/2023	$54.88	$14.25	$16.05	$0.00	$85.18
	12/01/2023	$56.13	$14.25	$16.05	$0.00	$86.43
	06/01/2024	$57.43	$14.25	$16.05	$0.00	$87.73
	12/01/2024	$58.88	$14.25	$16.05	$0.00	$89.18
	06/01/2025	$60.18	$14.25	$16.05	$0.00	$90.48
	12/01/2025	$61.63	$14.25	$16.05	$0.00	$91.93
	06/01/2026	$62.93	$14.25	$16.05	$0.00	$93.23
	12/01/2026	$64.38	$14.25	$16.05	$0.00	$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER *PLUMBERS & GASFITTERS LOCAL 12*	02/26/2023	$65.19	$14.07	$18.36	$0.00	$97.62
	09/03/2023	$66.94	$14.07	$18.36	$0.00	$99.37
	03/03/2024	$68.74	$14.07	$18.36	$0.00	$101.17
	09/01/2024	$70.54	$14.07	$18.36	$0.00	$102.97
	03/02/2025	$72.34	$14.07	$18.36	$0.00	$104.77
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						
Outside Electrical - East						
CABLE TECHNICIAN (Power Zone) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	08/30/2020	$29.67	$9.25	$1.89	$0.00	$40.81
For apprentice rates see "Apprentice- LINEMAN"						
CABLEMAN (Underground Ducts & Cables) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	08/30/2020	$42.03	$9.25	$10.27	$0.00	$61.55
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN CDL *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	08/30/2020	$34.62	$9.25	$10.07	$0.00	$53.94
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	08/30/2020	$27.20	$9.25	$1.82	$0.00	$38.27
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class A CDL) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	08/30/2020	$42.03	$9.25	$14.35	$0.00	$65.63
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class B CDL) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	08/30/2020	$37.09	$9.25	$10.87	$0.00	$57.21
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	08/30/2020	$27.20	$9.25	$1.82	$0.00	$38.27
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN -Inexperienced (<2000 Hrs.) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	08/30/2020	$22.25	$9.25	$1.82	$0.00	$33.32
For apprentice rates see "Apprentice- LINEMAN"						
JOURNEYMAN LINEMAN *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	08/30/2020	$49.45	$9.25	$17.48	$0.00	$76.18

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *LINEMAN (Outside Electrical) - East Local 104*

Effective Date - 08/30/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$29.67	$9.25	$3.39	$0.00	$42.31
2	65	$32.14	$9.25	$3.46	$0.00	$44.85
3	70	$34.62	$9.25	$3.54	$0.00	$47.41
4	75	$37.09	$9.25	$5.11	$0.00	$51.45
5	80	$39.56	$9.25	$5.19	$0.00	$54.00
6	85	$42.03	$9.25	$5.26	$0.00	$56.54
7	90	$44.51	$9.25	$7.34	$0.00	$61.10

Notes:

Apprentice to Journeyworker Ratio:1:2

TELEDATA CABLE SPLICER *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	02/04/2019	$30.73	$4.70	$3.17	$0.00	$38.60
TELEDATA LINEMAN/EQUIPMENT OPERATOR *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	02/04/2019	$28.93	$4.70	$3.14	$0.00	$36.77
TELEDATA WIREMAN/INSTALLER/TECHNICIAN *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	02/04/2019	$28.93	$4.70	$3.14	$0.00	$36.77

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)
Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

** Multiple ratios are listed in the comment field.
*** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.
**** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL SCHOOL DISTRICT
100 Hemlock Road – Wakefield, MA 01880-3597
(781) 246-0810 – FAX (781) 246-4919

NEMRV – CH 385 G

CORI REQUEST FORM

Northeast Metropolitan Regional Vocational School has been certified by the Criminal History Systems Board for access to all criminal case data including conviction, non-conviction and pending. As an Applicant/employee for the position of_____, I understand that a Criminal record check will be conducted for conviction, non-conviction and pending criminal case information only and that it will not necessarily disqualify me. The information below is correct to the best of my knowledge.

_____
Applicant/Employee Signature

APPLICANT / EMPLOYEE INFORMATION (PLEASE PRINT)

_____ _____ _____
LAST NAME FIRST NAME MIDDLE NAME

_____ _____
MAIDEN NAME OR ALIAS (IF APPLICABLE) PLACE OF BIRTH

DATE OF BIRTH_____LAST SIX DIGITS OF SOCIAL SECURITY NUMBER: _____-_____

MOTHER'S MAIDEN NAME: _____

***CURRENT AND FORMER* ADDRESSES: _____**

_____

SEX: _____ HEIGHT: __ft. ___ in. WEIGHT: _____EYE COLOR_____

STATE DRIVER'S LICENSE NUMBER: _____

*****THE ABOVE INFORMATION WAS VERIFIED BY REVIEWING THE FOLLOWING FORM OF GOVERNMENT ISSUED PHOTOGRAPHIC IDENTIFICATION: _____**

REQUESTED BY: _____
SIGNATURE OF CORI AUTHORIZED EMPLOYEE

Form ST-5
Sales Tax Exempt Purchaser Certificate

Rev. 6/09

Massachusetts Department of Revenue

Part 1. Exempt taxpayer information. To be completed by exempt government or 501(c)(3) organization.

Name
Northeast Metropolitan Regional Vocational School

Address
100 Hemlock Road

City | State | Zip
Wakefield | MA | 01880

Exemption number
E046-219-869

Issue date | Date of expiration of certificate
January 4, 1989 | NONE

Certification is hereby made that the organization named above is an exempt purchaser under Massachusetts General Laws, Chapter 64H, sections 6(d) or 6(e). All purchases of tangible personal property or services by this organization are exempt from taxation under said chapter to the extent that such property or services are used in the conduct of the business of the purchaser. Any abuse or misuse of this certificate by any tax-exempt organization or any unauthorized use of this certificate by any individual constitutes a serious violation and will lead to revocation.

Signature | Title | Date
Director of Finance

Warning: Willful misuse of this certificate may result in criminal tax evasion sanctions of up to one year in prison and $10,000 ($50,000 for corporations) in fines.

Part 2. Agent information. To be completed by agent of exempt government or 501(c)(3) organization.

Name of agent's organization
Northeast Metropolitan Regional Vocational School

Address
100 Hemlock Road

City | State | Zip
Wakefield | MA | 01880

Agent's name

Address
Same as above

City | State | Zip
Same as above

I certify that in making this purchase, I am acting as an agent for the exempt organization named above (select one):

☐ Government organization (local public school, city/town government, state agency, etc.).
Attach Form ST-2, if available. If Form ST-2 is not available, enter exemption number, if known: _____

☐ 501(c)(3) organization (parochial school, Scout troop, etc.). Form ST-2 must be attached.

Signature | Title | Date
Director of Finance

Part 3. Vendor information

Vendor's name

Check applicable box:

☐ Single purchase certificate (attach detailed receipts or complete Part 4, on reverse)

☑ Blanket certificate

This form is approved by the Commissioner of Revenue and may be reproduced.

ST-2

MASSACHUSETTS DEPARTMENT OF REVENUE

CERTIFICATE OF EXEMPTION

Certification is hereby made that the organization herein named is an exempt purchaser under General Laws, Chapter 64H, Sections 6(d) and (e). All purchases of tangible personal property by this organization are exempt from taxation under said chapter to the extent that such property is used in the conduct of the business of the purchaser. Any abuse or misuse of this certificate by any tax-exempt organization or any unauthorized use of this certificate by any individual constitutes a serious violation and will lead to revocation. Willful misuse of this Certificate of Exemption is subject to criminal sanctions of up to 1 year in prison and $10,000 ($50,000 for corporations) in fines. (See reverse side)

Northeast Metropolitan Regional Vocational
School District
Hemlock Road
Wakefield, Ma. 01880

EXEMPTION NUMBER E 046-2.19-869

ISSUE DATE 01-04-89

CERTIFICATE EXPIRES ON None

NOT ASSIGNABLE OR TRANSFERABLE

Stephen W. Kidder
COMMISSIONER OF REVENUE

Form ST-5C
Contractor's Sales Tax Exempt Purchase Certificate

Rev. 11/10

Massachusetts Department of Revenue

Part A. To be completed by governmental body, agency or IRC Section 501(c)(3) certified exempt organization

Exempt number E 04-621-9869

Contract number

Name of exempt organization Northeast Metropolitan Regional Vocational School 781-246-0810

Authorizing signature

Date

Part B. To be completed by purchasing contractor or subcontractor claiming exemption under MGL Ch. 64H, sec. 6(d), (e), (f) or (tt)

Purchaser (☐ contractor ☐ subcontractor)

Address

Date

Vendor registration number (if applicable)

Contract/subcontract number

Contract/subcontract date

Estimated date of completion

Part C. To be completed by purchasing contractor or subcontractor claiming exemption. See instructions. I claim the exemption corresponding to the box checked below, and certify as follows (check appropriate box below):

1. ☐ *Exemption under MGL Ch. 64H, sec. 6(d) or (e): Contractor as Agent of Exempt Entity.* I certify that the purchaser is a contractor or subcontractor engaged in the performance of the above described contract and that the purchaser is acting as an agent of one the entities described below (check appropriate box) in purchasing tangible personal property (other than building materials and supplies described in MGL Ch. 64H, sec. 6(f)):

☐ Governmental body or agency described in MGL Ch. 64H, sec. 6(d) (local public school, city/town government, state agency, etc.). Attach Form ST-2, Certificate of Exemption. If Form ST-2 is not available, enter agency's exemption number.

☐ Tax exempt organization (under IRC Section 501(c)(3)) as described in MGL Ch. 64H, sec. 6(e) (parochial school, Scout troop, PTO, etc.). Attach Form ST-2, Certificate of Exemption.

To the best of my knowledge and belief, the quantities of tangible personal property noted on the reverse side are exempt from the sales/use tax under the provisions of MGL Ch. 64 H, sec. 6(d) or (e) as they are purchased by a purchaser acting as an agent for either a Massachusetts governmental body or for a tax-exempt organization under IRC section 501(c)(3).

2. ☐ *Exemption under MGL Ch. 64H, sec. 6(f): Building Materials and Supplies.* I certify that the purchaser is a contractor or subcontractor engaged in the performance of a contract for the construction, reconstruction, alteration, remodeling or repair of a building or structure for a governmental body or agency or for a certified IRC Section 501(c)(3) exempt organization or other project described in MGL Ch. 64H, sec. 6(f). To the best of my knowledge and belief, the described quantities of building materials and supplies noted on the reverse side are exempt from sales/use tax under the provisions of MGL Ch. 64H, sec. 6(f), and the described quantities of these materials and supplies are being purchased for use exclusively in the above contract.

3. ☐ *Exemption under MGL Ch. 64H, sec. 6(tt): Consulting/Operating Contractor as Agent of Governmental Entity.* I certify that the purchaser is a consulting or operating contractor or subcontractor as defined in MGL Ch. 64H, sec. 6(tt) and that the purchaser is authorized and acting as an agent of, and providing "qualified services," as defined in MGL Ch. 64H, sec. 6(tt), to a governmental body or agency described in MGL Ch. 64H, sec. 6(d). Attach Form ST-2. If Form ST-2 is not available, enter agency's exemption number. To the best of my knowledge and belief, the quantities of tangible personal property noted on the reverse side are exempt from the sales/use tax under the provisions of MGL Ch. 64 H, sec. 6(tt). The purchaser has been authorized under the above contract by a governmental body.

Regardless of the exemption claimed, I will maintain adequate records to show the disposition of all property purchased under this certificate. I understand that I am fully liable for the payment of any sales/use tax due in the event that the property purchased under this certificate is used in a non-exempt manner.

Signed under the penalties of perjury.

Signature

Title

Location and description of project and description of kind and quantity of property or receipts/invoices must be attached or noted on the back of this form. This form is approved by the Commissioner of Revenue and may be reproduced.

Part D. Location and description of project

Part E. Description of kind and quantity of property purchased

Date	Description	Quantity	Cost
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
		Total cost	$

Additional information about the use of this form may be obtained by calling the Customer Service Bureau at (617) 887-MDOR or toll-free, in Massachusetts, 1-800-392-6089.

printed on recycled paper

Form ST-5C Instructions

Instructions to Vendors

In general, this form is intended for use by contractors and subcontractors purchasing building materials and supplies, as well as other types of tangible personal property for use in various tax-exempt projects. The applicable exemptions governing these purchases are found in MGL Ch. 64H, secs. 6(d), (e), (f), or (tt). Contractors and subcontractors must complete all appropriate sections of this form when making purchases for which they are claiming exemption. These exemptions and requirements are described briefly, below.

Part C

1. Contractors and subcontractors purchasing certain property (excluding building materials and supplies) as agents acting on behalf of governmental bodies and agencies or 501(c)(3) organizations. In general, contractors or subcontractors purchasing tangible personal property (other than building materials and supplies for use in projects described in MGL Ch. 64H, sec. 6(f), which are discussed in section 2, below) as duly authorized agents acting on behalf of governmental bodies or agencies or Internal Revenue Service certified tax exempt 501(c)(3) organizations must check Box 1 under Part C of Form ST-5C. If the purchase is made by an agent acting on behalf of a 501(c)(3) entity, the agent must also attach a copy of the exempt entity's Form ST-2, Certificate of Exemption, to this form. If the purchase is made by an agent of a governmental body or agency, Form ST-2 should also be attached. However, if the governmental body or agency does not present its agent with Form ST-2, the agent should submit other documentation evidencing its principal's exempt governmental status. Overhead items purchased in connection with such contracts, for example, office furniture and equipment, consumable supplies for the contractor's own use and not for the use of the governmental agency or 501(c)(3) organization, are not eligible for this exemption. Rather, a contractor, as the consumer of such items, must pay sales/use tax on these purchases.

Use of Form ST-5: Agents of exempt governmental entities or 501(c)(3) organizations who are not contractors or subcontractors purchasing the above property (i.e., property other than building materials and supplies described in MGL Ch. 64H, sec. 6(f)) should not use this form. Instead, such purchasers, for example, scout troops or Parent Teacher Organizations purchasing tangible personal property on behalf of exempt entities for fundraising purposes, should follow the instructions for Form ST-5, Exempt Purchaser Certificate, and present it to their vendors, along with a copy of the exempt governmental or 501(c)(3) entity's Form ST-2.

2. Contractors purchasing building materials and supplies for use in projects described in MGL Ch. 64H, sec. 6(f). Contractors or subcontractors purchasing building materials or supplies for use in an exempt project described in MGL Ch. 64H, sec. 6(f), for example, contracts for the construction, reconstruction, alteration, remodeling or repair of a building or structure owned by or held in trust for the benefit of for a governmental body or agency mentioned in MGL Ch. 64H, sec. 6(d) and used exclusively for public purposes, or for an IRS certified section 501(c)(3) exempt organization mentioned in MGL Ch. 64H, sec. 6(e), must check Box 2 under Part C of Form ST-5C.

Items that do not constitute "building materials and supplies" within the meaning of MGL Ch. 64H, sec. 6(f) include office supplies, furniture and equipment and other overhead items purchased for use by the contractor or its employees in performing its contracts. Contractors and subcontractors, as the consumers of such items, must pay sales/use tax on these purchases.

Exempt purchases of building materials and supplies are limited to those materials and supplies used, consumed, employed or expended in the construction, reconstruction, alteration, remodeling or repair of any building, structure, public highway, bridge or other such public work as well as such materials and supplies physically incorporated therein. Exemptions also include rental charges for construction vehicles, equipment and machinery rented specifically for use on the site of any tax-exempt project or while being used exclusively for the transportation of materials for any such tax-exempt project under Massachusetts General Laws, Chapter 64H, section 6(f). Form ST-5C applies only to the contract specified therein. You must record the name of the purchaser, the sales price and date of each separate sale made under such certificate. A copy of a valid Form ST-2, Certificate of Exemption, must be submitted at the time of sale. The contract number, or other identifying designation of an unnumbered contract, must appear on purchase orders and invoices. The vendor must retain a copy of Form ST-5C accompanied by Form ST-2 as well as other tax records. See Record Retention Regulation 830 CMR 62C.25.1.

3. Consulting or operating contractors purchasing certain property as agents of, and providing "qualified services" to governmental entities under MGL Ch. 64H, sec. 6(tt). "Consulting or operating contractors or subcontractors," as defined in MGL Ch. 64H, sec. 6(tt) purchasing tangible personal property on behalf of, and acting as agents of, and providing "qualified services" (as defined in MGL c. 64H, sec. 6(tt)) to a governmental body or agency described in MGL Ch. 64H, sec. 6(d) must check Box 3 under Part C of Form ST-5C. Operating and consulting contractors or subcontractors who contract with a state governmental body or agency to furnish services relative to the feasibility, environmental impact, engineering, architecture, design, management or operation, of a public project or facility are exempt from the sales/use tax for purchases of tangible personal property made as agents of the state governmental body when that property is (i) completely expended in the performance of the contract, (ii) title and possession of the property is turned over to the governmental body or (iii) the property becomes an ingredient or component part of the property that will be turned over to the governmental body as part of the performance of the contract. Such contractors or subcontractors must attach a copy of the exempt governmental entity's Form ST-2 provided by the entity on whose behalf it is making the purchases. If the exempt governmental entity does not present its contractors or subcontractors with Form ST-2, the contractor/subcontractor must present other documentation evidencing its principal's exempt governmental status. Overhead items purchased by contractors for their own use in performing contracts for exempt governmental entities are not eligible for this exemption. Rather, a consulting or operating contractor or subcontractor, as the consumer of such items, must pay sales/use tax on these purchases.

Any abuse or misuse of this certificate by any tax-exempt organization, or any unauthorized use of this certificate by any individual, constitutes a serious violation and will lead to revocation. Willful misuse of this Certificate of Exemption is subject to criminal sanctions of up to one year in prison and $10,000 ($50,000 for corporations) in fines.

If necessary, additional information may be obtained by calling the Customer Service Bureau at (617) 887-MDOR or toll-free, in Massachusetts, 1-800-392-6089.

printed on recycled paper

Northeast Metro Tech 2023-2024 CALENDAR

21 Counselors/Admin in Skillful Teacher course
24 Orientation for new staff
28-29 Professional Develop all staff
30 First day for Grade 9
31 All students report

(1 day)

AUGUST 2023

S	M	T	W	Th	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

1 No School
4 Labor Day - No School
13 9th Gr Parent Night

(19 days)

SEPTEMBER 2023

S	M	T	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

9 Columbus Day - No School
13 Progress Reports Tri 1
18 Parent/Teacher Conferences
25 Fall Program Advisory

(21 days)

OCTOBER 2023

S	M	T	W	Th	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

1 8th Grade Open House
10 Veterans' Day - No School
22 ½ Day students
23-24 Thanksgiving Break

(19 days)

NOVEMBER 2023

S	M	T	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

1 **End of Trimester 1**
22 ½ Day students
25-29 Holiday Recess

(16 days)

DECEMBER 2023

S	M	T	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

1 New Year's Day - No School
15 MLK Day - No School
19 Progress Reports Tri 2
24 Parent/Teacher Conferences (Snow date - Jan 31

(21 days))

JANUARY 2024

S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

This 185 day calendar reflects 5 school days already built into the calendar. The calendar will be adjusted to reflect the number of days used. This calendar is intended as a guide only. It may occasionally be necessary to change the calendar.

FEBRUARY 2024

S	M	T	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

19-23 Winter Recess

(16 days)

MARCH 2024

S	M	T	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

8 **End of Trimester 2**
11 Professional Day - No School
29 Holiday - No School

(19 days)

APRIL 2024

S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

12 Progress Reports Seniors
15-19 Spring Recess
26 Progress Reports Tri 3

(17 days)

MAY 2024

S	M	T	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

1 Spring Program Advisory
27 Memorial Day - No School
31 Last Day for Seniors

(22 days)

JUNE 2024

S	M	T	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

7 Graduation
19 Juneteenth - No School
21 Last day of school
End of Trimester 3

Attachment 5b.

NEMT High School Project

Certificate of Non-Collusion

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee club, or other organization, entity, or group or individuals.

Signature of Individual Date

Name of Business – Please Print

Attachment 5c.

NEMT High School Project

Tax Compliance Certification

Pursuant to M.G.L. c. 62C, §49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support, as well as paid all contributions and payments in lieu of contributions pursuant to MGL 151A, § 19A(b).

Signature: _____
(Duly Authorized Representative of Vendor)

Name of Business or Entity: _____

Social Security Number or Federal Tax ID#: _____

Date: _____

Attachment 5d.

NEMT High School Project

Affidavit of Prevailing Wage Compliance (c. 149, s. 26 and 27)

I, _____, _____ , of the
Name Title

_____ , with a principal office is located at _____
Offeror's Company Name

_____

do hereby certify that the above named corporation will comply with the prevailing wage laws as set forth in Sections 26 and 27 of the Massachusetts General Laws.

SIGNED UNDER THE PENALTIES OF PERJURY this ___day of _____, 20__.

_____
Signature of Duly Authorized Corporate Officer

Attachment 5e.

NEMT High School Project

Affidavit of Compliance

_____Massachusetts Business Corp. _____Foreign Corp. _____Non-Profit Corp.

I, _____, President _____ Clerk _____of

_____ , principal office is located at _____

_____

I do hereby certify that the above named corporation has filed with the State Secretary all certificates and annual reports required by Chapter 156B Sec. 109 (business corporation), by Chapter 181, Sec. 4 (foreign corporation) or by Chapter 180, Sec. 26A (non-profit corporation) of the Massachusetts General Laws.

SIGNED UNDER THE PENALTIES OF PERJURY this ___day of _____, 20___.

_____

Signature of Duly Authorized Corporate Officer

Attachment 5f.

NEMT High School Project

Certificate of Authority

(Corporations Only)

Instructions: Complete this form and sign and date where indicated below.

1. I hereby certify that I, the undersigned, am the duly elected Clerk/Secretary of

_____.

(Insert Full Name of Corporation)

2. I hereby certify that the following individual _____

(Insert the Name of Officer who Signed the Contract and Bonds)

is the duly elected_____ of said Corporation.

(Insert the Title of the Officer in Line 2)

3. I hereby certify that on _____

(Insert Date: Must be *on or before* Date Officer Signed Contract/Bonds)

at a duly authorized meeting of the Board of Directors of said corporation, at which a quorum was present, it was voted that

_____ _____

(Insert Name of Officer from Line 2) (Insert Title of Officer from Line 2)

of this corporation be and hereby is authorized to make, enter into, execute, and deliver contracts and bonds in the name and on behalf of said corporation, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this corporation's name and on its behalf, with or without the Corporate Seal, shall be valid and binding upon this corporation; and that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.

4. ATTEST:

Signature: _____ *AFFIX CORPORATE SEAL HERE*

(Clerk of Secretary)

Printed Name: _____

Printed Title: _____

Date: _____

Attachment 5g.

NEMT High School Project

Certificate of Authority

(Limited Liability Companies Only)

Instructions: Complete this form and sign and date where indicated below.

1. I, the undersigned, being a member or manager of

_____,

(Complete Name of Limited Liability Company)

a limited liability company (LLC) hereby certify as to the contents of this form for the purpose of contracting with the District.

2. The LLC is organized under the laws of the state of: _____.

3. The LLC is managed by (check one) a ____ Manager or by its ___ Members.

4. I hereby certify that each of the following individual(s) is:
   - a member/manager of the LLC;
   - duly authorized to execute and deliver this contract, agreement, and/or other legally binding documents relating to any contract and/or agreement on behalf of the LLC;
   - duly authorized to do and perform all acts and things necessary or appropriate to carry out the terms of this contract or agreement on behalf of the LLC; and
   - that no resolution, vote, or other document or action is necessary to establish such authority.

Name	Title

Signature: _____

Printed Name: _____

Printed Title: _____

Date: _____

Attachment 5h.

NEMT High School Project

Informational Sheet

If a Corporation:
Incorporated in what State:_____

President: _____

Treasurer: _____

Secretary: _____

If a foreign corporation, are you registered to do business in Massachusetts?

Yes _____ No _____

To be considered for Selection for this work, you-are required under Massachusetts General Laws Ch. 30, Sec. 39L to obtain from the Secretary of State, Foreign Corporations Section, a certificate stating that your corporation is registered, and to furnish such certificate to DCAMM prior to award of the contract.

If a partnership, name all partners on attached sheet.
If an individual:

Name: _____

Residence: _____

If an individual doing business under a firm name:

Name of Firm: _____

Business Address: _____

Name of Individual: _____

ELECTRONIC DOCUMENTS LICENSE AGREEMENT

Drummey Rosane Anderson, Inc., the Architect, has agreed to provide a license to use electronic files containing computer generated information to the following Recipient:

_____
(name)

_____
(address)

For the Project known as
Northeast Metropolitan Regional Vocational High School, Wakefield, MA 01880

All electronic files provided during the project are subject to the following conditions:

1. The information contained in these files is an Instrument of Service prepared by the Architect for this Project. The Architect shall retain all common law, statutory and other reserved rights, including copyright. Issuance of these files grants the Recipient a limited non-transferable license to make copies of these documents and of the information contained in them and make derivative work based on these documents, but only in connection with the Project. This license shall terminate at the end of Recipient's work or services on the Project. This license may also be terminated by DRA within three days of receipt of written notice, if the Recipient violates the terms of this license.

2. **THESE ARE NOT CONTRACT DOCUMENTS.** The Recipient acknowledges that the electronic files are for informational and convenience purposes only and not as an end product. The Architect makes no representations whatsoever as to the suitability for the Recipient's use or the accuracy and completeness of these electronic files. In the event of any conflict between the information contained in these files and information on corresponding hard copies issued for construction, the content of the hard copies shall govern.

3. These electronic files may also contain Architect's proprietary software application and formatting information that may or may not be compatible with the Recipient's computer systems. The Architect makes no representation that these files can run on any equipment or software other than that available in its office. Given the potential that the information presented on these electronic files can be modified, unintentionally or otherwise, the Architect reserves the right to remove all indications of its authorship and/or involvement from each electronic file provided.

4. Electronic files will be released upon receipt of the signed agreement. Updated copies of these files will be provided at the Architect's discretion. All provided updated copies will be subject to all the same conditions agreed upon herein.

5. It is understood that the use of these files is at the sole risk of the Recipient and that the Recipient to the extent permitted by law, shall release, indemnify and defend the Architect, its consultants, and employees from and against all liability arising out of (a) changes to the Architect's documents made by the Recipient or by anyone to whom the Recipient may release such files, (b) discrepancies or differences of any kind between the files and hard copies of the Contract Documents incorporated in the Agreement between the Owner and the Contractor, (c) the failure of such files to run accurately on equipment or software other than those on which they were produced, and (d) the use of information contained in the electronic files by the Recipient or by anyone to whom the Recipient may release such files for any purpose without the participation and assistance of the Architect.

ARCHITECT:	Drummey Rosane Anderson, Inc.	RECIPIENT:	_____
Address	235 Bear Hill Rd. 4th Floor	Address	_____
	Waltham, MA 02451		_____
By:	_____	By:	_____
Date:	_____	Date:	_____

[PROJECT NAME]

Diverse Business Enterprise Participation Monthly Affidavit

This form shall be completed and submitted monthly during the requisition process as a condition of payment. Please note that these figures will be verified with the Diverse Business Enterprise(s) identified. If there are outstanding issues that result in a failure to meet the contractual Participation Amount, please indicate in the "Explanation" column, and attach supporting documentation for same. Also note that copies of invoices and cancelled checks for payment to all Diverse Business Enterprise(s) are required.

Month / Year: [XXXXX]
Prime Trade Contractor Name: [XXXXX]
Prime Trade Contract – Original Contract Amount: [XXXXX]
Prime Trade Contract – Original Participation Amount: [XXXXX]
Prime Trade Contract – Revised Contract Amount (w/ Change Orders): [XXXXX]
Prime Trade Contract – Revised Participation Amount (w/ Change Orders): [XXXXX]
Prime Trade Contract – % Complete: [XXXXX]

Diverse Business Enterprise Name	Diverse Business Enterprise Classification	Diverse Business Enterprise Original Contract Amount	Change Orders To Date	Diverse Business Enterprise Revised Contract Amount	% Complete To Date	Amount Paid To Date	Balance Amount Due	Retainage %	Retainage Amount	Explanation

I declare, under penalty of perjury, that the information provided in this verification form and supporting documents is true and correct.

Prime Trade Contractor – Signature: _____

Prime Trade Contractor – Printed Name: [XXXXX]

Date: [XXXX]

NOTARY CERTIFICATE

Sworn before me this [XX] day of [XX], 20[XX].

Notary Signature: _____

Commission Expires: [XXXX]

SCHEDULE FOR PARTICIPATION
BY MINORITY/WOMEN BUSINESS ENTERPRISES
DIVISION OF CAPITAL ASSET MANAGEMENT AND MAINTENANCE
For use on c.149, §44A and c.30, §39M projects

DCAMM Project Number_____ Project Location _____

DCAMM Project Name _____

A. Filed Sub-Bidders that are 1) themselves MBE/WBE certified and/or 2) Utilizing MBE/WBE firm(s) to provide materials or services – submit with and attach to Filed Sub-Bid

B. Prime/General Contractor must submit to DCAMM's Compliance Office within five (5) working days of the opening of General Bids.

BIDDER CERTIFICATION:
The Bidder agrees that if awarded the contract it will expend at least the amount of the contract set forth below for MBE/WBE participation. For purposes of this commitment, the MBE and WBE designation means that a business has been certified by Massachusetts Supplier Diversity Office ("SDO") as either an MBE, WBE or M/WBE, see Article XIII of the Contract. The Bidder must indicate the MBE/WBE firms it intends to utilize on the project as follows (attach additional sheets if necessary):

MBE/WBE Company Name & Address	MBE or WBE	Describe Scope(s) of Work MBE/WBE firm is performing including Spec. Section(s) (Indicate whether providing "Labor and Material" "Material Only" or "Labor Only"	If MBE/WBE is a Material Supplier, Indicate Total Value of Supplies (**10%** of total value counts toward Value of Participation)	Total Dollar Value of Participation
1.				
2.				
3.				
4.				
5.				
6.				
7.				

MBE Goal-(Percentage):____% MBE Project Goal (dollars): $_____Total Dollar Value of MBE Commitment: $_____

WBE Goal (Percentage):____% WBE Project Goal (dollars): $_____Total Dollar Value of WBE Commitment: $_____

The undersigned hereby certifies that he/she has read the terms and conditions of the contract regarding MBE/WBE participation and is authorized to bind the Bidder to the commitment set forth above.

Name of Firm_____ Authorized Signature _____

Business Address_____ Print Name _____

Email_____ Title _____

Telephone #s: Office_____Mobile_____Date _____

LETTER OF INTENT

MINORITY/WOMEN BUSINESS ENTERPRISE PARTICIPATION
DIVISION OF CAPITAL ASSET MANAGEMENT AND MAINTENANCE

To be completed by the MBE/WBE, then provided to the General Bidder or Subcontractor listing the MBE/WBE on its Schedule for Participation The General Bidder must submit the Letter of Intent to DCAMM's Compliance Office along with the firm's completed Schedule for Participation within five (5) working days of the opening General Bids. Filed Sub-bidders submit the Letter of Intent accompanying the Schedule for Participation with its bid. Subcontractors/Suppliers submit with its price proposal.

DCAMM Project Number:_____ Indicate Mass. SDO Certification:

Project Name:_____ ____MBE

Project Location:_____ ____WBE

To:_____ ____M/WBE

Name of General Bidder/ Filed Sub-bidder/Subcontractor

1. This firm intends to perform work in connection with the above referenced project with its own workforce and understands it will be responsible for timely providing all required project payment verifications and weekly workforce reports, including, but not limited to, certified payrolls and workforce composition reports, certain of which must be submitted to DCAMM electronically.

2. This firm is currently certified by the Massachusetts Supplier Diversity Office ("SDO") to perform the work identified below, and has not changed its minority/women ownership, control, or management without notifying SDO within thirty (30) days of such a change.

3. This firm understands that if the General Bidder/Filed Sub-bidder/Subcontract proposer referenced above is awarded the contract, the Bidder/Proposer intends to enter into an agreement with this firm to perform the activity described below for the prices indicated. This firm also understands that the above-referenced firm, as General Bidder/Filed Sub-bidder/Subcontractor, can make substitutions only as allowed by Article XIII of the Contract.

4. This firm understands that under the terms of Article XIII of the contract, only work actually performed by an MBE/WBE with its own existing workforce will be credited toward the MBE/WBE participation goals, and this firm cannot assign or subcontract out any of its work without prior written approval of the DCAMM Compliance Office, and that any such assignment or subcontracting of its work will not be credited toward MBE/WBE participation goals.

MBE/WBE PARTICIPATION

Identify Specification Section(s) by Name and Number/Item Number(s)/ General Conditions	Describe Scope(s) of Work MBE/WBE is performing, provide details of all the work to be performed and clarify "Labor and Material" "Labor Only" or "Material Only"	If a Material Supplier, Indicate Total Value of Supplies (10% of total value counts toward total value of Participation)	Total Dollar Value of Participation
.			

(Attach additional sheets if necessary)

Total Dollar Value of Work to be Performed by MBE/WBE/M/WBE Firm: **$**_____

Name of MBE/WBE Firm:_____ Authorized Signature: _____

Business Address:_____ Print Name: _____

Email_____ Title: _____

Telephone #s: Office_____Mobile_____Date _____

PROJECT SAFETY PLAN

NEMT WAKEFIELD

100 HEMLOCK RD WAKEFIELD MA 01880

12/1/2022

The safety rules and regulations contained herein are NOT all inclusive. All United States Department of Labor, Occupational Safety and Health Administration (OSHA) and other legal

standards not specifically referenced in these rules, regulations, and policies shall apply when appropriate. In cases of conflict, the most stringent rule shall apply.

Table of Contents

I. Foreword 4

A. Management Policy Statement 4

II. Contents 4

A. Definitions 4

B. Administration 6

1. Coronavirus (COVID-19) Interim Guidelines 6

2. Management Statement of Final Authority 6

C. Responsibilities 6

1. Construction Manager – Gilbane 6

2. Contractors 7

3. Employees 10

D. General Requirements 10

1. Accident Investigation 10

2. Blood Borne Pathogens 11

3. Concrete (Cast-in-Place) 13

4. Confined Space Entry 13

5. Crane Safety 13

6. Demobilization 15

7. Demolition - Structural 15

8. Discipline - Enforcement 15

9. Electric - Temporary 16

10. Elevated Work (Other than Fall Protection) 17

11. Elevator Safety 18

12. Emergency Procedures - General, Fire, Medical, Weather, Other 18

13. Environmental - Asbestos 21

14. Environmental - Lead 22

15. Environmental - On-site Hazards 23

16. Environmental - Silica 23

17. Excavation 23

18. Fall Protection 24

19. Fire Protection 25

20. Hazard Analysis 25

21. Hazard Communication Program 26

22. Housekeeping and Hygiene Facilities 27

23. Recognition and Awards 28

24. Inspection and Auditing 28

25. Interim Life Safety and Impairment Plans 28
26. Ladders/Stairs 29
27. Lockout/Tagout (LOTO) Procedures 29
28. Masonry 30
29. Motor Vehicles and Equipment 31
30. Personal Protective Equipment (PPE) and Clothing 32
31. Powder-Actuated Tools 33
32. Precast/Prestressed Concrete 33
33. Pressure Testing Safety Requirements 34
34. Project - Code of Safe practices 34
35. Protection of the Public 35
36. Safety Coordination 37
37. Scaffolds/Lifts 37
38. Signs, Signals, Barricades and Lights (Motor Vehicle Exposure) 38
39. Steel Erection 38
40. Stretch and Flex 38
41. Substance Abuse Policy - Minimum 39
42. Temporary Heat 41
43. Training 41
44. Welding, Cutting and Burning - Hot-work 42
45. Work Permit Procedures 42
III. Appendices 43
A. Job Hazard Analysis 43
B. Hot Work Permit 44
C. Confined Space Permit 45
D. Hold Harmless Agreement 46
E. Excavation Inspection Form 47
F. Hand Protection Reference 48
G. Crane Lift Plan 49
H. Crane Use Permit 53
I. Ladder Permit 55

I. Foreword

A. Management Policy Statement

For generations, Gilbane has taken great pride in our concern and commitment to safety and health on all projects. Safety is the single most important element of our work. Gilbane is committed to providing a safe working environment. Everyone employed on our projects is expected to conduct their work in a safe manner, taking personal responsibility for their own safety and working with others to maintain a safe project site.

We take responsibility to work safely and stay vigilant in safeguarding our workers, visitors, the public and our clients.

Our commitment to safety starts with us along with our Division Management teams, which are responsible and accountable for the safe performance of work on our projects under their control. They are aided by our Division Safety Directors, and Project teams, who develop, execute, and monitor our safety plans.

All our efforts have made Gilbane one of America's safest builders. The goal is to perform all work incident and injury free.

The NEMT WAKEFIELD PROJECT embodies the policies and procedures for prevention of injury, property damage, fire damage and occupational illness. This document, the Gilbane- contractor selection process and site field activities are all designed to support and reinforce this goal.

It is a joint NEMT WAKEFIELD PROJECT and Gilbane policy to provide a safe place to work at all times and to conduct all operations in a manner as to provide protection for all individuals who might come into contact with these operations. The Owner's employees, Gilbane employees, Contractor and Subcontractor employees, and all others employed on this site, as well as anyone who comes on the site for any reason during construction, are expected to conduct their work in a safe manner and are required to comply with established safety programs. By contract, every Contractor on this site is obligated to perform all work in a safe manner, is obligated to conform to the requirements of the Federal Occupational Safety and Health act of 1970 (OSHA), all additions and revisions thereto, as well as other applicable Federal, State and Local requirements and the G Safety Plan.

All supervisory employees must accept their responsibility for the prevention of accidents and for conducting all operations under their direction in a safe and efficient manner.

With the cooperation, dedication, and assistance of everyone, this will be a successful and safe project.

II. Contents

A. Definitions

1. Contract: A written agreement between the Owner and Gilbane, between Gilbane and a Subcontractor, between the Owner and Other Contractor(s), or between Other Contractor(s) and its (their) Subcontractor(s).
2. Contractor: Any company performing work under Contract at the project site including sub-tier contractors.
3. Employer: Any contractor, supplier, or vendor performing work under Contract at the project site.
4. Owner: An entity that has a contract between themselves and Gilbane or, between themselves and the Contractor.
5. Project: The premises owned by the Owner as described in the contract between the Owner and Gilbane and/or areas and ways contiguous thereto, including any work sites set up by the ***Owner*** for use by a contractor exclusively for the storage of material or equipment, or for on-site fabrication of materials to be used on the job site, including temporary locations.

Project Description:

Construction of a new technical high school campus followed by the demolition of the existing campus buildings. The work will start with the clearing/grubbing of approximately 15 acres of woodland followed by the removal of approximately 160,000CY of ledge. Spread footings, frost wall and retaining wall foundations will then be placed, followed by the erection of structural steel and placement of slabs on deck. Roofing and exterior skin installation (mostly masonry and metal panels) will then start so that the buildings can be made watertight for interior finishes to start.

Site work associated with this project will include all new support utilities as well as the construction of 2 new drives: one up from the existing campus and another from Farm Street. Once the new buildings are completed and the staff and students have moved in, remediation and demolition of the existing campus buildings will begin. Finish site work will include new athletic fields, sidewalks and parking lots.

Location:

B. Administration

1. Coronavirus (COVID-19) Interim Guidelines

Collectively, we all need to ensure we are taking the necessary steps to prevent the spread of Coronavirus Disease 2019 (COVID-19). Gilbane continues to work with our clients, contractors and suppliers in order to take all necessary precautions to protect our employees, clients, staff, guests and our client's customers. Gilbane's policy is to always provide a safe place to work and to conduct all operations in a manner as to provide protection for all individuals who might encounter these operations, as well as any of our client's requirements.

The interim guidance prepared for this jobsite is based on what is currently known about the COVID-19 disease and as obtained by the Centers of Disease Control & Prevention (CDC), Occupational Safety and Health Administration (OSHA) and the Department of Health (DOH). As this issue progresses or recedes, we will update this guidance. This guidance is being implemented by Gilbane on a company-wide basis and our expectation is that all contractors will implement measures at least as protective as those outlined in the interim guidance. Please follow all direction given by the CDC, OSHA, DOH and Local, State and Federal Agencies.

2. Management Statement of Final Authority

a. All persons who come into the work area for any reason during construction will be required to comply with the established safety regulations that govern the project.
b. Contractors are committed by contract to observe and comply with all applicable safety regulations and procedures. Each Contractor will comply with the Site-Specific Project Safety Plan, hereafter referred to as the "Safety Plan".
c. If Gilbane finds Contractor areas of work or individuals being or acting in noncompliance with OSHA regulations or any other applicable regulations, Gilbane shall have the authority to order immediate correction and cessation of the non-compliant occurrence. ***Non-compliance with the Safety Plan will be grounds for Contractor dismissal and/or employee(s) being forbidden entry onto the project***. All costs of correction shall be borne by the Contractor deemed responsible. ***Gilbane's decision of responsibility shall be final.***
d. Nothing contained herein, however, shall serve to relieve the Contractor of their liabilities and/or obligations under the Federal OSH Act and all additions and revisions thereto, as well as all other applicable Federal, State and Local requirements.
e. The most stringent regulation shall apply if a conflict arises in the interpretation of the safety requirements of Gilbane, or the Federal, State or local Government.

C. Responsibilities

1. Construction Manager – Gilbane

a. Audit activities of the Contractor's safety program so that it conforms to the Safety Plan.
b. Provide weekly, written site inspections of the job site, notify the Contractors of any unsafe practices and conditions for which they are responsible and counsel them on the appropriate corrective actions when necessary. Site inspections and corrective measures shall be reviewed and discussed with the construction team to eliminate unsafe practices and conditions. See the "Inspection & Auditing" section of this document for details.
c. Provide all new Contractors and their subcontractor's employees with a Gilbane safety orientation before they start working on site. The orientation shall include a list of work rules, identification of hazardous areas, and the location of

SDS sheets. This orientation will inform the Contractor's/ subcontractor's employees of hazards specific to NEMT WAKEFIELD PROJECT on-site operations. After the orientation is complete, employees shall be required to acknowledge they have received, read, understood, and comply with the project safety requirements.

d. Identify the location where SDS sheets provided from the Contractors/ subcontractors can be found for the project.
e. Maintain required records and accident prevention materials at the job site so that an adequate history is maintained for the project.
f. Control the entrance and exit of the Contractor's/subcontractor's employees and visitors to and from the job site.
g. Review the Contractors' prior injury and illness log before awarding them work on site. Contractors with poor safety records may be disqualified from being awarded work on this project.
h. Review injury and near miss records during the project to identify trends to take positive action to reduce or eliminate such incidents from continuing to occur on the project.
i. The Construction Manager will examine and familiarize himself/herself with the job site and adjacent areas from the standpoint of access and facilities regarding safety. The job site should be explored regarding installing and operating the construction plan and evaluating any difficulties that might be encountered in complete execution of the work safely.
j. The Construction Manager shall immediately investigate all accidents or near miss accidents and take corrective actions to help prevent reoccurrence.
k. Specific Responsibilities
    1. Gilbane Project Manager
        i. The Project Manager directs and administers the Safety Plan on this Project. All reports, surveys, accident reports and other information relating to safety are to be submitted to the Project Manager.
        ii. The Project Manager shall establish a safety organization to assure the involvement of all personnel in the safety effort and to provide for their participation. The Project Manager appoints the Project Superintendent as their representative to monitor all safety activities on the site. The Project Manager evaluates individual Contractor's safety performance for compliance with all applicable Federal, State, local, Gilbane's and the Owner's safety requirements.
    2. Gilbane Superintendent
        i. The Superintendent is responsible for the active control of the Project Safety Plan.
        ii. The Superintendent is responsible for planning and requiring all work to be done in compliance with the Project Safety Plan.
        iii. Weekly inspections relating to safety shall be made and documented utilizing Predictive Solutions / SafetyNet platform.
    3. Gilbane Safety Manager
        i. The Gilbane Safety Manager is jointly responsible for the active control of the Project Safety Plan with the Gilbane Superintendent.
        ii. The Gilbane Safety Manager is responsible for reviewing trade contractors' pre-task plans.
        iii. The Gilbane Safety Manager shall act as a liaison between Gilbane and NEMT WAKEFIELD PROJECT EHS Department.
        iv. The Gilbane Safety Manger is responsible for frequent and regular, documented safety and health inspections of the work areas utilizing the Predictive Solutions / SafetyNet platform.
        v. The Gilbane Safety Manager shall develop the new worker orientation for the project and ensure that all new employees to the site receive orientation before beginning work.
        vi. The Gilbane Safety Manager shall provide coaching to trade supervisors related to pre-task planning to ensure that pre-task plans are thorough and relevant to the work and that the plans are communicated to their work crews.
        vii. The Gilbane Safety Manager is responsible for leading incident investigations and completing incident reports.

2. Contractors

a. Contractors are responsible for carrying out the procedures required by their Safety Program and the Gilbane Project Safety Plan.
b. Compliance with Federal, State, Local Laws and regulations is the contractual obligation of Contractors working on this project. Conflicts between current laws or contractual requirements shall be resolved by adhering to the more stringent requirement. Any project site safety regulations which exceed the minimum standards established by OSHA shall be incorporated in contractor's safety program.
c. If Contractor fails to correct safety violations, Gilbane will issue the Contractor written notification outlining safety violations. Failure of the contractor to abate may result in the removal of the Contractor from the project site; Gilbane's approved bidders' list or other appropriate measures.
d. Site safety inspections are to be an ongoing process and documented at least weekly. Contractors shall submit to Gilbane.
e. The Contractor is responsible for conforming to OSHA and NFPA standards of fire protection and prevention practices. Contractor shall also comply with all fire and safety rules and regulations established on the project.
f. Emergency Response:
    1. Prior to commencement of work, provisions must be made for prompt medical attention in case of serious injury. Each contractor shall have a minimum of one First Aid/CPR trained individual on the project and inform Gilbane of their name. Contractor shall ensure that each of its subcontractors meet these medical requirements.

2. Ensure that adequate first aid supplies shall be easily accessible when required.
3. Conspicuously post telephone numbers and addresses of the physicians, hospital, and ambulance.
4. Contractor's first aid attendant or other competent person shall treat the injured employee as often as necessary to ensure complete recovery, or until a decision is made to seek medical treatment.
5. Provide proper equipment for prompt transportation of the injured person to a physician or hospital, or a communication system for contacting necessary ambulance services.
6. A representative of the Contractor shall drive the injured employee to the medical facility and remain at the facility until the employee is ready to return. Contractor's representative shall carry necessary forms; i.e., authorization slips and/or return to work notices to the medical facility.
7. If it is necessary for the Contractor's first aid attendant to accompany the injured employee, provisions must be made by the Contractor to have another employee, properly trained and certified in first aid, available to render same during the absence of the regular first aid attendant.
8. Contractor shall complete and provide to Gilbane an "Employer's First Report of Injury" within 24 hours of any/all incidents involving work activities associated with the project. Contractors are advised to maintain their own OSHA 300 Log.
9. If the employee is able to return to the project site the same day, they must return with a statement from the doctor stating same and containing such information as date, employee's name, date of return to regular or restricted duty, date they are to return to the doctor, diagnosis, signature, and address of doctor. If the injured employee is unable to return to the project site the same day, the employee who transported them must bring this information back to the project and report it to Gilbane. Contractor shall make restricted duty work available to the injured employee.

g. The Contractor shall ensure that its supervisors are aware of their responsibilities, which include:
    1. Attend and participate in all supervisors' safety meetings, pre-construction, kick-off, and regularly scheduled meetings.
    2. Carrying out the procedures required by the Safety Plan.
    3. Ensure that each employee under their supervision has received the initial project safety orientation provided by Gilbane.
    4. Conduct or arrange for weekly "Tool Box Talk" safety meetings for all employees under their supervision as required. Minutes of Tool Box Talks are to be maintained and a copy of each Tool Box Talk is to be given to Gilbane before end-of -shift the day given.
    5. Become familiar with the requirements of all accident prevention standards and safety rules pertaining to their job.
    6. Explain to all employees applicable safe practice rules and regulations under their direct supervision.
        a. In the event a contractor utilizes employees whose primary language is not English, the contractor shall provide for appropriate interpretation to assure complete comprehension.
    7. Supervise the instruction and training of new employees either personally or through delegated experienced persons until the new employee satisfactorily demonstrates their ability to perform the work in a safe and efficient manner.
    8. Be responsible for continuous housekeeping in their area and for the use and maintenance of all personal protective devices, equipment, and safeguards.
    9. Ensure that all hazards created in an area as a result of work activities are addressed before the crew leaves the area, including breaks or lunch.
    10. Report to their own direct supervisor all cases of employees who, in their opinion, are not qualified for the work to which they have been assigned or who engage in unsafe practices.
    11. Notify their direct supervisor and/or the contractor's safety representative concerning work areas where they believe protective devices are required.
        a. NOTE: Such safety devices will include, but not limited to, the following: machine guards, operational shields, exhaust vent hoods and systems, welding shields, approved personal protective equipment, automatic stops and controls, barricades, railings, etc.

h. Required policies, plans, programs and procedures:
    1. Contractors are required to provide a site-specific safety plan that is in compliance with all safety standards required by Gilbane, and the Federal, State and Local agencies prior to the commencement of work.
    2. Contractor is responsible for notifying Gilbane of any hazardous chemicals or substances that are brought or cause to have been brought on the project site. Contractor shall provide Gilbane with a copy of Contractor's Hazardous Communication Program, Chemical information list, and Safety Data Sheet(s) (SDS) for the chemical(s) or substance(s) intended for use on the project. Gilbane will provide a centrally located place for this information. Contractor is responsible for maintaining a copy of Contractor's Hazard Communication Program, Chemical Information List, and Safety Data Sheet(s) on site for Contractor's own reference and employee training. The proper storage, use and disposal of wastes of any hazardous chemicals or substances are the responsibility of Contractor.

i. Contractor's Safety Representatives: The name of and resume for each Contractor's project/site safety representative will be provided to Gilbane for review prior to the Contractor starting work at the project site.
    1. Site Safety Representatives will be required based on a risk assessment by the Gilbane Division Safety Director and the project leadership team. Unless otherwise specified, Contractors with a staff and crew of 20 or more on site shall appoint a full-time site safety representative. The candidates resume including all safety training completed must be submitted to Gilbane. The candidate may be interviewed before they will be accepted. The Site Safety Representatives shall have – at minimum - OSHA 30-hour training and first aid/CPR training. Additionally, the site safety representative must meet the requirements of a competent person in their

discipline and be experienced in the type of work being performed. Gilbane will have the right to reject a candidate based on qualifications. The site safety representative shall perform the following duties on a daily basis:

a. Lead stretch and flex.
b. Review STA and JHA for the day.
c. Identify competent persons.
d. Complete daily safety inspection.
e. Submit required permits.
f. Coach Foremen on STA (pre-task plan) delivery.
g. Manage SDS materials.
h. Attend weekly safety committee.
i. Complete orientations for new workers.
j. Provide appropriate interpretation for their workers whose primary language is not English.

2. Each safety representative shall participate in accident and incident investigation involving their work and employees and those of their subcontractors.
3. Each safety representative has the right and authority to stop any and all hazardous work being performed by their employer whenever unsafe acts or conditions are found or imminent danger to life and health exists. They shall be empowered to take immediate action to eliminate unsafe acts and/or conditions.
4. The site safety representative shall conduct regular and frequent inspections of their Contractor's areas.
5. Each safety representative shall attend safety meetings scheduled by Gilbane.
6. Ensure that prior to the start of any work activity every foreman has reviewed each task assignment with every affected employee to assure a comprehensive understanding of the safety requirements and precautions to be taken while performing this work.
7. Ensure that appropriate personal protective equipment is provided and its use enforced.

j. Training, orientation, and education requirements:
   1. The Contractor shall instruct each employee on the project site in the recognition and avoidance of unsafe acts and/or conditions applicable to its work environment to control or eliminate injury or illness.
   2. All records of training, education and certification shall be maintained at a location accessible to Gilbane.
   3. At Gilbane's discretion, Contractor Project Supervisors may be required to attend Gilbane's Supervisor Skills Workshop. This 3-6 hour training is to maintain Gilbane's goal of an Incident and Injury Free culture.
   4. In an effort to create an incident and injury free culture on the project, Gilbane may hold periodic Principals Meetings to discuss project safety with contractor principals. Project walkthroughs and worker feedback interviews will be part of these meetings. Contractor principal / owner attendance at these meetings is mandatory.
   5. Short Service Worker (SSW) Program- New workers to a project are particularly at risk as they learn of their project work environment and project safety processes designed to support their safety. Therefore, Gilbane requires every worker on the project 30 days or less to participate in the SSW program. The program will be administered by the Contractor Supervisor Foreman and requires documented demonstration of project safety processes and safe behaviors by the worker at the end of 30 days to graduate from the program. Gilbane will provide details of the SSW Program for the Contractor Foreman to administer, and will monitor and assess program effectiveness.

k. Job/Activity Hazard Analysis and Safety Task Assignment:
   1. A Job Hazard Analysis (JHA) is required for every discreet work operation that has potential hazards that must be controlled and managed. The JHA must be submitted to the Gilbane project team prior to the start of any operation.
   2. Each Contractor shall complete a Safety Task Assignment Process form each day for all work crews, discuss with each work crew on a daily basis or when non-routine tasks occur and provide a copy to Gilbane at the end of the work day with their daily report.
   3. Ensure that prior to the start of any work activity every Supervisor has reviewed each task assignment with every affected employee to assure a comprehensive understanding of the safety requirements and precautions to be taken while performing this work.
   4. Periodically analyze work methods in detail for the purpose of job simplification and for the establishment of safe work methods.

l. Personal Protective Equipment:
   1. Contractor is responsible for providing and requiring the use of necessary personal protective equipment in all operations where there is an exposure to hazardous conditions.

m. It is Gilbane's goal to promote a work environment at the Project that is free from harassment of any kind. Gilbane has ZERO TOLERANCE for harassment, including harassment on the basis of age, citizenship status, ancestry, color, religious creed, creed, denial of family and medical care leave, disability including HIV and AIDS, marital status, including registered domestic partners, medical condition, pregnancy, childbirth and other pregnancy-related conditions, genetic information, military and veteran status, including protected veteran status, national origin, race, sex, gender, gender identity, gender expression, transgender status, sexual orientation and/or any other categories or status that are protected by applicable federal, state or local law. Contractor agrees to be bound by the Policy Statement on Harassment and any other violation or suspected violation of such policy by Contractor or any of its officers, agents, servants, employees, subcontractors or suppliers shall be considered as Contractor's failure to perform its obligations under the terms and conditions of this Agreement. Contractor shall actively promote a harassment-free work environment among its officers, agents, servants, employees, subcontractors, and suppliers.

3. Trade Contractor Employees

a. No trade contractor employee (employee) shall be required or knowingly permitted to work in an unsafe environment except for the purpose of making safety corrections and then only after proper precautions have been taken for their protection.
b. Each employee is responsible for learning and abiding by those rules and regulations which are applicable to the assigned tasks and for reporting observed or anticipated hazards to their immediate Supervisor. If the hazard is not immediately corrected, the affected employee will report the hazard to Gilbane.
c. **All employees shall observe the following:**
    1. **Courtesy**: Employees shall observe standards of behavior and conduct their work in a manner to avoid offending any person they may encounter throughout their work day.
    2. **Personal Protective Equipment**: All persons on the site will wear approved safety helmets with the chin strap fastened, eye protection meeting ANSI Z87, appropriate Cut level 4 gloves, ANSI Class II vest or ANSI Class II compliant apparel, and safety-toe footwear meeting ASTM F2413-11 with substantial soles. All other personal protective equipment, including respirators or eye protection, as appropriate to assigned tasks, shall be utilized in the proper manner at all times while there is exposure to the hazards.
    3. **Clothing**: Clothing suitable for the weather and your work shall be worn. Torn or loose clothing, cuffs or neckwear which may be a hazard are not allowed. Shirts must be worn and have sleeves. Pants must have legs (no shorts allowed). Clothing shall be maintained in a clean, neat and repaired fashion.
    4. **Vehicles**: Employees shall park their vehicles in designated areas. Operation of vehicles on the project site shall conform to all local traffic laws. The maximum speed limit on the project is ten (10) miles per hour.
    5. **Smoking**: **Smoking is permitted only in designated areas**.
    6. **Intoxicants**: Consumption of alcoholic beverages or controlled substances is not allowed on the project. All workers who are taking physician-prescribed or over-the-counter medication must be fit for work. ***All employees are specifically directed to the "Substance Abuse Policy" which is a part of this Safety Plan.***
    7. **Accidents**: All employees must immediately advise their Supervisor of any injury on the project or any non-injury accident which involves damage to property or equipment.
    8. **Personal Conduct**: Practical jokes, horseplay, scuffling, wrestling or fighting is prohibited.
    9. **Good Housekeeping**: Good housekeeping on the project is mandatory and every employee must do their part daily to minimize dust and to clean up their work area to keep the project clean for safety and efficiency. ***Controls shall be observed which keep dirt from being tracked into areas outside the work space.*** Clean up methods shall follow prescribed techniques to minimize the distribution of dust into the air.
    10. **Authorized Access**: Employees shall confine their activities to the areas designated at the work site. ***The employee's supervisor shall obtain permission from the appropriate Gilbane representative prior to entry into any areas outside the work site.***
    11. **Fire Protection**: Employees shall adhere to all fire protection regulations and shall conduct their work in a manner to prevent a fire.
    12. **Music:** No radios or use of in-the-ear/over-the-ear entertainment devices are allowed on site.
    13. **Safety Orientation:** All employees must attend the Gilbane Safety Orientation before they can start work onsite. After the orientation is complete, employees shall be required to acknowledge they have received, read and understand, and will comply with the project safety requirements.
    14. **Personal Safety Assessments (PSA):** To ensure that everyone who works on our project goes home safely each day, we expect that every worker will continually assess the hazards of their work tasks and environment, and take the necessary actions to avoid, report, prevent or correct the hazard. In support of this, Gilbane will require everyone conduct Personal Safety Assessments frequently on the jobsite. Individual PSAs will be discussed during project safety inspections and daily communications. Gilbane will provide information on the PSA process in Project Safety Orientation and via other safety communication methods on the project.

D. General Requirements

1. Accident Investigation

a. Gilbane shall be notified immediately in case of injuries, fatalities, near misses, property damage, environmental spills, bomb threats, or public demonstrations. A preliminary accident notification must be filed immediately with Gilbane who will then immediately notify the NEMT WAKEFIELD PROJECT Project Manager.
b. It will be each Contractor's responsibility to complete the First Report of Injury for their employees and to transmit copies of these reports to Gilbane within 24 hours.
c. Any accident or incident resulting in a lost-time injury, fatality, damage to property or equipment exceeding U.S. $1,000, a significant "near-miss" or the recognition of a potential hazard to health and environment is to be investigated by a committee comprised of the following: Gilbane Project Management, Gilbane Safety Manager, Contractor's Supervision, Contractor's Safety Manager and anyone familiar with the practices involved in the incident who can contribute to its analysis and make recommendations for action to prevent a reoccurrence. The investigation shall begin promptly after the

incident. Results of the investigation and recommendations for preventive action shall be documented within five (5) workdays of the incident. A principal's meeting will be required for such accidents. Detailed incident reports, including root cause analysis shall be provided to NEMT WAKEFIELD PROJECT.

d. Gilbane shall review first aid injuries to establish trends and practices that deviate from work standards and shall report and take corrective actions.

2. Blood Borne Pathogens

a. OSHA (29 CFR 1910.1030) requires that each employee exposed to blood and other infectious materials be advised of the potential Blood-borne pathogen hazards and how to guard against those hazards. Each contractor, and each sub-contractor, whose employees are occupationally exposed to blood and other potentially infectious materials (including all body fluids in situations where it is difficult or impossible to differentiate between body fluids, etc.) must develop a list of all such tasks on the project; instruct the employees in the potential risks involved; develop a labeling system for all infectious materials; train all potentially exposed personnel in the hazards and the proper controls for all listed tasks; provide safety materials and equipment; and offer appropriate medical treatment and advice for any exposure. These steps are outlined in detail in the following material. Employee training for this requirement will be documented and acknowledged by signatures following each session using the documentation statement included in this Blood-borne Pathogen Safety Program.

b. **Exposure Control Plan**
   1. Every contractor will be responsible for development and maintenance of a list of tasks within the project operations which involve occupational exposure to blood and other infectious materials. Each contractor will be further responsible for training their employees, obtaining medical services for their employees, and maintaining medical records for their employees assigned to all such hazardous tasks. One copy of the list identifying the hazardous tasks and of each employee assigned to perform those tasks will be forwarded to Gilbane.
   2. Employees will be allowed access to this Blood-borne Pathogen Safety Program and to information regarding those specific tasks in their work areas identified as involving exposure to blood and other infectious materials. All questions relating to the contractor's program should be directed to the contractor's superintendent or safety officer. All questions relating to the Project Safety Plan are to be directed to Gilbane.

c. **Employee Information and Training**
   1. All new and present employees will be given information regarding the requirements of this Blood-borne Pathogens Safety Program; the hazardous tasks present in their work place; and the potential health risks of these tasks. This requirement must be met through orientation sessions for all employees prior to assignment to the specifically identified hazardous tasks, and through annual refresher courses for all employees currently performing those tasks. The information and training shall include the following elements:
   2. The risks and symptoms of exposure to Blood-borne pathogens shall be identified.
   3. How to determine the presence of blood or other infectious materials in the workplace.
   4. Methods to be used to reduce or prevent the exposure to blood and other infectious materials, such as control procedures, work practices, or personal protective equipment.
   5. Procedures to follow in the event of an exposure to blood or other infectious materials.
   6. Identification of the log maintained in the project office in which is listed all tasks involving occupational exposure to blood and other infectious materials on the site.
   7. How to review tasks to minimize the potential hazards of infection.
   8. When a task involves the handling of blood and other infectious materials, how those materials are to be contained, labeled and properly disposed.
   9. The necessity for proper housekeeping and personal hygiene techniques including handwashing shall be emphasized.
   10. Employees must have the opportunity to ask questions and obtain answers from the trainer who must be knowledgeable in the subject matter.

d. **Container Labeling and Disposal**
   1. The Contractor and Gilbane will verify that all containers used to store or transport blood and other infectious materials generated at the site are clearly labeled with warning labels which include the orange or orange-red biohazard symbol. Labels shall indicate the contents, the hazards involved, and the name and address of the project. Red bags or containers may be used instead of labeling, but the management of these receptacles shall be controlled by employees specifically trained in this program. The Contractor and Gilbane will ensure that all secondary containers of the blood and other infectious materials have clear warning labels with the same information as the original container. Each contractor's superintendent, or safety representative if one is assigned, shall perform the above responsibilities for all their materials generated.
   2. All containers of blood and other infectious materials shall be controlled until delivered to an authorized disposal facility for incineration or decontamination by legally approved means. Arrangements may be made with a local hospital to receive and dispose of limited quantities of these regulated wastes in cases of first-aid treatment. Each contractor shall be responsible for proper disposal of all regulated wastes generated by their work.

e. **Hazardous Non-Routine Tasks and Nearby Work**
   1. In the event an employee is assigned to perform a non-routine task or is assigned to work in an area where a hazardous task non-routine to their work, is being performed, the employee will be given the additional information and training related to the hazards which may be encountered in the non-routine task. This information and training will be provided by the foreman, contractor safety representative or a trainer who must

be knowledgeable in this subject. The information will include the specific hazards of the task, the controls and protective measures required the types of personal protective equipment required, how to use the equipment, the nature of other work being performed in or near the non-routine task, and what emergency procedures are involved with the task.

f. **Universal Precautions**
   1. To ensure that employees who work on tasks presenting an exposure to blood and other infectious materials are afforded the greatest protection available, the following policy has been established:
   2. Prior to starting work on any task involving blood and other infectious materials, all employees will review safety precautions which should be taken. Universal precautions shall be observed which means treating all blood and other potentially infectious materials as if infectious. Particular attention shall be given to contaminated sharp objects which may penetrate the skin including, but not limited to, needles, broken glass, and exposed ends of wires.
   3. Work practices and engineering controls shall be followed diligently including the provision and use of the following:
   4. Gloves, latex.
   5. Masks and eye protection.
   6. Resuscitation bags and mouthpieces.
   7. Gowns, aprons or specialized clothing where required by established engineering practices.
   8. Hand-washing facilities, and other decontamination where required by established engineering practices.
   9. Decontamination of personal protective items shall be conducted by trained personnel following approved procedures. Disposable items shall be discarded into red bags or properly labeled containers and delivered for disposal as required elsewhere in this program. Items which are reusable and any work areas which were contaminated by blood and other infectious materials shall be cleaned and disinfected with a solution containing a strong concentration of chlorine bleach.

g. **Audit and Review**
   1. It will be the responsibility of Gilbane to review the entire Blood-borne Pathogen Safety Program at least annually, and revise and update the material contained herein to reflect all changes in the management, disposal, storage, and handling of blood and other infectious materials generated at the project site. It will be the further responsibility of Gilbane, to periodically audit procedures in use on tasks identified as exposing employees to blood and other infectious materials in order that they meet the requirements as set forth in the OSHA 1910.1030 standards. Each contractor's superintendent or safety representative shall perform the above responsibilities for all their tasks and procedures.

h. **Hepatitis B Vaccination**
   1. Hepatitis B vaccinations shall be made available to all employees who have occupational exposure to blood after the employee has received the training required in 29 CFR 1910.1030 paragraph (g)(2)(vii)(I) and within ten (10) working days of assignment, at no cost, at a reasonable time and place, under the supervision of a licensed physician or health care professional and according to the latest recommendations of the U.S. Public Health Service (USPHS). Prescreening may not be required as a condition of receiving the vaccine. Employees must sign a declination form if they choose not to be vaccinated but may later opt to receive the vaccine at no cost to the employee. Should booster doses later be recommended by the USPHS, they must be offered to the employees. Vaccination is encouraged unless 1) documentation exists that the employee has previously received the series, 2) antibody testing reveals that the employee is immune, or 3) medical evaluation shows that vaccination contraindicated for medical reasons.

i. **Post-Exposure Evaluation and Follow-Up**
   1. OSHA standard 1910.1030 specifies detailed procedures to be made available to all employees who have had an exposure incident. These procedures and any laboratory tests must be conducted by an accredited laboratory at no cost to the employee. Follow-up procedures must include a confidential medical evaluation documenting the circumstances of exposure, identifying and testing the source individual if feasible, testing the exposed employee's blood with the employee's consent, post-exposure prophylaxis, counseling and evaluation of reported illnesses. Health care professionals must be provided specific information to facilitate the evaluation and their written opinion on the need for hepatitis B vaccination following the exposure. Information such as the employee's ability to receive the hepatitis B vaccine must be supplied to the employer. All diagnoses must remain confidential.

j. **Recordkeeping**
   1. Medical records shall be maintained on each employee, with occupational exposure to blood and other infectious materials, for the duration of employment plus thirty (30) years. Medical records must be made available to the subject employee, anyone with written consent of the employee, OSHA and NIOSH. Medical records are not available to the employer. Disposal of medical records must be in accord with OSHA's standard covering access to records. These employee medical records must be confidential and must include the following information:
   2. Employee's name and social security number.
   3. Hepatitis B vaccination status, including dates.
   4. Results of any examinations, medical testing and follow-up procedures.
   5. Copy of the health care professional's written opinion.
   6. Copy of the information provided to the health care professional.
   7. Training records shall be maintained for a period of three years and must include the dates, contents of the training program or summary, trainer's name and qualifications, names and job titles of all persons attending the sessions.

3. Concrete (Cast-in-Place)

a. All equipment and materials used in concrete construction and masonry work shall meet the applicable requirements as prescribed in ANSI A10.9 most recent version, "Safety Requirements for Concrete Construction and Masonry Work."
b. All areas of rebar that must be crossed by any trade will be covered with a path of suitable materials 4 feet wide and the full length of the path.

4. Confined Space Entry

a. Contractor shall develop an entry procedure and written plan to be used when Contractor's employees are required to enter confined areas or spaces. Confined Space entry procedures will conform to all applicable OSHA standards and NEMT WAKEFIELD PROJECT requirements, including NEMT WAKEFIELD PROJECT permitting requirements, whichever are most stringent and approved by Gilbane.
b. Documentation of appropriate formal training for all involved in the confined space activity (entrants, attendants, supervisor, and rescue personnel) shall be submitted to Gilbane for approval prior to any entry.
c. Rescue team identification and availability must be confirmed by the exposing contractor and those rescue procedures and provisions included in the plan.
d. A confined space entry permit must be completed and posted at the entrance to the confined area. See Appendix for a Sample Confined Space Permit. Entry into **NEMT WAKEFIELD PROJECT controlled** confined spaces may be through the **NEMT WAKEFIELD PROJECT permit** process.

5. Crane Safety

a. **General Requirements**
    1. The contractor shall conform to the more stringent of Federal, State, local, client or Gilbane safety policy. Copies of certifications will be on file in the construction office.
    2. Contractors whose activities require the use of cranes shall be responsible for their proper set up and operation and shall advise Gilbane prior to the arrival on-site. The Gilbane Crane Use Plan and Permit shall be used (refer to Appendix).
    3. The contractor shall supply Gilbane with documented evidence of their competent person's training, and of their 'qualified persons', as required by 1926.1404, 1926.1427, 1926.1428, and where specified in 1926.1400, including the Operators, Riggers, Signal Persons, and 'Assembly/Disassembly Director.
    4. The Assembly/Disassembly Director shall be responsible to ensure that all provisions of safety as specified in 1926.1404 are met including but not limited to: adequate site and ground bearing conditions, proper blocking and cribbing, knowing load weights and center of gravity, equipment capacity, support of booms and counterweights, rigging of boom and suspension systems, determination of safe wind speeds, etc.
    5. No work shall proceed without evidence of a current annual inspection meeting Gilbane requirements. No claims will be accepted for losses sustained by the contractor for delays caused by failure to comply with these requirements.
b. **Inspection**
    1. A new independent third-party inspection is required in the configuration that the crane will be used, after severe weather and after adjustment or repair, for each piece of equipment. Severe weather includes hurricane, tornado and/or earthquake.
    2. Contractors shall provide Gilbane evidence of annual inspection by a third-party inspection agency not under the control or ownership of the crane owner and approved by the Gilbane Division Safety Director.
    3. All repairs and adjustments noted on the inspection shall be corrected prior to next use. 'Temporary alternative measures' for safety devices or operational aids as specified within Federal or State OSHA regulations will not be accepted.
    4. At least every 12 months, or if the crane or its associated rigging has sustained any incident which may have resulted in damage, in cases of severe weather, or after if any repair or modification the crane and its associated rigging shall be fully re-inspected by a qualified person in accordance with OSHA regulations, with proof of inspection provided to Gilbane. This certification will be for each crane and lifting device and associated rigging equipment brought onto the site.
    5. Documented inspections shall be performed by a qualified person designated by the contractor in accordance with 1926.1412, 1926.1413 and the manufacturer's recommendation and ANSI B30 Standard for the type of crane being inspected and the most current version. This inspection shall be completed prior to each shift starting work, and when equipment is modified, repaired or adjusted, post assembly, monthly, annually and in conditions of severe service. Evidence of documented inspections shall be made available to Gilbane.
    6. The inspection requirements apply to power-operated equipment used in construction that can hoist, lower and horizontally move a suspended load as specified in 1926.1400. Such equipment includes, but is not limited to: articulating cranes (such as knuckle-boom cranes); crawler cranes; floating cranes; cranes on barges; locomotive cranes; mobile cranes (such as wheel-mounted, rough-terrain, all-terrain, commercial truck-mounted, and boom truck cranes); multi-purpose machines when configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load; industrial cranes (such as carry-deck cranes); dedicated pile drivers; service/ mechanic trucks with a hoisting device; a crane on a monorail; tower cranes

(such as fixed jib “hammerhead boom”, luffing boom and self-erecting); pedestal cranes; portal cranes; overhead and gantry cranes; straddle cranes; side-boom tractors; derricks; and variations of such equipment.

c. **Operation**
   1. Operational Aids, including but not limited to: boom hoist limiting device, boom angle indicator, load radius indicator, luffing jib limiting device, anti-two-block device, load weighing device (such as a load moment indicator), and outrigger stabilizer position monitor must be in proper working order. Temporary alternative measures for safety devices or operational aids are not permitted to be used.
   2. Safety devices - including but not limited to: crane level indicator, boom and jib stops, foot pedal locks, check valves on hydraulic outrigger and stabilizer jacks, horns and anemometer must be in proper working order before equipment operations can begin. Completion of a lift plan is required for each load. Temporary alternative measures are not permitted to be used.
   3. A maximum wind speed for crane operations during the project shall be determined and agreed to by all parties prior to any crane use. Continued operation during winds exceeding 20 mph shall be reviewed.
   4. When lightning is observed, or thunder heard, all crane and lifting operations shall stop. Gilbane shall make the determination with the contractor’s competent person, as to the proximity of the operation being performed. When lightning is 10 miles away or less, work must stop for 30 minutes after the last audible thunder or visible flash of lightning, unless work is being conducted inside a “Safe Building”. A Safe Building standard include: enclosed roof, exterior walls, concrete floor, permanent or plastic sealed windows, permanent or temporary doors on the exterior and no standing water within the work area. Contractor shall plan work activities according to the latest weather forecast and be prepared to stop operations until such weather has safely passed.

d. **Operator**
   1. The crane operator(s) shall be proficient in the operation of the crane(s) and licensed in the State/City where the operation is being performed, or certified by an accredited crane operator testing organization, such as the National Commission for the Certification of Crane Operators (NCCO), or by an audited employer program developed by an accredited crane operator testing organization and audited by a third party qualified auditor.

e. **Power line safety**
   1. Crane and rigging operations are not permitted within 20 ft. of power lines unless the power lines are de-energized and confirmed by a qualified utility company representative.
   2. Where encroachment is required within 20 ft. from power lines, a planning meeting shall be conducted with the assembly/disassembly director, operator, utility agency, crew and other workers in the area to review steps to prevent encroachment, in accordance with 1926.1408, Table A.
   3. Tag lines must be non-conductive.
   4. Dedicated spotters shall be used.
   5. Proximity alarms or range control warning device shall be used.

f. **Special procedures**
   1. A Crane Lift Plan and Permit shall be developed by the Contractor’s qualified person and overseen by the Contractor’s qualified and competent assembly/disassembly director for the following and submitted to Gilbane prior to the lift taking place:
      i. A Critical Lift. Critical lifts are defined as lifting a load when the weights are at or over 75% of the rated capacity of the crane and rigging as determined by the manufacturer.
      ii. Multi-Crane Lifts.
      iii. 100 Tons or greater Lift.
      iv. Any application that deviates from the manufacturer’s recommendations.
      v. When special/unique hazards are under/adjacent to the load at any time during the lift.
      vi. When Gilbane determines such a procedure is necessary.
   2. The lift procedure will include a Job Hazard Analysis developed by the Contractor and submitted to Gilbane along with Pre-Lift meetings which shall be held at 30 days prior to the lift, the day prior to the lift and immediately prior to the lift with the actual workforce doing the lift. All concerned parties must be present for the meetings with minutes of the meeting recorded by Gilbane.
   3. The lift procedure will include documentation of calculations which incorporates weight of all material and all rigging equipment, a load chart for the crane(s) that will be used, a site plan and layout sheet which will include the path of travel of the load, swing radius protection and any other necessary factors.
   4. The Gilbane Crane Lift Plan/ Crane Critical Lift checklist, or equivalent shall be used (See Appendix).

g. **Record keeping**
   1. All records pertaining to crane inspections shall be kept with the crane or in the Contractor’s site field office in accordance with applicable OSHA regulations.
   2. If during any safety inspection, the operator or supervisor cannot produce the required crane inspection sheets, the crane shall be shut down as soon as possible and shall be inspected.
   3. Where crane operators are required to be licensed by the State where the project is being built, they shall have a current license and provide a copy to Gilbane when requested. Duplicates of Certification records shall be maintained on project site by Contractor and made available to Gilbane upon request. Evidence of competency of the operator shall be provided by the contractor to Gilbane.

h. **Rigging**
   1. Only qualified riggers shall perform rigging operations.
   2. A Competent Person appointed by the Contractor shall inspect all rigging equipment. Inspection shall be done and documented prior to each shift starting work, monthly and annually in accordance with 1926.1413.

3. If there are any deficiencies in rigging equipment, the equipment shall be immediately removed from service and the project site or destroyed.
4. Tag lines shall be used on all loads.
5. Rigging slings shall bear a legible manufacturers capacity tag.
6. Shake-out/sorting style hooks shall only be used to shake out steel once it has been unloaded and may not be used for overhead lifting.

i. **Signals**
1. The contractor shall appoint a qualified and trained signal person that meets the definition of 1926.1428 and 1926.1430.
2. When hand signals are used, only the standard method for signals shall be used 1926.1400 Appendix A.
3. **Operator and signal person shall meet prior to hoisting lifts to confirm understanding of signals.**

6. Demobilization

a. The Gilbane Superintendent and each Contractor shall organize and schedule the orderly removal of their project site offices and trailer facilities, the termination of temporary utility services, and the forwarding of mail. The site shall be left in the conditions specified by the contract documents. The Gilbane Superintendent shall inspect the site with the Owner to verify that all permanent security and safety devices are in place and performing their intended function.

7. Demolition - Structural

a. Although significant structural demolition is not expected as part of the NEMT WAKEFIELD PROJECT, limited demolition work may be required to facilitate new construction / installation of equipment and materials.
b. An engineering and hazardous material survey shall be completed before the start of demolition.
c. All structural shoring shall have stamped drawing and calculations by a registered Professional Engineer.
d. Areas being demolished must be secured by means of barricades to prevent unauthorized personnel from entering the area.
e. Contractors must submit, prior to the start of construction, a detailed demolition plan to include, means and methods, related drawings, and other relevant safety plans.
f. Gilbane will obtain from the owner a site survey identifying the locations of Asbestos and lead - containing materials and any other hazardous materials that may be on site. If the owner is unable to provide this information, the Contractor shall employ a testing agency that can identify and/or verify areas suspected of containing these materials prior to their disturbance during the demolition operation at their own cost.
g. An engineering survey shall be completed before the start of demolition.
h. All electric, gas, water, steam, sewer, and other service lines shall be shut off, capped, or otherwise controlled outside the building line before demolition work is started. The Contractor will notify any utility company whose services are affected in advance.
i. If electric, gas, water, steam, sewer, or other utilities are necessary during demolition; their lines shall be temporarily relocated and protected.
j. Before demolition begins, the building will be checked to determine whether any hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in pipes, tanks, or other equipment on the property. If found shall be eliminated before demolition is started. Any hazardous glass fragments shall be removed.
k. Guardrails and covers shall protect all floor and wall openings, which pose a fall exposure during demolition.
l. If debris is dropped through holes in the floor without the use of chutes, the area onto which the material is dropped will be completely enclosed with barricades not less than 42 inches high and not less than 6 feet back from the project openings. Signs shall be posted at each level, warning of the hazard of falling materials. Removal of the debris from the lower area shall not be permitted until debris handling from above has ended.
m. Floor openings not used, as material drops will be covered with material that can withstand two times the weight of any intended load. The floor opening cover will be secured to prevent it from being incidentally moved.
n. Demolition of exterior wall construction and floor construction will begin at the top of the structure and proceed downward, except for the cutting of holes in floors or walls for chutes and material drops, preparation of storage space, and similar preparatory work. Each story of exterior wall and floor construction will be Removed and dropped into the storage space prior to removing exterior walls and floor construction in the story below.
o. Wheel stops shall be installed on all open sides of floors to prevent equipment and material from going over the edge.
p. Entrances to multi-story structures being demolished shall be completely protected by sidewalk sheds, canopies, or both. Protection shall be provided from the face of the building for a minimum of 8 feet. Canopies shall be at least 2 feet wider (1 foot each side) than the opening or entrance being protected, and will be capable of sustaining a load of 150 pounds per square foot.

8. Discipline - Enforcement

a. **Imminent Danger**

1. Should an imminently dangerous condition be discovered, all work in the danger area will be stopped until corrections are made.

b. **Non-Compliance**
   1. Should Gilbane find contractor work areas or individuals being or acting in non-compliance with OSHA or the Project Safety Plan, Gilbane has the authority to order immediate correction of the non-compliant occurrence.
      i. All costs of correction shall be borne by the Contractor deemed responsible. If more than one contractor is deemed responsible, Gilbane's division of responsibility shall be final.
      ii. Nothing contained herein, however, shall serve to relieve the contractor of their liabilities and/or obligations under OSHA as well as other applicable Owner, Federal, State and local requirements as well as the Project Safety Plan.
      iii. Gilbane may withhold payment of any sums due contractors for failure to follow the Project Safety Plan policies and procedures.
      iv. Gilbane will issue a written, 24-hour notice in this regard requiring immediate response by the contractor.
      v. Repeated violations or lack of cooperation with regard to the Project Safety Plan by employees of a contractor will indicate non-compliance with provisions included in the contract and may be reason for the employee being barred from the project site and/or for termination of the contractor's contract. Additionally, if contractor receives three (3) written citations because of the actions of one or more of their employees; a meeting will be held with a representative from the Contractor, the Gilbane Superintendent, the Gilbane Division Safety Director and the Gilbane Project Manager and/or Project Executive to determine whether the Contractor's Field Supervisor is appropriate or whether replacement will be required.

c. **Orientation**
   1. At orientation, new employees are given their first warning: These are the rules; if you fail to follow them you will receive a citation.
   2. **1st** Violation: Notice is sent to employer. Employee must come in and see Gilbane to review violation so we can be sure the employee knows how serious this citation is and what corrective action must be taken.
   3. **2nd** Violation: This constitutes three (3) warnings. The individual may be removed from the property or from further access to the site.
   4. **"Immediate removal from the property" Citations** will result when:
      i. Any employee, supervisor or manager exposes themselves, NEMT WAKEFIELD PROJECT personnel, the public or other trade employees to imminent loss of life.
      ii. Any employee, supervisor or manager openly exhibits disregard, defiance or disrespect for the safety plan.
      iii. Any employee, supervisor or manager knowingly falsifies any investigative document or testimony involved in an investigation.
      iv. A violent physical encounter (i.e., fighting) or threat of violence occurs, all individuals involved in the incident are subject to permanent removal. False accusations or knowingly failing to take corrective action against violent behavior will not be tolerated.
      v. Theft or destruction of property occurs.
      vi. Any employee, supervisor or manager consumes, possesses, distributes or is under the influence of alcohol/drugs.
      vii. Violations of safety, traffic, housekeeping or material storage rules.
      viii. Any employee, supervisor or manager who engages in harassment on the basis of age, citizenship status, ancestry, color, religious creed, creed, denial of family and medical care leave, disability including HIV and AIDS, marital status, including registered domestic partners, medical condition, pregnancy, childbirth and other pregnancy-related conditions, genetic information, military and veteran status, including protected veteran status, national origin, race, sex, gender, gender identity, gender expression, transgender status, sexual orientation and/or any other categories or status that are protected by applicable federal, state or local law.

d. **Dispute Resolution**
   1. All disputes involving the Project Safety Plan shall be resolved by Gilbane whose decision is final and not subject to arbitration.

9. Electric - Temporary

a. **General**
   a. All electrical work, installation and wire capacities shall be in accordance with the applicable pertinent provisions of the National Electrical Code (most current version), ANSI and OSHA Standards.
   b. Extension cords used with portable tools must be of heavy duty 3-wire type and a minimum 12-gauge wire. Damaged electrical cords shall not be used.
   c. All cords will either be suspended a minimum of seven feet (7') above work platform or maintained out of walkways to prevent damage and slip/trip/fall hazards. Electrical cords will not be fastened with staples, hung from nails or suspended by non-insulated wire.
   d. Receptacles shall not be connected to the same ungrounded conductor of multi-wire circuits which supply temporary lighting.

b. **Ground Fault Circuit Interrupter (GFCI) and Assured Equipment Grounding Conductor Program (AEGCP)**

a. All 120-volt, single phase, 15 & 20-amp temporary power circuits (with the exception of temporary lighting) shall have GFCIs installed. In addition, all tools, cords and power sets shall have an AEGCP maintained on quarterly basis.
b. Portable tools will have the appropriate color code affixed to the male (plug) end following inspection. Extension cords will have the appropriate color code affixed to both ends (plug & receptacle). The previous quarter's color code will be removed to avoid confusion.
c. When using permanent power, once established in new construction or in renovation work, GFCIs must be used in conjunction with the AEGCP inspections.
d. The color codes used for identifying inspected & tested equipment on this project are:

January, February, March	White
April, May, June	Green
July, August, September	Red
October, November, December	Orange

(NOTE: The cycle of colors is repeated for the next year)

c. **Temporary Lighting**

1. Temporary lighting circuits must be a UL-approved assembly.
2. Open wiring is NOT acceptable for temporary lighting circuits. 'Open wiring' refers to the individual conductors being physically separated (as in the McGill "String-O-Lights.)
3. Lighting on barricades, fences or sidewalk coverings shall be encased in metal raceway.
4. Bulbs for temporary lighting must have guards to prevent accidental contact.
5. Temporary lights must be suspended by the lamp fixture and by non-conductive twine or cord or other material.
6. All wiring used for temporary lighting shall be run using SJTW cord type, minimum 14/2 Gauge conductor. Romex or crimp on style temporary lighting is not acceptable.
7. Splices shall be made within secured junction boxes and performed by a qualified electrician. Splices in conductors, when required, shall have nuts and conductors protected by 5 tightly wrapped half-lap wraps of 3M Scotch TM Super 33 Vinyl electric tape (or equal) for a thickness of 35 mils.
8. Portable electric lighting used in moist or other hazardous locations such as drums, tanks, vessels, bins, bunkers, etc., shall be operated at a maximum of 12 volts (non-explosive).
9. All shop lighting and portable task lighting shall have a cover and guard installed when in use or available for use.
10. Receptacles shall not be connected to the same ungrounded conductor of multi-wire circuits which supply temporary lighting.
11. Any temporary lighting must be on a dedicated circuit only utilized for temporary lighting.

b. **Wiring Ground**

1. All temporary wiring shall be effectively grounded in accordance with the National Electrical Code (Articles 305 and 310).
2. All non-current carrying parts of electrical equipment must be grounded or double-insulated. Grounded circuits must have enough capability to carry all currents likely to be imposed on it.
3. All electrical equipment and wiring in hazardous locations must conform to the National Electrical Code standards.

c. **Protection of Energized Parts**

1. All power panels shall have metal covers installed at all times. Electrical room doors shall be self-closing and locked from unqualified persons at all times When not working in the panel the door shall be closed and locked.
2. All open or exposed breaker spaces shall be adequately covered and labeled.
3. Fish tapes or lines made of metal or any other conductive medium are prohibited. Nonconductive tapes and lines will be used in their place.
4. Inspections and investigative type work conducted on live systems will be conducted in accordance with NFPA 70E and will only be authorized by Gilbane Division Safety Director after signature from the Contractor's Electrical Supervisor on the Energized Electrical Work Authorization Permit.

d. **Defective Electrical Tools and Equipment**

1. All electrical tools and extension cords found to be defective (Examples: missing or broken ground pins, exposed internal conductors) will immediately be rendered in-operative by cutting off the plug end or by immediately removing from the project.

10. Elevated Work (Other than Fall Protection)

a. **Hoists and Elevators**

1. Temporary personnel elevators and material hoists shall be constructed, installed and maintained in compliance with the manufacturer's instructions and the provisions of applicable statutes and regulations of governing authorities.

2. No elevators or hoists installed for this project are to be used for the movement of materials or personnel until the devices have been certified and licensed by a third-party inspector qualified to approve the equipment after assembly (before service), after alterations, and every three months.
3. No person shall be allowed to ride on top of a material hoist except for the purposes of inspections and maintenance.

b. **Overhead Work**
1. When overhead work or activities where materials could fall to an elevation below, an exclusion zone will be marked by a continuous physical barricade. Danger tape, caution tape or flagging does not meet the requirements of barricading for an exclusion zone. Examples include: 2x4 lumber, orange construction fencing supported every 6', metal railing system or physical barricade.
2. Signage preventing unauthorized users from entering the area will be posted on the barricade.

c. **Stilts**
1. Stilts are prohibited on Gilbane projects in New England

d. **Tool Tethering**
1. Tools and equipment used at elevation at the floor edge or near floor openings shall be tethered with an engineered tether to prevent from dropping to a lower level.

11. Elevator Safety

a. The scope of the NEMT WAKEFIELD PROJECT currently does not anticipate installation of new elevators. In the event that trade contractors / Gilbane need to utilize NEMT WAKEFIELD PROJECT elevators to facilitate work, their use shall be coordinated and scheduled with NEMT WAKEFIELD PROJECT.
b. Contractors shall comply with all applicable provisions of OSHA, ANSI, Gilbane Safety requirements and the National Elevator Industry Inc., Field Employees Safety handbook.
c. The elevator contractor shall hold a pre-mobilization meeting with Gilbane where safe work practices will be discussed.

12. Emergency Procedures - General, Fire, Medical, Weather, Other

a. **General Procedures**
1. Each project shall develop a written Site-Specific Emergency Action Plan. The Site-Specific Emergency Action Plan shall be posted and distributed.
2. In order for necessary emergency services to be supplied promptly, each contractor and sub-contractor shall poste telephone numbers and addresses of the physicians, hospital and ambulance along with the type of information to be transmitted for each emergency situation.
3. All accidents are to be handled by the ranking person present, with whoever is available to assist. The ranking person shall direct someone to notify first-aid personnel, and to call for emergency services as necessary. Gilbane is to be notified as soon as this can be done without delaying assistance to the injured. They will then take appropriate action.
4. In accidents resulting in injury to personnel, individuals qualified to administer first-aid will assist the injured, will stabilize their condition and may arrange for transportation to a hospital if further treatment is required.
5. Except when necessary to avoid further injury, or to prevent additional damage to the work, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by Gilbane, or the person designated to make the investigation and report. As soon as Gilbane, NEMT WAKEFIELD PROJECT or Authorities can release the area from this constraint, contractors concerned will clean-up and make repairs to return to a normal situation.

b. **Alarms**
1. Gilbane shall be notified of all emergencies and notify the appropriate emergency service of the incident and initiate appropriate action.
2. Fire alarms within the area of construction will consist of three short blasts on an air horn (or other suitable alarm) located at the means of egress, stairway, ladder, or building entry. Telephone notification of the fire department will be initiated immediately after sounding the air horn alarm. Telephones are available in the project site office. Radio contact with the project site office and Gilbane shall be used to inform all concerned regarding the fire.
3. A continuous long blast on the air horn may be used to summon first aid assistance in the event of an accident.

c. **Fire**
1. The following procedures are established in the event of a fire. "**RACE**"
- **R** **R**escue... anyone in immediate danger.
- **A** **A**larm... activate pull station, go to phone and dial 911.
- **C** **C**ontain... close doors and windows, isolate the fire.
- **E** **E**xtinguish... use correct extinguisher.

d. **Medical Accidents Involving Serious Injury or Death**
1. The following procedures are established in the event of an accident involving serious injury or death to employees or members of the general public:

- Individuals qualified to administer first-aid will assist the injured, will stabilize their condition, and will arrange for transportation to the hospital emergency room if further treatment is required.
- Gilbane is to be notified immediately. The Gilbane Project Manager and/or Safety Manager will then immediately notify the NEMT WAKEFIELD PROJECT Project Manager and NEMT WAKEFIELD PROJECT Security and EHS. OSHA must be notified within 8 hours for an employee fatality and within 24 hours of an employee in-patient hospitalization, amputation, or eye loss.
- All non-essential personnel shall be removed and/or kept back from the area.
- Provide rescue personnel with assistance as requested.
- No comments shall be made to the media. All inquiries shall be referred to Gilbane.
- No on-site photographs are to be taken without the specific approval of Gilbane.
- Gilbane shall make a full investigation and file an Accident/Injury Report.
- Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel. Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by Gilbane.
- As soon as Gilbane can release the area from the above constraint, contractors concerned will clean-up and make repairs to return to normal working conditions.

e. **Property Damage Accidents**

1. The following procedures are established in the event of an accident involving property damage:
    - Gilbane is to be notified as soon as this can be done without delaying efforts to prevent further damage. Gilbane then takes appropriate action and direct other personnel to assist as necessary.
    - Gilbane will immediately notify the NEMT WAKEFIELD PROJECT Project Manager of any incident involving NEMT WAKEFIELD PROJECT equipment or property.
    - Efforts shall be taken to protect against further damage where possible.
    - All non-essential personnel shall be removed and/or kept back from the area.
    - No comments shall be made to the media. All inquiries shall be referred to Gilbane.
    - No on-site photographs are to be taken without the specific approval of Gilbane.
    - Gilbane shall make a full investigation and file an Accident/Injury Report.
    - Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel. Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by Gilbane.
    - As soon as Gilbane can release the area from the above constraint, contractors concerned will clean-up and make repairs to return to normal working conditions.

f. **Severe Weather**

1. The following procedures are intended to prepare the project site in the event of severe weather conditions. Since severe weather may be reasonably anticipated to occur during the duration of the project, without significant advance warning, all work activities and project site conditions must be planned with a concern for emergency preparations.
    - Each contractor, at the time of mobilization, shall deliver to Gilbane a complete list of the contractor's supervisors with the complete after-hours telephone numbers. The list shall be kept current and shall be updated accordingly.
    - Each contractor shall ensure that their field trailers and subcontractors' field trailers are anchored according to the manufacturer's installation instructions and local regulations.
    - Upon notification of a Severe Weather Watch by the National Weather Service the following actions are to be initiated:
        1. Each contractor having on-site generators which are fuel-powered is requested to notify Gilbane of the numbers and wattage. Generators may be needed to provide temporary power for rescue or clean-up activities.
        2. All materials shall be secured to prevent them from becoming air borne during high winds. Particular attention will be given to picking up scrap materials and hauling or covering trash containers.
        3. Crawler and mobile cranes shall have booms lowered at the end of the shift. Cranes not capable of lowering booms shall be permitted to weathervane or free-swing. Check to assure that swinging booms will not contact other objects such as power lines, structures, etc.
        4. Sufficient flashlights, batteries, and bulbs shall be provided to assigned emergency response personnel. A supply of fresh batteries shall be maintained at the project for use in an emergency response.
        5. Each contractor shall coordinate with Gilbane and establish a secure location for sheltering of workers in a severe weather event.

- When lightning is 10 miles away or less, work must stop for 30 minutes after the last audible thunder or visible flash of lightning, unless work is being conducted inside a "Safe Building", which is a fully enclosed building with electrical wiring and plumbing, or a "Safe Vehicle", which is a hard topped metal vehicle with rolled up windows.

g. **Major Catastrophe Outside Working Hours**

1. Examples of other major catastrophes include:
    - Major fire.
    - Collapse of large portions of structures or large sections of scaffolds.
    - Heavy damage by wind or floods.
2. The owner's security or local authorities will be provided with an emergency call list to summon Gilbane personnel and the contractor's personnel to the site in the event of a major catastrophe outside working hours. The Gilbane Superintendent or a qualified alternate will cooperate fully with the directives of the owner's staff or local emergency authorities in the event of a major catastrophe. Gilbane will take any or all of the following actions as appropriate:
    - Stop work and remove all non-essential workers from the area.
    - Initiate firefighting, secure building, etc.
    - Call for assistance from outside (fire trucks, ambulances, electricians, life flight helicopters, Civil Defense Support, police)
    - Clear site access roads.
    - Issue instructions to supervisors and to others as necessary.
    - Set up security control at the disaster area.
    - Set up command & control center in site trailers. An alternate command & control center may need to be utilized.
    - No comments shall be made to the media. All inquiries shall be referred to Gilbane.
    - No on-site photographs are to be taken without the specific approval of Gilbane.
    - Gilbane shall make a full investigation and file an Accident/Injury Report.
    - Call in operators for heavy equipment such as front loaders, cranes, etc.
    - Other actions considered necessary for the particular situation.

h. **Bomb Threat**

1. When a bomb threat is received or if a suspicious article is found, Gilbane will take the following actions:
    - Work shall be stopped immediately, and the project and office shall be evacuated of all personnel. A count will be made to assure that all are present.
    - Gilbane will notify NEMT WAKEFIELD PROJECT Safety immediately.
    - Local police, fire or bomb disposal authorities shall be notified. A search of the premises will be made as directed by the appropriate authorities.
    - If a suspicious article is found, DO NOT TOUCH IT, notify the appropriate authorities.
    - Do not allow anyone except authorized personnel to re-enter the area.
    - If necessary to stop or detour traffic away from the affected area, local police or flagmen shall be utilized.
    - No comments shall be made to the media. All inquiries shall be referred to Gilbane.
    - No on-site photographs are to be taken without the specific approval of Gilbane
    - Gilbane shall make a full investigation and file an Accident/Injury Report.
    - If repeated threats occur within a short period of time, Gilbane will evaluate the situation and take appropriate action. This action may include shutting down the project site for that day.

i. **Environmental Spill**

1. In the event of a spill of environmentally damaging materials, immediate response is required to prevent or minimize the impact this event will have upon the environment and the public welfare. All personnel shall continue to observe standard precautions for handling the materials as detailed in the manufacturer's product Safety Data Sheet (SDS), including the use of personal protective equipment. Where conditions warrant, the contractor shall have emergency spill containment supplies available for immediate use. The following general procedures apply to the immediate response which must be initiated:
    - Immediately, all personnel in the area of the release shall be alerted to the hazardous material and the nature of the danger to themselves and the environment. As soon as possible, Gilbane shall be notified and requested to initiate emergency containment and clean up procedures.
    - NEMT WAKEFIELD PROJECT Safety, Project Manager and EHS shall be notified by the Gilbane Project Manager
    - The Wakefield Fire Department shall be notified.
    - If safe to do so, every effort shall be made to contain the materials within berms, by absorbent materials, or through other appropriate means, until proper handling and disposal personnel may be

mobilized at the site. Particular attention needs to be taken to avoid contamination of surface water, storm sewers, sanitary sewers, ground, plants and animals.

- All non-essential personnel shall be removed and kept back from the area.
- No comments shall be made to the media. All inquiries shall be referred to Gilbane.
- No on-site photographs are to be taken without the specific approval of Gilbane.
- Gilbane shall make a full investigation and file an Accident/Injury Report.
- Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel. Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by Gilbane or other person designated to make the investigation and report.
- Purchasing shall be notified to initiate the response of available environmental remediation contractors who are under standby contract.
- As soon as the site has been cleared by the environmental remediation contractor and authorities, Gilbane will release the area for contractors concerned to clean-up and make necessary repairs to return to a normal situation.

j. **Public Demonstrations**

1. When a public demonstration is expected or occurs, Gilbane will take the following actions:
    - Work on the project site shall continue where not encumbered by the public demonstration; however, work in the immediate area shall be stopped and all project employees shall be evacuated. A count will be made to assure that all are present.
    - NEMT WAKEFIELD PROJECT Safety and Local police shall be notified, and all employees shall cooperate fully with the law enforcement authorities.
    - Do not allow anyone except authorized personnel to enter the project site. All visitor passes are revoked, and all visitors shall be escorted from the project site.
    - If necessary to stop or detour traffic away from the affected area, local police or flagmen shall be utilized.
    - No comments shall be made to the media. All inquiries shall be referred to Gilbane.
    - No on-site photographs are to be taken without the specific approval of Gilbane.
    - If repeated public demonstrations occur within a short period of time, Gilbane will evaluate the situation and take appropriate action. This action may include shutting down the project site for that day or obtaining a judicial restraining order.

13. Environmental - Asbestos

a. Occupational Safety and Health Administration (OSHA) regulations have been promulgated to protect workers from exposure to airborne asbestos fibers. Under the Asbestos Control and Licensing Act, a contractor must be licensed by the Department of Labor and the State in which the work is being performed in order to remove asbestos.

b. Notification - Before starting asbestos removal work, the United States Environmental Protection Agency (USEPA) and the Local Department of Environmental Management must be notified in writing by the contractor and appropriate permits must be on file. Gilbane and/or its agent will verify this information by way of contract requirements.

c. Training - Employees of the contractor must be appropriately trained and licensed prior to the removal of any asbestos contaminated material. Any contractor's employees who may be exposed to Asbestos must be trained in the recognition of hazards and appropriate controls.

d. Posting - The asbestos material removal area shall be cordoned-off to prevent entry. Appropriately worded caution signs must be posted at all approaches to the area at such interval to allow individuals to take any necessary protective steps before entering the removal area.

e. Asbestos Handling - The encapsulation, removal and/or disposal of ACM shall be performed by a Contractor licensed to do such work in which the work is being performed and in accordance with all applicable Federal, State and Local Regulations per approved abatement plans.

f. Work Practices - Asbestos containing materials shall be worked in a wet state sufficient to prevent the emission of airborne fibers in excess of the permissible exposure limits. Work areas are to be adequately protected, through appropriate type enclosures, to ensure that no asbestos contaminated material will be permitted to leave the controlled area.

g. Personal Protective Equipment - In instances where re-usable clothing is used, the following precautions must be followed:

1. Contaminated clothes must be appropriately bagged and labeled. Proper notification is to be made to authorized laundries and haulers.
2. All employees working in asbestos removal areas shall wear appropriate personal protective equipment.

h. Signage – The following signage is required outside of all containment areas:

1.

- **DANGER**

- **ASBESTOS**
- **CAUSES DAMAGE TO LUNGS, MAY CAUSE CANCER**
- **AUTHORIZED PERSONNEL ONLY**

i. Cleanup - There shall be no dry sweeping of asbestos material. Use floor coverings to prevent debris from falling to lower floors and to expedite housekeeping.
    1. Labeling and Waste Disposal - Appropriately worded labels must be affixed to all materials, waste, debris, etc., containing asbestos friable materials. Asbestos waste and/or asbestos contaminated material must be collected and discarded in sealed, labeled, impervious containers by contractor.
    2. The following label content is acceptable to both the EPA and OSHA:
        - **DANGER**
        - **CONTAINS ASBESTOS FIBERS**
        - **AVOID CREATING DUST**
        - **DO NOT BREATHE DUST**
        - **CAUSES DAMAGE TO LUNGS, MAY CAUSE CANCER**

j. If applicable, Gilbane shall be provided with copies of all air monitoring reports and certified disposal receipts prior to final payment.

14. Environmental - Lead

a. In keeping with the requirements of the Occupational Safety & Health Administration's (OSHA's) Lead Exposure in the Construction Industry Standard (29 CFR 1926.62), it is assumed that every painted surface shall be considered a potential hazard unless determined otherwise by a proper survey from an accredited company (that has met all local/state/federal regulatory guidelines to perform such work) who is licensed to do business in performing environmental site and building assessments.
b. A potential source of lead emission is the disturbing of painted surfaces of structures and components within these facilities. Typical activities that would significantly disturb a painted surface include the following:
    1. Removal of all or part of the paint by hand or power tools
    2. Removal of all or part of the paint by blast cleaning
    3. Removal of all or part of the paint by other means such as the use of chemical strippers or a heat gun
    4. Structural work to the surface such as welding, burning, cutting, or drilling
    5. Manual demolition of buildings, portions of buildings, or the building components
c. The primary consideration when specifying work methods shall be the requirement to protect workers from exposure to lead above the Permissible Exposure Limit (PEL). Further considerations when specifying work methods shall be the effort to reduce the release of lead into the air, water and soil, and to reduce to a minimum the generation of debris.
d. At all times when activities which disturb paint are in process, the Site competent person for lead shall have unrestricted access to the work area for inspection and shall have the authority to stop work when the control measures being utilized are not as specified in this section or the OSHA Standard, if the control measures are not adequately controlling exposures or if other hazards are identified which require work to be stopped.
e. All air monitoring conducted by the site competent person for lead or other qualified representative shall be performed in accordance with the OSHA Standard. Detailed and accurate records of all monitoring and other relevant data used in conducting employee exposure assessments shall be kept and maintained in accordance with the applicable OSHA Standard.
f. The employer shall post the following warning signs in each work area where an employee's exposure to lead is above the PEL. At a minimum, they shall read:
    1. DANGER
    2. LEAD WORK AREA
    3. MAY DAMAGE FERTILITY OR THE UNBORN CHILD
    4. CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
    5. DO NOT EAT, DRINK or SMOKE IN THIS AREA
g. All worker protection requirements will, at minimum, meet the current OSHA Standard. These requirements include but are not limited to:
    1. Signage, Barriers & Access
    2. Exposure Monitoring
    3. Respiratory Protection
    4. Medical Surveillance & Records
    5. Education & Testing
    6. Decontamination & Clearance
h. All work involving lead removal or re-coating shall be conducted in a manner that minimizes the release of lead and lead containing materials into the air, water, and soil.
i. All lead-containing hazardous wastes that are generated shall be contained, collected, segregated, labeled and held at a location designated or approved by the Owner or Gilbane pending the appropriate disposition.
j. Contractor shall provide for proper disposal of waste, including EPA identification number, notification, certification, manifest, etc.
k. All waste containers must be leak proof and capable of being securely covered.

l. All waste containers shall be clearly labeled with weather resistant labels using indelible ink to identify the type of waste they contain and must contain the following language: DANGER: Clothing and equipment contaminated with lead. May damage fertility or the unborn child. Causes damage to the central nervous system. Do not eat, drink, or smoke while handling. D
m. oes not remove dust by blowing or shaking. Dispose of lead contaminated wash water in accordance with applicable local, state federal regulations.

15. Environmental - On-site Hazards

a. Material that is designated as a hazardous substance requires special attention by the Contractor and workers to minimize the exposure. A plan addressing the proper handling, storage and disposal of hazardous material must be developed. Gilbane and the Owner must be immediately notified of any hazardous material leak or spill. Any Contractor-caused oil spills must be reported immediately to Gilbane. If unanticipated potentially hazardous material is discovered, the Contractor shall stop work immediately, notify Gilbane, and develop a health and safety plan and site-specific work plan for approval.

16. Environmental - Silica

a. Contractors shall submit a written silica exposure control plan for review by Gilbane prior to the pre-construction conference. At a minimum, the contractor's silica exposure control plan shall comply with OSHA regulations including, but not limited to 29 CFR 1926.1153. Contractors can either use an exposure control method laid out in Table 1, or they can measure workers' exposure to silica and independently decide which dust controls work best to limit exposures to the PEL in their workplaces. Regardless of which exposure control method is used, all contractors are required to:
    1. Establish and implement a written exposure control plan that identifies tasks that involve exposure and methods used to protect workers, including procedures to restrict access to work areas where high exposures may occur.
    2. Designate a competent person to implement the written exposure control plan.
    3. Restrict housekeeping practices that expose workers to silica where feasible alternatives are available.
    4. Offer medical exams—including chest X-rays and lung function tests—every three years for workers who are required by the standard to wear a respirator for 30 or more days per year.
    5. Train workers on work operations that result in silica exposure and ways to limit exposure.
    6. Keep records of workers' silica exposure and medical exams.
b. Table 1 matches common construction tasks with dust control methods. The dust control measures listed in the table include methods known to be effective, like using water to keep dust from getting into the air or using ventilation to capture dust. In some operations, respirators may also be needed. Contractors who follow Table 1 correctly are not required to measure workers' exposure to silica and are not subject to the PEL. (Refer to 1926.1153 Respirable crystalline silica. Table 1 for more information.)
c. For tasks not listed in Table 1, or where the contractor does not fully and properly implement the engineering controls, work practices, and respiratory protection described in Table 1:
    1. The contractor shall conduct an exposure assessment to ensure that no employee is exposed to an airborne concentration of respirable crystalline silica in excess of 50 µg/m3, calculated as an 8-hour Time-Weighted Average (TWA).
    2. Exposure Assessment Requirements:
        i. The contractor shall assess the exposure of each employee who is or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level (25 µg/m3) in accordance with either the performance option or the scheduled monitoring option stated below.
        ii. Performance option: The contractor shall assess the 8-hour TWA exposure for each employee on the basis of any combination of air monitoring data or objective data sufficient to accurately characterize employee exposures to respirable crystalline silica.
        iii. Scheduled monitoring option: The contractor shall perform initial monitoring to assess the 8-hour TWA exposure for each employee on the basis of one or more personal breathing zone air samples that reflect the exposures of employees on each shift, for each job.

17. Excavation

a. Prior to opening any excavation or trench, the penetrating contractor shall notify 811 and all necessary personnel to determine whether under-ground installations, i.e. sewer, telephone, fuel, electric lines, etc., may be encountered and where they are located.
b. Any opening deeper than 12" requires a permit. See Appendix. Excavation permits shall be required while the excavation is open.
c. The contractor must designate a competent person trained in soil classification and the recognition of trenching and excavation hazards. This person must be on-site when excavating or trenching is being done.
d. Appropriate documentation to meet the OSHA trenching and excavation standards is to be maintained on site.
e. Trenches and excavations greater than 12" shall be barricaded to prevent persons from walking into them and signage must be posted.

f. Trenches and excavations 4 feet and over in depth or presenting a hazard to the worker shall be sloped, benched, or shored to protect employees from cave-in. Tabulated data for shield, support or other protective systems from the manufacturer must always be available while the equipment is onsite.
g. Where protective systems as defined in 29 CFR 1926.650-652 are designed by a licensed Professional Engineer, the resulting design documents must be reviewed by Gilbane prior to the commencement of the work to assure that the documents make accurate and complete assumptions (as set forth in the current, applicable contract specifications) upon which the design is based. Copies should be readily available on the site.
h. Trenches and excavations 6 feet or more in depth require fall protection in accordance with the Fall Protection section.
i. Trenches and excavations exposed to vehicular traffic must be protected with a hard barrier. When road levels are above working levels, berms, barricades, curbs or other hard barriers shall be constructed to prevent vehicles overrunning the edges or end of embankment. The barriers shall be constructed to one-half the diameter of the tires of the largest piece of equipment using the roadway.
j. When excavating in a public road, street, or highway, a traffic control plan that meets the local jurisdiction requirements and the Manual on Uniform Traffic Control Devices (MUTCD) - Federal Highway Administration (FHWA) is required.
k. Use a non-contact voltage tester i.e. Tic Tracer when digging near any underground electric lines.
l. Excavation contractors will provide a spill kit for use on site in the event of a hazardous material spill.
m. Drilled caissons will have fall protection provided both during and upon completion of the drilling by use of personal fall protection, guardrails or use of casing extending a minimum of 42 inches above the ground.

18. Fall Protection

a. A Fall Protection Plan must be developed by the contractor for all work with a fall exposure greater than 6-feet with a copy provided to Gilbane prior to start of work.
b. “Controlled Access Zones”, "Controlled Decking Zones", use of a “Safety Monitor” and “Warning Lines” are not permitted as primary means of fall protection.
c. **Personal Fall Arrest Systems (PFA)**
    1. Personal Fall Protection systems providing 100% fall protection shall be worn and used by all employees when working six (6') feet or more above the ground/floor or whenever working in a precarious position, unless other adequate fall protection (guardrails or safety nets) is provided.
    2. All lanyards are to be as short as possible, but in no event longer than six (6') feet. Retractable devices are preferred for most applications. Selection must be on a case-by-case basis. Wire rope lanyards are prohibited unless approved by contractor’s fall protection engineer.
    3. When working at a leading-edge, fall protection shall conform to ANSI Z359.14.
    4. A Personal Fall Restraint System shall also be used and attached to the manufacturer’s approved anchorage when working out of aerial lifts and scissors lifts.
    5. Only one individual shall use a vertical lifeline at a time. A Personal Fall Protection System shall be used and attached to vertical lifelines when working from suspended scaffolding.
    6. When wire rope is used a horizontal lifeline, it shall be designed by a registered Professional Engineer experienced in fall protection engineering and installed and maintained by a competent person. It shall be designed, installed and maintained to meet, at a minimum, the requirements of OSHA as contained in 29 CFR 1926.502.
d. To eliminate the potential of a fall when working on a flat roof or deck, a warning barrier meeting the following requirements may be used 15 feet from the fall hazard. If a worker is between the warning barrier and the fall hazard, a positive means of fall protection must be used. Warning tape is not allowed as a warning barrier. Warning barriers shall consist of ropes, wires, or chains, and supporting stanchions erected as follows:
    1. The rope, wire, or chain shall be flagged at not more than 6-foot (1.8 m) intervals with high-visibility material;
    2. The rope, wire, or chain shall be rigged and supported in such a way that its lowest point (including sag) is no less than 34 inches (.9 m) from the walking/working surface and its highest point is no more than 39 inches (1.0 m) from the walking/working surface;
    3. After being erected, with the rope, wire, or chain attached, stanchions shall be capable of resisting, without tipping over, a force of at least 16 pounds (71 N) applied horizontally against the stanchion, 30 inches (.8 m) above the walking/working surface, perpendicular to the warning line, and in the direction of the floor, roof, or platform edge;
    4. The rope, wire, or chain shall have a minimum tensile strength of 500 pounds (2.22 kN), and after being attached to the stanchions, shall be capable of supporting, without breaking, the loads applied to the stanchions as prescribed in paragraph (f)(2)(iii) of the applicable OSHA section;
    5. The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.
e. **Perimeter Protection**
    1. Wire Rope Protection: Immediately following the erection of columns, beams, and decking, a guardrail system consisting of a minimum of two (2) 3/8-inch diameter 7 x 19 galvanized new aircraft cables shall be installed as follows:
        1. Top rail of the wire rope cables shall be erected at 43.5 inches from the finished floor and shall be flagged every 6 feet.
        2. Mid rail of the wire rope cables shall be installed approximately halfway between the finished floor and the top guardrail – approximately 22 inches.

3. Wire rope guardrails shall initially be tensioned to 2,400 pounds of force and be maintained to comply with OSHA fall protection requirements.
4. Toe boards shall be installed.
5. The length of cable shall not exceed 120 feet without being terminated.
6. Cables shall be terminated at all 90-degree turns.
7. Connections shall be 'looped' with three (3) wire rope clamps (not alternating sides). Line splicing is not permitted.
8. All sequence breaks will require a two (2) cable assembly.
9. In bays with column spacing less than thirty (30) feet, install at least one intermediate stanchion rigged at 43.5 inches. In bays with column spacing greater than thirty (30) feet, install at least two intermediate steel angle stanchions rigged at 43.5 inches. Steel stanchions used at corners shall have diagonal supports installed to at least 80% of the height of the stanchion.
10. Turnbuckles shall be installed on top and mid rail wire rope cables at each perimeter side, or more to maintain tightness of wire rope.
11. Loading bays shall have separate guardrail and turnbuckle assemblies installed.

2. Steel Angle Protection: Bolt 2 ½" x 2 ½" x ¼" steel angles horizontally to the stanchions to serve as top- and mid-rails. A mid-stanchion post is required for spans greater than eight (8) feet. Toe boards shall be installed.
3. Wood Railing Protection: Secure 2" x 4" construction grade lumber horizontally to adequate stanchions to serve as top- and mid-rails. A mid-stanchion post is required every eight (8) feet. Toe boards shall be installed.
4. Manufactured Fall Protection System: Manufactured Fall Protection Systems must be equipped with integral top-rail, mid-rail, toe board and "falling object prevention".

f. Guardrails will not be used as a horizontal lifeline as part of a personal fall arrest system unless designed by a Registered Professional Engineer experienced in Fall Protection and installed under the supervision of the steel erector's competent person.
g. Guardrails shall not be used as an attachment point for equipment or materials (e.g. electrical cords, welding leads, pneumatic hoses).
h. Mesh fabric having openings of 1/2" or less and capable of withstanding 50 pounds of force without damage or displacement will be secured to all guardrails.

19. Fire Protection

a. Contractor shall be responsible for fire prevention in its work and operational areas, including offices, tool rooms, and storage areas twenty-four (24) hours per day, seven days per week through the duration of this Contract.
b. Appropriate fire suppression equipment, as required by OSHA and the local fire protection code, must be provided by the contractor. No less than a 20-pound fire extinguisher is allowed for general use.
c. Fire alarms within the area of new construction will consist of three short blasts on an air horn, or other suitable audible alarm, located at the means of egress, stairway, ladder, or building entry.
d. At least a one-hour dedicated nonworking fire watch is required during the duration of hot work operations including through break, lunch and end of shift/day. The fire watch shall be equipped with a minimum of a 20-pound fire extinguisher.
e. Fire watch must be provided at all levels below the hot work operation where a fire could occur. This may require more than one employee to perform dedicated fire watch. The cost associated with this requirement is solely the responsibility of the contractor.
f. If multiple hot work procedures are occurring, multiple dedicated fire watches are required. Roaming fire watches are prohibited.
g. Only safety containers approved by UL and the local Fire Marshall, and properly labeled as to their contents, are to be used for handling and/or storage of flammable liquids in quantities more than one gallon.
h. Hot work permits are required from Gilbane before starting any activities which create fire, sparks, cinders, slag, abrasive blasting, etc. See Appendix.
i. All tarpaulins and plastic used for temporary enclosures, barriers, or material protections shall be made of fire-retardant materials.
j. Fire Protection Standpipes shall not be altered or disengaged without coordination and permission of Gilbane and NEMT WAKEFIELD PROJECT
    1. Fire Department Connections (FDC) signage shall be visible/unobstructed outside the building/structure.

20. Hazard Analysis

a. Prior to beginning work, each contractor shall prepare a job hazard analysis that defines the activities to be performed and identifies the sequence of the work, the specific hazards, and the methods to be used to eliminate or minimize each hazard. The job hazard analysis shall be submitted prior to and will be reviewed during the pre-construction meeting by Gilbane, and the contractor's supervisors and safety representative. The job hazard analysis shall be written in a form acceptable to Gilbane. See Appendix A.
b. Each Contractor Foreman will inform their work crew of the Hazard Analysis for their work activity each day prior to start of work or when conditions change.

c. Each contractor shall submit for review by Gilbane a site-specific safety plan and Illness and Injury Prevention Program which addresses all the elements of this safety plan as they will be implemented by the contractor, its contractors, vendors and suppliers. The hazard analysis will be included as an appendix to the contractor's site-specific safety plan.
d. All high hazards, such as Exclusion Zones, shall be identified and documented daily as a part of the daily Safety Task Assignment, discussed with the work crews and distributed to all Contractors on site via the Daily Shift Start or equivalent meeting.
e. The Safety Task Assignment form shall be completed and discussed each day for all work crews or when non-routine tasks occur. A copy shall be provided to Gilbane at the end of the work day.
f. To ensure that everyone who works on our project goes home safely each day, we expect that every worker will continually assess the hazards of their work tasks and environment, and take the necessary actions to avoid, prevent or correct the hazard. In support of this, Gilbane will require everyone adopt the Personal Safety Assessment policy. Individual's PSA's will be discussed during project safety inspections and daily communications. Gilbane will provide information on the PSA process in Project Safety Orientation and via other safety communication methods on the project.

21. Hazard Communication Program

a. The Occupational Safety and Health Act (OSHA) requires that each employee potentially exposed to hazardous chemicals or materials be advised of the potential hazards and how to guard against those hazards. Each contractor whose employees are potentially exposed to hazardous chemicals must develop a list (Hazardous Materials Inventory) of all such chemicals used on the project; gather material safety data sheets (SDSs) for those materials; develop a labeling system for all materials; and train all potentially exposed personnel in the hazards and their controls for all listed compounds. These steps are outlined in detail in the following material. Employee training for this requirement will be documented and acknowledged by signatures following each session using the acknowledgment statement found at the end of this section.
    1. **Safety Data Sheets (SDS)**
        i. Every contractor will be responsible for development and maintenance of a list of hazardous chemicals utilized within the project operations and will be further responsible for obtaining and maintaining SDSs for all such hazardous chemicals. Employees will be allowed access to this information and the specific SDSs for chemicals utilized in their work areas. All questions relating to the program should be directed to the contractor's superintendent or safety representative. A copy of each SDS will be delivered to Gilbane prior to work involving that substance.
        ii. Gilbane will provide Safety Data Sheets for construction products being brought on site.
    2. **Employee Information and Training**
        i. All new and present employees will be given information regarding the requirements of the Chemical Hazard Communication Program; the hazardous chemicals present in their work place; and the physical and health risks of these chemicals. This requirement may be met through orientation sessions for new employees and refreshers for everyone during toolbox talks. The information and training will also include the following elements:
        ii. The symptoms of overexposure to the chemicals.
        iii. How to determine the hazardous presence or release of a chemical in the work place.
        iv. Methods to reduce or prevent the exposure to hazardous chemicals, such as control procedures, work practices, or personal protective equipment.
        v. Procedures to follow in the event of an exposure to hazardous chemicals. The location of the log containing the SDSs which apply to their work place and the location of the written Chemical Hazard Communication Program.
        vi. How to review SDSs to obtain the hazard information for the chemical, and how to read the labels which are required on the chemical containers. When a new hazardous chemical is obtained for use, each employee who could be exposed will be given the information and training as described above, and a copy of the SDSs for the chemical will be obtained and distributed to those who use the chemical in the work place. The SDSs will be available to all employees during each work shift.
    3. **Proper Disposal Procedures** of waste materials shall be enforced. Labeling of waste containers and disposal of all hazardous materials by a licensed disposal facility is required.
    4. **Container Labeling**
        i. All chemical containers at the site must be clearly labeled as to the contents, the hazards involved, and the name and address of the manufacturer. All secondary containers of hazardous chemicals are to be clearly labeled with the same information as the original container. Each contractor's superintendent or safety representative shall perform the above responsibilities for all their materials.
    5. **Hazardous Non-Routine Tasks and Nearby Work**
        i. In the event an employee is assigned to perform or is assigned to work in an area where a hazardous task, non-routine to their work, the employee will be given the additional information and training related to the hazardous chemicals which may be encountered in the non-routine task. This information and training will be provided by the first-line foreman, contractor superintendent, or contractor safety representative. The information will include the specific chemical hazards of the task, the controls and required protective measures, the types of personal protective equipment required, how to use the equipment, the nature of other work being performed in or near the non-routine task, and what emergency procedures are involved with the task.
    6. **Demolition**

i. Contractor shall stop the work, secure the area and notify Gilbane if material reasonably believed to be asbestos, lead, polychlorinated biphenyl (PCB) or hazardous materials is encountered in the work area.

7. **Chemicals in Unlabeled Pipes, Vessels and Containers**
   i. To ensure that employees who work on unlabeled pipes, vessels or containers have been informed as to the hazardous materials contained within, the following policy has been established: Prior to starting work on unlabeled pipes, vessels or containers, employees are to contact their foreman for the following information:
   ii. Type of chemical in the pipe, vessel or container.
   iii. Potential hazards.
   iv. Safety precautions which should be taken.
8. **Audit and Review**
   i. It will be the responsibility of each contractor's superintendent and safety representative to review the entire Hazard Communication Program, and to revise and update the material contained herein to reflect all changes in the purchase, use, storage, and handling of hazardous chemicals at the project site. It will be the further responsibility of the superintendent and safety representative to periodically audit those procedures in the use of the hazardous chemicals meet the requirements as set forth in the SDSs.

22. Housekeeping and Hygiene Facilities

a. The site, work areas, and all premises occupied by Gilbane or Contractor personnel shall be maintained in a clean, healthy, and sanitary condition.
b. Work areas, passageways, and stairs in and around buildings and structures, shall be kept clear of debris. Construction materials shall be stored in an orderly manner. Storage areas and walkways on the site shall be maintained free of dangerous depressions, obstructions, and debris. Construction equipment shall be stored or placed in an orderly manner.
c. Material may not be stored within 10 feet of an edge, adjacent to any shafts or stairwells.
d. All material lay down areas must be coordinated and designated by Gilbane to promote mobility of staged material. Pipes, conduits, metal fabrications and steel framing are to be stored on rolling racks, bins or similar means. Bulk material will be palletized or put in bins to allow for easy mobility using a pallet jack or wheeled device.
e. All materials shall be placed in carts, racks or other wheeled devices to allow easy movement and prevent the accumulation of loose materials.
f. Good housekeeping on the project is mandatory and every employee must do their part daily to minimize dust and to clean up their work area to keep the project clean for safety and efficiency. Controls shall be observed which keep dirt from being tracked into areas outside the workspace. Immediate cleanup is required when dust, dirt, or debris may affect the owner's operations.
g. All debris generated during a day's work shall be loaded into containers on the same day as created to maintain good housekeeping conditions. No debris when generated by a task shall accumulate on any surface and instead be placed or directed into a suitable, contractor supplied container immediately. This includes waste shipping and packing materials.
h. Debris and other loose materials shall not be allowed to accumulate.
i. Containers shall be provided for the collection and separation of waste, trash, oily and used rags and other refuse. Metal (dumpster type) containers must be used and emptied promptly.
j. Contractor shall notify Gilbane of any hazardous waste it will generate during performance of the Work. Contractor has the direct responsibility of maintaining proper storage of these wastes while on site and will verify to Gilbane in writing that the wastes have been disposed of in a legal manner. A copy of the haulers manifest must be provided to Gilbane.
k. Contractor shall not pour, bury, burn, nor in any way dispose of a chemical on the work project site.
l. Contractor shall clear all combustible debris to a solid waste disposal project site properly licensed under the laws of the State having jurisdiction. No open burning of debris or rubbish will be permitted anywhere on the project site.
m. Materials and supplies shall be stored in locations which will not block access-ways, and arranged to permit easy cleaning of the area. In areas where equipment might drip oil or cause other damage to the floor surface, a protective cover of heavy gauge, flame resistant, oil proof sheeting shall be provided between the equipment and the floor surface so that no oil or grease contacts the concrete. This requirement is applicable to both finished and unfinished floors.
n. All hoses, cables, extension cords, and similar materials shall be located, arranged and grouped so that they will not block any access-way and will permit easy cleaning and maintenance.
o. All work where exposure to respirable crystalline silica dust is possible will be completed in accordance with the Environmental – Silica Section of this Safety Plan.
p. Failure to maintain adequate housekeeping and to perform daily clean-up will result in the following actions:
   1. Written Notice: Upon receipt, the contractor shall take immediate action to perform housekeeping and clean-up.
   2. If having been given sufficient notice, the contractor fails to clean-up; the work will be performed by others, and the errant contractor back-charged for all related costs.
q. Daily and final clean-up must be performed in accordance with contract documents.
r. **Hygiene Facilities**
   1. The locations of lunch areas and employee toilet facilities will be designated by Gilbane.
   2. Eating within the construction project will be confined to designated areas.
   3. Each contractor shall provide an adequate number of covered garbage containers. Employees shall properly dispose of all break/meal refuse and drink containers in covered trash receptacles.
   4. The site will be cleaned and garbage and refuse will be collected at least daily and removed from the building.

s. **Potable Water**
   1. Each contractor shall provide potable water for its employees.
   2. Sanitary facilities shall be provided for personal hygiene.

23. Recognition and Awards

a. Safety awareness and recognition campaigns during construction will include the posting of banners, posters and signs emphasizing safety awareness, the proper use of safety equipment and safe work practices. Individuals and crews will be recognized and rewarded for performing above and beyond project requirements.

24. Inspection and Auditing

a. **Purpose and Scope**
   1. To establish a basic inspection/audit program for the elimination of unsafe practices by employees and to establish a hazard free work environment for all employees on the project.
b. **Objectives**
   1. To reduce and eliminate incidents through planning and inspection.
c. **Procedures**
   1. Accident prevention will be achieved only when each Contractor fulfills their contractual and statutory responsibilities and applies all practical steps to maintain safe and healthful work practices and conditions.
d. **Project Controls**
   1. Continued monitoring/audit of the performance of the Contractor and their supervision under this section will be made by Gilbane. Contractors will be notified of any unsafe practices observed. Gilbane shall utilize Predictive Solutions.
e. **Supervisory Control**
   1. Contractor - Each Contractor will be responsible for conducting continuous daily inspections of their operations to eliminate hazards.
   2. Planning - Contractors must extensively plan the procedures to be followed for each operation using Hazard Analysis procedures and submit such plans to Gilbane. Personnel chosen to perform any such planned operation shall be thoroughly briefed in all aspects of the procedure, including emergency actions to be taken in the event of a mishap.
f. **Inspections - OSHA**
   1. It is Gilbane policy to allow OSHA to conduct an inspection of the project (subject to review by Gilbane Corporate Legal if necessary). If a contractor wishes to assert their rights under the U.S. Constitution regarding inspection by OSHA, then the contractor must so notify OSHA prior to the start of an inspection.
   2. Each Contractor is required to notify Gilbane in writing prior to starting work if they, by their Company policy, will require a warrant for OSHA to inspect their work. Gilbane does not require a warrant.
   3. Contractors shall forward copies of any and all inspection reports and/or citations received by the Contractor from OSHA to Gilbane.
   4. In the event an OSHA Compliance Officer visits the site, he/she will be directed to the Gilbane office. Gilbane will immediately notify the NEMT WAKEFIELD PROJECT Project Manager. Gilbane will accompany the OSHA inspection party at all times. The appropriate Contractors will then be notified so that an Opening Conference may be conducted. Gilbane will organize an inspection party, consisting of both employer and employee representatives.
g. **Third Party Inspections – Non-OSHA**
   1. In addition to visits and safety inspections by its own corporate or insurance representatives, Contractor is advised that the Project may be inspected from time to time by authorized third parties. Among others so authorized are representatives of the Owner and/or its agent, insurance companies, and OSHA (addressed above). Upon their proper identification and clearance through security, third party inspectors are entitled to access and courteous consideration. The Contractor shall notify Gilbane of inspectors and their purpose upon their arrival. Gilbane will accompany inspectors. Contractor shall notify Gilbane of results of inspections.
h. **Notification of Hazards**
   1. Each Contractor shall notify Gilbane verbally or in writing of the existence of any hazardous conditions, property, or equipment at the work site which are not under the Contractor's control. However, it is the Contractor's responsibility to take all necessary precautions against injury until corrected by the responsible party. Every worker on a Gilbane project has stop-work authority.

25. Interim Life Safety and Impairment Plans

a. Whenever construction affects the facility's ability to accommodate occupants (either because of disruption of services, interruption of normal operations, or when hazards are present), it will become necessary to implement interim life safety measures, as follows:
   1. Ensure that all exits are clear. This includes areas directly affected as well as all other exits.

2. Ensure that there is free access to emergency services, that vehicles, material, etc. are not blocking the access route. Fire lanes are to be kept free of all objects.
3. Disabling of fire protection systems. A small disaster could escalate if the fire protection system is not functional. Care should be given to provide an alternate system while the primary system is off-line (post fire watch). This includes scheduled maintenance, upgrade, repairs, or adding of coverage resulting in disabling system, and disabling system to allow maintenance or repairs to be completed on other systems (e.g. hot work).
4. Fire alarm, detection, and suppression systems must not be impaired. A temporary (but equivalent) system shall be used if the system is impaired. These temporary systems must be tested monthly.
5. Temporary construction partitions shall be smoke-tight and noncombustible. Adequate signage shall discourage casual observers from opening or entering the partitions.
6. Additional (double) fire-fighting equipment must be provided, as well as personnel trained in its use.
7. Smoking is prohibited in and adjacent to all construction areas. Strict enforcement must occur.
8. Construction site shall be kept clean and orderly. This includes material piles, debris, platforms, and break areas.
9. Hazard surveillance of sites shall be increased and documented. Attention is to be given to evacuation routes, construction areas, storage, office/lunch areas, and fuel storage.
10. Whenever the safety of adjacent areas is compromised because of construction, staff shall be informed. Alternate exit routes shall be identified.
11. Facility-wide education programs are conducted explaining interim life safety matters and current life safety deficiencies.
12. The construction site must be restricted from all but authorized staff. Adequate signage shall be provided.
13. Alternate access must be provided for public and emergency traffic whenever disruption occurs.
14. Policy and procedures must ensure that roads and pathways are clear of mud, debris, materials, etc.
15. Proper notification must be made to local authorities (fire, police, other) whenever life safety is diminished.
16. Governing body shall be kept apprised of status of life safety during project.
17. Construction workers must be made aware of egress routes. Egress routes must be inspected daily to ensure no obstacles impede passage.
18. Effective storage, housekeeping, and debris-removal policies and procedures must be in place to reduce collection of combustibles in construction areas.
19. Whenever fire zones are altered, the owner's staff will be informed regarding new or different life safety measures regarding their changed compartmentation and fire safety.

26. Ladders/Stairs

a. Stairs or stair-towers are required as the primary means to access floors, roofs and elevated landings. Manufactured stairs, job-built wood stairs, temporary stair towers or permanent stairs shall be provided for worker access and shall be installed as soon as practical. Stairs shall be equipped with required slip resistant treads, stair rails and guardrails at intermediate landings, as well as at the slope, width, and landings, in accordance with applicable OSHA regulations and Building codes.
b. Upon delivery to the project site, all office trailers and material storage trailers shall be provided with stairway access to all doorways and shall have landings with railings which allow for at least 20" of clearance in front of any door swing.
c. Prior to starting work, the Contractor will conduct a risk analysis and will determine if the use of ladders is needed. If the Contractor determines that it is not feasible to use aerial lifts (boom lifts), aerial work platforms (personnel lifts) or scaffolds, the job hazard analysis must specify the reason(s) why. The methods of accessing work must be included in the daily pre-task plan.
d. Manufactured Podium Type 1A and 1AA ladders are the only ladders approved for use as work platforms. They shall comply with the regulations of ANSI-A14.1-2017 (or most recent version), Safety Code for Portable Wood Ladders or ANSI-A14.2-2017 (or most recent version), as required by OSHA. The use of any other ladder for access or as a work platform requires permission from Gilbane. See Appendix for Ladder Permit.
e. When working on/from a ladder at elevations greater than six (6') feet or more above the work surface, all ladders must be tied, blocked, stabilized by a second worker or otherwise secured against accidental displacement. Where adequate anchorages are available, workers shall use a Personal Fall Arrest System.
f. Any ladder used must be inspected daily and before each use. All ladders must be used in the manner and for the purposes for which they were designed and constructed.
g. Metal ladders shall not be used.
h. If a ladder is temporarily used to access an upper platform, walk-through ladder extension with a self-closing ladder gate must be used.
i. The use of 'Horse Scaffolds', 'Saw-Horse Ladders', 'Trestle Ladders', 'Ladder Type Scaffolds' or similar equipment types are not permitted to be used on the project.

27. Lockout/Tagout (LOTO) Procedures

a. The contractor must adhere and strictly follow the Project LOTO requirements. All work which may impact NEMT WAKEFIELD PROJECT facilities and/or systems shall conform to the Owner's requirements and permit process.

b. A Lockout/Tagout (LOTO) meeting will be conducted prior to initiating activities that will require LOTO. At this meeting, the contractor shall provide to Gilbane Superintendent for review, the contractor's project specific LOTO program, including providing samples of the locks and tags to be used, a list of authorized employees that will be applying their locks and tags
c. Electrical work (e.g., tie-ins, panel maintenance) shall be conducted only on de-energized (locked out and tagged out) systems. All circuit disconnects must be placed in an electrically safe work condition, (i.e., zero energy state'), including being locked in the open position and or otherwise appropriately identified with affixed tags stating "DANGER - DO NOT ENERGIZE" or other equivalent wording, and tested, and grounded (if applicable) prior to working on the system or equipment.
d. For non-electric work including, but not limited to, pneumatic, hydraulic, kinetic or other energy, the contractor planning to work on the system must dissipate or restrain stored energy, (such as from springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam and water pressure) by methods such as blocking, bleeding, de-pressurizing, etc., prior to working on the system or equipment.
e. Employees are not permitted to work on any energized circuits unless de-energizing introduces additional or increased hazards (examples include interruption of life support equipment, deactivation of emergency alarm systems, shutdown of hazardous location ventilation equipment, of life support systems, OR de-energizing is not possible, due to equipment design or operational limitations (examples include start-up or trouble-shooting diagnostics and testing.
f. Notification for energized work must be made to the Gilbane Division Safety Director. The pre-task planning and justification for all work on Energized systems must be submitted for review and signature by Owner, Gilbane Division Safety Director and Electrical Supervisor on the Energized Electric Work Authorization Permit. Safety representatives from each contractor involved in energized electrical Work request must participate in this pre-task planning. Additionally, work practices must conform to all applicable owner, state and federal requirements including the NEC and the most recent version of NFPA 70E.
g. If energized electric work is anticipated, the contractor's qualified Supervisor shall identify to Gilbane - and have on site - the appropriate Personal Protective Equipment (according to the contractor's calculated incident energy from their flash hazard analysis) based on the designated Hazard Risk Category - and in accordance with arc flash warning labels on electrical equipment and NEC and NFPA 70E requirements.
h. Consideration must be given to the potential of auto-start generators or similar equipment.
i. **Disruption of Systems (Line Break)**
    1. Policy - Any entry into an operating Process System under installation, testing, or operating conditions is subject to the procedures for "line breaking". Utilize double block and bleed method.
    2. All employees are to be informed of the inherent dangers of working on operating process systems.
    3. Entries can be made only with approval of the Owner and Gilbane.
    4. Added hazard potential exists when cooling occurs, vacuums which may be holding liquids in pockets often break without warning and liquid is released to run to the lowest point. Plugs (particularly solidified process materials) can move and release materials after the first connection has been broken.
    5. The Owner and Gilbane must agree on the location of first breaks
    6. All systems must be considered as having the potential to discharge contained energy/material from open ends of lines or broken flanges at any time even after the line has been drained and vented. Lock-out tag-out procedures will be followed due to the potential release of energy.
    7. Cautions:
        i. No Contractor may enter an operating piping system or equipment until the requirements of this procedure are met. Systems activated for testing purposes fall under this procedure.
        ii. Under no circumstances will any line/system be violated other than via the lock and tag procedure.
j. **Lockout Devices.**
    1. Only individually keyed padlocks shall be used. Padlocks are to be painted per the craft color code for easier detection and craft identification. A lockout device of the standard scissor type that will allow the placing of more than one padlock is required, when more than one craft is working on a circuit or mechanical process. A piece of chain or cable may be necessary to complete a lockout on some valves or controls.
    2. Danger Tags: Danger tags are not danger signs and shall not be used where a sign is needed. Two standardized danger tags shall be used on this project:
        i. "DANGER – DO NOT USE." This tag must be attached to each padlock on a lockout.
        ii. "UNSAFE – DO NOT USE." This tag does not require an attachment to a padlock but may be used if needed. This tag shall be used to identify tools, equipment, vehicles, etc.

28. Masonry

a. In addition to the requirements contained in OSHA 29 CFR 1926.706, the following is required:
    1. All work where exposure to respirable crystalline silica dust is possible will be done in accordance with the Environmental – Silica Section of this Safety Plan.
    2. The masonry contractor(s) shall appoint a competent person to prepare a job hazard analysis with recognition of the updated OSHA regulation for respirable crystalline silica dust (29 CFR 1926.1153). The job hazard analysis will be reviewed by Gilbane prior to start of work.
    3. A safe means of access to the level being worked shall be maintained.
    4. There shall be protection provided to prevent tools and material from striking any person below the work/storage level. This includes tethering of tools, equipment with engineered tethers.
    5. A tag line shall be used to control all loads.

6. When loads are being hoisted, all personnel are to be prevented from walking under the load.
7. No one shall be permitted to ride a load under any circumstances.
8. A measuring device to accurately determine wind speed shall be provided by the masonry contractor with observations made available to Gilbane upon request.
9. Impalement hazards will be protected including anchor bolts.

b. **Masonry Wall Bracing**
   1. The masonry contractor shall provide to Gilbane a design, prepared by a Professional Engineer, meeting the requirements of OSHA 29 CFR 1926.706 (b) and the Standard Practice for Bracing Masonry Walls under Construction as developed by the Council for Masonry Wall Bracing.
   2. No one shall be permitted within the limited access zone of an unbraced or braced wall subjected to winds of more than 35 mph (20 mph if during the initial period of construction).
   3. A DANGER sign shall be placed on every unsupported masonry wall that is more than 6 feet in height, braced or unbraced, and 50 feet or less in length. The sign shall be placed at each end of the wall and at intervals of not more than 100 feet along each side of the wall. The sign shall contain the words *DANGER* and *THIS UNSUPPORTED WALL IS UNSTABLE IN WINDY CONDITIONS.*

c. **Fall Protection (See Fall Protection Section)**
   1. All employees engaged in masonry work, including overhand laying or any other activity that exposes them to a fall of 6 feet or greater shall be provided with and use 100% fall protection. This protection shall be either a personal fall arrest system consisting of a full-body harness, double, shock-absorbing lanyard, and anchorage or a safety net or a guardrail. “Controlled Access Zones” are not permitted.
   2. Fall protection requirements shall be rigorously enforced with any observed violation cause for removal from the project.

d. **Perimeter Protection**
   1. A guardrail system will be constructed in accordance with OSHA 29 CFR 1926.500. Or alternative fall protection consisting of safety nets or personal fall arrest equipment provided.

29. Motor Vehicles and Equipment

a. All equipment must have documented inspections before first use and daily use by Contractor's operator. Documented and complete inspections must also be made by Contractor at 30 day intervals with proper documentation maintained at the project site by Contractor and copies shall be made available to Gilbane upon request.
b. Defective equipment shall be removed from service immediately, red-tagged, then repaired.
c. All Contractors’ operators of construction equipment shall be properly licensed and certified by a competent person. Copies of the certifications shall be maintained on project site by Contractor and made available to Gilbane upon request.
d. Vehicles used to transport employees shall have seats firmly secured and adequate for the number of employees to be carried. All passengers shall be properly seated with seat-belt used. Standing/kneeling on the back of moving vehicles is prohibited.
e. Locations for storage of all fuels, lubricants, starting fluids, etc., shall be reviewed by Gilbane prior to use by Contractor for storage and shall conform to the requirements of the NFPA as well as the local Fire Marshal.
f. Where required, contractors shall provide equipment diapers to protect from environmental spills.
g. Contractors shall provide adequate spill kits to control spills of grease, oil, hydraulic fluid and any other fluids from equipment or from storing or transferring such fluids.
h. If internal combustion engines are used on motorized equipment in enclosed areas, the contractor is responsible for monitoring the quality of breathing air for harmful contaminants and adequate oxygen and is responsible for providing adequate ventilation.
i. Drivers of motor vehicles shall have a valid state driver’s license (CDL when applicable) and be instructed to exercise judgment as well as observe posted speed limits.
j. All contractors’ means of ingress and egress shall be adequately marked and kept clear of stored material, debris and equipment.
k. Pedestrians always have right-of-way over motorized traffic.
l. Horns shall be sounded at blind corners, when passing, and/or for warning.
m. Shall be equipped with a charged and inspected fire extinguisher.
n. The maximum speed limit on the project is ten (10) miles per hour.
o. All mobile equipment shall be equipped with an Engineered Roll Over Protection System (ROPS)
p. Established hand signals or turn signals are to be used.
q. Reckless driving or other non-observance of these instructions will be cause for withdrawal of driving privileges on the project.
r. Any ATVs (Gators) used on the project shall be four-wheeled. All ATVs shall be equipped with an Engineered Roll Over Protection System (ROPS), seatbelts, horn, back-up alarm, safety flag, orange roof mounted flashing beacon, and headlights/taillights.
s. If required, all vehicles permitted access to the site must display an appropriate vehicle identification badge from the rear-view mirror or other conspicuous location at all times while on the project.
t. Seat belts shall be worn by all employees operating motor vehicles and any equipment with rollover protection structures during performance of work.
u. Properly trained and equipped flag persons shall be used whenever construction traffic accesses or exits from public highways as well as when construction traffic and deliveries interfere with the planned flow of traffic on public highways.

v. Keep hands, tools and loose clothing away from machinery rotating parts.

30. Personal Protective Equipment (PPE) and Clothing

a. **Head Protection**

1. Approved safety helmets shall be worn at all times in construction areas. This includes when entering the building at the beginning of the shift and exiting the building at the end of shift. Safety helmets shall meet the following requirements:
2. **Helmets** are to either:
    a. Meet type I & type II requirements of ANSI/ISEA Z89.1-2014, American National Standard for Industrial Head Protection, and the Energy Absorption Capacity clauses (4.2.1.2, 4.2.1.3 & 4.2.1.4) & Retention System Clauses (4.2.3 & 4.2.4) of EN12492: 2012, Mountaineering Equipment – Helmets for Mountaineers.

    b. Or be Kask Zenith or Superplasma HD, or *equivalent, in compliance with ANSI Z89.1-2014/CSA Z94.1-2015 and certified to EN12492. (Helmets shall be worn in accordance with manufacturers recommendations); [Helmets must display company logo with individual's name on the front and back. Helmets must face forward and have a chin strap FASTENED. ***Equivalents are accepted by documented proof of meeting mentioned standards and by providing EU-type Examination Certificate Number for the proposed alternate.**

b. **Eye and Face Protection**

1. Appropriate eye protection meeting the requirements of ANSI Z87 (most recent version) with side shields are required to be worn in a manner to protect the eyes while in construction areas at all times.
2. Goggles, welding hoods and shields, or face shields will be required to be properly worn at all times when in the area of operations, such as when welding, burning, grinding, chipping, chemical handling, working with corrosive liquids or molten materials, drilling, sawing, driving nails, using power actuated tools, concrete pouring, tampers, and gasoline fueled hand operated equipment (i.e. chain saws). In addition, goggles, welding hoods/shields, or face shields shall be worn as specified by manufacturer recommendations of tools, equipment, and material SDS. This section will also apply to those employees of Contractors who are assisting any worker as an apprentice or helper.
3. Prescription glasses must meet the requirements of ANSI Z87 (most recent version), or be covered with ANSI Z87 compliant over-the-glass safety glasses or face shield or goggles.
4. Safety glasses with dark lenses are not allowed for work in low-light environments. Clear or yellow-tinted lenses must be provided for low-light environments.
5. When performing overhead work where there is the possibility of debris, i.e. fire proofing, falling between a workers' safety helmet and safety glasses, the glasses shall be equipped with foam gaskets or goggles shall be worn.

c. **Hand and Arm Protection**

1. Employers shall select, provide, and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes. Employers shall base the selection of the appropriate hand protection on an evaluation of the performance characteristics relative to the task(s) to be performed, tool/equipment/SDS recommendations, conditions present, duration of use, and the potential hazards identified. All gloves shall have a minimum ASTM/ISEA/ANSI Level 4 cut resistance and are required 100% of the time while on-site.
2. Knife use and protection. Contractors shall work to reduce their reliance on knife use. Knives shall be self-retracting, sheathed or otherwise secured from accidental contact.
3. Employers shall select, provide and require employees to use appropriate arm protection when employee's arms are exposed to severe cuts, lacerations, abrasions or punctures. All cut resistant sleeves shall have a minimum ASTM/ISEA/ANSI Level 4 cut resistance and are required during all demolition, cold-formed metal framing, MEP in-wall metal stud rough-in, above ceiling work and sheet metal activities unless the pre-task plan indicates these hazards are not present for a specific task.

d. **Clothing**

1. Long or short sleeve shirts shall be worn at all times. All shirts shall be hemmed at neck, sleeve and tail. "Muscle shirts" are prohibited.
2. Long pants are required. "Shorts" are prohibited.
3. Loose fitting clothes or dangling jewelry shall not be worn around moving machinery, grinding operations, welding, or other hazardous operations.
4. Hair which could come in contact with, or be caught in machinery, shall be protected by an appropriate means.
5. Helmets are to be worn at all times in construction areas. Helmets are to comply with ANSI Z89.1-2014/ CSA Z94.1-2015 and certified to EN12492. Helmets shall be worn in accordance with the manufacturers' recommendations, display company logo with individual's name, must face forward, and have a fastened chin strap.

6. ANSI Class II vest or ANSI Class II compliant apparel is required to be worn at all times within construction areas.
7. Safety-toe footwear meeting ASTM F2413-11 (Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear) must be worn at all times while in construction areas. Sandals, tennis shoes or any other street type shoes are not permitted.
8. Wearable devices may be deployed and required as a part of each worker's Personal Protective Equipment on this project.

31. Powder-Actuated Tools

a. Powder-actuated tools shall use lead-free powder loads. Safety data sheets shall be submitted to Gilbane for verification.
b. Requests for variances to the lead-free requirement must be submitted in writing to Gilbane and include a copy of all lead dust provisions and controls that will be implemented in accordance with 29 CFR 1926.62 including but not limited to negative exposure assessments, respiratory protection, dust controls, housekeeping and training.

32. Precast/Prestressed Concrete

a. The use of precast / prestressed concrete is not expected on the NEMT WAKEFIELD PROJECT at this time. In the event that precast / prestressed concrete is utilized on the project the following shall apply:
b. **Fall Protection** for all employees engaged in work with a fall exposure of 6 feet or greater above a lower level shall be either a guardrail system, a safety net system or personal fall arrest system. The use of "Safety Monitoring" and "Warning Line System" and "Controlled Access Zones" are not permitted. Refer to Section on Fall Protection in this document for additional requirements.
c. **A Pre-Construction Meeting** between Gilbane, the Fabricator and the Erector must be held to discuss the following topics:
    1. Sequence of erection.
    2. Schedule of delivery by load list.
    3. Anchor bolt certification.
    4. Review of the structural plans and details.
    5. The written erection plan described below
d. **The Erector is to provide Gilbane the following:**
    1. Written erection plan prepared by a Company Officer or Professional Engineer indicating complete details of all phases of erection that shall include at least the following:
        i. Crane capacities, Crane lift plans with load calculation based on the crane(s) to be used and various setup locations.
        ii. Written stabilization plans for all phases including the use of temporary guying and bracing for columns and wall panels.
        iii. Written documentation of temporary bracing and connection details for use until permanent connections are completed including capabilities of workers doing the installation, types of welds or adequacy of bolted connections.
        iv. Listing of competent persons for fall protection, crane operation and erection along with phone numbers for emergency contact.
        v. Fall protection plan in accordance with the Project Safety Plan including Leading Edge protection both during installation and after. Sequencing breaks and end of workday protective measures will also be detailed. Interior floor hole protection must be provided per OSHA Subpart M greater than 2 inches in the least dimension.
        vi. Custody of Guardrail cables following completion of precast erection. Erector to present a plan detailing how the cables will be safely removed utilizing Personal Fall Arrest Systems; or safety nets.
        vii. All work where exposure to crystalline silica dust is possible will be done in accordance with the Environmental – Silica Section of this Safety Plan.
        viii. Hazard Analysis and pre-task plan of all operations, presented to all workers prior to each shift on hazards specific to the day's operation.
        ix. Proof of training for all erection crewmembers.
        x. Delivery locations for trailers including adequate ground preparation and plan for unloading.
        xi. Wind loading considerations including when operations will be suspended due to high winds.
    2. Any proposed field modifications to the approved Erection Plan shall be approved by the Contractor's Company Officer or the Professional Engineer of Record, added to the plan, which shall be available at the jobsite. A copy must be submitted to Gilbane.
e. **Lifting and Handling Requirements**
    1. Lifting inserts, which are embedded or otherwise attached to precast concrete members, shall be capable of supporting at least four times the maximum intended load applied or transmitted to them, and shall be used in accordance with the manufacturer's recommendations.
    2. Lifting hardware shall be capable of supporting at least five times the maximum intended load applied or transmitted to the lifting hardware.

3. Adjustment of precast members, after initial placement, which requires the lifting of the members in any manner, shall not be made unless wire rope safety tie backs are used, or the members are attached to the crane load line.

34. Pressure Testing Safety Requirements

a. Pressure testing involves hazards, such as the release of hazardous energy, being struck by loose fittings or burst pipe. In addition, if an inert gas, such as nitrogen is used, it can displace oxygen and can create an oxygen-deficient atmosphere, which can be harmful or fatal. If flammable gas is used, it can cause an explosion if there is an ignition source.
b. The following procedure shall set forth the minimum requirements to ensure that pressure testing is performed safely. Contractors shall also develop a site/task specific Job Hazard Analysis (JHA), as well as their own procedures for safely pressure testing pipe, and review with Gilbane prior to starting this activity.
    1. Contractor performing pressure testing shall barricade area off and place signage restricting access to only authorized personnel.
    2. Authorized personnel shall wear appropriate PPE consistent with the contractors JHA and pre-task plan.
    3. All mechanical devices, such as valves and blinds used to isolate the system shall have a lock and tag affixed by the contractor to prevent accident pressure release.
    4. Contractor and authorized personnel shall walk down the system and check the integrity of all connections, caps, seals and fittings within the system to be tested to ensure they are secure.
    5. Contractor shall install additional supports on piping necessary for increased pressure or weight of testing medium.
    6. Test equipment and gauges shall be inspected by the contractor and confirmed to be in proper working order before testing is begun.
    7. Maximum test pressure and duration of the test shall be communicated to the contractor's authorized testing personnel and Gilbane.
    8. Contractor to develop a venting procedure for dissipating gases safely. Monitors will be used to confirm adequacy of the ventilation scheme.
    9. Contractor shall develop a Drain procedure to drain water or other fluids safely, without polluting drains or creating slippery conditions.
    10. Contractor shall review the JHA and pre-task plan with all authorized personnel prior to the test.
    11. Testing shall be performed under the supervision of the contractor supervisor.
    12. Testing shall be conducted in accordance with pipe and testing equipment manufacturer's precautions and specifications.
    13. Test pressure shall not exceed the maximum allowable test pressure for any vessel, pumps, valves, or other components in the system.
    14. All repairs or adjustments to the system being tested shall be done only after the system pressure is safely and completely relieved and the test gauges indicate 0 psig pressure.
    15. Only mechanical devices, such as gate or ball valves shall be used for incremental release of flow in depressurizing systems. The opening or 'breaking' of flanges shall never be used as a means of depressurizing a tested system.
    16. Upon acceptance of the pressure test, pressure in the system shall be completely relieved so that the test gauges indicate 0 psig, and verified by contractor's supervisor.
    17. Contractor shall conduct all testing in accordance with applicable laws, codes, and ASME B31, B16 and related standards.

34. Project - Code of Safe practices

Each individual working on this project will be required to attend a safety orientation meeting at the start of their assignment. At the conclusion of the meeting, each will be required to sign a Code of Safe Practices as follows, indicating their agreement to follow that Code while on the Project. This does not relieve the Contractor of any responsibility to properly orient and train their employees for the specifics of their work.

Code of Safe Practices

NEMT WAKEFIELD PROJECT Project

Employee Name (Print): _____

I agree to abide by the following Code of Safe Practices while on this project.

1. To assist the project in being incident and injury free, I have granted permission to the Construction Manager to discuss all aspects of working safely with me. Likewise, I have the right to discuss safety issues with the Construction Manager, other Contractors (regardless of trade jurisdiction or craft) and to stop work at any time I feel there is an unsafe condition to me or others.
2. I understand there are above-OSHA requirements in the Project Safety Plan and the Gilbane Interim Guidance-Coronavirus Disease 2019 (COVID 19) ("Guidelines") and I will abide by those requirements.
3. I will work in a safe manner, protecting myself and others, and will report observed hazards to my supervisor. If not addressed, I will further report these hazards to Gilbane.
4. I will dress appropriately for the project, wearing a long or short-sleeved shirt, long pants, ANSI Class II reflective clothing and/or vest and safety toe (a.k.a. steel toe) footwear with substantial soles.
5. I will use personal protective equipment as required at all times.
6. I will maintain Social Distancing requirements as required by law and identified in the Guidelines.
7. I will not enter the Project if I have a fever as defined by the CDC or if I am experiencing COVID 19 symptoms as described by the CDC or been in close contact with someone diagnosed with COVID 19.
8. If I experience a fever or COVID 19 symptoms while on site, I will immediately inform the Construction Manager and leave the Project. I will also quarantine myself as required by the CDC and notify the MA Public Health officials.
9. I agree to follow the COVID 19 protocols established by NEMT WAKEFIELD PROJECT.
10. I will abide by the six-foot fall protection rules, including use of harnesses where required.
11. I will park only in designated areas and observe a ten-mile per hour speed limit on site.
12. I will only use tobacco products in designated areas.
13. I will eat only in designated areas and dispose of trash in proper containers.
14. I will not use any intoxicants or other controlled substances on the project.
15. I will report all injuries and accidents involving persons or property.
16. I will not bring any weapons - including firearms on site. I will not use tools as weapons.
17. I will conduct myself in a professional manner and not engage in any workplace violence, horseplay, practical jokes, or other behavior obnoxious to the general public. I will not harass anyone else on site or any member of the public, including harassment on the basis of age, citizenship status, ancestry, color, religious creed, denial of family and medical care leave, disability including HIV and AIDS, marital status, including registered domestic partners, medical condition, pregnancy, childbirth and other pregnancy-related conditions, genetic information, military and veteran status, including protected veteran status, national origin, race, sex, gender, gender identity, gender expression, transgender status, sexual orientation and/or any other categories or status that are protected by applicable federal, state or local law. I understand this harassment policy covers any verbal, physical or written forms of harassment. Any graffiti or physical action that exhibits harassment will be reported to the authorities for legal action.
18. I will not use any headset-type radios, music players, or other personal entertainment devices on site.
19. I will not use my cell phone in work areas, around heavy equipment or while engaged in work activities. If I must use a cell phone I will do so in safe areas.
20. I will comply with the security procedures established throughout the project for entrance to the site.

CONTRACTOR EMPLOYEE ACKNOWLEDGEMENT

I have received and understand Gilbane's site requirements related to safety, COVID-19 and other infectious diseases. I agree to abide by these requirements and any violation of these rules will be grounds for immediate dismissal from this project and could result in my being banned from other Gilbane projects.

Employee Name (Print) _____

Employee Signature _____

35. Protection of the Public

a. **Access to the Site**
   1. No work shall be performed in any area occupied by the public and / or personnel unless specifically reviewed and permitted by Gilbane and **NEMT WAKEFIELD PROJECT.** In that the project interfaces with the public and/or NEMT WAKEFIELD PROJECT personnel, precautions to be taken include, but are not limited to:
      i. Each Contractor shall take such necessary action as is needed to protect and maintain safe public use of sidewalks, entrances to buildings, lobbies, corridors, aisles, doors, exits and vehicular roadways. The Contractor shall protect the public with appropriate sidewalk sheds, canopies, catch platforms, fences, guardrails, barricades, shields, and adequate visibility as required by laws and regulations of governing authorities. Such protection shall guard against flying materials, falling or moving materials and equipment, hot or poisonous materials, flammable or toxic liquids and gases, open flames, energized electric circuits or other harmful exposures. Guardrails shall be made of rigid materials complying with the requirements for standard guardrails as defined by OSHA and the Project Safety Plan. Temporary sidewalks, ramps or stairs shall be provided with guardrails on both sides whenever permanent sidewalks, ramps or stairs are obstructed by the work. Barricades,

secured against accidental displacement, meeting the requirements of local authorities, may be authorized by Gilbane where fences, sheds, walkways and/or guardrails are impractical. During the period when any barricade, fence, shed, walkway, or guardrail is removed for the purpose of work, a watchman shall be placed at all openings.

ii. Appropriate warnings, signs and instructional safety signs shall be conspicuously posted where necessary. In addition, a signalman shall control the moving of motorized equipment in areas where the public might be endangered. Warning lights, including lantern and electric lights, meeting the requirements of governing authorities shall be provided and maintained from dusk to sunrise along guardrails, barricades, temporary sidewalks and at every obstruction to the public. These warning signs and lights shall be placed at both ends of such protection or obstruction and not over 20 feet apart alongside of such protection or obstructions.

iii. With respect to operations being performed on public roadways, all DOT and/or municipality requirements towards public safety will be strictly observed.

iv. Access to the site is limited to the entrance(s) designated for construction traffic as indicated on the site logistics plans issued with the construction documents. At no time are Contractor personnel or vehicles to obstruct traffic on public streets or Owner entry driveways. All material deliveries shall be scheduled in advance with the Gilbane Superintendent and shall be completed within the time segment allocated for the specific delivery.

v. A temporary six-foot high fence (preferably post-driven), in compliance with contract specifications and regulations of governing authorities, shall be provided and maintained around the perimeter of operations on the project site to control access to the work by employees, to protect the public, and to restrict access by unauthorized individuals. The rules and regulations of the governing authority shall apply when the owner of the property specifically prohibits such protective devices.

b. **Authorized Visitors**

1. All visitors to the site are required to register with Gilbane upon arrival. Each Contractor will be expected to regulate their visitors accordingly. All visitors must sign a hold harmless agreement before touring the jobsite. Visitor passes expire upon departure from the site and are to be surrendered to Gilbane. See Appendix.

c. **Parking**

1. Parking shall be in designated areas only. All vehicles delivering materials to the Project shall be authorized to do so by Gilbane. Unauthorized vehicles may be removed at the direction of Gilbane and all towing charges will be the responsibility of the vehicle owner.
2. **Fire hydrants and all designated fire lanes shall remain clear at all times for the use of emergency vehicles.**

d. **Employee Identification**

1. All project site employees will be issued safety helmet sticker upon completion of their initial safety orientation and after having passed their alcohol and drug test. All persons without a safety helmet identification sticker shall report to the Gilbane office for verification of employment status, attendance at an orientation session, or issuance of a single day visitor pass.
2. The NEMT WAKEFIELD PROJECT may utilize a badging system in addition, or in lieu of safety helmet stickers. This identification badge will remain the property of Gilbane and the Owner. The identification badge shall be maintained in good condition and on the person to whom it is issued. The identification badge shall be returned to Gilbane or the Owner when employment on the Project is terminated or when requested by Gilbane, or other authorized and designated person. All lost or stolen identification cards shall be immediately reported to Gilbane or the Owner.

e. **Tours**

1. It is of the utmost importance that a high degree of protection be afforded all persons touring the project site. The following guidelines shall be complied with by personnel who are responsible for the organization, direction and safe conduct of the tours:
   i. All group tours will be cleared through the Owner's representative and Gilbane.
   ii. All tours will be coordinated by Gilbane to accommodate the Project schedule, to make necessary preparations, and to assure safety precautions are observed.
   iii. Gilbane will review the following items with the person requesting the tour:
      - **Number of visitors -** Individual tour groups in non-hazardous areas should be limited to no more than five persons per tour guide (i.e. a tour group of 10 will require at least two tour guides).
      - **Clothing -** Tour groups will be required to wear appropriate clothing (i.e. slacks") and safety toe footwear (aka. steel toe).
      - **Children -** Children will not be permitted to accompany tours. Only those 18 years of age and older are permitted to work/visit/tour on the project.
      - **Protective equipment –** Safety toed footwear, helmets with chin straps fastened, safety glasses, reflective vest and gloves will be worn at all times while visitors are on site. Raincoats, and other necessary protection will be supplied as required.
      - **Release and Hold Harmless Agreement -** Each visitor will be required to sign this form prior to the start of the tour. See Appendix.
2. Immediately prior to entering the project site, all visitors shall be briefed about the need for careful and orderly conduct, including mention of any special hazards which may be encountered.

3. Technical and official visitor tours will be conducted in accordance with the above safety precautions. Since technical tours are often conducted through areas of more hazardous work, it is recommended that the number of people on such tours be proportionate to the degree of hazard involved.

36. Safety Coordination

a. A project pre-construction and/or kick-off meeting will be held with the superintendent(s), safety coordinator and Foremen of each new Contractor prior to coming on the site.
b. Gilbane will issue the project start package information and special instructions to the Contractors in support of the Safety Plan when needed.
c. Gilbane will conduct regularly scheduled meetings with the Supervisors of new Contractors coming on the site and explain safety goals, contents of this manual and otherwise provide site orientation, safety activities and information. All Supervisors will be required to attend this orientation after coming on the site.
d. Contractor meetings will be held as necessary and as directed by Gilbane. All Contractors working on the Project will have a representative at the safety meeting to maintain all safety requirements for their trade.
e. Gilbane will conduct safety meetings on a regularly scheduled basis. Minutes of the meeting will be a topic of all scheduling and progress meetings.
f. All Contractors are required to hold weekly 10-15 minute "Toolbox" safety meetings for all employees. Topics related to work assigned, and current safety problems will be discussed. Gilbane may monitor these "Toolbox" meetings through personal attendance or by reviewing a copy of the meeting report.
g. Prior to starting any major operation, which would involve locking/tagging procedures, a meeting must be set up involving Gilbane, and every Contractor Superintendent and every Contractor Safety representative affected by the work.
h. Pre-construction meetings.
    1. The Contractor, before starting work at the project site, shall attend a pre-construction “award” meeting with Gilbane to understand the project conditions and safety requirements.
    2. A project site tour shall be made to confirm the Contractor's awareness of potential safety hazards.
    3. The Contractor shall provide appropriate methods, equipment, devices and material.
    4. The Contractor shall provide or develop their own project specific safety plan and submit it to Gilbane for review prior to starting work at the project site.
    5. Such review shall not relieve the Contractor of responsibility for safety, nor shall such reviews be construed as limiting in any manner.
i. It is the Contractor's obligation to undertake any action, which may be required to establish and maintain safe working conditions at the project site.

37. Scaffolds/Lifts

a. The Contractor’s designated Competent Person shall inspect all scaffolds prior to each work shift with written documentation provided to Gilbane on a daily basis. All scaffolds shall bear a tag, signed and dated by the contractor’s competent person, denoting that the scaffold has been inspected and is safe to use prior to any employee utilizing that scaffold that day.
    1. Any contractor using scaffolding shall provide to Gilbane the name of their competent person along with the content of the competent person’s training experience and proof of Scaffold User Training for all employees who may work on scaffolding.
b. All employees erecting, using and dismantling scaffolds shall be trained in the hazards present and the safe procedures to be followed to eliminate exposure to those hazards and shall utilize fall protection when six (6) feet or more above the next lower level. Daily, documented inspections will be performed by a designated competent person.
c. Scaffold cross-bracing is not permitted to be used as a substitute for guardrails. Swing gates will be provided at all ladder or stair access points. Where material is being landed on a scaffold, the outrigger extension will not be used to support the material unless it is deemed adequate by the manufacturer and a factor of safety of 4 is provided.
d. All non-mobile scaffold frames shall have base plates installed and sill boards.
e. Dressed Nominal grade lumber is not allowed as scaffold planking.
f. All mobile scaffolds will have wheels locked when in use and stationery.
g. Scaffolds with a width less than 60 inches must have guardrails (top, mid and toe) installed when the work platform is in excess of 48 inches above the floor or lower work area. Outriggers are required when the working surface is 5 feet above the floor.
h. All individuals shall wear a Personal Fall Restraint System attached to the manufacturer’s approved anchorage point when working out of aerial lifts and scissors lifts. Standing on guardrails is not allowed.
i. Aerial Work Platforms and Elevated Work Platforms shall be fitted with appropriate primary or secondary guarding devices in an effort to eliminate operator crushing incidents. A primary guarding device is a physical structure that prevents the operator from being crushed. A secondary guarding device is an alarm and or sensor bar that alerts ground personnel when an operator is in a potential crush hazard. Operators must use engineered lift systems if the equipment will be used for hoisting work equipment (glass, dens glass, etc. must have engineered attachments).
j. A mast-climbing elevating work platform that may be adjustable by manual or powered means must meet the requirements of ANSI Standard ANIS/SIA A92.2 (most recent version) Standard for Mast-Climbing Work Platforms and be accessible by a stair system. All attachment points to be torqued per manufacturer requirements. Documentation shall be provided to Gilbane.

k. Stair Scaffolds:
    1. 'System' scaffold stairs shall be erected as early as possible during the building construction to facilitate safe access to all working levels once the steel erector has released the floor/level to Gilbane. Scaffold stairs shall remain in place until the permanent stairs are constructed and made available for use by Gilbane.
    2. Stair scaffolds shall be constructed in accordance with the manufacturer's instructions by trained and qualified workers under the direction of a competent person.
    3. Stair scaffolds shall be inspected daily by a competent person – reviewed by Gilbane – at the beginning of each shift. The competent person shall date and initial a scaffold tag and place the tag at the entrance to the stair scaffold.
    4. Stair scaffolds used during winter months shall be enclosed to prevent ice and snow from creating slippery conditions.
    5. Temporary lighting accordance with OSHA requirements shall be installed on all enclosed stair scaffolds.
l. Ladder Jack scaffolds are not permitted on Gilbane projects.

38. Signs, Signals, Barricades and Lights (Motor Vehicle Exposure)

a. Signs, signals and barricades shall be visible at all times where a hazard exists and will be in compliance with ANSI D6.1 (most recent version), Uniform Manual of Traffic Control or regulations promulgated by the local authority.

39. Steel Erection

a. Erection Plan
    1. An erection plan will be prepared by the Steel Erector's Qualified Person, stamped by a registered Professional Engineer and reviewed with Gilbane prior to start of work.
    2. The erection contractor's qualified person shall approve all changes in the safety erection plan.
    3. A copy of the erection plan shall be maintained at the project site showing all approved changes with a copy provided to Gilbane.
    4. The implementation of the erection plan shall be under the supervision of a competent person.
b. A safe means of access to the level being worked shall be maintained. Climbing and sliding on columns or diagonals, is not allowed.
c. Containers, such as buckets or bags, shall be provided for storing or carrying bolts or rivets and shall be tethered. When bolts, drift pins, or rivet heads are being removed, a means shall be provided to prevent accidental displacement. Tools shall be secured/tethered in such a manner to prevent their falling.
d. Fall protection provisions, such as lifeline attachments, dynamic fall restraints and other such devices shall be considered during shop drawing preparation, shall be incorporated in fabricated pieces, and shall have safety lines or devices attached prior to erection wherever possible.
e. A tag line shall be used to control all loads.
f. For the protection of other crafts on the project, signs shall be posted in the erection area by the erection contractor reading, "*Danger Workers Overhead*" and only ironworkers allowed in this area. This will include shake-out areas, erection areas and the load travel path from the storage area to the erection area.
g. When loads are being hoisted, all personnel are to be prevented from walking or working under the load.
h. No one shall be permitted to ride a load under any circumstances.
i. Crane personnel platforms will not be used for any purpose without the written approval of the Gilbane Division Safety Director.
j. Material shall not be hoisted to a structure unless it is ready to be put into place and secured.
k. Bundles of metal decking or small material shall be so secured as to prevent their falling out from the rigging.
l. Multiple lifts (e.g. "Christmas-treeing," "Suit casing") of any type are not allowed unless approved by the Gilbane Division Safety Director.

40. Stretch and Flex

a. All contractors at this project are required to design and implement a Stretch and Flex Program for their employees. The purpose of the program is to gently condition the muscles and tendons of the workers before they engage in their duties in order to avoid injury.
b. A Stretch and Flex Program shall be developed by each Contractor and submitted to Gilbane prior to commencing activities on site.
c. Stretch and Flex activities shall be performed everyday work activities are scheduled and they shall be performed before the work activities begin. Everyone is required to participate.
d. Recommendations.
    1. Consult with a licensed Physician/Physical Trainer/Stretching Instructor/Yoga Instructor for the most suitable stretches for your work crew.
    2. Check with your Company's insurance carrier. They may provide services, suggestions and guidance for your company's program.

3. May be performed as a group while discussing pre-task plans by discussing the day's work activities and associated risks.

41. Substance Abuse Policy - Minimum

a. **Purpose**
   1. The Owner and Gilbane have a commitment to protect people and property and to provide a safe working environment. The purpose of this policy is to provide a drug-free and alcohol-free work environment for each worker.

b. **Policy**
   1. The Owner and Gilbane prohibit the use, possession, distribution or sale on the project premises, facilities or work places of any of the following: alcoholic beverages, intoxicants, drugs and related drug paraphernalia.
   2. Workers must not report for duty or perform work while under the influence of any drug, alcoholic beverage or intoxicant. Workers on the project premises will be subject to search as provided herein. Applicants and workers will be required to consent to drug testing as provided herein.
   3. This policy will apply where state law or regulation and/ or collective bargaining agreements allow.

c. **Definitions** - When used herein, the following terms will have the meanings given below:
   1. Company - Gilbane Building Company.
   2. Alcohol - Ethyl (Ethanol). References to use or possession of fermented or distilled liquor included in any beverage, mixture, or preparation which may cause intoxication.
   3. Illegal Drug and/or Controlled Substance - Any drug or drug-like substance, whose sale, use or possession is unlawful (as defined by section 802 (6) of Title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that Title) or any drug whose use is legal, but which has not been legally obtained. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.
   4. Medication - Drugs prescribed for the named individual's personal treatment by a licensed physician and over the counter drugs which have been legally obtained and are being used for the purpose for which they were prescribed or manufactured.
   5. Employer - Any individual or firm that provides workers to perform work on the project premises and is responsible for their hiring, advancement, payment, discipline, and termination, including the Owner, the Architect, Gilbane, all contractors, all sub-tier contractors, all vendors, all suppliers, all material dealers, any Other Contractors, and any others coming on the project premises.
   6. Applicant - Any individual who is referred or makes application for employment on the project premises.
   7. Project Premises - All parts of any office, work site, or other work location, including parking lots under the control of the owner and/or Gilbane.
   8. Testing Facilities - A laboratory where a specimen can be tested for drugs and alcohol within threshold limits according to standards established by the U. S. Department of Transportation and is certified by the U. S. Department of Health and Human Services (HHS) under the National Laboratory Certification Program (NLCP) or in the case of a foreign laboratory is approved for participation by the U.S. department of Transportation with respect to Part 40.
   9. Accident - Any event resulting in injury to a person or property to which the Company believes a worker contributed as a direct or indirect cause.
   10. Near Miss - Any event, which the Company determines, has all the attributes of an accident, except that no harm was caused to personnel or property.
   11. Worker(s) – Any individual, salaried or hourly, of any employer who will be performing work on the project premises.
   12. Pre-Employment Testing - Drug testing of all individuals who are tentatively selected for employment, where not prohibited by law.
   13. Random Testing - Drug testing imposed without individualized suspicion that a particular employee is using illegal drugs, where not prohibited by law; such testing to be administered to a statistically random sampling of employees based on neutral criteria.
   14. Reasonable Suspicion Testing - Drug testing based upon a belief that an individual uses illegal drugs. The belief is drawn from specific observations, facts and reasonable inferences from these facts, where not prohibited by law.
   15. Post-Accident Testing - Drug and/or blood alcohol and/or breathalyzer testing performed as a result of an occupational accident and/or injury and/or near miss.

d. **Drug and Alcohol Detection Thresholds**
   1. All confirmatory drug testing shall be done in NLCP-certified facility.
   2. Drug and Alcohol Detection Thresholds will be in accordance with U.S. D.O.T.
   3. Alcohol maximum content shall not exceed 0.02g/100ml blood or equivalent.

e. **Prescription Drugs**
   1. Any worker using a prescription drug, which may impair mental or motor function, shall, as soon as possible, notify their employer who is to notify the Company and/or their Employer. For the safety of all workers, the Company may direct the Employer to not permit the worker on the project premises until released as fit for duty by the prescribing physician. The Company reserves the right to obtain a confirming medical opinion before allowing the worker to return to duty.

f. **Worker Testing**

1. Pre-Employment Testing (per applicable State Laws and Project Labor Agreements (PLAs)). All workers, salaried or hourly, who are hired, transferred or temporarily assigned to the project premises shall be required to consent to on-site drug testing in accordance with applicable State laws prior to assuming project responsibilities.
2. Post-Accident or Post-Near Miss drug and alcohol testing (per applicable State Laws and PLAs). After an accident or near miss incident, the Company will ask the Employer to test all those involved. An Employer's supervisor is to accompany injured employee, or those employees involved in the accident or the incident involving an Employer's worker to the clinic or medical facility. If the injured worker refuses to give a specimen of body fluid, the Employer's supervisor is to notify the Company. The worker is to be advised, again, that the refusal to submit to drug screening is a violation of the Project Safety Plan and that refusal will result in removal from the site. Employers must certify negative test results to the Company; otherwise, worker(s) shall not be permitted to return to the project premises.
3. Reasonable Suspicion Testing (per applicable State laws and PLAs). The Company will ask the Employer to test workers when a reasonable suspicion exists that the worker has been using drugs or alcohol. The belief must be drawn from specific observations, facts and reasonable inferences from these facts. Employers must certify negative test results to the Company; otherwise, worker shall not be permitted to return to the project premises.
4. Random Testing (per applicable State Laws and PLA's). The Company may conduct random testing without individualized suspicion that a particular individual is using illegal drugs at unannounced intervals during the course of the project. A minimum of 12% of active employees on site will be selected, at random, for drug screening, or as required per Regional Substance Abuse Program Consortium or PLA's. Employers shall advise their employee immediately prior to selection for Random testing and shall ensure workers submit to drug screening as soon as possible, and no longer than 1 hour from being notified. Employers must certify negative test results to the Company; otherwise, worker shall not be permitted to return to the project premises.

g. **Discipline and Rehabilitation**
   1. Unless a Project Specific Substance Abuse Policy by the Company or Owner is in effect, each Employer shall certify that they have a Drug Enforcement Policy which incorporates as a minimum the following requirements:
      i. When an applicant submits to pre-assignment testing and passes the required test, he or she will be eligible for further employment consideration.
      ii. If the applicant fails the required test, s/he may reapply for employment consideration after a period of no less than sixty (60) calendar days have elapsed. The Company may waive this sixty-day waiting period if the applicant completes an acceptable drug/alcohol rehabilitation program and presents acceptable proof of completion of the program to the Company Project management personnel. An applicant who fails the second test will not be considered for employment at the project premises for a period of no less than one year.
      iii. All workers who refuse to submit to a drug and alcohol test, or who fail to pass a drug and alcohol test will be removed from the project premises by the Employer and will be referred to their Employer's personnel management for Employee Assistance Programs and/or for disciplinary action.
      iv. A worker on the project premises, facility, or workplace in possession of Illegal Drugs and/or controlled substances is subject to disciplinary action, up to and including barring from the site by the Company and immediate termination by the Employer. Authorities will be notified of such an occurrence.

h. **Financial Obligation of the Employer**
   1. The Employer will bear the cost of time, transportation, and testing for workers who are being given drug and alcohol tests.

i. **Confidentiality**
   1. The Company will take steps to maintain the confidentiality of information generated by the implementation and enforcement of this policy and these procedures. Disclosure will be made only in appropriate circumstances. The Employer shall be responsible for maintaining the confidentiality of all information generated by the implementation and enforcement of this policy and these procedures for their own workers. The Company shall have the right to audit compliance with this policy and these procedures by the Employer, which shall include access to this confidential information.

j. **Training**
   1. Supervisors and management personnel will be trained to recognize appropriate symptoms and to administer the policy in a consistent, confidential and intelligent manner.

k. **Contractors and Suppliers**
   1. The Company and all Employers will include the provisions of this policy and these procedures, or another acceptable program, in their contracts with contractors, suppliers, consultants, agents, and others involved in providing goods or services on the project premises, and will require that they do the same with respect to their lower-tier contractors, suppliers, etc.

l. **Posting and Distribution**
   1. Significant sections of this policy and these procedures will be given to each applicant and worker upon request.
   2. This Minimum Drug Enforcement Policy will be included in each pre-bid and pre-construction meeting as well as an integral part of the project Safety plan and contract documents.
   3. The Company may revise and amend this policy and these procedures as required.

m. **Procedures for Examination Post-Accident Screening when required by Gilbane.**
   1. An Employer supervisor is to accompany injured employee, or those employees involved in the accident or incident involving an Employer's worker to the clinic or medical facility. Employers shall certify any worker(s)

involved in an accident or incident tested negative for drugs and alcohol prior to allowing them to return to the project premises.
2. If the injured worker refuses to give a specimen of body fluid, the Employer's supervisor is to notify the Company. The worker is to be advised, again, that the refusal to submit to drug screening is a violation of the Project Safety Plan and that refusal will result in removal from the site.
3. Workers must report all injuries immediately to their supervisor, whether the injury requires medical treatment or first aid only. Late reporting may result in denial of a claim.

42. Temporary Heat

a. If temporary heating is required on the NEMT WAKEFIELD PROJECT Project, it shall conform to the project NFPA 241 Plan.
b. No Kerosene, oil fueled, solid fuel burning, or convection heaters (a.k.a. 'Pot' heaters) are permitted.
c. Only gas fired (propane vapor or natural gas), hydronic, steam, electric or infrared heaters are permitted, based on the application.
d. Gas heaters must conform to the specifications:
    1. Direct Fired heaters shall conform to ANSI Z83.7 or Z83.4
    2. Indirect Fired heaters shall conform to ANSI Z83.8
    3. Infrared heaters shall conform to ANSI Z83.6
    4. All flexible connectors must be UL approved and conform to specifications UL-83.
    5. All heaters shall be AGA certified.
e. All heaters shall conform to (or exceed) applicable OSHA, ANSI, UL, NFPA, NEC, and related standards for design, construction, installation, clearance and use, as well as to all local codes.
f. All heaters shall be installed according to the manufacturer installation requirements, applicable Codes and Standards and to the local fire official's requirements. Installation of an appliance meeting the specifications shall be made by a qualified technician according to safety measures as outlined in ANSI A10.10, NFPA-58, NFPA-54, U.L., the operators/manufacturer's manual, and local codes.
g. Installation of temporary heat is to be a coordinated effort between Gilbane, the heating appliance supplier, the fuel supplier and Contractors. Heating appliance supplier, fuel supplier and Contractors may be required to provide a heating plan to Gilbane for review. This plan may include specifications for the heaters, heater and fuel placement and storage, heater maintenance, service, inspection schedule and competent persons to implement the Plan.
h. Whenever heaters are operating during non-working hours, the Contractor may be required by the client, local fire officials, or Gilbane to provide a qualified person to monitor and maintain the heaters. In such cases, the qualified person shall be trained by a qualified person in the safe operation of the heaters.
i. Contractor will keep flammable and combustible material away from the heater a minimum of 50'/30' respectively or more as indicated by heating unit manufacturer, local fire authority, owner, or unique conditions of the site.
j. Contractor will have a qualified person inspect each heating appliance at least at the beginning and end of each working day.
k. Contractor will be responsible for continuously monitoring carbon monoxide levels when operating heaters indoors ensuring levels are below the ACGIH TLV (The American Conference of Governmental Industrial Hygienists Threshold Limit Value of 25 ppm (or 29 mg/m3)) as a time-weighted average for a normal 8-hour workday and a 40-hour workweek. Contractor shall make report results available to Gilbane.

43. Training

a. Instruction and training of employees is an OSHA requirement and, as such, will be required on this project. Training of contractor personnel is the responsibility of the contractor. Examples of such required training are:
    1. Newly employed, promoted and/or transferred personnel shall be verbally instructed in the safety practices required by their work assignments.
    2. All new work assignments must include specific attention to safety. "Follow-up" monitoring is required in order to prevent accidents.
    3. Any Non-routine tasks as required by OSHA
    4. When operating specific equipment
b. Training of contractor personnel is the responsibility of the contractor.
c. Conduct Toolbox safety meetings for all employees at least once a week.
    1. Maintain an attendance record by having employees sign the reverse side of the Toolbox Safety Meeting Report, or equivalent form.
    2. Complete the report and submit it to the Gilbane Office within 24 hours after each meeting.
    3. File all toolbox meeting reports and summaries so that they are available for review at any time during project operations or for a period of five years following termination of the project.
d. It is the responsibility of Contractor supervision to explain the hazards involved in an assignment to all employees, either individually or in a group before they begin an assigned task.
    1. This task may only require a few words, but in many cases, it will require the actual demonstration of how the project can be done safely and the pointing out of the hazards that may be or will be encountered in any task.

44. Welding, Cutting and Burning - Hot-work

a. A suitable, approved fire extinguisher (minimum 20 lb. ABC) shall be ready for instant use in any location where welding is done. Screens, shields, or other safeguards shall be provided for the protection of workers or materials, below or otherwise exposed to sparks, slag, falling objects, or the direct rays of the arc.
b. A dedicated fire watch shall be present at all welding operations and remain for at least one hour after the hot work has halted.
c. The hot work operator shall wear appropriate personal protective equipment which includes a helmet meeting the requirements set forth in the Personal Protective Equipment (PPE) and Clothing Section at all times. Workers assisting the hot work operators shall also wear appropriate personal protective equipment. Adequate exhaust ventilation shall be maintained at all welding, cutting, burning work areas.
d. Work permits shall be obtained daily, prior to any welding, burning or cutting operations on the site.
    1. **Electric Arc Welding**
        i. Electric welding equipment, including cables, shall meet the requirements of the National Electric Code. All arc welding and cutting cables shall be of the completely insulated flexible type capable of handling the maximum current requirements of the work. Cables in need of repair shall not be used. The frames of all arc welding and cutting machines shall be grounded either through a third wire in the cable connecting the circuit connector or through a separate wire which is grounded at the source of the current. All ground connections shall be inspected to ensure that they are mechanically strong and electrically adequate for the required current. Welding practices shall comply with all applicable regulations.
    2. **Gas Welding or Cutting**
        i. When gas cylinders are stored, moved, or transported, the valve protection cap shall be in place. When cylinders are hoisted, they shall be secured in an approved cage or basket. The valve cap shall never be used for hoisting. All cylinders shall be stored, transported, and used in an upright position. If the cylinder is not equipped with a valve wheel, a key shall be kept on the valve stem while in use.
        ii. At the end of each workday or if work is suspended for a substantial period of time, compressed gas cylinder valves must be closed, regulators removed and properly stored.
        iii. Cylinders containing oxygen or acetylene, or other fuel gas shall not be taken into confined spaces.
        iv. Cylinders containing oxygen or acetylene, or other fuel gas shall be stored in designated areas outside the structure and protected from sunlight. Areas shall be approved by Gilbane.
        v. No one shall use a cylinder's contents for purposes other than those intended by the supplier.
        vi. All hoses used for carrying acetylene, oxygen or other fuel gas shall be inspected at the beginning of each working shift. Defective hoses shall be removed from service.
        vii. Oxygen cylinders and fittings shall be kept away from oil and grease.
        viii. Regulators, gauges, backflow check valves, and torches shall be kept in proper working order.
        ix. Flash arrestors are required on the oxygen and acetylene hoses; positioned at the regulators.

45. Work Permit Procedures

a. **General Procedures**
    1. A copy of this section of the Project Safety Plan will be issued to all Contractors and will serve as notice by Gilbane that a work permit as specified by Gilbane is necessary before starting any hazardous work activity.
    2. The work permit shall be obtained from Gilbane before starting each day's work. The procedures for initiating a hazardous work permit are listed on the permit application appropriate to the type of work.
    3. Work permits shall follow the specific project procedure, which may require paper permits or electronic permits obtained through the project-specific controls system.
    4. Hazardous work permits include, but are not limited to, the following activities: Hot work, confined space entry, guardrail removal, line breaks, after-hours work, trenching and excavation, crane use, barricade installation, and shaft work.
    5. Due to special project conditions, additional job-specific hazardous work permits may be required to be incorporated into the safety plan. Additional job-specific hazardous work permits shall also be considered as a contract commitment.
b. **Hot Work**
    1. Hot work is defined as a process or procedure which could result in a fire if not properly controlled. Common types of hot work are welding, burning, cutting, brazing, soldering.
    2. Hot work will only be permitted only during normal working hours. Permits will be issued the day before work is to be accomplished, and the work area will be inspected to verify that adequate control has been established. A copy of the permit will be available at the point of work. An adequate number of fire extinguishers will be available within 50-feet of the point of work for which a permit is issued. The Contractor will take the necessary precautions when welding or burning above walls to assure that protection is maintained on both sides of the wall and that the areas below are protected on multilevel buildings.
    3. Inspection of the permit area one hour (or more) post-completion of hot work is required by the contractor.
c. **Confined Space**
    1. When work in confined spaces is scheduled, such as a caisson, boiler, deep excavations, etc., consideration must be given to two major known and recognized hazards:

2. The possibility of fire or explosion, flammable gases, fumes, vehicle fumes, vapors, or dusts.
3. The possibility of injury to the worker (or loss of consciousness) as a result of inhalation or absorption through the skin of toxic materials or from oxygen deficiency.
4. For work in a confined space, the responsibility for recognition and advance notification is the Contractor's. Gilbane will be notified and will issue a work permit. The Contractor will be responsible for providing equipment and special instructions for the worker, such as ventilating units, respirators, personal fall protection, air monitoring devices and life lines, etc., and for conformance to all applicable OSHA standards.
5. It is required that the "buddy system" be used and that an observer tend to all the workers in a confined space. Rescue procedures shall be agreed upon beforehand and documented.

d. **Guard Rail Opening/ Floor Cover Removal**
   1. Work which requires the opening of guard rails or the removal of hole covers to be performed shall be approved in advance by the Gilbane Superintendent. Particular attention shall be given to the alternate means of fall protection which will be required to safely perform the work and protect other workers in the vicinity of the fall exposure. Specific plans for providing alternate fall protection shall be described in the request for the work permit.

e. **Off-Hours Work**
   1. Gilbane shall approve work, which is required to be performed outside normal working hours established at the site, in advance. Any work occurring within the existing Owner facility shall be at the convenience of the Owner, and shall comply with all conditions imposed by the contract specifications and the work permit issued by Gilbane or other persons identified by the Owner.

III. Appendices

A. Job Hazard Analysis

JOB HAZARD ANALYSIS

Safety Form (Insert Doc. Date):

Project Name: _____ **Project Number:** _____ **Author:** _____

Activity/Operation	List unsafe condition(s), unsafe action(s) or potential hazards	How the activity can be done safely (Correcting items in column to left)

B. Hot Work Permit

No. Project No.

REMOVE ALL COMBUSTIBLE MATERIAL FROM THE WORK AREA

Date: Location:

Start Time: Stop Time:

Description of Work:

Torch Cut Solder Weld Other Hot Work

One Class 2A portable fire extinguisher required.

Dry Chemical fire extinguisher Required

Wet Down upon Completion

Fire Watch required for Hours after completion of Hot Work

PERMIT EXPIRES AT STOP TIME

IF FIRE OCCURS CALL FIRE DEPARTMENT THEN NOTIFY PROJECT SUPERINTENDENT

Gilbane Project Superintendent will arrange to inspect area 2 hours after stop time.

Person authorized to do hot work:	Person issuing permit:
Print Name	Print Name:
Signature:	Signature:
Company:	Company:

C. Confined Space Permit

Date Submitted _____ Work to be performed on _____ Time __:__ AM/PM Location / Description of Line Break:_____ Contents of Line:
_____ Name of Responsible person:
_____Tel:_____ (In charge of Work) Contractor Name:
_____ Tel:_____

Special Requirements	Yes	No		Work to be performed Permits Obtained	Yes	No
Lock-out / de-energize				Burning		
Lines broken - capped or blanked				Welding		
Purge - flush or vent				Brazing		
Ventilation - ____mechanical ____natural				Grinding		
Secure area				Open flames		
Protective clothing				other		
Non-sparking tools					Yes	No
Full body harness and lifeline				Hazards Expected		
Tripod or other hoisting equipment				Corrosives		
Electrical eqpt for explosive atmosphere				Flammables		
Lighting				Toxics		
Fire Extinguishers				X-temps		
Respiratory protection				Electrical		
Powered communications				Physical - engulfment		

Tests to be Taken	P.E.L	Yes	No	Actual Reading	Time Tests Taken				
% of oxygen									
% of L.E.L.									
Carbon monoxide									
Aromatic hydrocarbon									
Sulfur dioxide									
Ammonia									
Hydrocyanic acid									
Hydrogen sulfide									

Testing Equipment _____Serial No._____ Calibrated by
_____Date calibrated ____/____/____ Testing conducted by
_____

Personnel making entry:		Standby Person:
		Rescue Tel:
		Permit canceled on _____/_____/____
		Time _____ AM / PM

The above individuals have been informed of the hazards, provided with protective equipment and trained in its use as well as safe work practices. All individuals have been trained. **ORIGINAL POSTED AT ENTRY LOCATION - COPY TO SAFETY** **Contractor** Name:(print)_____
Signature: _____ **Gilbane** Name:(print) _____ Signature _____

D. Hold Harmless Agreement

To: **Gilbane** Date:

Job No: Job Name:

Job Location:

In consideration of permission granted to the undersigned to enter and inspect the premises as describe which permission is given as a courtesy to me (us) and for my (our) benefit only. I (we) herewith agree fo (ourselves) and for my (our) heirs, executors and administrators that I (we) will, to the full extent permitt and do release and forever discharge **Gilbane**, and its affiliates, subsidiaries, officers, directors, agents, e representatives

and/or **NEMT WAKEFIELD PROJECT**

and/or the contractors or subcontractors who may be performing work on the said premises from all ma claims, actions or causes of action which I (we) now have or which I (we) or my (our) heirs, executors or administrators hereafter can, shall or may have because of bodily injury or damage to property which I (v suffer while on said premises, whether the said injury or damage may be due to the act or negligence of **Gilbane Building Company,** and its affiliates, subsidiaries, officers, directors, agents, employees, represe

or of **NEMT WAKEFIELD PROJECT**

Or of any contractor and subcontractor or otherwise; it is understood that I (we) accept full responsibilit above-mentioned risk.

IN WITNESS WHEREOF, I (we) have hereunto set my (our) hand this of 20

E. Excavation Inspection Form (Sample)

Date Time AM PM

Project Number: 8389.070 Project Name: DCAMM – Westfield State University

Weather Dig Safe Contacted Yes No

Log prepared by (**Name-Print**) **Signature**

Competent Person

Trench depth ft	**Trench width** ft.	**Trench length** ft.

Protective System Trench shield Sloping Shoring Other

Purpose of Trench Drainage Sewer Water Gas Utility Other

Were Visual soil tests made Yes No

If yes, what type ?

Were Manual soil tests made Yes No

If yes, what type ?

Type of soil Stable rock Type A Type B Type C

Surface encumbrances Yes No

If yes, what type ?

Water Conditions Wet Dry Submerged

Hazardous atmosphere exists Yes No

If yes, follow confined space entry procedures and permit and monitor for hazardous atmospheres

Is ladder within 25 ft. of all workers Yes No

Are employees exposed to vehicular traffic Yes No

Is excavated material stored 2 ft. or more from edge of trench Yes No

Are Utilities protected Yes No

Are all employees trained in the recognition and avoidance of hazards Yes No

Periodic Inspections

1.	**AM / PM**	**2.**	**AM / PM**	**3.**	**AM / PM**
4.	**AM / PM**	**5.**	**AM/ PM**	**6.**	**AM / PM**

F. Hand Protection Reference

PURPOSE - To aid in the prevention of hand and finger injuries when performing construction operations. ***SCOPE*** Employers shall select, provide, and require employees to use appropriate hand protection 100% of the time while on site. All gloves shall have a minimum ASTM/ISEA/ANSI Level 4 cut resistance. Employers shall base the selection of appropriate hand protection on an evaluation of the conditions present, duration of use, and the hazards and potential hazards identified. Gloves shall also be worn as specified by manufacturer recommendations of tools, equipment, and material SDS. If an appropriate glove for the task is not available in a minimum Level 4 cut resistance, the employer shall submit a JHA and product data for review and approval by Gilbane. Different exposures require the use of different types of gloves. Evaluate each situation to ensure which is the appropriate type of hand protection. (See chart below)

OPERATION	***GLOVE TYPE***
Energized Electrical Work (EEW) Welding operations Grinding Operations Exposure to sharp edges & metal burrs (sharp metal) Utility knives, hacksaws, & cross-cut saws Concrete work Exposure to petroleum products Exposure to hazardous materials such as solvents, paints, adhesives, etc. Working around machinery Exposure to excessive heat, hot piping or equipment. Using saws – porta band, and reciprocating. Handling wire rope/rigging. Handling glass Handling wood	Electrically insulated-rated rubber gloves with leather protectors Gauntlet-type leather welding gloves Tight-fitting leather gloves Cut-resistant gloves (Kevlar® or tight-fitting leather) Cut-resistant gloves (Kevlar®) Rubber or leather gloves Chemical-resistant gloves per the MSDS requirements & manufacturers requirements (Neoprene, PVC, Nitrile or Rubber) * Chemical-resistant gloves per the MSDS requirements & manufacturers requirements (Neoprene, PVC, Nitrile or Rubber) * Tight-fitting leather gloves should be utilized when hand protection is necessary around rotating equipment to prevent entanglement of gloves/hands in machinery Kevlar® heat resistant gloves and sleeves. Tight-fitting leather gloves. Tight-fitting leather gloves. Cut-resistant gloves - Kevlar® Tight-fitting leather gloves

GLOVES* Neoprene – Protects from acids, caustics, oils, greases and many solvents PVA – protects from aromatics, ketones and chlorinated solvents (Xylene, Trichloroethylene) Butyl – protects against common organic acids and caustics, alcohols, esters, acetone and ketones PVC – protects against chemicals, oil and greases, acids and petroleum hydrocarbons Nitrile – protects against greases, oils, acids and solvents

G. Crane Lift Plan

Crane LIFT PLAN

This plan should be based on "worst case" combination of load weight and lift radius for a specific crane configuration in the location as indicated on the Lift Plan. The Lift Plan may be valid for more than one day, as long as the configuration, location, maximum expected load and maximum expected radius do *not* change from the Lift Plan as submitted. Every crane setup and operation must be covered by the Lift Plan as submitted. A Crane Use Permit is also required for each crane set up location prior to lifting.

Date Submitted:	Proposed Date(s) For Lift Start : Complete:
Contractor/ Rigging Company:	Emergency Phone Number
Crane Company:	Emergency Phone Number
Project:	Lift Location/Nearest Building(s):
Description of Lifting Work to be done	
Description of Lifting Scope: number of days _____,	number of items to be picked_____

1. Crane Information			
Make	Model	Capacity (tons)	
Crane's Total Boom Length for this Configuration (Boom only)	Jib Used?	Length	Offset, if Used
Will outriggers be fully extended? _____If not, please explain setting:			
Will the Lift be based on 360° crane use and chart? _____If not, please explain:			
Maximum Boom Length Required	Maximum Pick Radius Required		
Is FAA or Airport Notification Required?			
Owner or local regulatory agency notification required?			

2. Load Characteristics		
Description of Max Load		
Dimensions of Max Load .		Provide sketch
Weight of Max Load_____	How was this determined?	Please attach calculations.
What is the maximum safe wind speed allowed for the picks covered under this lift plan?		
Will the load be unbalanced? Y N If so, how will it be leveled during pick?		

3. Rigging Information:
List Rigging Components Please be specific – number, type, softeners, size, length, lift beam, capacity, etc.
Worst Case Weight of Line, Block , and All Rigging:

4. Other Weights to be Considered to Determine Total Gross Load of Item to be Lifted:	
a. Weight of Max Load	
b. Weight of Rigging:	
c. Added weight for factor of safety (minimum 20% of line a for uncertified weight)	
Total Gross Load:	

1

5. Crane Location/Clearances
a. Has contractor developed a plan to control and protect vehicular and pedestrian traffic? _____Please submit.
b. Will a full road blockage or partial road blockage be required?
c. Will load be placed on permanent facilities such as existing roof or landscaping at any time during pick?
d. Has Contractor developed a to scale plot plan showing crane location, adjacent structures, roadways, underground Utilities, etc. within swing radius? Y N Please submit showing direction of swing
e. Has Contractor completed a to-scale elevation sketch or drawing depicting crane, adjacent structures, and load? Y N Please submit.
f. Has Contractor surveyed the area for overhead power lines and other hazards?
g. Have ground conditions adequate to support all loads been verified?
h. Will load or any part of crane/rigging be within 20 feet of energized power lines or any process system at any time during assembly/disassembly or hoisting?

6. Summary "Worst Case " Lift Scenario			
a. Max Pick Radius	b. Total Gross Load	c. Crane Chart Capacity @ Max Pick Radius	d. % of Crane Capacity (line 6b/ 6c)

7. Contractor Assembly/Disassembly Director to Verify the Following			
☐ Crane Operators Certified and Riggers, Signal persons qualified and documentation provided	☐ Daily, Monthly, Annual Inspections current and available to Operator in cab	☐ Lift Plan Reviewed and copy in cab	☐ Crane Configuration in Compliance with Lift Plan and manufacturers requirements
☐ Outriggers Extended per Lift plan and Proper pad supports Installed			☐ Operator has confirmed that Winds not excessive for Picks/per mfr req'ts
☐ Overhead hazards reviewed		☐ Ground conditions adequate for superimposed loads/verified w/controlling entity	
☐ Slings and Rigging Inspected	☐ Taglines to be Used	☐ Swing Radius Barricaded, secure	☐ Lift Plan and Crane Permit Reviewed with Erection/Demolition Crew
☐ Traffic Control Plan in Place		☐ Signals System In Place	
☐ Measure and confirm max pick radius without load		☐ Confirm total Gross Load weight prior to reaching max radius	
☐ Work area controlled- fall zone restricted		☐ Power lines deenergized/ 20 ft distance maintained	
☐ Safety devices functioning		☐ Operational aids functioning	
☐ Fall protection equipment/methods in place		☐ Crew trained on hazards/safe work plan?	

8. Certified/Qualified personnel (documentation must be provided)		
☐ Operators	☐ Riggers	☐ Signalpersons
☐ Equipment/rigging Inspectors	☐ Designated spotters	

9. Documentation Provided (all must be provided):				
☐ Plot Plan w/Crane Location etc	☐ Elevation Sketch	☐ Weight Calculations for Max Load	☐ Rigging List/Sketch	☐ Appropriate Crane Charts
☐ De-energization/grounding of power lines from utility	☐ Underground conditions reports			

10. Safety work plans (all must be provided):			
☐ Fall protection Plan	☐ Work around power lines	☐ Assembly/disassembly Plan	☐ Work area control
☐ Traffic Control Plan	☐ Job/Activity Hazard Analysis for all other related activities		

11. Attachments and supports		
☐ Foundation per mfr req'ts or Structural PE?	☐ Collars/struts per mfr req'ts?	☐ Attachment to building/structure per PE?

12. Critical Lift	Yes	No
Will crane(s) need to "travel" with loads?		
Will pick require more than one crane?		
Is total gross load more than 75% of rated capacity of crane at the max radius?		
Is total gross load more that 50% of rated capacity AND lifting over existing facilities?		
Will lift/carry personnel?		
Are multiple cranes/derricks to be used for the lift?		
Is pick item weighing over 10,000 pounds being up ended (horizontal/vertical)?		

If the answer to any of the above is yes then this is a critical lift which will require additional information below, and must be signed off by contractor's licensed professional engineer unless otherwise waived by all individuals who sign below.
PE stamp required PE stamp not required

Detailed description of item to be lifted - use separate sheet(s) as necessary

List hoisting equipment to be used. Include inspection tag number and date

Equipment/Lift relationship		
Operating radius	**Lift Unit 1**	**Lift Unit 2**
Boom length		
Allowable load (from Load chart)		
Ratio Lift/Allowable load		
Clearance between boom & Lift		
Clearance to surroundings		

Weight of Critical Lift (use A, B or C)		
A. Certified Scale weight (attach ticket)	lbs.	
B. Calculated independently by more than one source	Source Name:	lbs.
	Source Name:	lbs

Pre-Lift Inspections	
☐ Hoisting equipment	☐ Ground bearing conditions
☐ Underground utilities/adjacent structures	☐ Cribbing/mats design/installation
☐ Rigging/thimbles/clamps	☐ Spreader bars/Blocks/Attachments

Name and Signature of Qualified Person Inspecting:

Operator experience:

List experience on this type of equipment and type of lift (use separate sheet when required:

Attach schedule of operations including time for rigging and equipment inspection

Remarks

3

Signatures			
Crane Company Qualified Person	Signature: Date:	Contractor/Rigger Assembly/Disassembly Director	Signature: Date:

Contractor Assembly/Disassembly Director is solely responsible for accuracy and completeness of this lift plan and the safe execution of the lift (s). Contractor Assembly/Disassembly Director and equipment Operator will verify lift will comply with applicable OSHA and ANSI Standards and manufacturer requirements.

Construction Manager (CM) Representative	Signature:	Date:
Safety Representative from CM	Signature:	Date:
Certified Operator(s)	Signature(s):	Date:
Qualified rigger(s)	Signature(s):	Date:
Qualified Signalperson(s)	Signature(s):	Date:

Contractor Assembly/Disassembly Director is solely responsible for accuracy and completeness of this lift plan and the safe execution of the lift (s). Contractor Assembly/Disassembly Director and equipment Operator will verify lift will comply with applicable OSHA and ANSI Standards and manufacturer requirements.

The Gilbane review is only to acknowledge the receipt of the Contractor/ Rigger and Crane Company's lift plan

4

H. Crane Use Permit

A crane use permit is required for *each and every time* a crane is setup and operated. A signed off lift plan is required before a crane use permit can be issued. No Lifting or extension of outriggers can be done until all sections of the crane permit have been signed off.

Date:	Time of Crane Use: Start _____ Complete _____			
Pick Location:				
Pick Location (nearest buildings):		Gilbane Representative for Pick:		
Contractor/ Rigging Company:		Emergency Phone No:		
Lead Rigger/Competent Person:		Emergency Phone No:		
Crane Company:				
Crane Operator:		License #	Expiration Date:	
Make	Model	Capacity	S/N	
Boom Length	Jib Used? _____ If so, length? _____		Offset, if Used	

2. Load Characteristics (From Lift Plan dated _____)		
Description of Maximum Load	Dimensions of Max Load	
Total Gross load from Lift plan (max Load, Rigging & contingency)		
Max Pick Radius	Crane Capacity at Max radius	% Total Gross Load / Crane capacity

3. Operator to Verify the Following			
☐ All Required OSHA Paperwork, Licenses and Certifications been completed and available in Cab	☐ Daily Inspection Completed and in Cab	☐ Lift Plan Reviewed and copy in cab	☐ Crane Configuration in Compliance with Lift Plan
☐ Outriggers Extended per Lift plan and Proper Dunnage Installed (Minimum 3'X3'x4")			☐ Operator has confirmed that Winds not excessive for Picks
☐ Operator has reviewed Overhead hazards		☐ Operator has reviewed underground hazards	
☐ Operator will measure and confirm max pick radius without load		☐ Operator will confirm total Gross Load weight prior to reaching max radius	

4. Contractor/Rigger to Verify			
☐ Slings and Rigging Inspected	☐ Taglines to be Used	☐ Swing Radius Barricaded, secure	☐ Lift Plan and Crane Permit Reviewed with Erection/Demolition Crew
☐ Traffic Control Plan in Place		☐ Signals System In Place	

Signatures	
Crane Operator Date and Time	Contractor/Rigger Date and Time:
Contractor/Rigger and Operator are the competent persons and are solely responsible for the safe execution of the lift(s) and will complete the lift(s) in accordance with OSHA and ANSI standards.	
Construction Management (CM) Representative	Date & Time:
This Permit is issued to the above competent persons for the performance of the above planned lift(s).	

I. Ladder Permit

APPENDIX P – LADDER PERMIT

Ladder Permit

Achievement First Dev 1
Project #: J01234.000

Ladder Permit-0003

Date:	**Valid Until:**
Location:	
Permit Issued To:	**#:** 0
Company: Trade Inc.	

Ladder Permit Information

Consider how work may be accomplished at or from the ground-level to minimize elevated work. Ladders are to only be used where no safer means exists to access elevated areas. Consider the use of scaffolds, aerial and scissor lifts, rolling stairs, etc. as safer alternatives. NOTE: If three points of contacts cannot be maintained, 100% fall protection is required.

Reason Ladder is Only Option:			
Activity/Task to be performed from Ladder:			
Type of Ladder:	**Other:**	**Weight Capacity:**	**Height (ft):**
Will You Be 6ft or more above a working surface? If YES, what specific Fall-Arrest System will you use and what will be your anchor point (Retractable Device is the only appropriate method of fall protection) - Fall Arrest System -			
Workers Involved			
Worker's Name:	**Orientation Sticker # :**		

CM Representative:		**Date and Time:**

Gilbane

Northeast Metro Regional Vocational HS

Quality Management Plan

Published 08/15/2023

Table of Contents

Table of Contents

Overview **1**
- Purpose 1
- Primary Elements 1
- Content 1

Definitions **2**

The Project Quality Management (QM) Team **5**
- Contractor - Gilbane 5
- Trade Contractor 5
- Other Project Parties 6

Construction **8**
- Documentation 8
- Quality Assurance Activities 8
  - Trade Contractor Kick-off Meeting 8
  - Pre-installation Meeting 8
- Quality Control Activities 9
  - First Delivery Inspections 9
  - Mockups 9
  - Benchmark - Follow-up Benchmark Inspections 10
  - Closure Inspections (In-wall, Above-ceiling, Below-grade, Encased in Concrete) 10
  - First Equipment in Place Inspection 11
  - Third Party Inspections 12
  - Rolling Completion List (RCL) 12
  - Install - Activation Inspection (Before Startup) 12
  - Startup Inspection 13
  - Punchlist 14
  - Final Inspection and Acceptance 14

Project Completion **17**

Designation of Dedicated Quality Representative for Trade Contractor **19**

Attachments **21**

1

Overview

Overview

The Quality Management Plan is initiated, managed, and documented by Gilbane Building Company, while working closely with Architect, Engineers, Consultants, Third-Party Inspection Agencies, and Trade Contractors to deliver the best possible product to the Owner that is consistent with the Requirements.

Purpose

The Quality Management Plan (QMP) lays out the principles and practices designed to ensure the Owner is provided with a facility that meets or exceeds its expectations. By following this plan, the team will:

1. Assess whether the Trade Contractors' work complies with the Requirements.
2. Identify and prevent potential errors and mistakes and reduce rework by inspecting Trade Contractors' work at the earliest possible opportunity.
3. Improve the day-to-day relationships between Gilbane, Owner/Owner's Representative, Architect, Engineers, Consultants, Third-Party Inspection Agencies, and Trade Contractors by agreeing on what is required and acceptable work at the start of new work and making sure that what has been agreed upon is maintained throughout the rest of the work without deviation.

Primary Elements

To ensure the project is completed in accordance with the Requirements, Gilbane recognizes Quality Assurance and Quality Control as the two primary elements of the quality process. Simply outlined, success in implementing the QMP can be attributed to the following:

1. Have an approved and agreed upon plan of action.
2. Know what is to be built and know when it is to be built.
3. Have the right materials, equipment, and documents.
4. Have enough qualified workers under proper management.
5. Do it right the first time.

Content

Quality activities delineated below are documented and distributed according to Gilbane's timetable, or when requested by authorized representatives of Northeast Metropolitan Regional Vocational High School, and others as determined by mutual agreement between Gilbane and Northeast Metropolitan Regional Vocational High School.

2

Definitions

Definitions

Quality: The characteristics of an item that bear on its ability to satisfy stated or implied needs; conformance to the Requirements.

Requirements: Owner-Gilbane contract, Trade contract agreement, Contract Documents

Deficiency or Nonconformity: Any item which does not conform to the Requirements or the non-fulfillment of a specified requirement.

Work: As defined in the Trade Contract Agreement Article 1.1

Issue: Items which present discrepancy or ambiguity and require resolution prior to the advancement of the Work.

Quality Assurance (QA): The planned and systematic activities implemented in a quality system so that quality requirements for a product or service will be fulfilled.

Quality Control (QC): The observation techniques and activities used to fulfill requirements for quality.

Rolling Completion List (RCL): A tool used to track deficiencies, noted as incomplete, missing, or not meeting the Requirements, throughout the life of a project.

Punch list: A document prepared during key milestones or near the end of a construction project listing work that does not conform to Contract Documents.

3

The Project Quality Management (QM) Team

The Project Quality Management (QM) Team

Contractor - Gilbane

Role	Responsibility
Project Executive Neil Benner	The Project Executive is responsible for ensuring a project specific Quality Management Plan has been developed and that the project team is following the Quality Management Plan.
Project Manager Keith Doucot	Responsible for the distribution, education, and execution of the Quality Management Plan at the project site. Lead advocate for the quality program at the project level. Leads quality assurance meetings in conjunction with the Quality Manager / Project Superintendent.
Project Superintendent(s)/ Quality Manager Andy Brodeur	Responsible for coordinating, implementing, enforcing, and documenting quality assurance and quality control activities. Responsible for ensuring that the required inspection forms have been completed and distributed. Responsible for verifying conformance of Work to the Requirements and documenting deficiencies on the Rolling Completion List (RCL) and managing until completion. Responsible for documenting deficiencies that are noted in field reports, commissioning reports, third party reports, etc. and adding these to Gilbane's Rolling Completion List. Responsible for documenting QA / QC activities in the daily reports.
Project Engineers Don Venerus Lauren Muldoon	Responsible for keeping the Contract Documents up-to-date and available for use in conducting field inspections. Participate in quality meetings and field inspections activities when needed.

Trade Contractor

Each Trade Contractor is to identify a quality representative responsible for ensuring its Work conforms to the Requirements, as well as this Quality Management Plan. Each Trade Contractor is to complete and return a Designation of Dedicated Quality Representative form which identifies this person. In the event this individual leaves Trade Contractor's employ or is no longer assigned to this project, Trade Contractor must identify a replacement representative within forty-eight (48) hours after the designated individual leaves. In the event the designated representative, whether it be the initial representative or a replacement representative, is not satisfactory to Gilbane, Trade Contractor must designate a qualified representative within forty-eight (48) hours of receipt of Gilbane's objection.

Role	Responsibility
Trade Contractors	Each Trade Contractor must maintain a complete and up-to-date set of Contract Documents. Trade Contractor must install its Work is accordance with the Requirements, as well as perform the required inspections and testing identified. Each Trade Contractor must attend activities requiring Trade Contractor participation. Participation in Trade Contractor Kick-off Meeting, Pre-Installation Meeting, as well as additional inspections outlined below is required. The Trade Contractor is also responsible for arranging manufacturer technical representative participation in quality activities as called for in Contract Documents, for materials furnished by that Trade Contractor. Coordinate any off-site testing required. Each Trade Contractor is to provide advance notice (minimum 48 hours, preferably 72 hours) of anything that would require a QC

	activity, such that progress is not interrupted. All Trade Contractors must comply with contractual obligations, regardless of whether an inspection has been performed for their Work.

Other Project Parties

Every entity working on the project is responsible for quality activities. Those responsibilities will be defined in those parties' contracts for the project.

4

Construction

Construction

All quality activities outlined below will be required on the Northeast Metropolitan Regional Vocational High School. Quality activities do not change the contractual obligations of the Trade Contractor. Failure of an inspection to identify a non-compliance does not release the Trade Contractor from its contractual obligations.

Documentation

Project documentation, as described in the following subsections and throughout this QMP, will be created, and maintained utilizing Procore. The Gilbane team will gather the applicable reference documentation as noted in the subsections below prior to performing the meeting or inspection. During an inspection, Gilbane will utilize the applicable inspection in Procore and complete all fields. Any non-conforming items will be added to the Rolling Completion List (RCL) in Procore. Gilbane will take photos and attach directly to the inspection. Photos shall include, images of the material / equipment, delivery tickets, equipment tags, etc. Inspections must not be signed off or closed until all non-conforming items have been corrected. Once all items within an inspection are compliant, Gilbane will obtain all required signatures. All documents pertaining to an inspection must be stored in one location.

Quality Assurance Activities

Trade Contractor Kick-off Meeting

Gilbane will schedule and conduct a Trade Contractor Kick-Off Meeting with each Trade Contractor following contract award and prior to site mobilization. If the Trade Contractor who is awarded the contract will not be starting on site for several months, a follow-up abbreviated Trade Kickoff Meeting directly before mobilization will be required. The goal of this meeting is to review the following:

- Site Specific Safety and Quality Management Plan for the project;
- Project procedures, processes, and protocols;
- Submittal and RFI processes; and
- General pre-construction topics - such as security, access, safety, site utilization, and administrative procedures.

Timing: Following trade contract award, prior to Trade Contractor mobilizing on site. If the trade contract is awarded several months prior to mobilizing on site, a follow-up meeting must be had to ensure they are ready to mobilize, ensure submittals and procurement are well underway, and to confirm the quality representative has not changed.

Mandatory Participants: Gilbane, Trade Contractors, Major Sub-tier Contractors

Optional Participants: Owner/Owner's Representative, Design Team

Reference Documents: Trade Contractor Kick-off Meeting Agenda, Contract Documents, Quality Management Plan

Pre-installation Meeting

Gilbane will schedule and conduct a Pre-installation Meeting for all activities or scope of work called out in the Contract Documents. The goal of this meeting is to:

- Coordinate upcoming work that may involve more than one Trade Contractor;
- Review application instructions to ensure work is done correctly the first time;
- Examine work area to verify preliminary work in place follows the Requirements;
- Review sequence of work that may be unclear; and/or
- Review approved submittals.

Timing: Before the start of a specific sequence of work with adequate time to allow response and reaction, as necessary.

Required Participants: Gilbane, Trade Contractors, Major Sub-tier Contractors

Optional Participants: Owner/Owner's Representative, Design Team, Manufacturer's Representative, Third Party Inspection Agency

Reference Documents: Pre-Installation Meeting Agenda, Contract Documents, approved submittals, manufacturers' recommended installation instructions, approved shop drawings, coordination drawings, pertinent codes and standards.

Quality Control Activities

First Delivery Inspections

First Delivery Inspections are required for all material / equipment. The goal of first delivery inspections is to discover non-conforming material and/or equipment as soon as it arrives to the site and while the material is still on the delivery trucks. This inspection also establishes the basis of judging all future deliveries of like material and equipment.

Requirements:

- Trade Contractor must notify Gilbane of the first on site delivery of each type of material or equipment at a minimum of forty-eight (48) hours before it arrives to site.
- Gilbane performs and documents inspection using the First Delivery Inspection. Photos shall be taken and filed with inspection.
- Non-conforming materials and/or equipment are to be rejected by Gilbane or the Trade Contractor and will not be allowed to be set into place. In no case will such materials be used on the project and must be removed from the site.
- Non-conforming work must be documented and managed by Gilbane on the Rolling Completion List.
- The Trade Contractor must correct any non-conforming work to bring it into compliance with the Requirements and will be re-inspected to confirm satisfactory completion.
- Gilbane to obtain signoff for approved inspections.

Timing: The inspection is to be conducted as soon as the material or equipment arrives on-site, preferably prior to unloading. Trade Contractor must give Gilbane ample notice of the anticipated delivery, at least forty-eight (48) hours prior to its arrival.

Required Participants: Gilbane, Trade Contractor

Optional Participants: Owner/Owner's Representative, Design Team

Required Material for Inspection: First Delivery Inspection, approved submittals, approved shop drawings, Contract Documents, delivery tickets.

Mockups

Mockups will be performed as required for all items called out in the Contract Documents. The goal of a mock-up is to obtain early approval of aesthetics, means and methods of construction and function of the Work and to identify and resolve issues or deficiencies in installation or coordination prior to release of materials.

Requirements:

- Trade Contractor to submit shop drawings for all required mock-ups
- Trade Contractor must notify Gilbane a minimum of forty-eight (48) hours in advance of inspection.
- Gilbane performs and documents inspection using the Benchmark - Mock-up Inspection. Photos shall be taken and filed with inspection.
- Any non-conforming work must be documented and managed by Gilbane on the Rolling Completion List.

- The Trade Contractor must correct any non-conforming work to bring it into compliance with the Requirements and will be re-inspected to confirm satisfactory completion.
- Open design questions are to be documented by the RFI process for resolution.
- These inspections are not intended to be occasions for presenting substitutions for materials or methods of construction, but rather to ensure work is underway correctly.
- Gilbane to obtain signoff for approved inspections.

Timing: Work is inspected for compliance during and after completion of the mock-up. Trade Contractor must give Gilbane ample notice of inspection, at least forty-eight (48) hours prior to desired inspection date.

Required Participants: Gilbane, Trade Contractors, Major Sub-tier Contractors, Owner/Owner's Representative, Design Team

Optional Participants: None

Required Material for Inspection: Contract Documents, approved submittals, manufacturers' recommended installation instructions, approved shop drawings, coordination drawings, pertinent codes and standards.

Benchmark - Follow-up Benchmark Inspections

Benchmarks are required after the installation of the first piece of a type of Work. The goal of a benchmark is to establish from the start what acceptable Work is. This serves as the standard of reference for all subsequent like Work by this Trade Contractor.

Requirements:

- Trade Contractor must notify Gilbane a minimum of forty-eight (48) hours in advance of inspection.
- Gilbane performs and documents inspection using the Benchmark – Mock-Up Inspection. Photos shall be taken and filed with inspection.
- Any non-conforming work must be documented and managed by Gilbane on the Rolling Completion List.
- The Trade Contractor must correct any non-conforming work to bring it into compliance with the Requirements and will be re-inspected to confirm satisfactory completion.
- Open design questions are to be documented by the RFI process for resolution.
- These inspections are not intended to be occasions for presenting substitutions for materials or methods of construction, but rather to ensure work is underway correctly.
- Gilbane to obtain signoff for approved inspections.
- Gilbane must perform follow-up benchmarks to ensure the Trade Contractor is performing subsequent work to the same standards.

Timing: Work is inspected for compliance during and after the installation of the first piece of a type of Work. Follow-up benchmark inspections must be conducted at a frequency determined by Gilbane. Trade Contractor must give Gilbane ample notice of inspection, at least forty-eight (48) hours prior to desired inspection date.

Required Participants: Gilbane, Trade Contractor(s)

Optional Participants: Owner/Owner's Representative, Design Team

Required Material for Inspection: Benchmark – Mock-Up Inspection, Contract Documents, approved submittals, approved shop drawings, previous Benchmark – Mock-Up Inspection

Closure Inspections (In-wall, Above-ceiling, Below-grade, Encased in Concrete)

Closure Inspections are required for all work being covered or concealed. The goal of a closure inspection is to confirm that all Work is completed according to Requirements prior to closure or concealment behind walls, below grade,

above ceilings, or encased in concrete, thereby avoiding re-entering these spaces and preventing damage to finished work.

Requirements:

- Trade Contractor must notify Gilbane a minimum of forty-eight (48) hours in advance of the inspection and verify their work is complete.
- Gilbane performs and documents inspection using the Closure Inspection. Photos shall be taken and filed with inspection.
- Any non-conforming work must be documented and managed by Gilbane on the Rolling Completion List.
- The Trade Contractor must correct any non-conforming work to bring it into compliance with the Requirements and will be re-inspected to confirm satisfactory completion.
- Gilbane to obtain signoff for approved inspections.

Timing: Work is inspected prior to being covered or concealed. Trade Contractor must give Gilbane ample notice of inspection, at least forty-eight (48) hours prior to desired inspection date.

Required Participants: Gilbane, Trade Contractor, Third Party Inspections (when required)

Optional Participants: Owner/Owner's Representative, Design Team

Required Material for Inspection: Closure Inspection, coordination drawings, Contract Documents, approved submittals, approved shop drawings

First Equipment in Place Inspection

First Equipment in Place Inspections are required for all equipment when put in place. The goal of first equipment in-place inspections is to verify that installed equipment complies with Requirements, verify that it fits in the space intended, ensure that it is properly placed to accept all connections to it, and make early judgments as to relationships to adjacent Work, prior to permanent anchoring.

Requirements:

- Trade Contractor must notify Gilbane a minimum of forty-eight (48) hours in advance of the first placement of each piece of equipment.
- Gilbane performs and documents inspection using the First Equipment in Place Inspection. Photos shall be taken and filed with inspection.
- Non-conforming materials and/or equipment will not be allowed to be set into place and will be removed from the site. In no case will such materials be used on the project.
- Any non-conforming work must be documented and managed by Gilbane on the Rolling Completion List.
- The Trade Contractor must correct any non-conforming work to bring it into compliance with the Requirements and will be re-inspected to confirm satisfactory completion.
- Gilbane to obtain signoff for approved inspections.

Timing: The inspection is conducted once a piece of equipment is set in place and prior to permanent anchoring.

Required Participants: Gilbane, Trade Contractor

Optional Participants: Owner/Owner's Representative, Design Team

Required Material for Inspection: First Equipment-in Place Inspection, approved submittals, approved shop drawings, coordination drawings, Contract Documents.

Third Party Inspections

Third Party Inspections employ independent experts to provide analysis of key pieces of the Work such as soil compaction, concrete, welds, bolted connections, etc.

Requirements:

- Inspection is conducted and documented by Third-party Inspector.
- Any non-conforming work must be documented and managed by Gilbane on the Rolling Completion List.
- The Trade Contractor must correct any non-conforming work to bring it into compliance with the Requirements and will be re-inspected to confirm satisfactory completion.
- Inspection results are distributed by Gilbane.

Timing: Third-party inspections take place as required through the life of the project.

Required Participants: Gilbane, Trade Contractor, Third Party Inspector

Optional Participants: Owner/Owner's Representative, Design Team

Required Material for Inspection: Contract Documents, approved submittals, approved shop drawings

Rolling Completion List (RCL)

A Rolling Completion List is utilized to track all incomplete or non-conforming Work throughout the life of the project whether they originate from the Gilbane team, Owner observation, design team field report, or a third-party inspection agency. RCL items must be addressed as soon as possible, however, may end up on the punch list if not addressed prior to punch list work beginning.

Requirements:

- Gilbane documents all non-conforming work on the RCL.
- The RCL is distributed to Trade Contractors, and they must complete their items by the associated due date.
- Gilbane will then verify that the items were satisfactorily resolved; if not, the item will be sent back to the Trade Contractor for resolution.
- All open items at time of punch list activities must be added to the punch list.

Timing: The RCL is an "active" document utilized throughout the life of a project.

Required Participants: Gilbane

Optional Participants: Any project stakeholder can note a deficiency.

Required Material for Inspection: Contract Documents

Install - Activation Inspection (Before Startup)

Install - Activation Inspections are required for all systems / equipment. The goal of the install - activation inspection is to confirm that systems and / or equipment are properly installed prior to activation.

Requirements:

- Trade Contractor must notify Gilbane a minimum of one (1) week in advance of placing equipment into dynamic operation for the first time. If the specific item is a piece of equipment that is to be commissioned, the Trade Contractor must complete a pre-functional checklist for all static requirements prior to this activation inspection.
- Trade Contractor(s) to inspect the work and the environment and concur that the installation is safe and meets the requirements for operation. This inspection sometimes involves more than one Trade Contractor when other work is associated with the operation of the equipment being inspected (electrician, plumber, HVAC, controls, etc.).

- Trade Contractor to perform all manufacturer install checklists and startup forms and submit to Gilbane.
- Gilbane to confirm the First Equipment in Place inspection has been completed and that there are no open issues.
- Gilbane performs and documents inspection using the Install - Activation Inspection. Photos shall be taken and filed with inspection, as well as completed manufacturer install checklists and startup forms.
- Trade Contractor performs operational testing, shakedown, debugging, etc. The equipment should be tested at all required speeds and operating modes and preliminary programming should be verified as required to allow subsequent safe equipment operation.
- Any non-conforming work must be documented and managed by Gilbane on the Rolling Completion List.
- The Trade Contractor must correct any non-conforming work to bring it into compliance with the Requirements and will be re-inspected to confirm satisfactory completion. The system / equipment cannot be started until all non-conforming items have been resolved.
- Equipment failing to meet life safety and operational requirements will not be allowed to be activated until failing conditions have been remedied by the responsible Trade Contractor(s) and the equipment has been re-inspected by the inspection team.
- Gilbane to obtain signoff for approved inspections.

Timing: When Trade Contractor has completed the static installation of their equipment and is ready to place it in dynamic operation before demonstration and turning it over to the Owner. Trade Contractor shall give Gilbane at least one (1) weeks' notice prior to placing the equipment in dynamic operation.

Required Participants: Gilbane, Trade Contractor(s), Manufacturer's Representatives, Commissioning Agent, Controls Contractor

Optional Participants: Owner/Owner's Representative, Design Team

Required Material for Inspection: Install - Activation Inspection, manufacturer's install checklists and startup forms, pre-functional checklists, Commissioning Plan, Contract Documents, approved equipment and control submittals, approved shop drawings.

Startup Inspection

Startup Inspections are required for all systems and equipment. The goal of the startup inspection is to demonstrate that the system / equipment is properly installed, that individual equipment, components, and subsystems are capable of consistent, safe, and reliable operation, and to provide training and turnover to the Owner.

Requirements:

- Trade Contractor must notify Gilbane a minimum of forty-eight (48) hours in advance of when the installation of equipment is complete and ready for demonstration. If the specific item is a system / equipment that is to be commissioned, review and confirm the Pre-functional Checklist has been completed and ensure readiness for the functional testing to be performed with the Commissioning Agent (CxA).
- Gilbane to confirm the Install - Activation inspection has been completed and that there are no open issues.
- Gilbane performs and documents inspection using the Startup Inspection. Photos shall be taken and filed with inspection.
- Any non-conforming work must be documented and managed by Gilbane on the Rolling Completion List.
- The Trade Contractor must correct any non-conforming work to bring it into compliance with the Requirements and will be re-inspected to confirm satisfactory completion.
- Equipment is not accepted until all major deficiency items have been satisfactorily corrected by the responsible Trade Contractors. Re-inspection will be required to verify all deficient work has been satisfactorily corrected. Upon resolution, the system / equipment can be turned over to the Owner.
- Gilbane to obtain signoff for approved inspections.

Timing: When Trade Contractor has completed operational testing, shakedown, debugging, and completed activation of the system and / or equipment. Trade Contractor must give Gilbane ample notice of inspection, at least forty-eight (48) hours prior to desired demonstration date.

Required Participants: Gilbane, Trade Contractor(s), Manufacturer's Representative, Commissioning Agent, Controls Contractor Owner/Owner's Representative, Owner's Facility Staff, Engineer

Optional Participants: Architect

Required Material for Inspection: Startup Inspection, testing, adjusting, and balancing (TAB) report, completed install and pre-functional checklists, completed Install - Activation inspection, Commissioning Plan, Contract Documents, approved equipment and control submittals, approved shop drawings.

Punchlist

A Punch List is utilized to track all incomplete or non-conforming Work at the end of the project. The punch list is used to ensure we are providing the Owner with a quality product that meets or exceeds Requirements. Any incomplete RCL items will automatically get transferred to the punch list.

Requirements:

- Prior to the start of punch list activities, Gilbane shall hold a meeting with the Owner/Owner's Representative, and Design Team to prepare for punch list activities.
- When the project, or areas of a project are complete, Gilbane will notify the Owner/Owner's Representative, Design Team and Trade Contractor's those areas are ready for Punch Listing.
- Trade Contractors are to ensure the areas are clean and ready, and obvious deficiencies shall be corrected prior to the punch list.
- Non-conforming items will be documented on the punch list.
- Gilbane will distribute the punch list to the Trade Contractors, and they must complete their items by the associated due date.
- Gilbane will then verify that the items were satisfactorily resolved; if not, the item will be sent back to the Trade Contractor for resolution.
- Owner/Owner's Representative and Design Team will verify punch list items are acceptable and either close them out or reject them for resolution.

Timing: At the end of the project, typically once the project obtains substantial completion. When areas will receive Owner FFE, it is a best practice to perform the punch list prior to FFE move-in to document the condition of the space.

Required Participants: Gilbane, Owner/Owner's Representative, Design Team

Optional Participants: Engineer, Consultants

Required Material for Inspection: Contract Documents, RCL

Final Inspection and Acceptance

A Final Inspection will be performed when all Work has been completed, as determined by Gilbane and approved by the Owner/Owner's Representative and Design Team.

Requirements:

- If Owner requires a final inspection, ensure Owner, Design Team and Gilbane are in attendance.
- When complete, Gilbane to communicate in writing to the Owner that all Work is complete and final payment should be made.

Timing: When completion of the Work, corrections, documentation, training, and all other requirements have been met by the Trade Contractor.

Required Participants: Gilbane, Owner/Owner's Representative, Design Team

Optional Participants: Trade Contractor(s)

Required Material for Inspection: Rolling Completion List, Punch List

5

Project Completion

Project Completion

Prior to project completion, Trade Contractors and Vendors must provide closeout documentation such as as-built drawings, operations and maintenance (O&M) manuals, warranties and guarantees, etc. Refer to the Contract Documents to determine specific closeout requirements. Training must be provided to the Owner and/or its authorized representatives as required to instruct personnel regarding the operations and maintenance of equipment and materials. Attic stock must also be formally turned over the Owner in an acceptable location determined by the Owner.

Upon final acceptance of a Trade Contractor's Work, completion of all the final paperwork requirements and conformance to all Requirements, Gilbane will issue a "Final Acceptance Letter" for Owner approval and final payment.

Eleven months after the time of substantial completion, members of the original project team will conduct a walk - through of spaces turned over to the Owner. Trade Contractor may be required to attend that meeting and / or to participate in follow up activities as a result of that meeting.

6

Designation of Dedicated Quality Representative

Designation of Dedicated Quality Representative for Trade Contractor

Project Name

Project Location

Trade Contractor	
Quality Representative	
Title	
Phone	
Email	

The above individual is identified as the Quality Representative for the Trade Contractor, who shall be responsible for bringing its quality management processes into accordance with Gilbane's, confirming the quality of the Work, and who shall have full authority to represent Trade Contractor regarding quality, including, if required, stopping work.

In the event this individual leaves Trade Contractor's employ or is no longer assigned to this project, Trade Contractor must identify a replacement representative within forty-eight (48) hours after the designated individual leaves. In the event the designated representative, whether it be the initial representative or a replacement representative, is not satisfactory to Gilbane, Trade Contractor must designate a qualified representative within forty-eight (48) hours of receipt of Gilbane's objection.

Authorized by			
	Print Name	**Signature**	**Date**
Trade Contractor			

7

Attachments

Attachments

- First Delivery Inspection
- First Equipment In-Place Inspection
- Benchmark – Mock-Up Inspection
- Closure Inspection (In-wall, Above-ceiling, Below-grade, Encased in Concrete)
- Install - Activation Inspection
- Startup Inspection

First Delivery Inspection

Project Name	
Project Location	

General Information			
Project Number		Date / Time of Inspection	
Trade Contractor		Bid Package Number	
Location (if applicable)			
Description of material / equipment			
Applicable Specifications		Applicable Drawing / Details	

Inspection Details	Yes	No	N/A
Has the material / equipment submittal been approved prior to delivery?	☐	☐	☐
Does the material / equipment conform to the Contract Documents?	☐	☐	☐
If the material / equipment does not conform to the Contract Documents, was it removed from site?	☐	☐	☐
Comments			

Attachments	
Document	**Attached?**
Photos of material / equipment, delivery tickets, identification labels, tags, etc.	☐

Acceptance Signatures				
	Company	**Print Name**	**Signature**	**Date**
Trade Contractor				
Owner / Owner's Rep				
Architect				
Engineer				
Gilbane Representative				
Other				

First Equipment in Place Inspection

Project Name	
Project Location	

General Information			
Project Number		Date / Time of Inspection	
Trade Contractor		Bid Package Number	
Location			
Description			
Applicable Specifications		Applicable Drawing / Details	
Submittal Number & Title			

Inspection Details			
	Yes	**No**	**N/A**
Has the equipment submittal been approved prior to delivery?	☐	☐	☐
Does the equipment fit in the intended location?	☐	☐	☐
Comments			

Attachments	
Document	**Attached?**
Applicable spec sections, drawings, approved submittals, and photos of equipment in place	☐

Acceptance Signatures				
	Company	**Print Name**	**Signature**	**Date**
Trade Contractor				
Owner / Owner's Rep				
Architect				
Engineer				
Gilbane Representative				
Other				

Benchmark - Mock-up Inspection

Project Name	
Project Location	

General Information			
Project Number		Date / Time of Inspection	
Trade Contractor		Bid Package Number	
Inspection Type	☐ Mock-up ☐ Benchmark ☐ Follow-up Benchmark		
Location (if applicable)			
Description of Benchmark - Mock-up			
Applicable Specifications		Applicable Drawing / Details	

Inspection Details	Yes	No	N/A
Has the material / equipment submittal been approved prior to the Benchmark - Mock-up?	☐	☐	☐
If no, explain why a Benchmark - Mock-up is being conducted without an approved submittal			
Does the Benchmark - Mock-up conform to the Contract Documents?	☐	☐	☐
If the Benchmark - Mock-up does not conform to the Contract Documents, is a re-inspection by Gilbane acceptable for approval?	☐	☐	☐
Comments			

Attachments	
Document	**Attached?**
Approved submittal(s), photos of benchmark / mock-up	☐

Acceptance Signatures				
	Company	**Print Name**	**Signature**	**Date**
Trade Contractor				
Owner / Owner's Rep				
Architect				
Engineer				
Gilbane Representative				
Other				

Closure Inspection

Project Name	
Project Location	

General Information						
Project Number		Date / Time of Inspection				
Trade Contractor		Bid Package Number				
Inspection Type	☐ Below Grade ☐ In-Wall ☐ Above Ceiling ☐ Concrete Encasement ☐ Other					
Concrete Placement (if applicable)	Specified Concrete		No. of CYs		Placement No.	
Location						
Description of Area being Enclosed						
Applicable Specifications		Applicable Drawing / Details				

Inspection Details	Yes	No	N/A
Does the area being closed conform to the Contract Documents?	☐	☐	☐
Are all associated Trade Contractors in agreement that the area can be closed?	☐	☐	☐
Comments			

Attachments	
Document	**Attached?**
Photos of area being enclosed	☐

Acceptance Signatures	Company	Print Name	Signature	Date
Trade Contractor				
Trade Contractor				
Trade Contractor				
Trade Contractor				
Owner / Owner's Rep				
Architect				
Engineer				
Gilbane Representative				
Other				

Install / Activation Inspection

Project Name	
Project Location	

General Information			
Project Number		Date / Time of Inspection	
Trade Contractor		Bid Package Number	
Location			
System / Equipment Description			
Applicable Specifications		Applicable Drawing / Details	

Inspection Details	Yes	No	N/A
Has the System / Equipment been installed per Contract Documents?	☐	☐	☐
Has the Trade Contractor completed all manufacturer install checklists and startup forms?	☐	☐	☐
Has the First Equipment in Place inspection been completed, and any open issues have been resolved?	☐	☐	☐
Has the System / Equipment been activated?	☐	☐	☐
Does the System / Equipment meet specified design parameters under full load and part-load conditions during all modes of operation, as described in the Contract documents and Commissioning Plan?	☐	☐	☐
Are there any open non-conforming issues?	☐	☐	☐
If the System / Equipment is not approved, is a re-inspection by Gilbane acceptable for approval or does the entire team need to re-inspect?	☐	☐	☐
Comments			

Attachments	
Document	**Attached?**
Photos, manufacturer's install checklists / forms	☐

Acceptance Signatures				
	Company	**Print Name**	**Signature**	**Date**
Trade Contractor				
Owner / Owner's Rep				
Architect				
Engineer				
Gilbane Representative				
Other				

Startup Inspection

Project Name	
Project Location	

General Information			
Project Number		Date / Time of Inspection	
Trade Contractor		Bid Package Number	
Location (if applicable)			
System / Equipment Description			
Applicable Specifications		Applicable Drawing / Details	

Inspection Details	Yes	No	N/A
Has the Install / Activation inspection been completed, and any open issues have been resolved?	☐	☐	☐
Has the System / Equipment been started up and are there any open non-conforming issues?	☐	☐	☐
If the System / Equipment is not approved, is a re-inspection by Gilbane acceptable for approval, or does the entire team need to re-inspect?	☐	☐	☐
Comments			

Attachments	
Document	**Attached?**
Photos, manufacturer's install checklists / forms	☐

Acceptance Signatures				
	Company	**Print Name**	**Signature**	**Date**
Trade Contractor				
Owner / Owner's Rep				
Architect				
Engineer				
Gilbane Representative				
Other				

Gilbane Building Company

NEMT High School Project

J09299

Contractor Controlled Insurance Program
Contractors Insurance Procedures Manual

10/04/2022

THIS MANUAL IS A CONTRACT DOCUMENT

Table of Contents

1.0 INTRODUCTION 4

1.1 Overview 4

1.2 About this Manual 5

1.3 Responsibilities Concerning Loss Control & Claim Reporting 5

2.0 PROJECT DIRECTORY 6

3.0 PROJECT DEFINITIONS 8

4.0 SUBCONTRACTOR RESPONSIBILITIES 10

4.1 Alliant WrapX 10

4.2 Subcontractor Bids 11

4.3 Enrollment 11

4.4 Assignment of Return Premiums 11

4.5 Payroll Reports 11

4.6 Insurance Company Payroll Audit 12

4.7 Completion of Work 12

4.8 Safety 12

4.9 Claims Reporting 13

4.10 Change Order Procedures 13

4.11 Spot-R 14

5.0 INSURANCE COVERAGE 13

5.1 Covered Parties 13

5.2 Parties Not Covered 14

5.3 Exclusion of Subcontractors from the CCIP 14

5.4 Evidence of CCIP Coverage 15

5.5 Description of Insurance Coverages 15

5.6 CCIP Termination or Modification 16

5.7 General Liability Obligation 16

6.0 SUBCONTRACTOR INSURANCE REQUIREMENTS 17

6.1 Workers' Compensation 18

6.2 General Liability 18

6.3 Business Auto Liability 19

6.4 Construction Equipment Insurance 20

6.5 Professional Liability Insurance (Errors & Omissions) 20
6.6 Aviation Insurance 21
6.7 Pollution Liability 21
6.8 Riggers Liability 23
6.9 Conditions of Understanding 21
6.10 Other Insurance Requirements of All Subcontractors 22
7.0 CLAIM PROCEDURES 23
7.1 General Procedures 23
7.2 Investigation Assistance 24
7.3 Workers Compensation Claims 24
7.4 Return to Work 25
7.5 Incident Management and Reporting Procedures for Trade Contractors 28
7.6 Sample Offer of Temporary/Alternative Position Letter 29
7.7 Liability Claims 30
7.8 Property Claims 30
7.9 Automobile Claims 30
7.10 Pollution Claims 31
7.11 Loss Runs 31
8.0 APPENDIX 32

SECTION 1

1.0 INTRODUCTION

1.1 Overview

Gilbane Building Company (Sponsor) has elected to use a Contractor Controlled Insurance Program (CCIP) for the NEMT High School Project (Project). Under such a program, the Sponsor purchases certain insurance policies for protection of some (but not all) of the insurable risks that exist on a construction project. The insurance purchased by the Sponsor will be endorsed to extend coverage of the policy to any enrolled Subcontractors, or Sub-Subcontractors. All Subcontractors and Sub-Subcontractors on the Project should carefully consider the CCIP and its implications to their company before executing a contract requiring their participation in the CCIP.

The CCIP provides the following insurance for all Subcontractors, regardless of tier, that are approved for participation in the insurance program:

- Commercial General/ Excess Liability
- Workers' Compensation

Certain Subcontractors are ineligible for this program. These parties are identified in the Definitions, Section 5.2 of this manual.

The Sponsor will pay all insurance premiums for the CCIP coverage listed above. You should notify your insurer(s) to delete from your insurance program charges and coverage for the on-site activities of this Project that are covered under the CCIP.

Alliant, the CCIP Program Broker/Administrator, will be administering the program on the behalf of the Sponsor.

Insurance coverage and limits provided under the CCIP are limited in scope and specific to this project only. Your insurance representative should review this information. Any additional coverage you may wish to purchase will be at your own expense.

The guidelines in this manual are to be used for informational purposes only. Any conflict between this document and any contract or subcontract, the contract or subcontract will govern. Any difference with the actual CCIP policies will control in the event of any inconsistency or misunderstanding.

1.2 About this Manual

This manual is designed to identify, define, and assign responsibilities for the administration of the CCIP. The guidelines in this manual are to be used for informational purposes only.

This Manual:

- Generally describes the CCIP
- Identifies responsibilities of the various parties involved in the project with regards to the CCIP
- Provides a basic description of the CCIP operation
- Describes audit and administration procedures for the CCIP
- Provides answers to basic questions about the CCIP

This manual will be updated throughout the course of the project if necessary

This Manual does not:

- Provide coverage interpretations
- Provide complete information about coverage
- Provide answers to specific claims questions

Specific questions about the CCIP, its administration, or the coverage provided should be referred to the CCIP Administrator identified in the Project Directory section immediately following this introduction.

1.3 Responsibilities Concerning Loss Control & Claim Reporting

It will be the responsibility of all Subcontractors of any tier to exercise every reasonable action to prevent work related injuries, property and equipment damage at the project site, as well as to minimize the exposure of risk to the public and third party property. All Subcontractors of any tier will conduct loss control prevention practices according to those requirements set by Federal, State and Local Laws, statutes, and specific project procedures developed for this project.

In the event of an accident, it will be the obligation of the responsible Subcontractor of any tier to see that the injured workers or members of the public are given immediate medical treatment. Also, all appropriate medical and claim forms must be filed with the appropriate Authorities, the Primary CCIP Carrier, Site Safety Personnel, and the CCIP Administrator.

SECTION 2

2.0 PROJECT DIRECTORY

CCIP ADMINISTRATOR
Alliant Insurance Services Construction Services Group 140 East 45th Street, Suite 6B New York, NY 10017

PROGRAM MANAGER	PROGRAM ADMINISTRATOR
Cory Davis Office: 212-895-2922 CDavis@alliant.com	**[Alliant Admin]** Office: xxx-xxx-xxxx _____@alliant.com

VICE PRESIDENT – CLAIMS
Cathie McGrath Office: 516-414-8931 Fax: 855-278-8194 cmcgrath@alliant.com

WORKERS COMPENSATION CLAIMS ADVOCATE	GENERAL LIABILITY CLAIMS ADVOCATE
Lorraine McCormick Office: 516-414-8933 Fax: 516-414-8682 lmccormick@alliant.com	**Nancy Hluboky** Office: 516-414-8924 Fax: 516-414-8967 nhluboky@alliant.com

CCIP PORTAL – ALLIANT WRAPX	
CCIP Document Submission Email:alliantwrapx@alliant.com	**Online Enrollment, Payroll Reporting & Document Management** Website: http://alliantwrapx.alliantinsurance.com/contractorportal ***Contact Project Administrator for User Access**

SPONSOR

Gilbane Building Company
7 Jackson Walkway
Providence, RI 02903
Phone: 1-800-GILBANE

Risk Manager

Alexander Cole
Mobile: 401-378-2924
ACole@GilbaneCo.com

Claims Manager

[GIG Claims Manager]
Office: xxx-xxx-xxxx
Mobile: xxx-xxx-xxxx
_____@gilbaneco.com

SENIOR PROJECT EXECUTIVE	PROJECT EXECUTIVE
Michael Mallett Office: 617-960-9350 Mobile: 617-839-6157 MMallett@GilbaneCo.com	**Neil Benner** Office: 617-960-2978 Mobile: 617-697-6712 NBenner@GilbaneCo.com
PURCHASING MANAGER	**SAFETY MANAGER**
[Name] Office: [xxx-xxx-xxxx] Fax: [xxx-xxx-xxxx] [Xxxxxx]@[xxx]	**[Name]** Office: [xxx-xxx-xxxx] Fax: [xxx-xxx-xxxx] [Xxxxxx]@[xxx]

CCIP Coverages

INSURANCE COMPANIES	POLICIES
TBD	Workers' Compensation
TBD	General Liability
Various	Excess Liability

SECTION

3

3.0 PROJECT DEFINITIONS

The following definitions apply to this project and to the descriptions of the Project Coverage used in this manual:

Approved Off-Site Locations:
Storage yards or staging areas used solely in connection with performing work at the Project Site. All locations must be approved by the Sponsor and insurer.

Certificate of Insurance:
A Document providing evidence of the existence of coverage for a particular insurance policy or policies.

Contract:
A written agreement between the Sponsor and the Subcontractor for specific work and also includes an agreement between a Subcontractor and any tier of Subcontractor.

Employer:
Any individual, firm, or corporation that provides direct construction labor for work performed at the Project Site.

Enrolled:
Applies to those eligible Subcontractors, and Sub-Subcontractors that have submitted all necessary enrollment forms and have been accepted into the CCIP as evidenced by a Certificate of Insurance. *Also described in this manual as a Participating Subcontractor.*

Ineligible:
Applies to Subcontractors of any tier excluded from participation in the CCIP.

Insured:
The Sponsor, Participating Subcontractors, and any other party so named in the insurance policy.

Insurer:
The insurance company named on a policy or certificate of insurance that provided coverage for the CCIP.

Participating Subcontractor: See *Enrolled*

Project Site:
Project Site shall mean those areas designated in writing by Sponsor for performance of the Work and such additional areas as may be designated in writing by Sponsor for Subcontractors use in performance of the Work. Subject to notification and other requirements for off-site locations, the term Site shall also include (a) field office sites, (b) property used for bonded storage of material for the Project approved by Sponsor, (c) staging areas dedicated to the Project, and (d) areas where activities incidental to the Project are being performed by Subcontractors covered by the workers' compensation policy included in the CCIP, but excluding any permanent locations of Subcontractors.

Subcontractor (aka: Trade Contractor):
Any entity contracting directly with the Sponsor.

Sub-subcontractor:
Any entity of any tier subcontracting with a Subcontractor to the Sponsor.

Subcontractor Claims Obligation:
The amount Subcontractors of every tier are responsible for paying as their contribution for settlement of an insured loss.

Sponsor (aka: Construction Manager):
Gilbane Building Company

Unauthorized Parties: Individuals or contractors are designated as Unauthorized Parties (Parties who are not allowed on the project site and for whom CCIP coverage will not apply) in the event that:

a) The employee does not complete the Gilbane safety orientation training or does not obtain proper badging as required by the project.
b) The employee has not complied with substance abuse protocols and requirements. Trade Contractors are responsible for substance abuse protocols and standards as outlined in safety manual.

Please refer to the Safety Manual for actual substance abuse protocol and requirements.

Work:
Operations as fully described in the Contract, performed at, or emanating directly from the Project Site. Also, the entire completed construction or the various separately identifiable parts required to be furnished under the Contract documents.

SECTION 5

4.0 SUBCONTRACTOR RESPONSIBILITIES

Subcontractors of any tier are required to cooperate fully with the Sponsor and its CCIP Administrator in all aspects of CCIP operation and administration. All Subcontractors of any tier will be required to provide information necessary to bind coverage under the CCIP on a "per contract" basis. Responsibilities of the Subcontractor include:

- Exclude the cost of insurance from their bid as appropriate.
- Complete online CCIP enrollment process.
- Include the CCIP provisions in all subcontracts as appropriate
- Notify the CCIP Administrator of all subcontracts awarded and to provide all necessary information for enrollment.
- Maintain and report monthly payroll expenditures to the CCIP Administrator.
- Cooperate with the CCIP Administrator's requests for information.
- Comply with all insurance, claim, and safety procedures.
- Notify the CCIP Administrator immediately of any insurance cancellation or non-renewal (contractor-required insurance).

4.1 Alliant WrapX

Alliant WrapX (WrapX) is a proprietary Risk Management Information System (RMIS). All relevant CCIP information will be captured and stored online in a "paperless" format through WrapX. Information to be stored includes award notifications, enrollment information, CCIP payroll, and notice of work completions for all contractors on a per contract basis. Alliant Insurance will provide all CCIP Eligible Contractors a project welcome letter detailing instructions for utilizing the WrapX contractor portal upon receipt of a Notice of Award for the awarded contractor.

Submission of all CCIP related documents should be sent by e-mail to:

alliantwrapx@alliantinsurance.com

If you should have any questions or require additional information about this process or other matters related to the CCIP, please contact your CCIP Administrator identified in Section 2: Project Directory of this Manual.

4.2 Subcontractor Bids

Each bidder is required to **exclude its normal cost for the insurance coverages provided by the CCIP from the bid/subcontract price.**

4.3 Enrollment

Enrollment into the CCIP is required but not automatic. Eligible Subcontractors must complete the enrollment form online (see instructions in Section 8), and participate in the enrollment process for the CCIP coverage to apply. This form must be completed and submitted to the CCIP Administrator prior to mobilization. Access to the project site will ***not*** be permitted until the enrollment is complete.

Each Subcontractor of any tier shall provide details about its lower tier subcontractors to the CCIP Administrator so that they may facilitate enrollment of all Sub-subcontractors as well. Each Sub-subcontractor is responsible to complete their Enrollment online to obtain coverage under the CCIP.

A separate online Enrollment is required for each Contract for which you are performing Work; however, only one Workers' Compensation policy will be issued for your firm.

In the event the Sponsor elects not to include a Subcontractor of any tier's work under the CCIP, the standard terms and conditions regarding insurance listed in the Contract Document will then apply. The CCIP Administrator will advise a Subcontractor of any tier which has submitted an enrollment form if they excluded from the CCIP.

4.4 Assignment of Return Premiums

The Sponsor will pay the cost of the CCIP insurance coverage. The Sponsor will be the sole recipient of any return CCIP premiums or dividends. All Participating Subcontractors shall assign to Sponsor all adjustments, refunds, premium discounts, dividends, credits, or any other monies due from the CCIP insurers.

4.5 Payroll Reports

Each Participating Subcontractor must submit a Monthly Payroll Report online identifying man-hours and payroll for all work performed at the Project Site on a "per contract" basis to the CCIP Administrator.

The monthly man-hour reports shall certify all Work performed at or emanating directly from the Project Site, including supervisory and clerical personnel on site.

Payroll shall be unburdened and allocated by Workers' Compensation Classification(s), and shall be reported on both a gross and net basis, as per the relevant state's workers compensation payroll reporting requirements. Subcontractors of all tiers shall limit the payroll reported for Owners and Executive Officers as stated in the relevant state's workers compensation manual rules.

A Separate Monthly Payroll is required for each Subcontract for Work you are performing.

Payroll shall be reported online via the Alliant WrapX Contractor Portal:

http://alliantwrapx.alliantinsurance.com/contractorportal

4.6 Insurance Company Payroll Audit

Each Participating Subcontractor is required to maintain payroll records for the Project Site in accordance with the Basic Manual of Rules, Classifications, and Experience Rating Plan for Workers' Compensation and Employers Liability Insurance. Each Participating Subcontractor is required to participate in any audit conducted by the insurers for the CCIP, and to cooperate with the auditor(s) conducting such audit.

4.7 Completion of Work

When a Participating Subcontractor has completed its work, each Participating Subcontractor shall complete a Notice of Work Completion online and submit it to the CCIP Administrator. The Sponsor will not release final payment until all required data has been submitted to and approved by the CCIP Administrator. It is the upper-tier Subcontractor's responsibility to assure that each of their lower-tier subcontractors completes this form. This form must be completed separately for each contract.

Any Subcontractor Claims Obligation that Subcontractors of any tier are responsible for will be considered at the time of the Contract close-out unless the actual cost of the claim has been established and considered prior to close-out.

4.8 Safety

Non-compliance with Project Loss Control Requirements could be considered to be the same as non-compliance with another contractual condition. Minimum standards for Subcontractor programs are outlined in the NEMT High School Project Project Safety Manual.

The Sponsor or its loss control representatives will have the right to "Stop Work" when serious defective conditions, unsafe work activities, or life threatening hazards are identified. In accordance with contract requirements, if deemed necessary, the Sponsor may remove any subcontractor and/or subcontractor employees that blatantly violate these requirements. The Sponsor, at its discretion, will designate an individual to act on its behalf, in all matters relating to work site safety and health.

4.9 Claims Reporting

Please refer to section 7 of this Manual.

4.10 Change Order Procedures

All change orders submitted by Subcontractor of any tier will be priced to **exclude** their normal cost of insurance for the coverage(s) that are provided by the CCIP.

5.0 INSURANCE COVERAGE

5.1 Covered Parties

Subcontractors of any tier must enroll in the CCIP before coverage is available to them for any loss. Therefore no Subcontractor of any tier shall begin work on site until they have properly enrolled in the CCIP. All insurance, underwriting, payroll, rating or loss history information (including evidence of other insurance required under Section 5 requested by the Administrator) must be provided to the Administrator by Subcontractor of any tier within five (5) working days of the request. *A Subcontractor or Sub-Subcontractor shall not be deemed to be a Participating Subcontractor and shall not be permitted to work on the project until enrolled in the CCIP by the Administrator. Enrollment will be established only upon issuance by the Administrator of a CCIP Certificate of Insurance to the Participating Subcontractor.* Every Participating Subcontractor shall, at all times during and after the Project, cooperate with the Sponsor, the Administrator, and the CCIP insurers and adjusters concerning matters relating to the CCIP.

5.2 Parties Not Covered

At the sole discretion of Gilbane, and/or subject to State regulations, they may elect to enroll or exclude any trade contractors, parties or entities.

The following parties will be excluded:

a) Hazardous materials remediation, removal and/or transport companies and their consultants;
b) Any trade contractor performing/involved in; Structural Demolition, Blasting, Concrete Cutting, Sawing, Core Drilling, Cranes, Hoist's, Scaffolding, Exterior Insulation & Finish Systems (EIFS), Direct-applied Exterior Finish Systems (DEFS).
c) Architects, engineers, and soil testing engineers, and their consultants; surveyors, industrial hygienists
d) National Elevator Companies
e) Vendors, suppliers, fabricators, material dealers, truckers, haulers, drivers and others who merely transport, pickup, deliver, or carry materials, personnel, parts or equipment or any other items or persons to or from the Project Site;
f) Trade Contractors, and any of their respective Sub-Trade Contractors, who do not perform any actual labor on the Project Site. In the event the trade contractor does not have on-site labor, but its Sub-Trade Contractor does have on-site labor, the sub-trade contractor will need to fully enroll.

5.3 Exclusion of Subcontractors from the CCIP

The Sponsor has the right to exclude Subcontractors of any tier from participating in the CCIP. Such Non-participating Subcontractors, who will not be covered under the CCIP, must comply with the insurance requirements outlined in the Contract and the excluded contractors section of the insurance manual. On-site coverage would be solely based on the contractor's primary insurance policy and no exclusions should affect coverage. Any applicable exclusions must be removed and or amended to not affect primary coverage.

NOTE: Wrap-Up/Consolidated Insurance Program Exclusions must not contain any variation of the wording: "Involved" and or "Allowed to enroll"

5.4 Evidence of CCIP Coverage

Each Participating Subcontractor will be issued an individual Workers' Compensation policy including Employer's Liability coverage. The CCIP Administrator will also provide a Certificate of Insurance evidencing General Liability, and Excess Liability insurance to each Participating Subcontractor, each of whom will be a named insured on the policy. Other documentation including forms, posting notices, if any, will be furnished to each Participating Subcontractor. A copy of the liability policies are available upon request to Gilbane Risk Management.

5.5 Description of Insurance Coverages

The following coverage is provided by the CCIP:

- Commercial General/ Excess Liability
- Workers' Compensation and Employer's Liability

Liability Insurance Policies: Master policies will be endorsed to include the Sponsor and any of their affiliates, or subsidiary companies or corporations, as well as the Subcontractors enrolled in the CCIP as a Named Insured.

The following coverage summaries are provided for informational purposes only. The actual terms and conditions of the coverage provided are contained in the insurance policies under the CCIP, and Gilbane Building Company and others shall not rely upon this summary in lieu of the policies themselves. Copies of the policies will be made available to all potential Participating Subcontractors upon written request.

5.5.1 Workers' Compensation and Employer's Liability Insurance

Workers' Compensation and Employer's Liability		
Part One:	Workers' Compensation	Statutory Limit
Part Two:	Employer's Liability	Annual Limits Per Insured
	Bodily Injury by Accident, each accident	$1,000,000
	Bodily Injury by Disease, each employee	$1,000,000
	Bodily Injury by Disease, policy limit	$1,000,000

Each Enrolled Subcontractor will be issued a separate workers' compensation policy

5.5.2 Commercial General Liability Insurance

	Limits of Liability Shared by All Insureds
General Aggregate	$ 4,000,000
Products/ Completed Operations Limit (Reinstates Annually)	$ 4,000,000
Personal/ Advertising Injury Limit	$ 2,000,000
Each Occurrence Limit	$ 2,000,000
Damage to Premises Rented to You Limit	$100,000
Medical Expense Limit	$10,000
Completed Operations Extension Period	10 years/Statute of Limitation
Deductible	Paid for by Sponsor

The deductible will apply only to loss covered by insurance policies in the CCIP. The deductible does not impose upon the Sponsor any duties of an insurer toward Participating Subcontractor. A Single General Liability policy will be issued covering all insureds.

5.5.3 Excess Liability Insurance

	Limits of Liability Shared by All Insureds
Each Occurrence Limit	$ 100,000,000
Annual General Aggregate Limit	$ 100,000,000

5.6 CCIP Termination or Modification

The Sponsor reserves the right to terminate or modify the CCIP or any portion thereof. If the Sponsor exercises this right, subcontractors will be provided notice as required by the terms of their individual contracts. At its option, Sponsor may procure alternate coverage or may require the Subcontractors to procure and maintain alternate insurance coverage.

5.7 General Liability Obligation

At Gilbane's discretion, the trade contractor or sub-trade contractor of any tier may be required to pay up to the first $5,000 per occurrence to the extent losses payable are attributable to trade contractor's Work, or the acts or omissions of its sub-trade contractors or any other party performing any of the Work for whom the trade contractor may be contractually or legally responsible.

SECTION

6

6.0 SUBCONTRACTOR INSURANCE REQUIREMENTS

Subcontractors of any tier are required to maintain insurance coverage that protects the Sponsor from liabilities arising from the Subcontractor of any tier's operations performed away from the project site, for types of coverage not provided by the CCIP, and for operations performed in connection with excluded parties operating under your control or direction.

Verification of insurance shall be submitted in the form of a Certificate of Insurance on a standard ACORD Form 25-S and the required and applicable endorsements to the listed policies. A sample of an acceptable Certificate of Insurance and other documentation is provided for your review in the Appendix.

Subcontractors are responsible for monitoring their lower tier Subcontractors insurance documents, whether enrolled or excluded. The Sponsor reserves the right to disapprove the use of Subcontractors unable to meet the insurance requirements. Certificates evidencing compliance shall be submitted to Sponsor.

The limits of liability shown for the insurance required of the Subcontractor are minimum limits only and are not intended to restrict the liability imposed on the Subcontractors for Work performed under their Contract.

Subcontractors of any tier agree to obtain and maintain during the life of this contract the following minimum insurance requirements. Subcontractors of any tier shall pay the premiums required for such insurance.

Current Experience Modification Rating (EMR) for subcontractors of any tier should be 1.0 or less in order to qualify for CCIP Enrollment.

6.1 Workers' Compensation

Subcontractors of all tiers shall maintain at their own expense Workers' Compensation Insurance applicable to all employees and subcontractors hired by the insured, who are not covered under the CCIP workers' compensation policy. The insurance shall provide limits as follows:

Workers' Compensation and Employer's Liability		
Part One:	Workers' Compensation	Statutory Limit
Part Two:	Employer's Liability	Annual Limits Per Insured
	Bodily Injury by Accident, each accident	$1,000,000
	Bodily Injury by Disease, each employee	$1,000,000
	Bodily Injury by Disease, policy limit	$1,000,000

Enrolled Subcontractors *shall provide evidence of workers' compensation applicable to "off-site" activities.* ***Excluded Subcontractors*** *shall provide evidence of workers compensation applicable to "on-site" and "off-site" activities.*

A certificate of insurance evidencing this coverage shall be provided to the CCIP Administrator. If any Subcontractor of any tier is leasing labor though an Employee Leasing Firm or Professional Employer Organization (PEO), then Subcontractor shall attach an Alternate Employer Endorsement to its policy and schedule the Sponsor.

6.2 General Liability

This insurance shall include coverage for bodily injury, property damage, and personal injury with no less than the following limits:

General Liability and Excess Liability		
	Enrolled Parties	**Excluded Parties**
General Aggregate	$ 2,000,000	$ 2,000,000
Products/ Completed Operations Aggregate	$ 2,000,000	$ 2,000,000
Personal/ Advertising Injury	$ 1,000,000	$ 1,000,000
Each Occurrence Limit	$ 1,000,000	$ 1,000,000
Medical Expense	$ 5,000	$ 5,000
Excess Liability Occurrence/Aggregate	$ 5,000,000	$ 5,000,000
Liability Requirements for use of Cranes		
Utilizing Tower Cranes (New York City)	$80,000,000	$80,000,000
Utilizing Tower Cranes	$25,000,000	$25,000,000
Utilizing Mobile Cranes	$10,000,000	$10,000,000

Enrolled Subcontractors *shall provide evidence of general liability insurance for "off-site" activities.* ***Excluded Subcontractors*** *shall provide evidence of general liability insurance applicable to "on-site" and "off-site" activities.*

A certificate of insurance evidencing this coverage shall be provided to the CCIP Administrator. This insurance shall be endorsed to name Gilbane Building Company and all other entities as required by contract as additional insureds on a primary and non-contributory basis, and provide evidence of such status via the additional insured endorsement CG 2010 11/85 or its equivalent.

Subcontractor's Policy shall NOT contain the following exclusions:

- Must not exclude coverage for explosion, collapse and underground hazards (XCU exclusion).
- Must not contain any exclusions or limitations of coverage because of Wrap-up exclusions or project specific exclusions.
- Must not contain any exclusion for or limitation applicable to residential work, or any prior work exclusion.

Excluded Subcontractor's should provide a copy of their policy, their schedule of forms and/or copies of their exclusions to Alliant and for further review by Gilbane Risk Management where necessary.

6.3 Business Auto Liability

Subcontractors of every tier will maintain at their own expense Automobile Liability Insurance covering the operations, maintenance, use and loading and unloading of all owned, non-owned, and hired vehicles. As such, all subcontractors of any tier shall furnish to the CCIP Administrator a Certificate of Insurance showing such coverage with the following minimum limits of liability. This insurance shall be endorsed to name Gilbane Building Company and all other entities as required by contract as additional insureds on a primary and non-contributory basis and provide evidence of such status via additional insured endorsement CA 2048 02/99 or its equivalent.

Business Auto Liability	
Combined Single Limit: Bodily Injury and/or Property Damage	$1,000,000

If Subcontractor will be hauling or transporting any hazardous materials, then policy shall include the most current version of the ISO CA 99 48-Broadened Pollution Liability Endorsement, or its equivalent, and the MCS-90 shall also be attached to the policy.

All Subcontractors shall provide evidence of automobile liability. The CCIP does <u>not</u> cover automobile liability.

NOTE: Subcontractors workers compensation, general liability, umbrella/excess liability, and auto liability policies shall all be endorsed to provide a waiver of subrogation in favor of Gilbane Building Company and all additional insureds and indemnitees required in the contract.

6.4 Construction Equipment Insurance

Any policies maintained by the Participating Subcontractors on their owned, borrowed and/or rented equipment and materials shall contain a provision requiring the insurance carriers to waive their rights of subrogation against the Sponsor and all other indemnities named in their contract documents.

The CCIP does <u>not</u> cover subcontractor's property.

6.5 Professional Liability Insurance (Errors & Omissions)

In the event any contract specifications requires a Participating Subcontractor, including any professional service provider, to perform professional services, such as, but not limited to, architectural, engineering, construction management, surveying, design, etc., a certificate of insurance must be provided to the CCIP Administrator prior to commencing work:

Professional Liability	
Each Claim	$ 1,000,000
Aggregate	$ 1,000,000

Change in limits, coverage, or loss of aggregate limit due to outstanding claims must be reported to the CCIP Administrator within thirty (30) days of any such event. This policy must be endorsed to provide a Waiver of Subrogation in favor of the Sponsor and all additional insureds and indemnities required in the contract.

The CCIP does <u>not</u> provide Professional Liability insurance.

6.6 Aviation Insurance

In the event any fixed aircraft, rotary aircraft, or Unmanned Aerial Vehicles ("drones") are used in connection with this Agreement and/or execution of the work, policy limits must be in accordance with the Sponsor's requirements. ***The CCIP does <u>not</u> provide Aviation insurance or coverage for liability arising out of the use of UAVs.***

6.7 Pollution Liability

If this Agreement involves the removal of asbestos or any other hazardous or regulated materials, the removal/replacement of underground tanks, or use of toxic chemicals and substances, the Subcontractor will be required to provide coverage of not less than the following limits, for such exposures subject to requirements and approval of the Sponsor:

Pollution Liability	
Each Claim/Per Occurrence	$ 5,000,000
Aggregate	$ 5,000,000

Coverage shall include bodily injury and property damage liability, defense costs, and clean-up costs and shall provide non-owned off-site disposal coverage if hazardous or regulated materials will be transported to a disposal site.

Policy shall also be endorsed to name Sponsor and all other entities as required by contract as additional insureds on a primary and non-contributory basis. Waiver of Subrogation is also required in favor of the Sponsor and all additional insureds and indemnities as required in the contract.

The CCIP does <u>not</u> provide Pollution Liability insurance.

6.8 Riggers Liability

Riggers Liability Insurance. To the extent the Trade Contractor's Work requires it to utilize power-operated equipment (as defined under OSHA 1926.1400 (a)) to hoist, lower or otherwise move a suspended load, then it shall provide riggers liability insurance. The limit for this coverage shall equal or exceed the full replacement cost value of the largest hoist intended to be made within its Scope of Work. This insurance shall name Construction Manager and Owner as loss payees to this insurance.

6.9 Conditions of Understanding

The amount and types of insurance coverage required herein shall not be construed to be a limitation of the liability on the part of the Sponsor, Participating Subcontractors, Nonparticipating Subcontractors, or any lower-tier Subcontractors. Any type of insurance, or any greater limits of liability than described above, which the Subcontractor requires for their own protection or on account of statute, shall be the Subcontractor's own responsibility and at its own expense. The carrying of the insurance described shall in no way be interpreted as relieving a Subcontractor of any tier, whether Participating or Non-Participating, of any responsibility of liability under this contract.

6.10 Other Insurance Requirements of All Subcontractors

Participating Subcontractor shall file certificates of such insurance with the Sponsor, which shall be subject to the Sponsor's approval for adequacy of protection, including the satisfactory character of any Insurer. If requested by the Sponsor, a certified copy of the actual policy(s) with the appropriate endorsement(s) and other documents shall be provided to the Sponsor.

Subcontractor shall immediately provide written notice to the Sponsor of any notice of cancellation, notice of non-renewal, or any other material modification of the insurance coverages required to be provided by the Subcontractor.

In the event of failure of any tier to furnish and maintain said insurance and to furnish satisfactory evidence thereof, the Sponsor shall have the right to take out and maintain same coverage for all parties on behalf of the Subcontractor of any tier who also agrees to furnish all necessary information thereof and to pay the cost thereof to the Sponsor immediately upon presentation of a premium invoice.

SECTION 7

7.0 CLAIM PROCEDURES

This section describes basic procedures for reporting various types of Claims: Workers' Compensation, Liability, and damage to the Project.

7.1 General Procedures

The Trade Contractor is to report all injuries, occupational-related illnesses or property damage to the Site Safety Manager immediately. All Parties will instruct employees and other personnel to report, in writing, by the end of the business day, ***all*** Accidents and Occurrences of any type to the Site Safety Manager or Project Superintendent.

At Construction Manager's discretion, trade contractors and sub-trade contractors of any tier may be assessed a $2,500 penalty for any claims not reported by the end of the business day for each occurrence.

The Site Safety Manager or Project Superintendent Contact information can be found in Section 2 of this manual.

Occupational Medical Clinic Information: TBD

Hospital Information: TBD

For Eye/Ear Injuries: TBD

***Immediately* call the Site Safety Manager or Project Superintendent in the event of the following, including but not limited to:**

- Any injury for which an ambulance is called
- Injury to head or neck
- Possible injury to back or spinal cord
- Unconscious employee
- Possible blindness
- Amputation of limbs
- Fatality
- Heart attack or stroke
- Hospitalization
- Property damage estimated over $1,000

7.2 Investigation Assistance

All Parties will assist in the investigation of any accident or occurrence involving injury to persons or property. All Enrolled Parties will cooperate with the companies involved in adjusting any claim by securing and giving evidence and obtaining the participation and attendance of witnesses required for the investigation and defense of any claim or suit.

7.3 Workers Compensation Claims

The main responsibility for any Party is first to see that the injured worker receives immediate medical care. Next, you should immediately notify the Site Safety Manager in the event of a serious injury or accident.

Trade contractors' on-site personnel will follow these procedures if any employee is involved in an accident or occurrence resulting in bodily injury:

1. Trade Contractor should contact the designated first aid/medical personnel and transport the injured party to the on-site first aid or medical facility, as necessary.

2. Report all injuries or occupational-related illnesses by the end of the business day to the Employer's Project Supervisor and Gilbane's Site Safety Manager or Site Superintendent.

3. Employer must complete an Accident Investigation Report Form and return to Construction Manager's Site Safety Manager by the end of the business day. The Site Safety Manager will fax/mail the completed form to the Insurance Carrier by the end of the business day.

4. Supply the Injured Party with a Medical Information Claim Folder which shall include a Doctor's Initial Report Form, Construction Manager's 90 Day Modified Alternate Duty Program, Position Description and a Medical Authorization Form which are to be returned by the Injured Party to the Site Safety Manager by the end of the business day.

5. Trade contractor and its sub-trade contractor will provide for Modified Alternate Duty (Return to Work Program) based upon the work abilities given to the Injured Party from the treating physician.

6. Immediately send all subsequent medical return to work notes, inquiries or correspondence about an Injured Party to the Site Safety Manager.

7. No Injured Party will be allowed on a job site unless they have provided the Site Safety Manager with the proper return to work note, either full duty or modified duty.

At Construction Manager's discretion, trade contractors and sub-trade contractors of any tier may be assessed a $1,500 per week for failure to implement return to work program requirements.

7.4 Return to Work

Purpose:

Construction Manager is committed to providing a safe work place for both its employees and the trade contractors' employees; facilitating prompt quality medical care in the event of a work related injury; and pursuing modified alternate duty to minimize the risks and financial burdens to its workforce.

Construction Manager has a "Return To Work" (RTW) program, which will be implemented by each trade contractor. Each trade contractor will provide a Modified Alternate Duty Program for an employee who has sustained a work related injury or illness and is medically unable to perform all or any part of his / her normal duties during all or any part of the normal workday or shift.

This applies to all trade contractors of all tiers on the project.

The program must include, but not be limited to:

- Immediate reporting of all work related injuries to Construction Manager.
- All injured employees will be provided with an approved medical treatment facility listing where appropriate, or a recommended panel listing. If there is any doubt as to where to go for treatment, the injured employee must contact Construction Manager.
- Trade contractors need to communicate to the injured employee and physician; Construction Manager's Return To Work Program and facilitates Modified Alternate Duty with physicians and the employee.
- The injured employee must provide Construction Manager's Safety Manager, Project Managers, Supervisors and Foreman copies of all medical notes, to include a statement on work capacity.
- Modified Alternate Duty assignments must comply with all medical limitations as outlined by a physician.
- Construction Manager's Safety Manager, Project Managers, Supervisors and Foreman all must be informed of the modified alternate duty assignment, anticipated length of alternate duty, and the restrictions.
- The injured employee is not to assume normal work activities unless there is medical documentation releasing them to their normal duties and presented to Construction Manager's Safety Manager.

Responsibilities:

The following will define the reporting responsibilities of each party involved in the CCIP for Return to Work.

Sub-Trade Contractor – A successful return to work program requires the cooperation and accountability of all your employees.

- Failure of a trade contractor to provide reasonable Modified Alternate Duty to an injured worker will result in a $1,500 weekly assessment against the trade contractor until the injured employee is returned to work in either a modified alternate duty position or full duty.
- Ensure that your employees understand Construction Manager's RTW program and clarify any procedures that are unclear.
- Your employees are to report all injuries, even minor incidents, immediately within established reporting protocols.
- Your employees are to work closely with Construction Manager and your managers/ supervisors and communicate all necessary information regarding their ability to return to work.
- Your employees are to provide the physician with the information, including the RTW program, necessary to help them determine how and when they can return to work.
- Your employees are to work within their medically stated limitations.
- Your employees are to help co-workers stay focused and provide a positive environment when they return to modified alternate duty.

Supervisor / Manager – Supervisors / Managers play a key role in the success of the return to work program. They must implement and manage the program.

- Understand and support Construction Manager's written policies / procedures.
- Complete the Accident Forms immediately after the incident as per the Incident Management and Reporting Procedures (attached).
- Facilitate treatment with the injured employee.
- Coordinate Modified Alternate Duty with the injured employee within the injured employee's work abilities as per the medical documentation.
- Monitor the injured employee's progress on modified alternate duty and provide weekly updates to the Construction Manager's Safety Coordinator.

Insurance Carrier Team – Are responsible for the daily claim handling.

- Coordinate medical care and return to work issues.
- Contact and communicate with the treating physician following each office visit.
- Manage issues related to claim file resolution.
- Analyze losses and recommend corrective action.

At Construction Manager's discretion, trade contractors and sub-trade contractors of any tier may be assessed a $1,500 per week for failure to implement return to work program requirements.

7.5 Incident Management and Reporting Procedures for Trade Contractors

EMERGENCIES (Serious Bodily Injury)

1. Call responding Emergency Medical Service (911) and Notify Construction Manager's Personnel immediately
2. Secure and Check scene for safety
3. Implement and follow site specific Emergency Action Plan.

NON-EMERGENCIES

1. Contact site safety coordinator to complete Construction Manager's Accident Investigation Form.
2. Complete internal subcontractor accident report and ensure Employee reads and **signs entire form.**
3. Assure that injured party, or transporter of injured party, verifies contact information for treating Doctor
4. Following treatment, employee and person accompanying injured should return to the work site.
5. Foreperson of injured and Construction Manager's safety coordinator to review return to work restriction if any are prescribed and complete "**Return To Work**" section.

INVESTIGATION

Trade contractor to proceed with Incident Investigation and give report to Construction Manager's safety coordinator.

7.6 Sample Offer of Temporary/Alternative Position Letter

Dear Employee:

(Contractor or Owner Name) is extending an offer of temporary transitional employment.

We are aware that you are medically cleared for work with restrictions. The task requirements of the offered position are within the scope of your current physical limitations.

You are being offered a position as a _____. This temporary transitional employment is subject to the limitations described on the attached medical report from _____. The wages you will be paid are $_____ per hour. The work hours are _____.

You are expected to return to work in the transitional position as described above on _____(date) at _____ am/pm. Please report directly to _____ at the _____project/site located at _____.
Any questions regarding this temporary position offer should be directed to _____ immediately.

YOUR FAILURE TO REPORT TO WORK AS OUTLINED ABOVE MAY RESULT IN THE TERMINATION OF YOUR WORKER'S COMPENSATION BENEFITS.

Sincerely,

SEND CERTIFIED, RETURN RECEIPT REQUESTED, AND REGULAR MAIL

7.7 Liability Claims

Trade contractors must immediately report all Accidents at the Project Site involving death, injury, or damage to property of non-employee personnel (the public, tenants, and visitors) to the Site Safety Manager. As soon as the on-site personnel become aware of the accident or occurrence, they must:

1. Take appropriate emergency measures to prevent additional injury or damage, including contacting police and fire authorities as required by law.

2. Complete and submit an Accident Investigation Report to the Site Safety Manager by the end of the business day.

3. Immediately send all subsequent inquires or correspondence about an insured loss or claim, including a summons or other legal documents, to the Site Safety Manager immediately.

At Construction Manager's discretion, trade contractors and sub-trade contractors of any tier may be assessed a $2,500 penalty for any claims not reported by the end of the business day for each occurrence.

Do ***not*** voluntarily admit liability. Cooperate with Construction Manager or the CCIP Insurer representatives in the accident investigation.

7.8 Property Claims

Report any damages to your Work or the Work of any other trade contractor to the Site Safety Manager. In addition, complete the Accident Investigation Form and submit it to the Site Safety Manager immediately.

7.9 Automobile Claims

No coverage is provided for automobile accidents under the CCIP. It is the sole responsibility of each Party to report accidents/claims involving their automobiles to their own insurers.

HOWEVER, all accidents occurring in or around the Project site must be reported to Construction Manager's Site Safety Manager. Accident investigations will occur and focus on liability arising out of the Project construction activities that could result in future claims (i.e. due to the conditions of the roads, etc.). Each Party shall cooperate in the investigation of all automobile accidents.

7.10 Pollution Claims

No coverage is provided for pollution incidents under the CCIP. It is the sole responsibility of each Party to report accidents/claims to their own insurers.

Report events that may give rise to a pollution claim by immediately notifying the Site Safety Manager of any known or suspected pollution incidents. Each Party shall cooperate in the investigation of all incidents.

7.11 Loss Runs

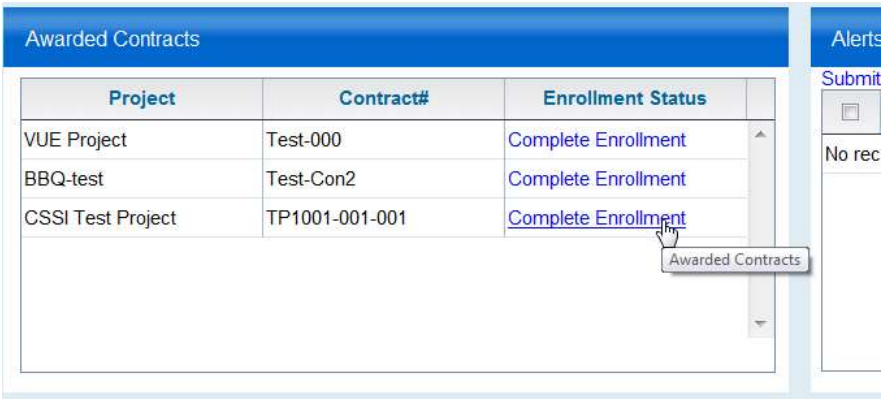
An enrolled trade contractor may obtain loss runs for their own on-site experience by requesting, in writing on their company letterhead, directed to the Program Administrator.

8.0 APPENDIX

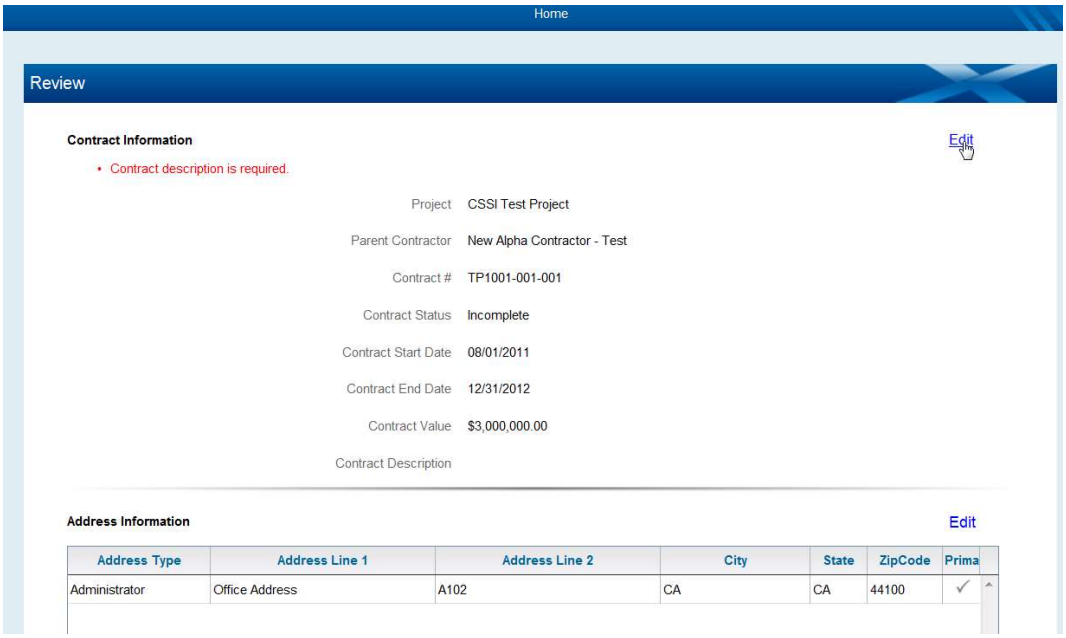
- **Enrollment**: ONLINE SUBMISSION REQUIRED
- **Notice of Subcontractor Award** – To be completed by All Awarding Subcontractors for their lower tiers
- **Monthly On-Site Payroll Report** – ONLINE SUBMISSION REQUIRED
- **Notice of Work Termination** – ONLINE SUBMISSION REQUIRED
- **Subcontractor's Incident Report Form**
- **Notice of Property Loss Form**
- **[STATE] Employer's First Notice of Loss or Injury**
- **Certificate of Insurance** Checklist and Samples

Alliant WrapX Enrollment Process

- **Enrollment into the project will be completed online.**
- **You will receive access to the online system: Alliant WrapX, within three days after Alliant has been notified of your awarded contract.**
- **Please contact the Wrap Administrator if you have not been given a login ID and Password**
- **Link to the Contractor Portal: https://alliantwrapx.alliantinsurance.com/ContractorPortal**
- **After logging into the system, find your newly awarded contract under the Awarded Contracts window.**



- **Click on Complete Enrollment to begin the process**
- **The enrollment wizard will start on the Review page. Any section that is not compliant will be listed in Red. Click Edit to begin updating that section, and continue through the enrollment wizard by clicking Next**



- **Please see the required information listed below so you can have all the information ready when you are attempting to enroll.**

Required Information for Online Enrollment

	Required Information	Help
1	Contractor name	May include type of company: Corporation, LLC, etc…
2	Parent contractor name	Name of company you are contracted with
3	Contractor Federal ID Number	Check Alliant data and update
4	Start Date at project site	Day physical work starts at jobsite
5	Estimated completion date	Can be an estimate
6	Contract Value	
7	Contract Description	Scope of work
8	Contractor Address	Physical address of office. Any P.O. Box should be entered under Mailing address
9	Contractor Main Phone and Fax numbers	
10	Contractor Primary Contact Name	
11	Contact position	
12	Contact phone and fax numbers, and email address	Email is preferred method for communication
13	Contractor Payroll Contact Name	Can be the same as the Primary Contact
14	Payroll Contact phone and fax numbers, and email address	Email is preferred method for communication
15	Workers' Compensation Class Codes to be used on job	Can be found in your company WC rate pages
16	Estimated Man hours and Payroll	Required for enrollment
17	Risk ID #	Also called Rating Board file #
18	Rating Bureau	NCCI or WCRIB or similar name
19	Experience Modifier (EMR)	Can be found in your company WC rate pages
20	WC Offsite Carrier	Corporate WC carrier name
21	WC Offsite Policy #	Corporate WC policy number
22	WC effective date	Corporate WC effective date
23	Policy Expiration Date	Corporate WC expiration date
24	If any work is being subcontracted out, please include information about subcontractors so enrollment can be started for each contractor	At a minimum: Contractor name; estimated start date; contact name, email and phone number; and contract value for subcontracted work.

Alliant

FORM - H
SUBCONTRACTOR'S INCIDENT REPORT FORM

Location:	
Injured Name:	
Address:	Home Phone:
Employer:	Work Phone:

Date of Incident:	
Description of Incident:	
Action Taken:	
EMS / Police / Fire Dept. Called:	▫Yes ▫No
Where Taken:	
Witnesses:	
Additional Remarks:	
Report Made By:	Company:
Date:	

PLEASE SUBMIT COMPLETED INCIDENT REPORT TO THE
PROJECT SAFETY MANAGER

Alliant

Damage to Insured Property

Email to: cmcgrath@alliantinsurance.com
Fax: 855-278-8194

Date

INSURED INFORMATION

Date Of Loss | Time | Date Notified

Contact Name (F,M.L) | Home Tel. ( ) -

Address | City | State | Zip

Work Tel. ( ) - | Best Time To Contact | Where To Contact

ACCIDENT INFORMATION

Location Of Accident | City | State | Zip

Police, Fire, EMT, Etc. Contacted? ☐ Yes ☐ No | Name Of Division/Department

Damage Estimate: $ | Type Of Loss (I.E., Fire, Wind, Water Damage)

Describe What Happened

List Specific Item(s) Damaged / Stolen:

ADDITIONAL COVERAGE

List Any Other Insurance – Companies, Policy #s, Coverage Types And Amounts

REPORT PREPARER

Additional Remarks

Your Name | Tel. ( ) -

Email:_____

Gilbane

Trade Contract Conditions

Northeast Metropolitan Regional Vocational High School

Gilbane Project 9299

Wakefield, MA

Table of Contents

Article 1 – General Definitions 2

Article 2 – Construction Manager's Right to Reject 4

Article 3 – Supervision and Construction Procedures 5

Article 4 – Labor and Materials 6

Article 5 – Superintendent and Key Personnel 7

Article 6 – Drawings and Specifications at the Site 7

Article 7 – Communications 8

Article 8 – Submittals and Requests for Information 10

Article 9 – Substitutions 17

Article 10 – Separate Trade Contracts 18

Article 11 – Tests 19

Article 12 – Completion and Final Payment 20

Article 13 – Time and Material Work 20

Article 14 – Allowances 21

Article 15 – Quality 21

Article 16 – Temporary Services and Systems 23

Article 17 – Dispute Resolution Process 26

These Trade Contract Conditions are intended to supplement the Trade Contract Agreement; however, should any of the terms, provisions or conditions set forth in these Trade Contract Conditions be deemed to be in conflict or inconsistent with any term, provision or requirement set forth in the Trade Contract Agreement, then it is understood, acknowledged and agreed that the terms, provisions and conditions in the Trade Contract Agreement shall take precedence, control and govern.

In the event of a conflict between the Prime Contract (including its General Conditions, if any) and these Trade Contract Conditions, the more stringent shall apply.

Article 1 – General Definitions

In the event of a conflict between any of the definitions in this Article 1 and any of the definitions contained within the Contract Documents, the definitions in the Contract Documents shall control.

1.1 "Provide", or "perform": To supply, install and connect, complete and ready for safe and regular operation of particular work referred to unless specifically noted otherwise.

1.2 "Furnish only", “furnish” or “supply”: to purchase, procure, acquire and deliver complete with all related accessories to the site or other designated location and transfer to others for installation.

1.3 "Install": To receive, unload, distribute, construct, erect, mount, and connect complete with related accessories.

1.4 "Product": The term “product” shall include materials, equipment and systems.

1.5 “Approval”: where required for an item, shall be obtained from the Architect through the Construction Manager in writing.

1.6 “As Indicated”: The term “as indicated” shall mean a reference to example details, notes, or schedules on the drawings, other paragraphs or schedules in the Specifications, and similar requirements in the Contract Documents to define the Work and is not meant to limit the scope. Where terms such as “Shown”, “Noted”, “Scheduled”, and “Specified” are used instead of “Indicated”, it is for purpose of helping the reader accomplish the reference, and no limitation of location is intended except as specifically noted.

1.7 “Suitable”, “reasonable”, “proper”, “correct” and “necessary”: Such terms shall mean as suitable, reasonable, proper, correct, or necessary for the purpose intended as required by the Contract Documents, subject to the judgment of the Architect or the Construction Manager.

1.8 “Including”, “Such as”: The terms “including” and “such as” shall always be taken in most inclusive sense, namely, “including, but not limited to”, and “such as, but not limited to”.

1.9 “Option”: The term “option” shall mean a choice from the specified products or procedures, which shall be made by the Trade Contractor. The choice is not “whether” the work is to be performed, but “which” product or “which” procedure is to be used.

1.10 “Exposed”: The term “exposed” shall mean any item or surface, exterior or interior, which can be seen by a person outside the building or seen by a person inside any usable space within the building during normal activity.

1.10.1 Mechanical and electrical rooms, air handling rooms, storage rooms and penthouses shall be considered to have exposed surfaces, as shall the mechanical and electrical construction within them.

1.10.2 The interiors of closets and alcoves shall be considered exposed surfaces and shall be finished to match the finish of the adjoining room or space, unless another finish is shown.

1.10.3 The interiors of cabinets shall be considered exposed, but a finish different from that of the exterior may be permitted or required.

1.10.4 Spaces which are not normally occupied or used by occupants or building staff, such as, shafts, hoist ways, tunnels, ceiling plenums, attics, and crawl spaces shall be considered "concealed" spaces, unless finishes are shown or specified for their surfaces.

1.11 "At no additional cost": The term "at no additional cost" shall mean at no additional cost to the Owner, the Architect, or the Construction Manager, and that all such costs are included in the Trade Contract amount.

1.12 "Testing Laboratory": An independent entity engaged to perform specific inspections or tests of the Work, either at the project site or elsewhere; and to report and interpret the results of those inspections or tests.

1.13 Unless specifically noted otherwise in the contract documents, the term "overhead" as used in Article 12.1 of the Trade Contract and elsewhere with similar meaning shall be understood to include but not necessarily be limited to the following:

1.13.1 Salaries, fringes and other compensation of the Trade Contractor's personnel stationed at the Trade Contractor's principal office or offices other that the project site office.

1.13.2 Salaries, fringes and other compensation of the Trade Contractor's personnel stationed at the project in "non-working" supervisory and/or administrative roles.

1.13.3 Expenses of the Trade Contractor's principal office and offices including the project site office. These expenses include, without limitation, heat, light, power, stationery & supplies, postage & shipping, office equipment (fax, telephone, copiers, computers, printers, software, furniture, radios, telephones, parking, all company vehicles, etc.), lease line cost, drinking water, coffee, first aid, shop drawings, submittals, samples, as-built drawings, blueprinting, photocopying, record storage, trailers.

1.13.4 Trade Contractor's capital expenses including interest on the Trade Contractor's capital employed for the Work.

1.13.5 Penalties, fines, and costs imposed by governmental authorities in connection with or resulting from any violation of, or noncompliance with laws, regulations, codes, ordinances or directives.

1.13.6 The cost of small tools (valued at $250 or less per unit purchase price) and associated consumables.

1.13.7 Incidentals.

1.14 "Submittals" include, but are not limited to, Shop Drawings, Product Data, Samples, Mock-ups, Benchmarks, Warranty, Maintenance Manuals, Waivers, and Releases.

1.15 "Drawings" are drawings, diagrams, schedules and other data categorized as the following:

1.15.1 "Design Drawing": are drawings, diagrams, schedules and other data specifically prepared by a discipline of the design team, stamped and sealed by the Designer of Record, as a representing the design intent.

1.15.2 "Coordination Drawing": drawings showing work with horizontal and vertical dimensions required to avoid interference with structural, framing MEP rough-ins, fire protection, elevators, adjacent Trade Contactor's scope of work, and other thru floor and wall penetrations.

1.15.3 "Shop Drawing": are drawings, diagrams, schedules and other data specifically prepared for the Work by the Trade Contractor or any Trade-Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

1.16 "Product Data" are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Trade Contractor to illustrate a material, product or system for some portion of the Work.

1.17 "Samples" are physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work will be judges, but not used in the actual Work.

1.18 A "Request for Information" (RFI) means a written request to obtain information not contained, or inferable from, the Contract Documents. An RFI form will be used to obtain clarifications of the content or intent of drawings or specifications issued by the Design Engineer. The Request for Information creates a written record of the question and the response.

1.19 "Mock-ups" are full-size, unless noted otherwise, models of a structure, component or assembly used for demonstration, study, or testing prior to commencing full production. Mock-ups are not incorporated into the actual Work.

1.20 "Benchmarks" are portions of the actual Work in place used to establish a standard of measurement, evaluation or quality. Furnish complete as-built drawings, operating and maintenance manuals, spare parts, attic stock and other required close-out information or materials no later than 30 days prior to substantial completion. Perform training of Owner's personnel prior to beneficial occupancy.

1.21 "OEM" means Original Equipment Manufacturer.

1.22 "Maintained assets" means items on drawings or specification documents that require the submittal of electronic data. Such asset data include but are not limited to doors, escalators, elevators, plumbing fixtures, air handling units, fans, pumps, heat exchangers, boilers, chillers, compressors, exhaust hoods, kitchen equipment, sub-stations, switchgear, transformers, panels, motor control centers, emergency generators, fire alarm systems, fire pumps, biomedical equipment, laboratory equipment, hospital gas systems, roofing system, security systems, cameras, badge readers, computers, and vehicles. Bulk and general construction items such as concrete, structural steel, siding, casework, and wall, floor or ceiling materials will not be included with the exception of roofing, or any other element requiring routine or scheduled periodic maintenance in accordance with the manufacturer's written recommendations.

1.23 "Electronic Documentation" means software-based originals of hard copy documents resident in formats such as word processing, spreadsheet, graphic, or read-only applications.

1.24 "Electronic Data" means information elements of measurable, extractable, and/or sortable value. This information will typically be delivered in spreadsheets, database tables, or, in less typical cases, tables within word processing documents.

Article 2 – Construction Manager's Right to Reject

2.1 The Construction Manager shall have the authority to reject Work which does not conform to the Contract Documents and to require any special inspection and testing in accordance with the Contract Documents.

2.2 The Construction Manager may reject any means, methods, techniques, sequences or procedures proposed by the Trade Contractor which might constitute or create a hazard to the Work, or to persons or property, or which will not provide Work in accordance with the Contract Documents.

Article 3 – Supervision and Construction Procedures

3.1 The Trade Contractor shall supervise and direct the Work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Trade Contract subject to the overall coordination of the Construction Manager.

3.2 The Trade Contractor shall be responsible to the Owner and the Construction Manager for the acts, omissions, materials and work of his employees and all his Trade-Subcontractors and their agents and employees and other persons performing any of the Work under a contract with the Trade Contractor.

3.3 Observations, inspections, tests or approvals by persons other than the Trade Contractor shall not relieve the Trade Contractor from his obligations to perform the Work in accordance with the Contract Documents.

3.4 The Trade Contractor shall do and be responsible for the correct laying out of the Work as per Contract Documents from control established by others including all necessary leveling and checking. The Trade Contractor shall periodically check the established base lines and benchmarks, and shall lay out all partition lines and other significant reference lines or points which will enable them to accurately place their boxes, openings, sleeves, conduits, pipe, duct, controls, hangers, inserts and other devices. Trade Contractor shall be responsible for laying out his Work from these reference points. The Trade Contractor shall also make all field measurements required for the work.

3.5 Trade Contractor shall study and compare the Contract Documents, materials and other information provided by the Owner and Construction Manager and shall take field measurements of any existing condition related to the Work, observe any conditions at the site affecting the Work and report promptly any errors, inconsistencies or omissions discovered.

3.6 Claims for Concealed or Unknown Conditions: If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Construction Documents, then the observing party shall give notice to the other party promptly before conditions are disturbed and in no event later than ten (10) days after first observance of the conditions.

3.7 Any requests for pricing or proposal responses from the Construction Manager throughout the duration of the Project shall be responded to, in writing, by Trade Contractor within five (5) business days. Trade Contractor's response to Construction Manager's request for a price or a proposal shall include a complete justification and backup materials for such price or proposal within said five (5) business days, unless agreed otherwise by Construction Manager. Failure to timely, fully and properly respond and provide such price, proposal and supporting information shall be deemed a breach of the Trade Contract Agreement. Under no circumstances shall the Trade Contractor price or proposal be deemed accepted or be deemed a change unless and until Trade Contractor has strictly complied with terms and conditions for Changes of the Trade Contract Agreement. Further, under no circumstances shall Trade Contractor markup the price or proposal with rates that are higher than are permitted under the terms of the Trade Contract Agreement.

Article 4 – Labor and Materials

4.1 The Trade Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him. Harassment, offensive language and/or physical altercations will not be permitted on the grounds. Violation will be cause for immediate debarment from the site, and Trade Contractor shall be liable for the violations of its employees and its Trade- Subcontractor at any tier. Workers shall be courteous and professional in manner while on the premises.

4.2 The Trade Contractor shall accept delivery, unload, store, protect, provide security, distribute, install and clean any materials, systems and equipment furnished by others which are a part of the Work. The Trade Contractor shall document receipt of such materials, systems and equipment on forms acceptable to the Construction Manager.

4.3 Whenever the Trade Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of the Work of this Agreement, the Trade Contractor shall immediately give notice thereof to the Construction Manager. The Trade Contractor shall then confirm the notice, in writing, within twenty-four (24) hours of the giving thereof and shall include all relevant information with respect thereto. No claims will be accepted for costs incurred as a result of labor disputes.

4.4 Trade Contractor shall be responsible for employing skilled and competent personnel and Trade-Subcontractors whom will work compatibly with all other Trade Contractors and all other subcontractors and suppliers at the work site and who will comply with all rules established for work at the site including but not limited to rules regarding reserved gate site access and site visitation. There shall be no manifestations on the site of any dispute between any labor organization and the Trade Contractor or its Trade-Subcontractors. Trade Contractor agrees to employ workers, agents, suppliers and Trade-Subcontractors who will perform the work under this Agreement whether or not other employees or workers on the site are members or non-members of any labor or collective bargaining organization. Trade Contractor acknowledges that a project site dual gate system may need to be implemented by Construction Manager and will follow all directives in the use of the dual gate system.

4.5 Trade Contractor shall provide to Construction Manager, in writing, the business name, business address for each and every Trade-Subcontractor, supplier or vendor performing work at the Project. Such information must be provided to Construction Manager no later than three (3) business days before such Trade-Subcontractor, supplier or vendor provides labor, materials or services at the Project or as otherwise requested by Construction Manager. Trade Contractor's failure to comply with this Section shall constitute a material breach of this Agreement.

4.6 Trade Contractor agrees not to participate in or permit any cessation of Trade Contractor's Work which is a result of any labor dispute, regardless of whether said labor dispute involves Construction Manager, Trade Contractor or any other employer on the project. If, for any reason, there is a work stoppage, picketing, boycott, violation of work site rules or any other interference with the work by employees of Trade Contractor, its Trade-Subcontractors or their agents or suppliers, which in the sole judgment of Construction Manager will cause or is likely to cause a delay in the progress of construction, then upon forty-eight (48) hours written notice, delivered either in hand, by electronic mail, by overnight carrier (e.g., Federal Express or UPS), or registered mail, Construction Manager shall have the right to declare Trade Contractor in default of the Trade Contract Agreement and upon the giving of such notice, Construction Manager shall have the right to take those steps which it is afforded by this Agreement and by Law. In such event, Construction Manager may require Trade Contractor to provide as-built reproducible drawings or electronic files at Trade Contractor's expense with forty-eight (48) hours' notice. In such an eventuality, any costs to complete the work of Trade Contractor which exceed the unpaid balance of the Contract Price, shall be paid to Construction

Manager along with reasonable attorney's fees within thirty (30) days after presentation of documented written demand for such excess has been made upon Trade Contractor by Construction Manager.

Article 5 – Superintendent and Key Personnel

5.1 The Trade Contractor shall employ a competent superintendent and/or Lead Foreman and necessary assistants to coordinate all the Trade Contractor's work force including Trade-Subcontractors, who shall be in attendance at the Project site during the progress of the Work. Construction Manager has the right, in Construction Manager's sole discretion, to require the removal and replacement of any of Trade Contractor's or any of its Trade-Subcontractor's personnel without liability to Trade Contractor. Construction Manager may exercise such right of removal by written notice to Trade Contractor, and Trade Contractor shall immediately comply. The superintendent shall be satisfactory to the Construction Manager, and shall not be changed except with the consent of the Construction Manager, unless the superintendent proves to be unsatisfactory to the Trade Contractor or ceases to be in his employ. The superintendent shall represent the Trade Contractor and all communications given to the superintendent shall be as binding as if given to the Trade Contractor and has the authority to make commitments on behalf of the Trade Contractor with regard to cost, schedule and manpower issues. All communications shall be confirmed in writing upon request.

5.2 A duly authorized representative of the Trade Contractor shall be available for emergency telephone communication from the Owner or Construction Manager on a twenty-four (24) hour basis, seven (7) days a week during the performance of the work.

5.3 The Trade Contractor shall identify the key personnel he intends to assign to the project to the Construction Manager within forty-eight (48) hours after the Trade Contractor has been notified to proceed. The Construction Manager reserves the right to approve the Trade Contractor's proposed personnel, and anyone not so approved shall be immediately replaced with someone acceptable to Construction Manager. If, in the course of construction, the Construction Manager feels that it would be in his best interest to request a change in the Trade Contractor's personnel, he may do so; and, the Trade Contractor shall immediately assign an acceptable replacement at no additional cost.

5.4 To ensure a safe working environment and the effective coordination of the work, the Trade Contractor's superintendent must be able to effectively communicate both orally and in writing with the Construction Manager's project staff and the workforce under the superintendent's control.

Article 6 – Drawings and Specifications at the Site

6.1 The Trade Contractor shall maintain at the site a set of all Drawings, Specifications, Addenda, Bulletins, Proposal Requests, Trade Contract Change Orders and other Modifications, in good order and marked currently to record all changes made during construction, including any changes in locations, sizing and arrangement of the various components of the Work or any other variations from the Drawings or Shop Drawings. The Trade Contractor shall mark each drawing as the Work shown thereon is completed in the field, revising any or adding lines, dimensions, elevations, depths, notes or any other information required to accurately record "As-Built" conditions. These Drawings, marked to record all changes during construction, and approved Shop Drawings, Product Data and Samples shall be delivered to the Construction Manager upon completion of the Work.

6.2 In addition to maintaining and delivering to the Construction Manager those record Drawings required by this Article and the Contract Documents, the Trade Contractor shall also prepare and submit to the Construction Manager, upon substantial completion of the Trade Contractor's Work, "As-Built" Drawings in the format as required by the Contract Documents.

Article 7 – Communications

7.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the corporation for whom it was intended, or if delivered at or sent by email, registered or certified mail to the last business address known to him who gives the notice.

7.2 The Construction Manager may call for meetings of the Trade Contractors, Trade-Subcontractors, and material suppliers as it deems necessary for the proper coordination of the work. Project manager, superintendent and / or foreman and any additional persons with appropriate expertise according to the subject matter shall attend meetings. The person(s) must be knowledgeable of the material status, schedule durations and work activities of all of their work at the project site including the work of their Trade-Subcontractors and empowered to make binding commitments on behalf of the Trade Contractor and its Trade-Subcontractors. Such meetings shall be held at the jobsite on regular working days during regular working hours. The Trade Contractor and Trade-Subcontractors may be required to attend meetings before and/or after their mobilization on the project site. Meeting participation requirements are not limited to the Trade Contractor's mobilization period. Unless otherwise directed by the Construction Manager, attendance shall be mandatory for all parties notified. Without limiting required meeting types, several typical meetings are indicated as follows:

A. Preconstruction Meetings. Immediately after the Trade Contract Agreement is awarded, one or more meetings will be scheduled at the project site to review project procedures, designation of name and title of the authorized person or persons representing the Trade Contractor and responsible for project management and/or field operation, designation of Emergency Contact(s), designation of representative for progress meetings, the requirements for daily, weekly and monthly reports and other submittals required to perform and administer the project.

B. Project scheduling meetings.

C. Computer software training

D. Weekly Trade Contractor meetings

E. Principal meetings

F. Safety Committee Meetings

G. Incident and Injury Free Training meetings

H. Quality inspections (for example, mockup review, benchmark review, first delivery inspections)

I. Safety orientation meeting

J. Daily Huddle

K. Building envelope review efforts

L. Punchlist Review meeting

M. BIM, VDC and/or MEP coordination meetings

N. Submittal review meetings (aka Submittal Review Parties)

O. Financial status review meeting

P. Commissioning activities

7.3 The Construction Manager requires project reports documenting the project, updates, in the format as required by the Construction Manager. Without limiting the reports required, several typical reporting requirements are indicated as follows:

A. **Daily Force and Activity Reports** shall be prepared and submitted by each Trade Contractor, including similar data for each of his Trade-Subcontractors. This report will be on a form approved by the Construction Manager and will indicate Supervisors, Journeymen, Laborers or Helpers and, by composition of the crew, the activities, related to the contractors' schedule, that are being performed and will include information or material deliveries, test and other significant events. This report shall also substantiate compliance with EEO and residency requirements, if applicable. Each Daily Force and Activity Report shall be delivered to the Construction Manager at the job-site by 9:00 a.m. on the next business day.

B. **Separate Daily Documentation of any "Changes in the Work"** being performed on a basis described in Article 8 of the Trade Contract Agreement.

C. **Monthly Economic Inclusion Business and Workforce Compliance Reports**, for targeted business and workforce participation, etc., in accordance with project requirements and as may be required by governing bodies to be submitted through the Construction Manager and/or Owner.

D. Certified Payroll

E. **Material and Equipment Planning and Tracking Plan**. A Material Status Report must be completed by each Trade Contractor as set forth in Article 9.11 of the Trade Contract Agreement. The items listed should correspond to the items listed on the Submittal Schedule. At a minimum, this report must be updated and submitted monthly with the Application for Payment, or more often as required by the Construction Manager. It is mandatory that the Trade Contractor maintain an accurate and current Material Status Report. This information is vital for identifying delivery dates that adversely affect the overall project schedule and allows for expediting of these items. Trade Contractor must immediately notify Construction Manager of any changes to material release and lead times that may affect the project schedule.

F. **Weekly Minutes/Reports of Safety Program "Tool Box" Meeting** and other Safety information.

G. **Job Cost Breakdown Reports**. The Trade Contractor shall submit job cost breakdown reports for record and tax purposes to the Construction Manager. The first report shall be submitted thirty (30) days after the date of each Notice to Proceed on any portion of Work and shall be consistent in format with the schedule of values. Another report shall be submitted at the completion of the job and shall include all additions and deletions. Interim reports on various elements of the work shall be submitted as required by the Owner for investment, tax credit, pollution control, financing, and other purposes.

H. **Monthly Progress Payment Applications** in keeping with the Owner's payment application requirements and the direction of Construction Manager's personnel.

I. Open Changes Log

J. **Time and Material Tickets** where applicable (See Article 13)

K. **Safety Incident information** associated with any worker(s) employed by the Trade Contractor and Trade-Subcontractors.

Article 8 – Submittals and Requests for Information

8.1 Procore

8.1.1 The Owner and Gilbane have agreed to utilize Procore, which is an internet-based program designed to enhance collaboration amongst the project team members, or such other internet-based program as required by Construction Manager in its sole discretion. Procore, or such other designated program, shall be utilized as the electronic platform for all project controls. Trade Contractor and all of its Trade-Subcontractors shall utilize Procore on the project at no additional charge to Construction Manager.

8.1.2 Trade Contractors that do not utilize Procore, and instead provide hard copies of required documentation, will be subject to backcharge for related document transmission fees, Gilbane personnel time and document reproduction fees. Exceptions may be granted to this requirement in extenuating circumstances. Please notify Gilbane of any issues relating to the use of Procore at time of bid.

8.2 Submittals

8.2.1 General Submittal Requirements.

8.2.1.1 The Trade Contractor shall review, approve and submit all Submittals required by the Contract Documents through the Construction Manager with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of any separate contractor. Submittals shall be submitted in a timely manner necessary to support the Project Schedule, including required times for submittal review and approval and subsequent procurement, fabrication and lead times required by the Trade Contractor for materials and or equipment to be delivered to the Project. In the event there is no submittal date identified, Trade Contractor shall review, approve and submit through the Construction Manager all Submittals required by the Contract Documents within twenty (20) days after Trade Contractor's receipt of the Trade Contract Agreement. Whenever the Contract Documents require a certified engineer's stamp, review or report, it shall be understood to mean an engineer licensed and registered in the State of the Project and paid for by the Trade Contractor.

8.2.1.2 Submittals forwarded by the Trade Contractor to the Construction Manager shall be in conformance with the requirements of the Contract Documents. The Trade Contractor shall notify the Construction Manager in writing of any deviations in the Submittals from the requirements of the Contract Documents at the time of submission.

8.2.1.3 By approving and submitting Submittals, the Trade Contractor represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such Submittals with the requirements of the Work and of the Contract Documents.

8.2.1.4 The Construction Manager will review such Submittals with reasonable promptness, checking only for completeness and conformance with the Contract Documents. The Construction Manager will return to the Trade Contractor, without review, any Submittals not bearing the Trade Contractor's approval stamp or other mark showing that they have been reviewed and approved by the Trade Contractor. The Construction Manager will return to the Trade Contractor for correction or completion, any Submittals found not to be complete or in proper form. The Construction Manager, if he finds Submittals to be in order, will forward the Submittals to the Architect/Engineer.

8.2.1.5 Approval of the Trade Contractor's Submittals does not constitute a complete check, but indicates only that design, general method of construction and detailing is satisfactory. The Work shall be in accordance with the approved construction documents and other submittals. The Trade Contractor shall not be relieved of responsibility related to deviations from the requirements of the Contract Documents, by the Construction Manager's and/or Owner's approval of Trade Contractor's design and construction documents such as Shop Drawings, Product Data, Samples or other submittals unless the Trade Contractor has specifically informed the Construction Manager in writing of such deviations at the time of, and as a part of the submittal and (1) the Construction Manager has given written approval to the specific deviation(s) as a minor change in the Work, or (2) a Subcontract Change Order has been issued authorizing the deviation.

The Trade Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Construction Manager's forwarding or the Architect/Engineer's approval thereof.

8.2.1.6 The Trade Contractor shall direct specific attention, in writing or on resubmitted design and construction documents or other submittals such as Shop Drawings, Product data, Samples or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the event Trade Contractor fails to provide specific written notice as required hereunder, the Architect's approval of a resubmission shall not apply to such revisions.

8.2.1.7 The Trade Contractor shall resubmit Submittals, as required, until Architect's acceptance is obtained. Submittals that are rejected or require revisions shall be corrected and resubmitted to the Construction Manager within ten (10) days after the Construction Manager sends the Submittals back to the Trade Contractor. No portion of the Work requiring submission of Shop Drawings, product Data or Samples shall be commenced until the Submittal has been accepted by the Architect/Engineer. All such portions of the Work shall be in accordance with accepted (pursuant to the Contract Documents) Submittals, which copies shall be maintained on the job site.

8.2.1.8 The Trade Contractor shall be responsible for the delays caused by rejection of the Submittal of inadequate or incorrect shop drawings and manufacturers data. Trade Contractor is allowed two (2) reviews for required submittals. Additional reviews required in addition to this, as a result of incorrect submittal information submitted by the Trade Contractor, may result in additional costs from the Architect if incurred by the Construction Manager.

8.2.1.9 Substitutions may only be made with the consent and approval of the Construction Manager and Owner and, if appropriate, in accordance with a Trade Contract Change Order.

8.2.1.10 The Trade Contractor shall prepare a schedule of required Submittals not later than fourteen (14) days after contract award. The schedule shall include a complete list of items requiring Submittals to be reviewed by the Construction Manager and approved by the Architect and the anticipated date of submission. The schedule is to be submitted on a form approved by the Construction Manager. The schedule shall be updated monthly or as required by the Construction Manager. All Submittals, other than those required to be made through Procore, shall be accompanied by a transmittal letter and reference shall be indicated to the item numbers of the above-mentioned schedule.

8.2.1.11 All Submittals shall be transmitted to the Construction Manager and shall include:

A. Date and revision dates.

B. Project title and number.

C. The names of:

i. Architect/Engineer

ii. Construction Manager

iii. Trade Contractor

iv. Contract Number

v. Supplier

vi. Manufacturer

vii. Separate detailer when pertinent

D. Number of Shop Drawings, Product Data and Sample submitted. (System to be established by Construction Manager).

E. Identification of product or material.

F. Relation to adjacent structure or materials.

G. Field dimensions, clearly identified as such.

H. Specification Section number and paragraph.

I. Applicable standards, such as ASTM number or Federal Specification.

J. Identification of deviations from Contract Documents.

8.2.1.12 After review by the Architect, the Construction Manager will return Submittals, which will have been stamped by the Architect as follows, unless noted otherwise:

A. “Accepted”

B. “Reviewed”

C. “Accepted as Noted”

D. “Reviewed as Noted”

E. “Revise and Resubmit”

F. “Accepted for Record”

G. “Accepted and Resubmit for Record”

H. “Rejected”

I. “Void”

J. “Record Only”

8.3 Requests for Information (RFI).

8.3.1 General RFI Requirements.

8.3.1.1 Each RFI must reference a drawing, detail or specification and provide a clear, concise explanation of the Request for Information.

8.3.1.2 The Trade Contractor is responsible to submit its RFIs in a timely manner so as not to impact the progress of Work and in accordance with the requirements of the Contract Documents.

The Construction Manager will forward RFI responses to the originating Trade Contractor and any other Trade Contractor whose work may be affected by the response.

8.3.1.3 In the event the Trade Contractor believes a response to an RFI constitutes a Change, or otherwise impacts the cost of, and/or time of performance of, its work, Trade Contractor shall follow the notice provisions for Changes set forth in the Trade Contract Agreement.

8.4 Coordination Drawing Process

8.4.1 Coordination Requirements –

Trade Contractor's scope requiring spatial clearance or integration with adjoining Trade Contractors' scope are required to prepare and actively participate in scheduled Construction Manger coordination meetings. Coordination efforts can include, but are not limited to:

- Site Civil Utilities
- Foundation penetration and foundation embeds
- Structural Systems to MEP+FP and architectural elements
- Enclosure Systems
- Interiors and MEP+FP

If BIM Standards/BIM Execution Plan is referenced in the project manual, the BIM Standards/BIM Execution Plan supersede, or are an addition to any Trade Contractor's requirements in this section. Any Trade Contractor not identified in the BIM Standards/BIM Execution Plan, but requiring coordination with adjoining Trades, is required to participate and produce coordination drawings. No extra compensation will be paid for relocating any in place work that has been installed without proper coordination between all trades involved. If any improperly coordinated work, or work installed that is not in accordance with the approved coordination process, necessitates additional work by the other trades, the costs of all such additional work shall be borne solely by the Trade Contractor(s) responsible.

8.4.2 Conformance to Design –

The design drawings and associated models/files (if provided) are representational in nature. The respective trade contractors are responsible for; filed verification of all on-site conditions relevant to their work and all associated cost of installing the final coordinated systems.

In the Trade Contractor's process, minor changes routings that do not affect the intended function may be made as required to avoid space conflicts, when mutually agreed, but items may not be resized or exposed and concealed items relocated without the Architect/Engineer's and Construction Manager's written approval. No changes shall be made affecting the function or esthetic design of the building, without written approval. If conflicts or interferences cannot be satisfactorily resolved, the Architect and Construction Manager shall be notified and their decision obtained. No unauthorized deviations will be permitted, and if any are made without knowledge or agreement of the Architect/Engineer and/or Construction Manager, this unauthorized work will be subject to removal and correction by the respective Trade Contractors at no additional cost to the Owner or Construction Manager. All Design changes and subsequent document updates formally issued and approved shall be updated and shown as it relates to this effort. The coordination drawings may lack complete data in certain instances pending receipt of shop drawings, but sufficient space shall be allotted for the items affected.

8.4.3 Coordination Schedule –

The Construction Manager shall issue the project schedule containing milestones and overall coordination information. Immediately after award and distribution, the Trade Contactor must inform the Construction Manager of any scheduling constraints or issues. It is the Trade Contractor's responsibility to inform document and work for successful resolution. Trade Contractor shall allocate and assume the responsibility of providing proper resources and manpower required to meet the coordination schedule. The Trade Contractor is responsible to attend, with the appropriate staff, all Coordination meetings per Construction Manager's direction. It is expected that any preparation, additional meetings, and correspondence needed for successful coordination is the responsibility and discretion of the Trade Contractor. Each Trade Contractors is responsible for the delivery of their scope of work as it relates of the coordination effort. All work performed by subcontractors hired by individual Trade Contractors shall also be subject to the Master Project Schedule as well as the Coordination Schedule with the sole responsibility of deliverables residing with the Trade Contractor. The Trade Contractor will be held responsible for delays and re-work as it relates to any 3rd party subcontracts.

8.4.4 Coordination Leadership –

The Construction Manager, or delegated Trade Contractor (if not noted or defined, shall be the HVAC Trade Contractor) shall lead the coordination process. The lead is responsible for distributing the project sheet title block, schedule meeting to comply with the project schedule, identify areas of conflict, elevate to the Construction Manager issues that cannot reach resolution, aggregate and "submit for record" signed off coordination drawings, per defined area. All Trade Contractor will be required to submit generated files and participate in the coordination effort/meetings as it facilitates work in the Field.

8.4.5 Coordination Drawings –

All work on the coordination drawings shall be performed by competent drafter/modeler and shall be clear and fully legible. The Architect/Construction Manager shall be the judge of the acceptability of the deliverables and files. Coordination Drawings shall show layout, routing, sizes, elevations, or any element that pertains to the coordination effort, to include access or clearance zones, overlayed on the architectural and structural backgrounds as necessary.

Coordination drawings are a part of the ship drawing process and should be the first evolution, where further detail and definition is added to reach the shop drawing submittal. The coordination drawing submitted invidiously by the Trade Contractor or aggregated into a combined coordination sign-off, shall contain a signature of a Trade Contractor representative and denotes the acceptance and intent to facilitate the work as shown on the coordination drawing.

Sign-Off Requirements

1) Model/file/sheet – Designated Lead to Generate & Submit to Construction Manager
    a. Dated and named per signed off area
    b. Viewpoints generated within per zone/area of sign off
2) Official Coordination Submittal for Record – Designated Lead to Compile
    a. (PDF) Language outlining particular sign off, with signatures & comments from each trade
    b. Coordination Drawings
        i. Single overlay of all trade overhead routing with an architectural/structural background

ii. Single overlay of all trade (RCP) on ceiling elements (sprinklers, Diffusers, lights, etc.)

iii. Individual trade routing architectural/structural background

iv. Individual trade RCP information on architectural background

v. Individual trade Plan/in wall drawing if applicable on architectural background

Coordination drawings shall be further updated and to reflect the field conditions, work performed, and any subsequent changes. These documents and files shall represent the record documents and basis of the required "as-built" drawings and files.

8.5 Record Documents and Turnover

In Addition to maintaining and delivering to the Construction Manager those record Drawings required by the Contract Documents, the Trade Contractor shall also prepare and submit to the Construction Manager, upon completion of the Work, "As-Built" Drawings in the format required but the Contract Documents.

8.5.1 Each Trade Contractor shall keep a complete record of his own work and shall indicate deviations from the Drawings as to the installation of his own work. All information shall be recorded in a neat, legible and accurate manner. All changes, revisions or additions made in the installation of the work which differs from that required but the Drawings must be noted.

8.5.2 Upon completion of the work, the Trade Contractor shall forward the marked-up Drawings, suitable for preparation of composite "As-Built Drawings" to the Construction Manager for review and transmittal to the Architect. All changes shall be indicated in contrasting colors or highlighting.

8.6 The Trade Contractor, prior to or at the time of Substantial Completion for the Work and during administrative closeout of the project, shall submit one copy of all specified warranties and guarantees to the Construction Manager for review, approval and subsequent transmittal to the Architect and Owner. At no time shall Trade Contractor withhold such specified warranties and guarantees due to a payment dispute, backcharge dispute, and/or other dispute with Construction Manager and/or Owner. Trade Contractor's obligation to provide such specified warranties and guarantees is an independent obligation that must be timely satisfied regardless of payment status. Failure to comply with this Article may result in costs, expenses and damages (including, but not limited to, delay damages and/or liquidated damages) for which the Trade Contractor shall be responsible.

8.7 Owner's Maintenance Manual ("O&M Manual"): The Trade Contractor, during the course of the work, shall maintain, coordinate and collect copies of warranties, guarantees, certificates, installation drawings, manufacturer's maintenance and operations manuals, parts lists, keying schedules, and any other items identified or required by the Contract Documents and at the acceptance of the project, shall assemble this material into a manual and forward to the Construction Manager for incorporation in the Operations and Maintenance Manual for the project in accordance with the timing requirements of the Contract Documents. At no time shall Trade Contractor withhold such operations manuals, parts lists, and keying schedules due to a payment dispute, backcharge dispute, and/or other dispute with Construction Manager and/or Owner. Trade Contractor's obligation to provide this information is an independent obligation that must be timely satisfied regardless of payment status. Failure to comply with this Article may result in costs, expenses and damages (including, but not limited to, delay damages and/or liquidated damages) for which the Trade Contractor shall be responsible.

8.7.1 The O&M Manual shall include identification of vendors. Specifically, Trade Contractor shall identify the Trade-Subcontractor, Trade Contractor, supplier, distributor and/or manufacturer that is responsible for the installation, service and/or warranty of each maintainable asset. Data shall

include the firm's name, address, contact person, phone number, e-mail address, web site address, date of acceptance, warranty provider, warranty term and any other pertinent information necessary for the Owner to obtain service.

8.8 Electronic Data and Documentation Submittal Specifications

8.8.1 Trade Contractor shall provide construction documentation in electronic documentation format as specified below. The intent is to support the Owner's computerized asset, maintenance, or space management systems. Trade Contractor is responsible to pursue, obtain and furnish to Construction Manager the complete asset data required from project participants that are under its Trade Contract Agreement Work.

The submittal of all specified data in electronic format is to occur concurrently with the progress of the Work. Timely and accurate submittals of requisite data will be a condition precedent for issuance of monthly payments. All submittals shall be completed a minimum of thirty (30) days prior to Substantial Completion or Owner Occupancy, whichever occurs first. Any performance-related data should be submitted no later than thirty (30) days after its measurement and recording in the field. Any deviations identified by Gilbane are to be promptly corrected by the submitting project participant(s) and resubmitted.

8.8.2 Equipment Tagging. The Trade Contractor shall ensure that manufacturer's equipment tags are fixed to all maintainable equipment items and easily accessible after equipment installation. These permanent tags include, but are not limited to, equipment model number and serial number.

8.8.3 Updated As-Built Drawings. Any revisions or updated as-built drawings shall be provided in electronic format per project-specific requirement at least thirty (30) days prior to Owner's occupancy of the Project.

8.8.4 Submittal of Construction Documents. All documents provided in paper format shall also be provided to Construction Manager in an electronic format (electronic documentation such as MS Word, MS Excel, or Adobe PDF) per project requirements. Documents that need to be provided in electronic format include but are not limited to:

A. Drawings (e.g., as-builts, shop drawings, floor plans)

B. Submittals

C. Operations and Maintenance manuals

D. Testing and Balancing reports

E. Commissioning report

Article 9 – Substitutions

9.1 By executing the Trade Contract Agreement, you are representing that there are no substitutions to the requirements of the Contract Documents other than those items that are specifically identified in writing, provided to, and approved in writing by, Construction Manager prior to the full execution of this contract.

9.2 If the Trade Contractor proposed to use a material, product, equipment or item which, while suitable for the intended use, deviates in any way from the detailed requirements of the Contract Documents, Trade Contractor shall inform the Architect through the Construction Manager in writing of the specific, detailed nature of all such deviations at the time the material, product, equipment or item is submitted for approval, and shall request a written approval of the deviation from the requirements of the Contract Documents. Trade Contractor shall be liable for any deviation that the Trade Contractor has failed to obtain such written approval. Any stamp of "approval" shall not be deemed written approval of any such deviation(s).

9.3 By submitting a request for approval of a deviation or substitute, Trade Contractor warrants to Construction Manager and Owner that: (i) it has investigated the proposed substitute product and determined that it is equal in all respects to the specified material; and (ii) it will coordinate the installation of the substitute, and make the changes required to incorporate the substitute into the Work, without additional cost to Construction Manager and/or Owner. Trade Contractor shall provide, upon Construction Manager's or Architect's or Owner's request, without cost to any of them, evidence demonstrating to a reasonable certainty that the proposed substitution or deviation: (a) will provide a quality of result at least equal to the specified material; (b) is at least equal in serviceability to the specified material; (c) will not entail changes in details and construction of related Work other than those approved by Architect to be performed at no additional cost to Construction Manager or Owner; and (d) will provide a cost advantage or other benefit to Owner. If, in the opinion of Construction Manager, Architect and/or Owner, the evidence presented by Trade Contractor does not provide a sufficient basis for such reasonable certainty, Construction Manager, Architect and/or Owner may reject such substitution or deviation without further investigation. Such rejection shall not relieve the Trade Contractor from complying with the Specifications at no additional cost to the Owner or Construction Manager.

Article 10 – Separate Trade Contracts

10.1 Mutual Responsibility of Trade Contractors

10.1.1 Should the Trade Contractor cause damage to the work or property of the Owner, the Construction Manager, any separate trade contractor or other contractor, the Trade Contractor shall, upon due notice, promptly remedy such damages as well as be responsible for any loss, cost, expense or damages arising from such incident. If such separate trade contractor or other contractor sues the Owner or the Construction Manager on account of any damage alleged to have been caused by the Trade Contractor, the Owner or Construction Manager shall notify the Trade Contractor who shall protect, defend, indemnify and hold harmless the Owner and Construction Manager from such claims as also set forth in the Trade Contract Agreement. Trade Contractor shall further be responsible to Owner and Construction Manager for such proceedings at the Trade Contractor's expense, and if any judgment or award against the Owner or Construction Manager arises therefrom, the Trade Contractor shall pay or satisfy it and shall reimburse the Owner or Construction Manager for all attorney's fees and court costs which the Owner or Construction Manager has incurred arising from Trade Contractor's Work, acts or omissions.

10.1.2 Should the Trade Contractor sustain any damage through any act or omission of any other Trade Contractor having a contract with the Construction Manager for the performance of work upon the site or of work which may be necessary to be performed for the proper prosecution of the Work to be performed hereunder, or through any act of omission of a Trade-Subcontractor of such Trade Contractor, the Trade Contractor, as an inducement to be awarded this Agreement, shall have no claim and hereby agrees to waive any claim against the Owner, Architect, Construction Manager or the Owner's consultants for such damage, except and solely to the extent Trade Contractor has been provided a written change order or written Subcontract Change Directive by an authorized Representative of Construction Manager as set forth in the Trade Contract Agreement.

10.1.3 Should any other contractor having or who shall hereafter have a contract with the Construction Manager for the performance of work upon the site sustain any damage through any act or omission of a Trade-Subcontractor of the Trade Contractor, the Trade Contractor agrees to reimburse such other contractor for all such damages and costs, and shall defend and hold the Owner, Architect and Construction Manager harmless from all claims.

10.1.4 Trade Contractor shall coordinate its work with other trade contractors so as to not cause interference, disruption or delays to the work or to the Project schedule.

10.1.5 In the event the Trade Contractor's operations cause any damage, interference, or inconvenience to work being carried out under any other trade contract agreement, the Trade Contractor shall restore, replace, rectify, or otherwise make good any damage to the satisfaction of the Construction Manager or to the other Trade Contractors.

10.1.6 Trade Contractor agrees that he has become familiar with the site, has reviewed the Plans and Specifications covering the Work of his and other trades and thereby accepts responsibility for all necessary coordination of his Work with the work of other Trade Contractor(s) affected.

Article 11 – Tests

11.1 If the Contract Documents, laws, ordinances, rules, regulations or order of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Trade Contractor shall give the Construction Manager timely notice of its readiness so the Architect/Engineer and Construction Manager may observe such inspection, testing or approval. The Trade Contractor shall bear all costs of such inspections, tests or approvals unless otherwise provided. In this section, "timely notice shall be no less than three (3) business days written notice.

11.2 In addition to the requirements of Article 11.1, in the event that the Architect/Engineer or Construction Manager otherwise determines that any Work requires special inspection, testing and/or approval, then Trade Contractor shall give Construction Manager no less than three (3) business days' advance written notice of such special inspections or testing being performed. If the Trade Contractor fails to timely provide such notice, or if such special inspection or testing, or any testing or inspection, reveals a failure of the Work to comply with the requirements of the Contract Documents, the Trade Contractor shall bear all costs and Damages to remedy and shall cure such Work and such non-compliance, including compensation for the Architect/Engineer's and Construction Manager's additional services and supervision made necessary by such failure.

11.3 Required certificates of inspection, testing or approval shall be secured by the Trade Contractor at Trade Contractor's sole expense, and promptly delivered to the Construction Manager.

11.4 Neither the observations of the Architect/Engineer or the Construction Manager, in their administration of the Construction Contract, nor inspections, test or approvals by persons other than the Trade Contractor, shall relieve the Trade Contractor from his obligation to perform the Work in accordance with the Contract Documents.

11.5 The Trade Contractor shall deliver test samples of any of the materials specified in any of the applicable Sections of the Contract Documents to an independent testing laboratory selected and approved by the Owner and Construction Manager, if so required. This may apply to materials proposed for use, materials already delivered to the job, or materials already incorporated into the construction.

11.6 The Trade Contractor shall maintain a file of all test reports. In addition to delivery of a copy of all tests, inspections or other reports to the Construction Manager upon receipt by the Trade Contractor; at the completion of the project, these reports shall also be submitted as an Appendix to the Operations and Maintenance Manual.

11.7 Any materials which fail to meet the requirements of these Contract Documents shall not be used whether previously approved by the Architect. If they have been delivered to the project site, they shall be removed. If they have already been incorporated into the Work, the Construction Manager or the Architect may order them removed, or, at the discretion of the Owner, through the Construction Manager, they may be permitted to remain in place provided that the Trade Contractor agrees to a proper deduction from the Contract Sum of any credit required by the Owner to accept such materials.

11.8 The cost to retest or re-inspect Work, which previously failed such testing or inspection, shall be borne solely by the Trade Contractor.

Article 12 – Completion and Final Payment

12.1 When the Work is substantially completed, the Trade Contractor shall notify the Construction Manager, in writing, that the work will be timely ready for final inspection and test on a definite date. Notice shall be given at least fifteen (15) days in advance of said date. If the Architect/Engineer and Construction Manager concur that the Work will be ready for final inspection or test on the date given, the Architect/Engineer and the Construction Manager will make such inspection. The Trade Contractor is required to furnish access for the final inspection. As an additional condition precedent to Final Payment, the Work shall be found acceptable under the Contract Documents and the Contract fully performed, and the Trade Contractor shall document the turnover of spare stock of materials, spare parts, accessories and special tools to the Owner through the Construction Manager.

12.2 As an additional condition to final payment, neither application for final payment nor for the remaining retained percentage shall be made until the Trade Contractor has submitted to the Construction Manager (1) an affidavit in the form acceptable to Construction Manager which affidavit shall generally release all claims, and shall certify that all payrolls, bills for materials and equipment, supplies, Trade- Subcontractors and all other indebtedness connected with the Trade Contractor's Work have been paid (2) consent of surety, if any, to final payment (3) properly executed "Release and Waiver of Lien and Bonds" on forms provided by the Construction Manager, (4) specified warranties and guarantees, (5) substantiation that contractual DBE requirements have been met, if required by the Contract Documents; and (6) if required, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens arising out of the Contract. If any Trade-Subcontractor fails or refuses to timely submit any such information or documents, the Trade Contractor shall be in breach of the Contract and Final Payment shall not be due.

12.3 The act of acceptance of final payment by the Trade Contractor shall be deemed to be Trade Contractor's full and complete waiver and release of all claims, disputes, differences, demands, arbitration, payments, delays, liens, bond claims, changes, extras, acceleration, and actions at law or in equity, whether known or unknown against Construction Manager, Architect/Engineer, and Owner.

Article 13 – Time and Material Work

13.1 In the event that a Trade Contractor is directed to proceed with a Change pursuant to Change Order for Time and Material or a Subcontractor Change Directive, in each event pursuant to the terms and subject to the conditions and provisions of the Trade Contract Agreement, the Trade Contractor shall keep and present to the Construction Manager an itemized and certified accounting together with supporting data, including Time and Material tickets. Time and Material tickets will only be considered when authorized pursuant to either a Change Order or a Subcontractor Change Directive, and the work noted on said tickets has been verified at the time it was performed, in writing, by the Construction Manager's Authorized Representative. Any Time and Material tickets for work alleged to have been performed by the Trade Contractor, in which the Construction Manager's Authorized Representative has not been notified and has not agreed to track on a Time & Materials ("T&M") basis, is done at the Trade Contractor's expense. No compensation will be made for such tickets. Also, all Time and Material work verification slips are to be presented by the Trade Contractor to the Construction Manager on a DAILY BASIS, on the SAME DAY the work is performed. It is understood that the Construction Manager's signature on a T&M ticket is for verification of the time and materials expended, and shall not alter the contractual obligations of the Trade Contractor, nor be a Change Order, Subcontractor Change Directive, change, extra or otherwise create any liability on behalf of Construction Manager without the authorization of a Change Order for Time and Material or a Subcontractor Change Directive issued by Construction Manager pursuant to the express terms, conditions

and provisions of the Trade Contract Agreement. The project will be using an electronic system to manage Time and Material tickets such as Extracker (or similar). No hard copy tickets will be accepted on this project – all T&M tickets must be initiated by the Construction Manager through the designated electronic T&M tracking system.

Article 14 – Allowances

14.1 If the Trade Contractor shall include in the Trade Contract Sum an Allowance authorized pursuant to the Contract Documents, then subject to the express terms for such Allowance set forth in the Contract Documents, the following will apply:

14.1.1 These Allowance costs shall only include the out-of-pocket direct costs that the Trade Contractor pays to third parties, and shall not include any of Trade Contractor's overhead, supervision, general condition costs, general requirements costs, profit or any other costs of Trade Contractor's operations.

14.1.2 For the avoidance of doubt, the Trade Contractor shall not apply mark-up or any overhead and profit to the reimbursable costs within the Allowance.

14.1.3 Whenever the third party direct out-of-pocket costs are more than or less than the Allowance amount, the Trade Contract Sum shall be adjusted accordingly by Trade Contract Change Order, but again subject to any terms, conditions or provisions of the Contract Documents. It is specifically understood that all unspent portions of Allowance amounts will be subtracted from the Trade Contract Sum and returned to the Construction Manager by Trade Contract Change Order.

14.1.4 These Allowances are only to be used where specifically authorized in advance and in writing by the Construction Manager. Costs charged against these allowances will be determined based upon a lump sum, unit price, or actual time and material costs as directed by the Construction Manager.

14.2 If the Trade Contractor Allowances for an item will exceed the amount agreed-upon for such Allowance item, the Trade Contractor shall not proceed with the portion of the Work that will exceed the Allowance amount until receipt of a Change Order or a Subcontractor Change Directive adding the additional cost overrun of such Allowance.

Article 15 – Quality

15.1 Trade Contractor shall participate in the Quality Control Program by maintaining a complete and up-to-date set of Contract Documents related to its installations, providing advance notification (minimum forty-eight (48) hours, preferably seventy-two (72) hours) of anything that would require a quality control activity, such that progress is not interrupted, providing recommendations for resolution of conflicts/discrepancies, and appointing a responsible party to participate in the quality assurance and quality control activities identified within the Contract Documents, including providing immediate response and correction of deficiencies. This provision shall also apply to all associated Trade Subcontractors, manufacturers, etc.

15.2 Quality Assurance (QA): QA meetings will occur prior to the start of select work, for example a preconstruction meeting and pre-installation meetings. Trade Contractor shall have its identified Project Manager and Project Foreman in attendance at these meetings, and shall coordinate attendance by its installing Trade Subcontractors and/or manufacturer as needed. Any action items resulting from these meetings will be noted in the Construction Manager's quality issues list for resolution with a responsible

party and due date. Trade Contractor shall respond to all quality issues for which it is assigned responsibility by the due date.

15.3 Quality Control (QC): QC activities shall occur on a continuous basis to ensure that ongoing work is compliant with project requirements. All QC activities will be documented by Construction Manager as installation is inspected for compliance, deficiencies and issues added to the Rolling Completion List (RCL). Trade Contractor shall notify Construction Manager of the following QC inspection occasions at least forty-eight (48) hours before they occur. Trade Contractor is responsible to designate a representative to participate in the inspection and that representative should have the authority to direct the removal of any material or equipment that does not conform to requirements. Potential QC inspections include, but are not limited to, the following:

A. First Delivery Inspections (Present delivery ticket to Gilbane at start of this inspection.)

B. Mock-ups

C. First Equipment-In-Place

D. Benchmark/Follow-up Inspection

E. Closure Inspection (below grade, in-wall, or above ceiling): Prior to any work being covered, the Trade Contractor will notify Construction Manager that it is complete and ready for inspection. Trade Contractor will sign off on completed areas of concealed work prior to calling for an inspection.

F. Activation Inspection: If more than one Trade Contractor's work is associated with the operation of the equipment being inspected, coordinate inspection with all required contractors.

G. Start-up Inspection: Turnover Inspection

H. Final Inspection

15.4 Non-conforming materials and/or equipment will not be allowed to be set into place and will be removed from the site. In no case will such materials be used on the project. Non-conforming conditions will not be allowed AND non-conforming equipment may require removal from the project in the Construction Manager's sole discretion.

15.5 Rolling Completion Lists (RCL) will be maintained by Construction Manager. This tool is used to track deficiencies, noted as incomplete, missing, or not meeting the requirements, throughout the life of a project. QC activities, field observations of noncompliance, Owner observations, Architect Field Observation Reports, and Inspection and Testing Agency reports will be compiled into the RCL and it will identify the location of the deficiency, the party responsible for resolution, and the inspection and correction dates. Trade Contractor shall correct the deficiency for which it is responsible and shall implement necessary measures to ensure that those deficiencies (or others) are not repeated.

15.6 Eleven months after the time of substantial completion, members of the original project team will conduct a walk -through of spaces turned over to the owner. Trade Contractor may be required to attend that meeting and/or to participate in follow up activities as a result of that meeting.

Article 16 – Temporary Services and Systems

16.1 Coordination and installation of electric power for use in temporary trailers shall be the responsibility of the individual Trade Contractors.

16.2 Potable water shall be available to the Trade Contractor at a central location. Extensions of the water supply for Trade Contractor's exclusive use shall be the responsibility of the Trade Contractor.

16.3 The Construction Manager will provide temporary toilets, excluding Trade Contractor's trailer hookup.

16.4 The Construction Manager will provide temporary fire safety equipment for general use. Trade Contractor shall provide its own fire extinguishers for its trailers, and for use, as required when cutting and burning are performed.

16.5 The Construction Manager will provide rubbish containers and rubbish disposal service unless noted otherwise in the Proposal Form. The Trade Contractor must not use these containers for the disposal of earth, surplus or slop concrete, hazardous materials, masonry, regulated materials, and/or steel stock. Each Trade Contractor must dispose of these elements at his own expense. Trade Contractors are responsible to separate their rubbish as required by the Construction Manager and all agencies having jurisdiction. Any resorting of debris by the Construction Manager to correct the disposal of this Trade Contractors debris will be backcharged to this Trade Contractor. Reference Specification 017400 Construction Waste Management for recycling and waste stream requirements for the project.

16.6 For further description and location of temporary services and system, refer to the Site Logistics and Site Utilization Document in the Project Manual and the following paragraphs.

Each Trade Contractor shall be responsible for furnishing, installing or otherwise providing any or all of the following temporary facilities, structures or services as may be necessary or required for or during, performance of the work of his Contract

16.6.1 Temporary field office facilities complete, including all furniture, heat, cooling, lighting, telephone, plumbing and toilet fixtures as he may require for his exclusive use. (Site location and number are subject to approval of the Construction Manager).

16.6.2 Temporary storage facilities, sheds or buildings as may be required for the proper protection or storage of materials and/or equipment. (Site location and number are subject to approval of Construction Manager).

16.6.3 Temporary extension from, and hookup to, all temporary utilities which have been provided to a common point for use by the Trade Contractor during construction.

16.6.4 Maintenance, cleanup and removal of all temporary facilities provided by the Trade Contractor for his exclusive use.

16.6.5 Furnishing, erection, maintenance and removal of all temporary hoists and scaffolding as may be required by the Trade Contractor for the performance of his Work.

16.6.6 Temporary drainage and dewatering measures including all pumping, drainage, erosion control or other work required to protect the Work of the Trade Contractor while in progress.

16.6.7 All temporary facilities, structures, services or items of work specifically required or defined in the Scope of Work of the Contract (Bid Package) or otherwise required by the Contract Documents for his work.

16.6.8 Distribution of drinking water for his employees and Trade-Subcontractors.

16.6.9 At the end of the day's work, all Work subject to damage by adverse weather conditions shall be covered or otherwise protected as required. Weather protection shall be adequate to

permit each Trade Contractor to work on a continuous basis without shutdown due to temperature or weather conditions as far as possible.

16.6.10 Provide snow removal as necessary to perform your work except access to site and access roads within the site, which is by others.

16.7 Temporary Electric System

As the Work progresses and structure and decks are constructed, the lighting/hand tool circuits will be installed throughout the building according to the following criteria.

Temporary lighting shall be installed in all areas and rooms, including all platforms, levels and stairways but excluding crawl spaces, duct and riser shafts per OSHA Standard 1926.56. Any temporary lighting required beyond the foregoing shall be provided by the party requiring the same and the work will be paid for by that Trade Contractor.

16.7.1 Operations and Maintenance

The system will be operated during normal work week, defined as five (5) days, including 1/2 hour before regular working hours and 1/2 hour after regular working hours for every trade.

Maintenance of the electrical service beyond the duration defined above will be at the expense of the Trade Contractor requesting the service. Charges for maintenance of the services will be made from the trade contractor responsible for operating the utility service to the Trade Contractor and will not involve (nor occur cost to) the Construction Manager or Owner.

16.7.2 Relocation to allow construction to proceed and removal when permanent power is available will be coordinated with the Construction Manager as part of the maintenance service.

16.7.3 The Electrical Trade Contractor may be requested in the Bid Package "Scope of Work" to include part or all of the above described temporary service and distribution and/or maintenance.

16.7.4 Payment for Electrical Energy. The Construction Manager will pay for the cost of all energy consumed by all trades during the construction period metered through this system.

16.8 Temporary Heating (reference Exhibit B – Scope of Work for more information)

16.9 Temporary Water

16.9.1 Temporary water distribution will be provided for the use of all Trade Contractors and to provide a temporary fire protection system.

16.9.2 The temporary fire protection system shall be installed using the permanent standpipes and risers, and shall be installed as rapidly as construction permits.

16.9.3 Temporary fire standpipe connections, including pipe fittings, and valves shall be provided at the location of each permanent hose rack or station as shown on the contract drawings.

16.9.4 At each temporary riser connection shall be provided a temporary hose rack, 100 feet of 1-1/2" UL approved fire hose system with brass couplings and a 1-1/2" nozzle. The system shall also provide 2-1/2" valved, capped connection at each location together with 1-1/2" valved connection with a pair of hose bibs. Hose adaptors on the discharge side of the 2-1/2" valve shall be compatible with hose fittings used by the local fire department.

16.10 Housekeeping – Cleaning, Rubbish and Trash Removal

16.10.1 Reference Exhibit B – Scopes of Work for Daily Cleanup Requirements

16.10.2 The job-site shall be maintained in a neat orderly condition and kept free from accumulations of waste materials and rubbish during the entire construction period. Trade Contractor will remove their crates, cartons and other flammable waste materials or trash from the work areas at the end of each working day.

16.10.3 Each Trade Contractor shall be responsible for cleaning all surfaces as necessary to make them free of spatters or other deposits of paint, plaster, mortar, concrete, adhesives, roofing, dirt, soil, oil, or any other material foreign to the surface involved. The Construction Manager shall back-charge to the responsible party the cost of cleaning which is required by accidental soiling or damage by another Trade Contractor.

16.10.4 Each Trade Contractor is responsible to share the task of litter cleanup (e.g. coffee cups, lunch wrappers, etc.) – reference Exhibit B – Scopes of Work for more information.

16.10.5 This Trade Contractor shall make all efforts to minimize dust and airborne debris. This includes utilizing wet cutting operations where permitted and providing and maintaining all required dust partitions. Other measures shall be required if, in the estimation of the Construction Manager, the existing dust control methods are not sufficient.

16.10.6 Reference Exhibit B – Scopes of work for Cleanup required by Traded Contractor. In the states of Connecticut, Massachusetts and Rhode Island those Trade Contractors who are not signatory to the Laborer's Union shall collect and deposit identifiable rubbish and debris from their operation to a central location or container on each level of the building as designated by the Construction Manager for further disposal by others on a daily basis. Debris collected in the immediate area of the trash chute shall be deposited directly into the trash chute by all Trade Contractors.

16.11 Vehicle Cleaning – Trucking

16.11.1 The Construction Manager (on the Site Utilization Plan) will designate the wash-down area to be utilized by the Trade Contractors. The "wheel wash station" will be equipped with a hose connection and drainage area. The Trade Contractor shall provide manpower, hose and other supplemental scrapers, brushes, etc., which may be required to satisfactorily clean his vehicles leaving the site. The construction of this temporary facility may be included in the "Scope of Work" of the excavation or site Preparation Bid Package, Review scope of work carefully.

16.11.2 All vehicles shall be cleaned of all mud and debris before leaving the site. Each Trade Contractor shall be responsible for providing whatever personnel may be required to perform the required vehicle cleaning throughout the progress of his work. The wash-down area shall not be used for cleaning out of concrete mix trucks.

16.11.3 Cleaning of concrete equipment shall be performed at locations designated by the Construction Manager. Cleaning shall be conducted in such a manner as to prevent spillage of fluid or concrete to the ground or penetration of existing ground soil. The responsible Trade Contractor shall remove from the site all residue accumulated from the cleaning operations of concrete equipment.

16.11.4 All trucks leaving the site with earthen materials or loose debris shall be loaded in a manner that will prevent dropping of materials on streets, and are to have suitable coverings fastened over the load before they enter surrounding paved streets. Trucks bringing earthen materials over paved streets to the site shall be similarly loaded and covered. The Trade Contractor shall conform to all local regulations regarding load limits and be responsible for any costs due to failure to comply with the above.

16.12 Site Security, Personnel & Property Protection

16.12.1 At no time remove, alter or render ineffective any barricades, railings or cover on the project without written permission of the Construction Manager. Where these safety devices are to be turned over to others, upon completion of the work, the devices shall be repaired or replaced so that they meet the required standards prior to turnover. Replace guardrails and other safety structures which you have removed to perform your work, coordinate with the Construction Manager. Closely follow safety procedures while structures are removed.

16.12.2 The Trade Contractor shall provide and maintain proper warnings and detour signs at all pedestrian and vehicular closures, intersections, and along detours, directing traffic around closed portions of roadways. He shall, at his own expense, wherever necessary or required, provide and maintain fences, temporary roadways, temporary cross signs, watchmen, warning lights and take such other precautions as may be necessary to protect life and property, and shall be responsible for all damages occasioned in any way by his act or neglect. All barricades and obstructions shall be illuminated at night, and all lights shall be kept on from one-half hour before sunset, until one-half hour after sunrise.

Article 17 – Dispute Resolution Process

17.1 Dispute Resolution – Claim Definition

17.1.1 The Trade Contractor and the Construction Manager (the "Parties") agree that any and all disputes, differences, claims, or issues arising from this Agreement or involving the Project, including further any party seeking any payment, cost, expense, compensation, loss, time, adjustment, change, request for equitable adjustment, delay, acceleration, damage, remedy, recover or relief of any type or nature shall be collectively referred to as a "Claim" in this Article of the Agreement.

17.2 Claim Notice Requirements

17.2.1 All notice requirements for any claim by Trade Contractor shall be governed by the requirements set forth in this Agreement and the Contract Documents and, nothing in this Article shall excuse, relieve or discharge such requirements. In addition to the notice requirements in this Agreement or the Contract Documents the Trade Contractor shall also provide Construction Manager with a separate Formal Written Notice within three (3) business days after the occurrence of the event giving rise to the Claim. The Formal Written Notice must be labeled in Bold text at the top of the letter, "Trade Contractor's Formal Written Notice of Claim" and shall include specific details and basis for such Claim. Timely submission of such Formal Written Notice is a strict condition precedent to any right or remedy of Trade Contractor to pursue any relief relating to such Claim and, Trade Contractor's failure to timely and properly serve such Formal Written Notice on Construction Manager shall waive the Claim. Daily logs, meeting minutes or other project records and documents shall not constitute a Formal Written Notice. It is specifically understood and agreed that Trade Contractor's failure to timely serve such Formal Written Notice would prejudice Construction Manager's rights and remedies with the respect to: (i) investigating such Claim; (ii) its ability to take remediation and/or mitigation actions; and/or, (iii) the Owner, Architect, Engineer, separate trade contractor, separate contractor or others and, therefore, such failure shall be an absolute waiver of the Claim.

17.3 Owner Claims

17.3.1 In the event the Prime Contract includes any dispute resolution process ("Owner's Dispute Resolution Process"), then to the extent that the Claims between the Construction Manager and Owner include or involve the Trade Contractor and/or any of its Trade-Subcontractors, vendors, suppliers at any tier or any of their acts, omissions, work or obligations, Trade Contractor consents, accepts and agrees to be bound to the Owner's Dispute Resolution Process and will require its Trade-Subcontractors to so consent, accept and agree as well. In addition, the Construction Manager shall have the right to add Trade Contractor, in Construction Manager's sole discretion, as a party to Owner's Dispute Resolution Process. Construction Manager shall be deemed to have exercised such exclusive right by giving written notice to Trade Contractor. Upon Construction Manager exercising such right and giving such written notice, Trade Contractor hereby consents, accepts and agrees to be a party, and shall be legally bound by any resolution, decision, finding, determination, award, judgment, holding or result of the Owner's Dispute Resolution Process. Trade Contractor shall assist the Construction Manager and provide promptly upon written request of Construction Manager, and without subpoena or other legal process, full access to any documents, information, data, cost data, witnesses, employees, experts or other items maintained or within the control of the Trade Contractor related to the Project or any Claim. Trade Contractor's consent and agreement to the terms and conditions of this Article is part of this Agreement's consideration and is a material inducement for Construction Manager to enter into the Trade Contract Agreement.

17.3.2 For purposes of this Article 17.3.2, "Payment Bond" means any payment bond issued by Construction Manager including, without limitation, payment bonds issued pursuant to the Federal Miller Act (40 U.S.C. 3131 et seq.), payment bonds issued pursuant to state Little Miller Acts, and payment bonds issued on private commercial projects. For any Claim subject to the Owner's Dispute Resolution Process, Trade Contractor agrees to forebear in filing any suit or action, including any suit or action against Construction Manager's surety under a Payment Bond, or to stay any suit or action that has been filed, including any suit or action against Construction Manager's surety under a Payment Bond, until the Owner's Dispute Resolution Process is exhausted. It is understood by Trade Contractor that the stay of any suit or action pursuant to this Article is not a waiver of the Trade Contractor's Payment Bond rights, including any rights under the Federal Miller Act or any state Little Miller Act. Furthermore, it is understood by Trade Contractor that its agreement in Article 17.3.1 above to be bound to and by the Owner's Dispute Resolution Process is not a waiver of the Trade Contractor's Payment Bond rights, including any rights under the Federal Miller Act or any state Little Miller Act.

17.4 Mediation

17.4.1 Subject to the Exclusions (hereinafter defined) and/or Owner's Dispute Resolution Process as set forth in this Article, Claims shall be subject to non-binding Mediation as a condition precedent to binding Arbitration. The Trade Contractor and Construction Manager shall endeavor to resolve their Claims by a meeting of each company's respective senior management representatives. Such senior management representatives' meeting shall be conducted within a reasonable time of either Party's request, but only after a failure of the Parties to reach a resolution of the Claim at the project management level at the site. In the event that the senior management meeting is not successful, then the Claim shall be mediated using a mediator mutually agreed upon by the Parties. A request for mediation shall be made in writing, delivered to the other Party to this Agreement. If the Parties are unable to mutually agree upon a mediator, location and date for the mediation within sixty (60) days of either Party's initial written request to mediate, then either Party may proceed to administration of the mediation by the American Arbitration Association ("AAA") in accordance with its

Construction Industry Mediation Procedures in effect on the date of this Agreement. Any mediation shall also comply with any Mediation Statutes and Laws in effect where the Project is located. The parties shall share the mediator's fee, costs and any filing fees equally. Each party shall bear its own legal fees. Mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in writing at mediation, and signed by the Parties, shall be fully binding upon the Parties and may be enforceable as a settlement agreement in any court having jurisdiction thereof.

17.5 Arbitration

17.5.1 Subject to the Exclusions and/or Owner's Dispute Resolution Process as set forth in this Article, any Claim not settled at mediation shall be subject to binding Arbitration pursuant to the terms and conditions set forth herein. The Parties shall first attempt to agree upon an arbitrator in a private arbitration utilizing the Construction Industry Rules of the American Arbitration Association, and the Arbitration requirements set forth herein. If the Parties cannot agree upon such an arbitrator, then the Claims shall be resolved in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, except there shall be a waiver of any fast track arbitrations, and the fast track arbitration procedure of the AAA shall not apply.

17.5.2 Notwithstanding any rule of the AAA to the contrary, Construction Manager shall have the right to reject any arbitrator appointed by the AAA within a period of thirty days (30) after his or her appointment.

17.5.3 The Parties shall be permitted to have full and complete discovery as set forth herein. Any arbitration award or judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof, unless they mutually agree otherwise in writing. Claims shall be heard by a single arbitrator, unless the claim amount exceeds $750,000, in which case the dispute shall be heard by a panel of three arbitrators. The Federal Rules of Civil Procedure shall apply, and there shall be no limitation imposed by the Arbitration panel limiting the witness, depositions, or discovery unless dictated by the Federal Rules of Civil Procedure unless otherwise agreed in writing by the Parties; except as follows:

17.5.3.1 In the event a Claim between the Trade Contract and Construction Manager is for an amount less than $100,000, then the Parties agree: (i) to limit depositions to three representatives for each Party; and (ii) to be limited to request e-discovery e-mails of only three (3) records custodians of the other Party; in each event unless otherwise agreed in writing by the Parties.

17.5.3.2 In no event, regardless of the amount in controversy, shall either Party be permitted to seek e-discovery e-mails from more than five (5) records custodians of the other Party, unless otherwise agreed in writing by the Parties

17.5.4 The Parties agree that the Arbitrator or arbitration panel hearing the case shall be either an attorney who has worked in house with a contractor or construction management firm, or as a former judge, in each event who has ten or more years of experience in commercial construction litigation matters.

17.5.5 The place of arbitration shall be where the Project is located unless otherwise agreed by the Parties. The arbitration shall be governed by the laws of the State where the Project is located, except any disputes concerning the arbitrability of any issue shall be governed by the Federal Arbitration Act and not by any state act(s). Hearings will take place pursuant to the standard procedures that contemplate in-person hearings. The arbitrator(s) will have no authority to award punitive damages. Any award in an arbitration initiated under this clause shall be limited

to monetary damages and shall include no injunction or direction to any party other than the direction to pay a monetary amount. Arbitrator(s) will have the authority to allocate the costs of the arbitration process among the parties, but shall not have the authority to allocate attorneys' fees and taxable costs except as a cost or damage for failure of a party to indemnify or defend the other, when applicable. The award of the arbitrator(s) shall be accompanied by a reasoned opinion, and arbitrators shall issue such written opinion within sixty (60) days of the conclusion of evidence and closing arguments received by the arbitration panel. Except as may be required by law or requested by any government agency or entity, neither a party nor the arbitrator(s) may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties, which consent may not be unreasonably withheld, conditioned or delayed when a reasonable basis is provided as a basis to disclose such results.

17.5.6 The Parties agree that failure or refusal of a party to pay its required share of the deposits for compensation of the arbitrator(s) or administrative charges shall constitute a waiver by that Party to present evidence or cross-examine witness. In addition, in such event, should such Party continue to fail and/or to fully refuse to cure the non-payment within twenty (20) days after written notice, then such failure to pay shall be deemed a default and shall entitle the other Party to a default judgment of liability in its favor. The other Party shall then be permitted to present evidence for any and all damages, loss and liability claimed against the non-paying Party without cross-examination or objection by the non-paying Party for entry of a final monetary award or judgment in favor of the other Party.

17.5.7 Trade Contractor hereby consents and agrees that any Claim against Construction Manager's or its Surety under a payment bond, whether on a public or private project, shall be subject to this Article 17; Construction Manager's surety on any payment bond shall be entitled to all of the rights and dispute resolution procedures afforded Construction Manager under this Article. Trade Contractor's surety on any payment and/or performance bond issued by Trade Contractor and its surety agrees to participate and be bound by all dispute resolution proceedings under this Article, including, but certainly not limited to, arbitration. Trade Contractor shall also flow down this specific requirement in all of its agreements, for every tier, related to the Project.

17.5.8 The Parties hereby agree that the provisions stated in this Agreement with respect to payment(s), withholding of payment(s), interest applicable to payment(s) and recovery of attorneys' fees in relation to collection of payment(s) from a Claim supersede and replace the terms of any prompt payment act, statute, or law. To the extent permitted by law, the provisions of any prompt payment act, statute or law shall not apply to this Agreement, and are hereby waived by the Parties.

17.5.9 The Parties expressly agree that any arbitration pursuant to this Article may be joined or consolidated with any arbitration involving any other person or entity (i) necessary to resolve the claim, dispute or controversy, or (ii) substantially involved in or affected by such claim, dispute or controversy. Both the Construction Manager and Trade Contractor will include appropriate provisions in all contracts they execute with other parties in connection with the Project to require such joinder or consolidation and to require resolution of claims via arbitration.

17.6 Continuing Performance

17.6.1 The existence of a Claim shall not be grounds for any nonperformance by Trade Contractor, or its surety; nor shall it be grounds to limit the right of Construction Manager to proceed with any remedies under this Agreement for any breach or default by Trade Contractor. Trade

Contractor shall proceed diligently with performance of this Agreement and with the performance of its Work pending any Dispute Resolution Process as set forth in this Article or as set forth in the Prime Contract's dispute resolution process.

17.7 Claims Expressly Excluded from Arbitration

17.7.1 Notwithstanding any other term, provision or condition set forth in this Article, any Claim involving a matter that is, or should be, defended by insurance and/or have insurance coverage shall be excluded from any arbitration terms, requirements or provisions in this Article, except to the extent such insurance coverage involves Contractor Default Insurance. For the avoidance of doubt, Contractor Default Insurance shall not be deemed a basis for such exclusion from Arbitration. The intent of this section is to exclude, except for Contractor Default Insurance, arbitration requirements for any Claim that is, or should be, subject of insurance coverage or may involve the interests of a third party or insurance company who has not agreed to Arbitration and, further to avoid multiple proceedings or the possibility of inconsistent verdicts.

17.8 Election to Litigation

17.8.1 As a material inducement for Construction Manager to enter into this Agreement with Trade Contractor, it is agreed the Construction Manager shall have the right, at all times and in its sole discretion, to elect to proceed to litigation with any Claim involving Trade Contractor rather than arbitrate the Claim as set forth in Article 15.4. Construction Manager shall issue written notice to Trade Contractor that Construction Manager has elected to proceed with litigation rather than arbitration. In such event, the jury trial waiver in Article 9.20 herein shall be given full force and effect. The Construction Manager may make such election in writing served on Trade Contractor at any time prior to the selection of the arbitrators or prior to the time to reject an arbitrator has passed, whichever is later.

17.8.2 In any part of this Article of the Dispute Resolution Process shall be adjusted or determined to be contrary to the applicable Laws, then all remaining terms, provisions and articles, in all other respects, shall be and remain legally effective and binding upon the Parties.

RE: ***Northeast Metropolitan Regional Vocational High School***
Subject: **Project Startup Information/Billing Requirements**
J09299.100
December 6, 2022

Our Purchasing Department has awarded your firm a contract on the above referenced project. **Gilbane will use Textura Contract Payment systems to manage trade contractor pay applications and compliance documentation. Please sign up online with Textura at …https://www.oracle.com/corporate/acquisitions/textura/index.html**

In order to expedite payments and to avoid any misunderstandings as to the proper billing procedures to be followed, we request the following instructions be strictly adhered to:

1. **The following are items that the Contractor must comply with immediately following the contract award for issuance of payment.**

   A. Submit **for approval** a listing of all subcontractors and major suppliers to be listed each month on the Contractor's Sworn Statement.

   B. **Schedule of Values**

   Submit for **approval** a detailed Schedule of Values of your Contract amount on formal AIA document. This breakdown shall be divided into both labor and material line items for each major area of work in your Contract Specifications.
   You shall also include separate line items for Bond (where applicable), shop drawings, allowances (where applicable), clean up, safety, site supervision and coordination, closeout, etc.

   Submit first schedule within 7 days of contract award for approval of format. Final form to be submitted on AIA G703. Submit updated schedule, including amendments issued by Change Request number and description, with each payment application.

   C. **See attached Exhibit A for submitting Insurance Certificates through BCS. All insurance certificates must be submitted through BCS for approval.** Submit to both Gilbane's Project Engineer and Accountant copies of Insurance Certificates and Performance Bonds as required in your Contract and Project Specifications.

   D. **Material Status Reports**

   Submit initial report in format corresponding to Schedule of Values within 7 days of contract award. Please reach out to your applicable Project Manager or Project Engineer for acceptable form to be used.

   E. **Miscellaneous**

   For those Contractors that are "Out of State" Contractors, you are required to register with the Department of Revenue and adhere to their requirements and laws. Please see below link for further information.

   https://www.mass.gov/info-details/out-of-state-contractors-and-subcontractors

2. **BILLING INSTRUCTIONS**

- A draw calendar will be posted in Textura and at the request of the Project Team, the pay application and all supporting documents requested for payment **MUST** be completed in Textura **no later than noon on the 20th** each month to include work completed through the last day of that month. Billings will be opened roughly on the **15th of each month.** The application will be reviewed by the Gilbane Project Team (Project Manager, Superintendent, Project Engineer, Project Accountant). If necessary, it will be returned for corrections via Textura as a "Rejection" with comments of corrections/adjustments.

- When submitting requisitions, work completed should be projected through the end of each month. **Applications posted in Textura after noon on the 20th may not be considered for payment until the following month. If the 20th of the month falls on a weekend, then the application must be posted in Textura on the Friday prior to the 20th. No exceptions can be made so please plan accordingly.**

- **Any application for payment submitted by specified date above shall be deemed approved if no response is given to subcontractor in accordance with the Massachusetts Prompt Payment Act where it is applicable**

- **Please note that billing for a Change Order and being paid for that Change Order is stipulated upon the fact that you have fully executed said Change Order.**

A. Contractor is to attach the following to each copy of the Application for Payment (if not already included in Textura.

1. **Contractor's Request for Payment Form.**

   a. Retainage reduction must be requested by letter two weeks prior to Sub review. Submit original Consent of Surety to Reduction of Retainage and Power of Attorney with billing if applicable.

2. **Schedule of Values Form.**

   a. Please Note: Monthly requisitions will not be accepted without this form. **(AIA *G702 and G703*)** G703 must include detailed breakdown of specific areas of work as requested by the Project Team.

3. **Contractor's Sworn Statement with Waivers of Lien for prior payments. Also, include Sub-Sub and Suppliers waivers.**

   A. Contractor Waivers are to be totaled cumulatively, i.e. total *net* amount of payments received by your firm to date.

   B. Sub-sub and Supplier's Waivers will be submitted within 20 days of contractors receipt of payment from Gilbane as verification of payments noted on the previous months Contractor's Sworn Statement.

   C. Waivers of Lien are automated through Textura unless a specific lien waiver is mandated to be used by the Owner.

   D. Certified payrolls may be required. Please verify this information with Gilbane project manager.

3. **Extra Work**

A. You are cautioned concerning any extra work. This department will not under any circumstances make payment to you for extra work included as part of your monthly Request for Payment unless a Contract Amendment has been issued or a separate Purchase Order written.

B. Daily Time and Material slips will be processed only ***if they are signed daily by the Gilbane Project Manager or his/her designee.*** Original invoices for material and equipment and certified payrolls will be required as back-up to any authorized time and material work.

4. **Contract Closeout**

A. When your Contract has reached substantial completion, request for contract closeout should be made in writing to the Project Manager. Final billing should include Gilbane Building Company General Guarantee, General Release and Waiver of Lien, Final Sworn Statement, Subs/Supplier's Waiver, MBE Report, substantiated with canceled checks, and Consent of Surety to Final Payment.

B. For Out of State Contractors, you are required to adhere to the Department of Revenue's requirements which can be found on the below link:

a. https://www.mass.gov/info-details/out-of-state-contractors-and-subcontractors

5. **Special Note**

Under certain circumstances, the Owner, Architect or Project Specifications may require additional information from the Contractor not contained in the aforementioned instructions. This includes but is not limited to the implementation of Joint Checks. If this should occur, a separate instruction will be issued by this office or included as an addendum to the attached index of forms to be used on the project.

6. **Project Site Office**

All billing hard copy billing documents (not already located in Textura) shall be sent to:

Gilbane Building Company
Attn: ***Carly White***
10 Channel Center Street Suite 100
Boston, MA
02210

All billing electronic documents (not already located in Textura) shall be sent to:
CWhite12@gilbaneco.com
SUBJECT: Northeast Metro Voc HS

7. **Contact**

Any questions relating to billings, payment, waivers, suppliers' waivers and required documents shall be addressed to:

Carly White
Office: ***617-960-8806***
Email: CWhite12@***GILBANECO.COM***

8. **Safety Requirements**

The subcontractor shall submit copies of any routine accident reports to the Construction Manager within 24 hours. Any major accident shall be reported immediately to the Construction Manager. The Safety Plan included in your bid documents shall be strictly adhered to, and the Safety Assignment Notice completed and returned to the jobsite.

9. **Stored Material**

Any material stored off site must carry additional insurance (All Risk Rider) stating Gilbane Building Company and Owner as insured. All material is to be inspected by Gilbane Building Company personnel before billing can be approved. Bill of Sale, Bailment Agreement, and receipts for items being billed at cost only are required. **Paperwork must accompany request two weeks prior to billing to insure adequate time to schedule inspection**.

10. MBE/EEO Utilization Reports

Gilbane will monitor actual performance regarding the Projects MBE/EEO goals through utilization of various reports provided by the Trade Contractors. These reports will be required as a condition for payment to the Trade Contractor.

Requirements

A. Please see attached required schedules I-1, I-2, and I-3 to be used in accordance with this reporting.

Any questions relating the MBE/EEO reports should be addressed to the Project Accountant.

11. Project Startup Information

A. Project Mailing Address Delivery Address:

Gilbane Building Company
Attn: ***Carly White – Northeast Metro Voc HS***
10 Channel Center Street – Suite 100
Boston, MA
02210

B. Subcontractor Coordination Meetings weekly as determined.

C. **Material Deliveries** – Coordinate with the jobsite.

D. **Shop Drawings/Submittals –** Quantities and format is described in the General Conditions.

E. **MSDS Information** must accompany all material deliveries in accordance with the Hazard Communication Program.

F. **Material Status Reports** are required every month with billing. If they are not submitted, the requisition will not be accepted.

If you have any questions as to the proper execution or use of these forms or any questions concerning these instructions, do not hesitate to contact the Project Accountant at 617-960-8806.

By earnestly following these instructions, a significant contribution will be made to the success of the project to the benefit of all concerned.

Truly yours,

Carly White
GILBANE BUILDING COMPANY

Oracle's Textura Payment Management: Work Faster and More Efficiently

What Is Textura (TPM®)?

Oracle's TPM is an Internet-based construction invoicing and payment solution. With the TPM system, subcontractors can electronically sign and submit their pay applications—including invoices, sworn statements, and conditional and/or unconditional lien waivers. Payments are made electronically via ACH (Automated Clearing House) resulting in faster access to your funds. In addition, TPM facilitates submission and tracking of compliance documents and sub-tier lien waivers. In short, TPM has revolutionized the construction payment process. Thousands of subcontractors currently use TPM to submit their pay applications every month.

Sign Pay Applications and Submit Electronically

TPM automatically generates the required Pay Application documents and transmits them to your GC electronically at the click of a button.

- Invoices are created by simply entering a percent complete or dollar value by line item of your budget
- Electronic submission of documents eliminates the expense and inconvenience of fax or hand delivery
- Invoice amounts are verified with lien waiver and payment amounts, reducing the risk of error

Receive Payments via ACH

TPM uses the secure ACH network for electronic deposit of funds to accelerate draw payments.

- ACH will deliver funds faster than a manual check. Payments are made through TPM directly by the GC and are subject to the terms of your contract.
- ACH works like direct deposit. Funds are immediately available, no waiting for checks to clear.
- TPM alerts you via email that payment has been disbursed.

Know What is Happening, When It Happens

TPM offers complete visibility throughout the draw process and notifies users of critical events.

- Receive real-time notifications when a draw is opened, change order issued, payment disbursed, etc.
- Receive email reminders to update expiring insurance documents and notification of non-compliance.
- Online invoice approval and rejection ensures that both parties are informed of final invoice amounts.

Manage Documents Online

Project documents created in or uploaded to the system are available for viewing, printing or downloading to your computer. TPM will store these documents for a minimum of ten years.

- Pay Application backup documents are submitted quickly and easily via an upload attachment feature.
- Electronic submission & tracking of legal documents such as insurance certificates reduces payment holds.
- Possibility for lost or delayed documents resulting in held payments is virtually eliminated

What Does It Cost to Use TPM?

0.22% of contract value*

- Maximum – $3,750
- Sub-tier subcontractors – $100

Payment Methods

- ACH (default) or Credit Card

**Plus applicable taxes*

Technical Requirements:

TPM is completely web-based- there is no software to install. Users need only:

- Internet access (high-speed recommended)
- Email access for each user
- Adobe Acrobat Reader 6.0 or higher (free download)

Free Training & Support:

Our Training Supports your training needs with:

- Free webinars
- Individual training by phone

Support representatives are available to answer your questions at 866 -TEXTURA (866-839-8872).

STATE OF_____

COUNTY OF_____ DATE_____

SUB-SUB WAIVER OF LIEN

I, the undersigned, being a duly authorized Agent/Officer of the company stated below, do hereby affirm that all bill against _____ for labor, materials, services, etc. provided to said Company for Gilbane Building Company's project entitled **Northeast Metropolitan Regional Vocational High School** located at **100 Hemlock Road, Wakefield, MA 01880** have been fully paid covering work completed through period ending _____ and our right of lien is hereby waived.

Amount Paid: $_____

_____

(Company)

_____

(Signature)

_____

(Title)

Sworn to and subscribed before me this

_____ day of _____ 20_____

My commission expires_____

Given under my hand and notarial seal this

_____day of _____20____

_____

Notary Public

(SEAL)

SUPPLIER'S WAIVER OF LIEN

I, the undersigned, being duly authorized Agent Officer of the Company stated below, do hereby affirm that all bills against _____ for materials, services, etc. delivered to said Company at the site of Gilbane Building Company's project **Northeast Metropolitan Regional Vocational High School** located at **100 Hemlock Road, Wakefield, MA 01880** have been fully satisfied through period ending _____ and our right of lien is hereby waived.

Amount Paid: $_____

Dated this _____ day of _____ 20___

_____
(Company)

_____
(Title)

_____
(Signature)

Site Logistics Summary

Northeast Metropolitan Regional Vocational High School

Gilbane Project Number 9299

Wakefield, MA

Logistics – Site Plan

The attached site plans include the limits for perimeter fencing/barricades, material delivery locations, personnel access points, controlled access points for workers and pedestrians at site entry to jobsite trailers, to the work area and into the building, temporary roadway and material storage limits, field office plan, muster point, dumpster locations, spill containment areas, and truck wash areas.

- Perimeter fencing/barricades shall be provided by Gilbane in accordance with the attached plan "Phase 1-3 Temporary Fence Plans". Any other supplemental fencing or barricades shall be provided by the Trade Contractor in accordance with the temporary fencing specifications. Trade Contractor shall be responsible and include all costs to move/relocate fencing off hours for their work.
- Reference "Site Logistics Plan – Field Office Area & Back Field Access" for Site Utilization plan in the referenced area.
- Reference "Back Field Access Site Plan – 2-17-23" for Site Utilization plan for back field access and rear of school.
- Materials shall only be delivered between the hours of 7:00AM – 3:30PM and be delivered in "just-in-time" fashion to the areas. Reference "Trucking Delivery Routes to Site NEMT 12/5/22" and "Trucking Delivery Routes – At Site 8/9/22" for allowable trucking routes to the site and within the site proximity. Materials not to be immediately installed will not be accepted on the project site. Trade Contractor shall include all costs for off-site warehousing/storage to accommodate this project work plan.
- Controlled access points to the project are maintained through the course of construction. Material, equipment, or other construction means shall not block this access way during normal working hours.
- Additional materials such as crane mats, or stone shall be provided by Trade Contractor requiring additional soil capacity beyond what is provided. All engineering for means and methods shall be provided by the Trade Contractor.
- Field offices shall be limited to one trailer per Contractor and shall be removed when dictated by Gilbane. All costs for relocations, mobilizations, removals, utilities, setup, etc. shall be paid by the Trade Contractor.
- Temporary toilets shall be provided in quantities supporting the current manpower on site.
- A project muster point is designated on the attached "Site Security Plan". Periodic emergency evacuation drills will be performed on the project and all personnel are required to participate.
- Dumpsters shall be provided by Gilbane unless noted otherwise in the Exhibit B – Scopes of Work for each Trade Contractor.
- Reference the attached "Trash Out/Leave Out Plan" for trash chute and dumpster locations.
- Reference the attached "Trash Out/Leave Out Plan" façade leave out locations for material loading and trash access locations.
- Street sweeping and truck washing shall be the responsibility of any Trade Contractor entering or leaving the site. Reference the contract drawings for stabilized construction entrances.
- The Construction Manager shall clear the main access roads and parking lot during snow events. Trade Contractors shall be responsible to clearing snow and ice at their own trailer access areas. Trade Contractors are restricted from traveling on walkways which are not clear of snow and ice.

Logistics – Utility Plan

- Temporary electrical service shall be brought into the building, distributed and shall be made available for Trade Contractor use. A site electrical plan has been established to show the overall plan (reference the Contract Documents. Special Considerations have been made for:
    - Special equipment whips (Floor Grinders, Spray Fireproofing, Welding Equipment, etc)
    - Available power for elevators
    - Charging service for lifts and equipment
- Temporary water service will be available on site When using hydrants, Trade Contractor shall include all meters and service fees for their work.
- Temporary gas service shall be used for Temporary Building Heat for the Winter 2024 – 2025 season.

Logistics – Interior Phasing and Sequencing

- Leading-edge protection during the structural phase of the work shall be provided by the Structural Steel Contractor and be coordinated with interior Trade Contractors in an effort to eliminate conflicts and modifications after the work is installed. A shop drawing showing designated opening, dimensions, and proposed details shall be submitted for review prior to installation. Trade Contractors requiring any modifications to the leading-edge protection after shop drawings have been reviewed and approved must complete a re-submittal of their proposed system. Modifications to the existing leading-edge protection system will only be completed after approval and at no additional cost to the project.
- A priority wall sequence diagram has been established showing the interior wall construction that will occur prior to overhead MEP rough-in work. This plan shall be acknowledged and included in the Trade Contractor's work plan.
- An interior sequence diagram showing walkways, laydown area limits, and sequence of work shall be acknowledged and included in the Trade Contractor's work plan.
- A survey and site control plan has been established. Trade Contractors must strictly adhere to this surveying and control plan:
- A tolerance review meeting with the Structural Trade Contractor interfaced with the interior Trade Contractors will be held multiple times during the course of the project. The following Trade Contractors shall prepare a method statement outlining the specified tolerances and quality control mechanisms that are proposed to ensure the tolerances are met.
    - Project Surveyor
    - Structural Concrete
    - Steel/Precast
    - Building Envelope Trade Contractors
    - Davits/Fall arrest Trade Contractor
    - Interior Framing Trade Contractor
    - Flooring Trade Contractor
- A floor/area communication board will be utilized on the project to identify safety concerns, project constraints, and quality concerns and communicate the weekly work plans.
- Just-In-Time Deliveries
    - All Trade Contractors shall schedule their materials for just-in-time deliveries in accordance with the Schedule.
    - Trade Contractors shall not have more than 1 week of materials stored on the project site.
    - Trade Contractors shall include all associated storage, material handling and delivery costs.
- Work Areas/Production Stations/Cutting Stations

- All work areas/cutting stations/production stations shall be kept neat and clean.
- All materials shall on wheeled racks or other means of wheeled storage.
- **All debris goes into a trash can – not on the floor!**

- Material Storage
  - Any materials not identified will be removed from the project.
  - All materials shall be stored on wheels or carts for ease of movement. NO PALLETS IN THE BUILDING. When pallets are used (when approved by the Construction Manager), Trade Contractor shall furnish one pallet jack to be used by the project team as needed to move materials. Under no circumstances shall materials be placed in designated walkways.
  - All materials shall be placed on carts or pallets with a color code to identify Trade Contractor's materials.
  - All materials shall be stored in designated locations as identified by the Construction Manager (See attached material storage locations).
  - All materials shall be returned to the designated storage area at the end of each workday.
  - All extension cords, tools and equipment shall be rolled up and stored at the end of each workday.
  - Any materials, tools, equipment, etc., not stored in the designated areas will be removed from the jobsite at the Trade Contractor's expense.

Logistics – Exterior Work and Sequencing

- Reference the attached "Façade Sequencing Plan 8/14/23" for sequencing plan for the exterior façade work.
- Reference the attached "FRP Concrete Site Utilization Plan 10/26/22" for Site Concrete Logistics.
- Reference the attached "Slab on Deck Placement Drawing 10/14/22" for Concrete Deck Placement Sequencing.
- Reference the attached "Steel Erection Sequence Plan 10/24/22" for Steel Erection Sequencing.

List of Attachments

- Phase 1-3 Temporary Fence Plans
- Site Logistics Plan – Field Office Area & Back Field Access
- Back Field Access Site Plan – 2-17-23
- Trucking Delivery Routes to Site NEMT 12/5/22
- Trucking Delivery Routes – At Site 8/9/22
- Site Security Plan
- Trash Out/Leave Out Plan
- Façade Sequencing Plan 8/14/23
- FRP Concrete Site Utilization Plan 10/26/22
- Slab on Deck Placement Drawing 10/14/22
- Steel Erection Sequence Plan 10/24/22

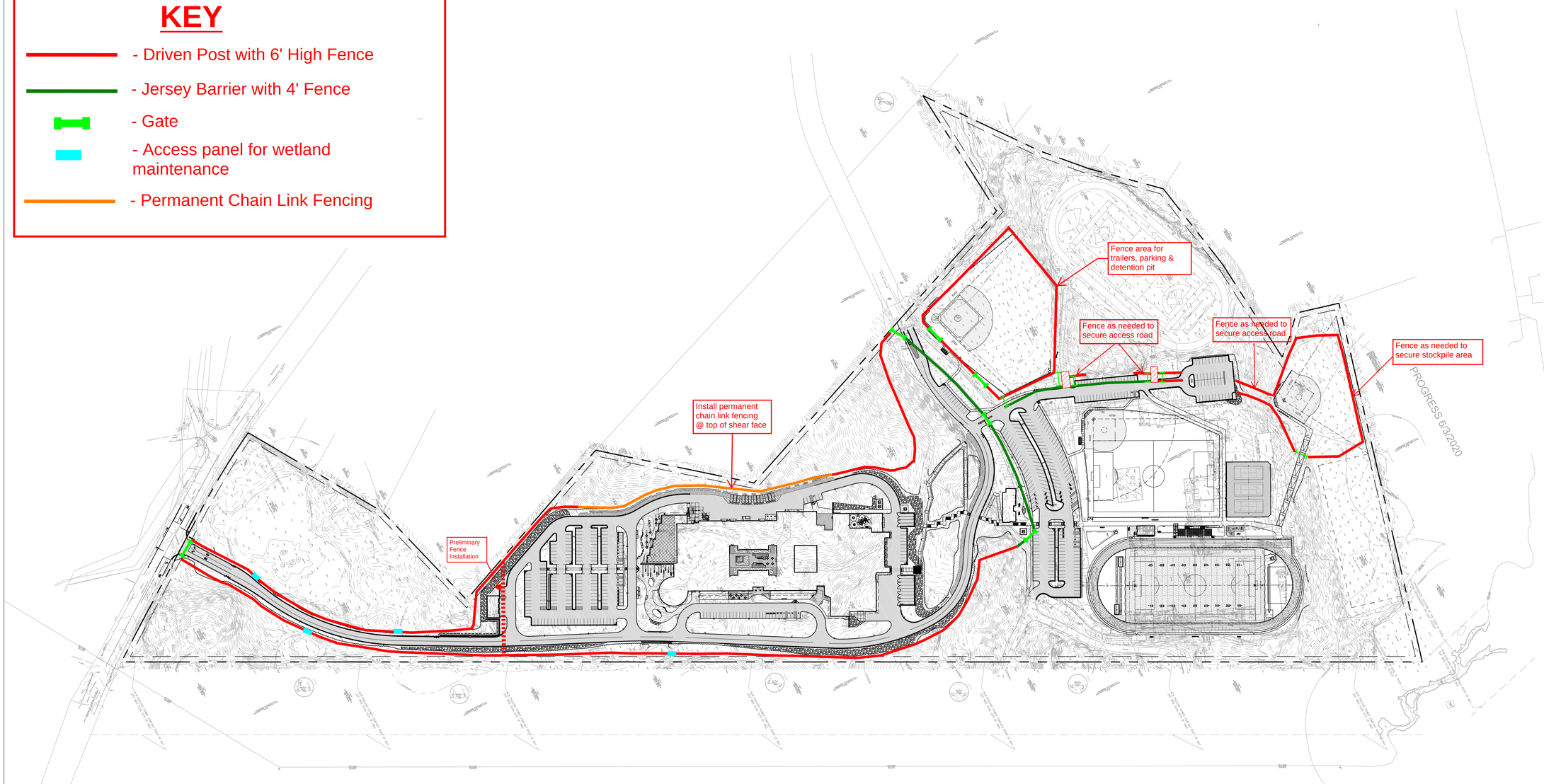
Gilbane

SITE UTILIZATION

PHASE 1&2 TEMPORARY FENCE PLAN
3-8-23

KEY

- Driven Post with 6' High Fence
- Jersey Barrier with 4' Fence
- Gate
- Access panel for wetland maintenance
- Permanent Chain Link Fencing



NORTH

SCALE: 1" = 100'-0"

0 50' 100' 250'

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

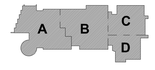
100 Hemlock Rd,
Wakefield, MA 01880

WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

© COPYRIGHT 2022 DRUMMEY ROSANE ANDERSON, INC.

DESIGN
DEVELOPMENT
COST
ESTIMATE SET

June 23, 2022



KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

OVERALL SITE PLAN

Scale: 1" = 30'-0"
Job No.: 20202.00
Drawn By: JM
Date: June 23, 2022

L000

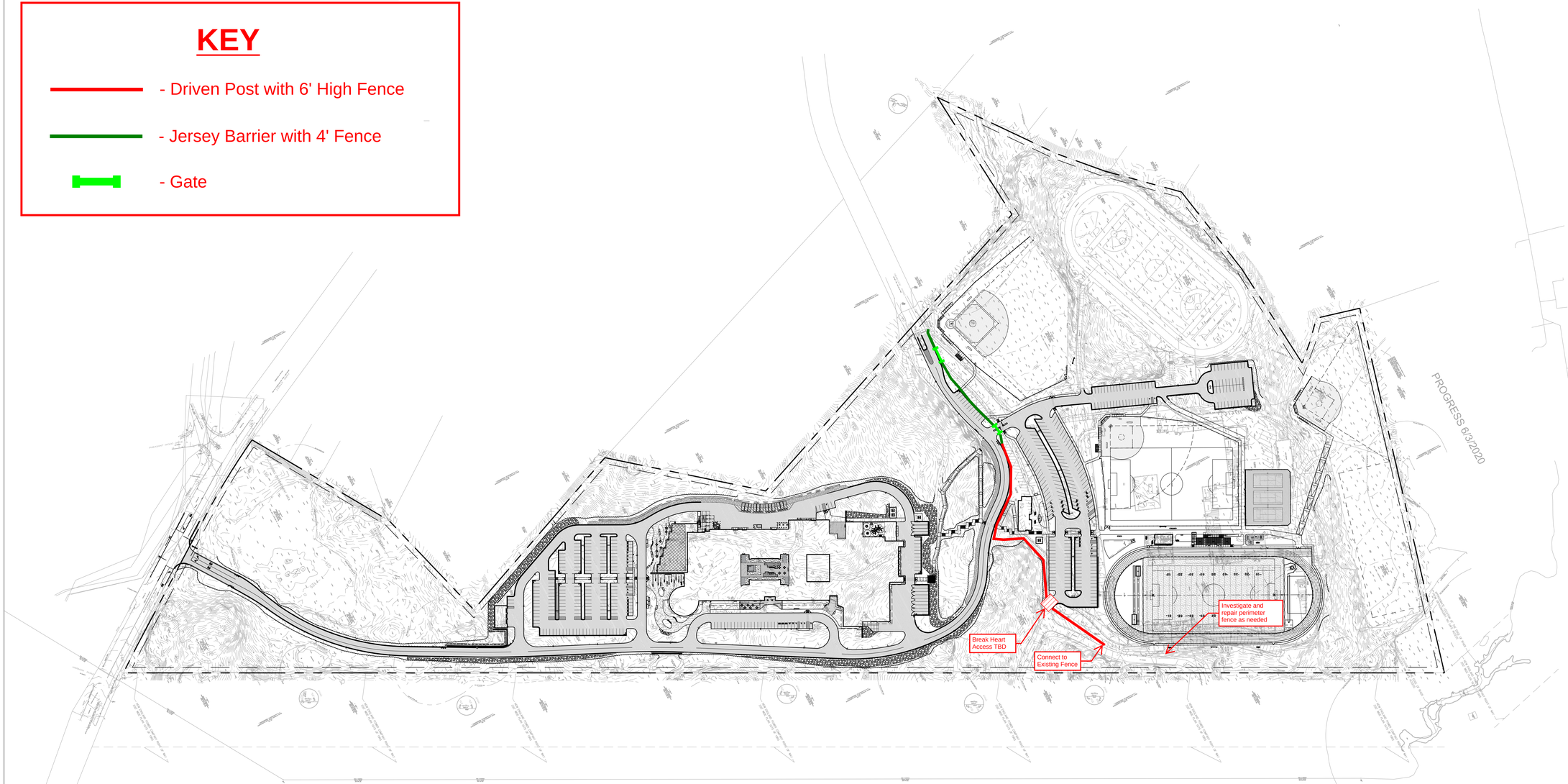
Gilbane

SITE UTILIZATION

PHASE 3 TEMP FENCE PLAN

KEY

- Driven Post with 6' High Fence
- Jersey Barrier with 4' Fence
- Gate



NORTH

SCALE: 1" = 100'-0"

0 50' 100' 250'

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

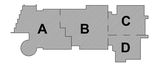
100 Hemlock Rd,
Wakefield, MA 01880

WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

© COPYRIGHT 2022 DRUMMEY ROSANE ANDERSON, INC.

DESIGN
DEVELOPMENT
COST
ESTIMATE SET

June 23, 2022



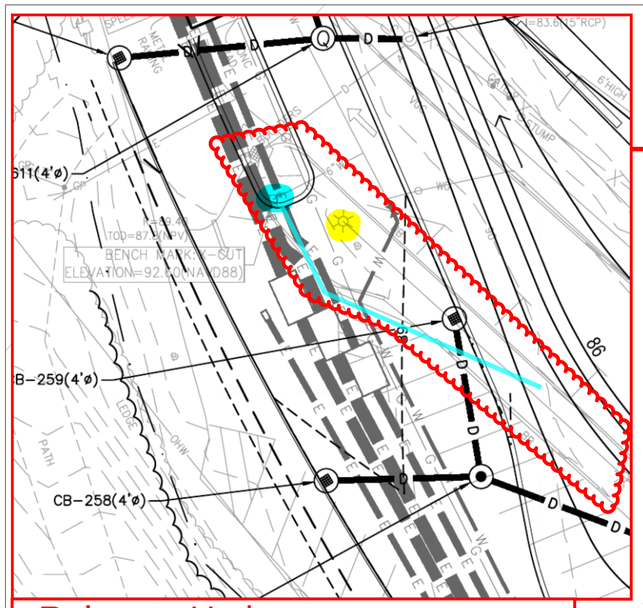
KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

OVERALL SITE PLAN

Scale: 1" = 30'-0"
Job No.: 20202.00
Drawn By: JM
Date: June 23, 2022

L000



- Relocate Hydrant
- Remove Light Pole
- Prep & Pave

Stone tracking pad

Gilbane/PMA/Visitor Parking
Subject to relocation during utility installation

Temporary Access Road (TO BE WIDENED TO 16') ALTERNATING ONE WAY TRAFFIC

School Traffic Reroute

GATE

Jersey Barrier w/ fence

See Baseball Field Detail Plan

CROSSWALK - STOP SIGNS TO BE PLACED FOR CONSTRUCTION TRAFFIC

Existing Tree (TBD)

CONSTRUCTION TRAFFIC ZONE

SEE NEXT PAGE FOR PARKING ARRAINGEMENT

GATE

Install sign showing two way traffic

Stone tracking pad

Install signage showing "DO NOT ENTER" and "STOP" and to yield to school traffic (for construction vehicles)

Proposed new curb line, to allow diagonal parking on both sides. **Widen parking lot as shown.**

Area required to build access road

Stone tracking pad

ALTERNATE ACCESS GATE

Approximately 120 Parking Places are lost in this plan

Gilbane

SITE UTILIZATION

SITE LOGISTICS PLAN - FIELD OFFICE AREA & BACK FIELD ACCESS

Scheduled:	
Last Updated:	2/2/23 (Revised)

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd, Wakefield, MA 01880

WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

©COPYRIGHT 2022 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022

KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

DEMO AND SITE PREPARATION PLAN - 3

Scale: 1" = 30'-0"
Job No.: 20202.00
Drawn By: JM
Date: June 23, 2022

L103

PRELIMINARY DEMOLITION INFORMATION NOTED, REFER TO EXISTING CONDITIONS SURVEY FOR DETAILED INFORMATION

PROGRESS 6/3/2020

Jersey Barriers with Fencing
Construction Fencing as Required
Construction Gates
Maintain Walkway Access to Field
20' Paved Construction Traffic Zone
20' Processed Material Construction Traffic Zone (Maintain as Required)

P&P SHED
P&P PAVEMENT AND STAIRS
P&P CLF AND GATES
P&P CLF
R&D CLF
Remove Propane Tanks
Hydrant to Remain Provide Access
Remove Tree (RFI)
40' Container Removed by Owner
Remove Bleachers & Shed
Remove or Relocate Playground Equipment (TBD)
R & D PLAY EQUIPMENT AND SAFETY SURFACING
R & D GAS TANKS
R & D JERSEY BARRIER
R & D GATE
R&D SIGN
R & D SHED
R & D BLEACHERS
S&S LOAM
Raise SD MH
Protect CB
P&P PAVEMENT & STAIRS
Adjust Fencing
Adjust Walkway
Maintain Existing Pavement
Elev. 102' +/-
Relocate Propane Tank & Provide Acess
R & D BASKETBALL COURTS & HOOPS
R&D PAVEMENT
R&D GAS TANK
R&D CLF
R & D EXISTING BUILDINGS AND APPURTENANCES
Elev. 66.4' +/-
R&D INFIELD
R&D BACKSTOP
R&D TRAILER
SCHOOL TRAFFIC
Classroom Trailer to Remain
R&D SHED
R&D TREES, TYP.
S&S LOAM, TYP.
GATE
SCHOOL TRAFFIC
SCHOOL TRAFFIC
R & D EXISTING BUILDINGS AND APPURTENANCES
R&D SHED
R&D GRAVEL
R&D TREES, TYP.
S&S LOAM, TYP.
R&D BENCHES, TYP.
R & D EXISTING BUILDINGS AND APPURTENANCES
R&D PAVEMENT
S&S LOAM, TYP.
R&D TREES, TYP.
R&D BENCHES AND PORTABLE TABLES
S&S LOAM, TYP.
R&D WALL
R&D PAVEMENT
R&D PAVERS
R&D WALL AND STAIRS
R&D FLAGPOLES
R&D HANDRAIL
R&D TRAILER
R&D TRAILER
P&P PRACTICE FIELD
S&S LOAM
R&D CONC. WALL
R&D FUEL MANHOLES & CONCRETE PADS
R&D CONCRETE STAIRS
R & D AC UNIT
R & D RECREATIONAL EQUIPMENT
R & D TRAILER
R & D JERSEY BARRIER
R & D SHED
R & D GAS TANKS
R & D METAL GUARDRAIL
R & D CLF
P&P BIT CONC.

Gilbane

SITE UTILIZATION

BACK FIELD ACCESS
SITE PLAN
2-17-23

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

©COPYRIGHT 2022 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022

A B C D

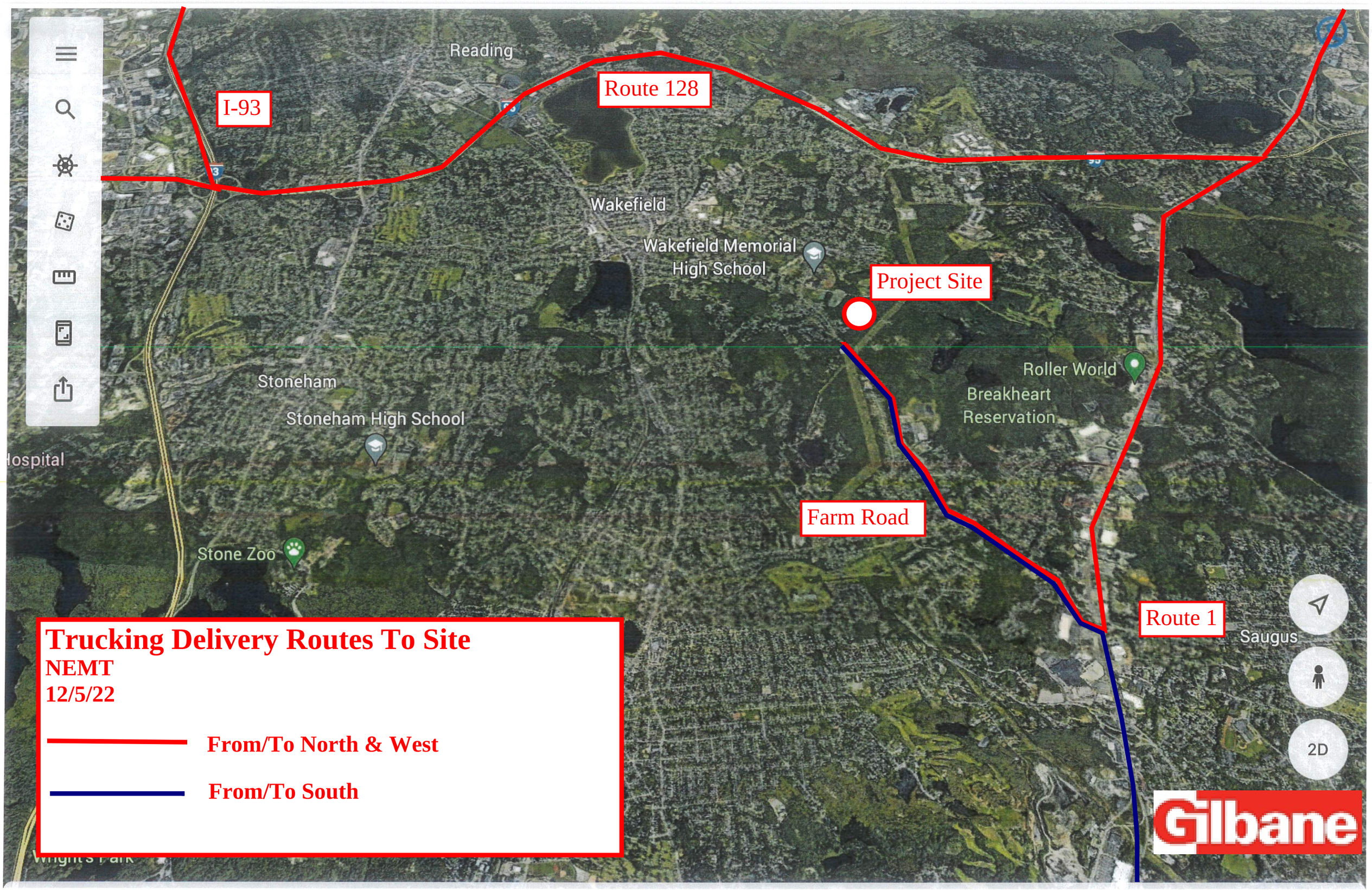
KEY PLAN

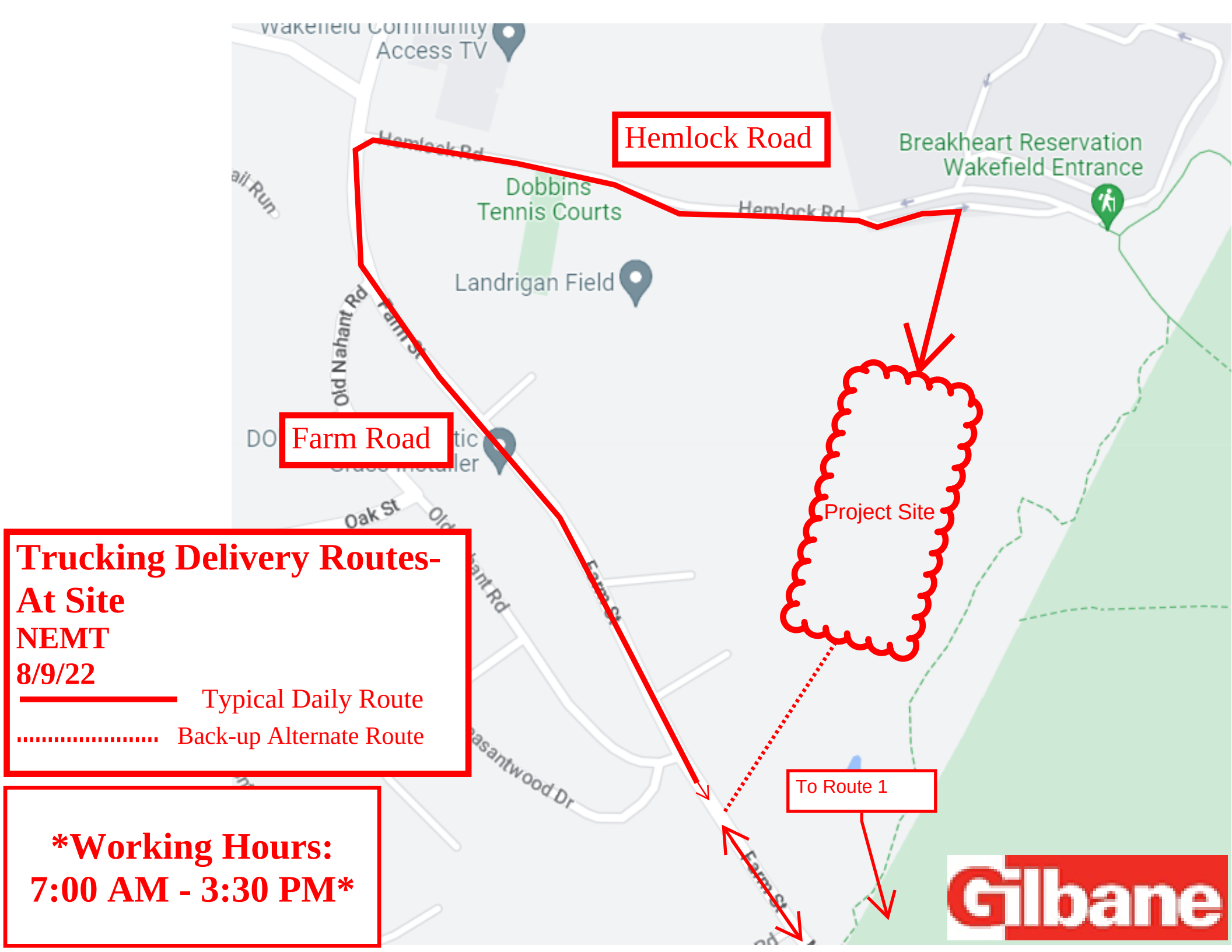
PROJECT NORTH | MAGNETIC NORTH

DEMO AND SITE PREPARATION PLAN - 4

Scale: 1" = 30'-0"
Job No.: 20202.00
Drawn By: JM
Date: June 23, 2022

L104


Reading
I-93
Route 128
Wakefield
Wakefield Memorial
High School
Project Site
Roller World
Breakheart
Reservation
Stoneham
Stoneham High School
Stone Zoo
Farm Road
Route 1
Saugus
2D
Trucking Delivery Routes To Site
NEMT
12/5/22
From/To North & West
From/To South
Gilbane

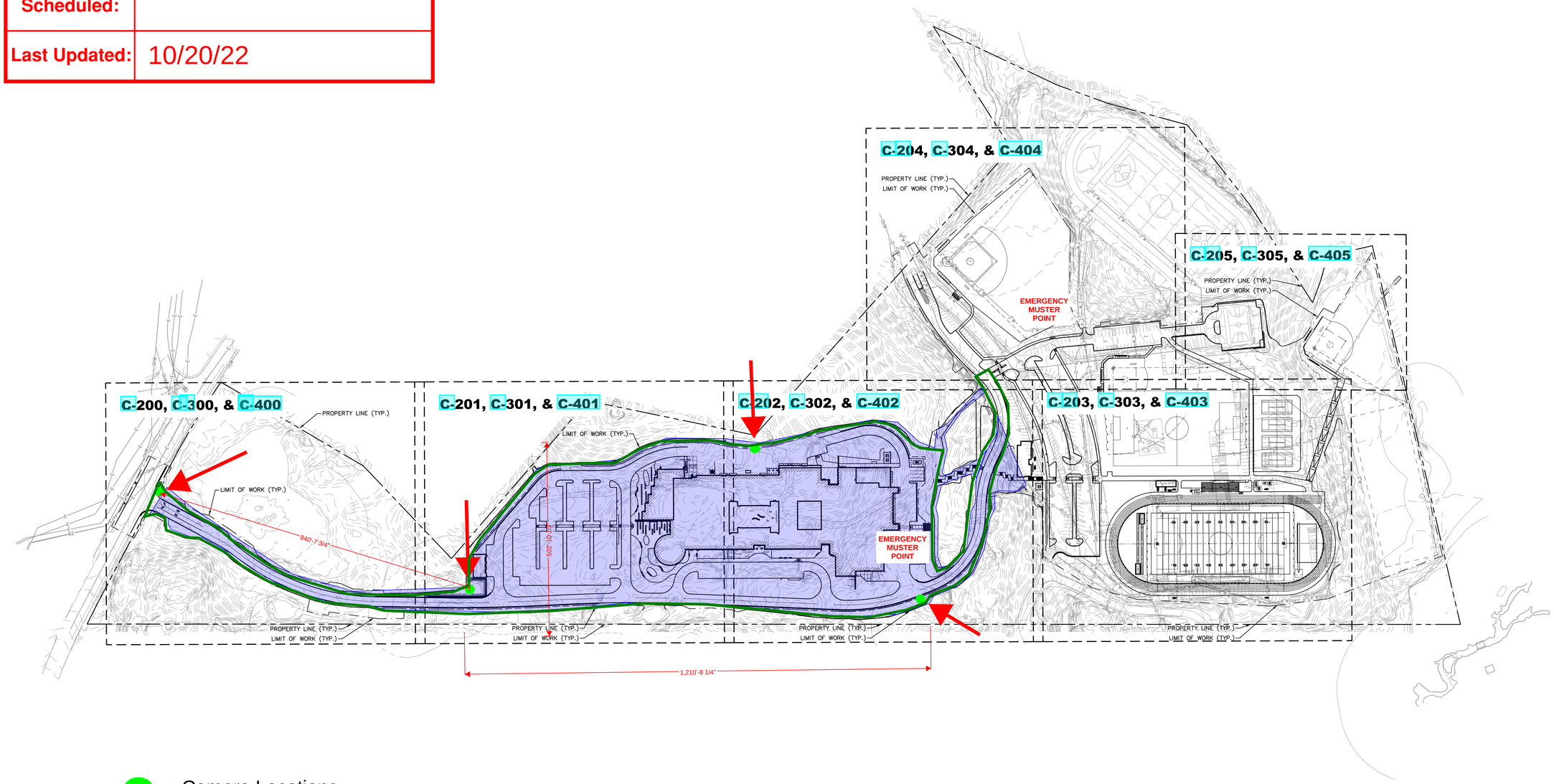

Wakefield Community Access TV
Hemlock Road
Breakheart Reservation Wakefield Entrance
Dobbins Tennis Courts
Hemlock Rd
Landrigan Field
Old Nahant Rd
Farm St
Farm Road
Project Site
Oak St
Pheasantwood Dr
To Route 1
Trucking Delivery Routes- At Site
NEMT
8/9/22
Typical Daily Route
Back-up Alternate Route
*Working Hours:
7:00 AM - 3:30 PM*
Gilbane

Gilbane

SITE UTILIZATION

SITE SECURITY PLAN

Scheduled:	
Last Updated:	10/20/22



= Camera Locations

= Area to be Covered by Camera

= Site Fence

SCALE:
1" = 100'
100 50 0 100 200
NITSCH PROJECT No.13872

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

Nitsch Engineering

www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

©COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT
COST ESTIMATE SET

JUNE 23, 2022

KEY PLAN

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: JUNE 23, 2022

C-100

LAST SAVED: 10/21/2022 3:44 PM
A:\2000\13872\REVIT\13872R22_CENTRAL.RVT

Gilbane

SITE UTILIZATION

TRASH OUT / LEAVE OUT PLAN

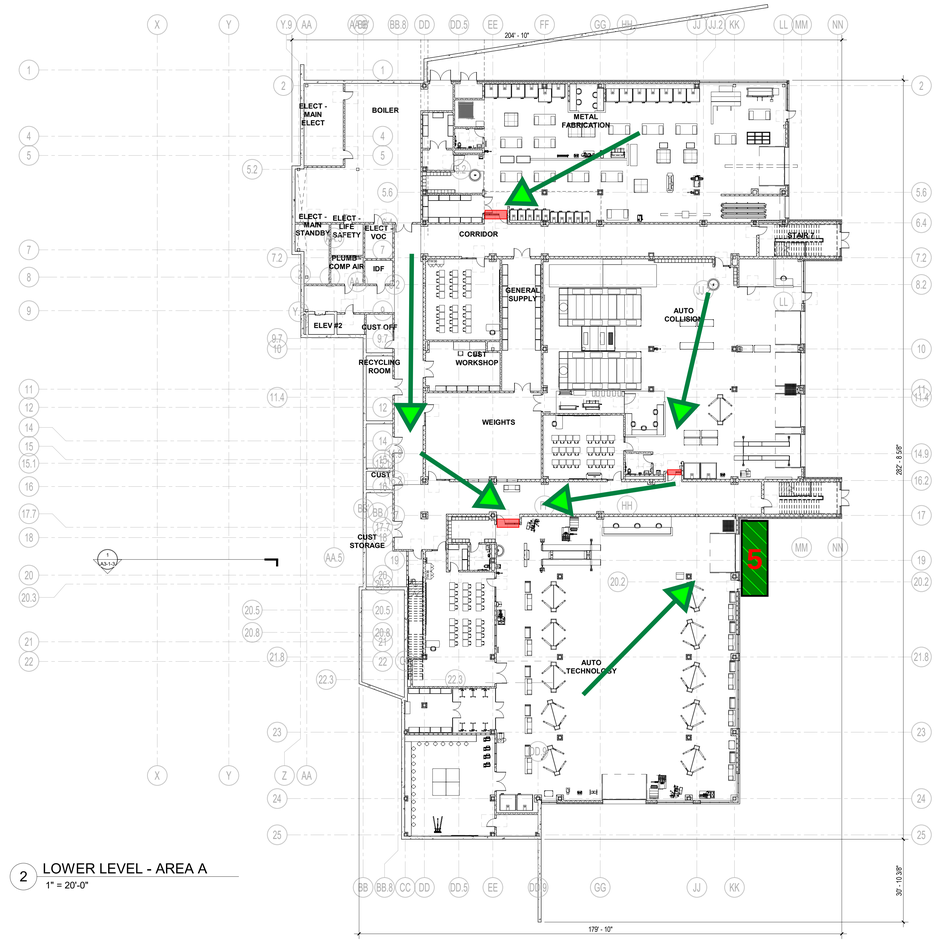
TRASH OUT FIRST FLOOR

- Trash Route to Dumpster/Chute

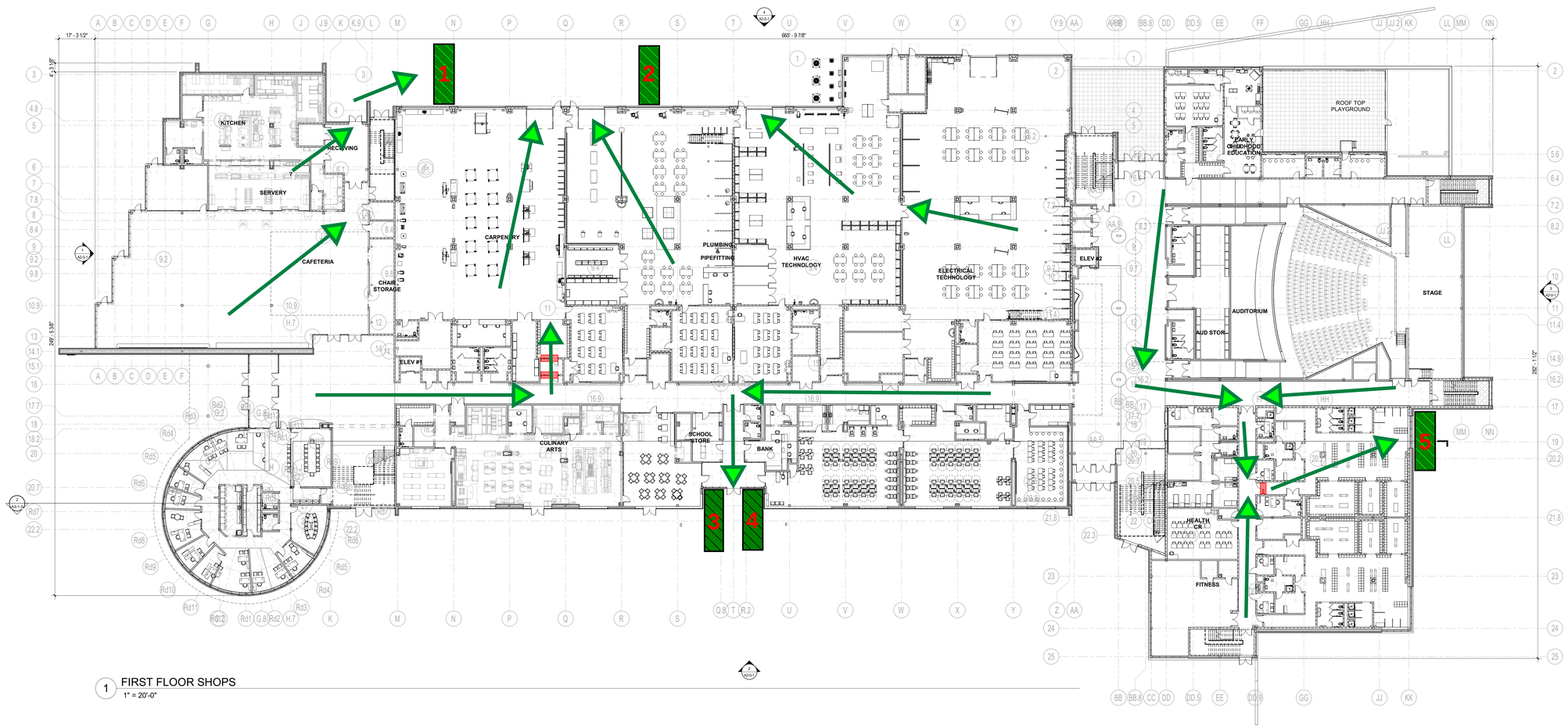
- Dumpster (typ.)

- Interior Leave-Out Sections

PROGRESS



2 LOWER LEVEL - AREA A
1" = 20'-0"



1 FIRST FLOOR SHOPS
1" = 20'-0"

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.drarws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

OVERALL LOWER LEVEL & FIRST FLOOR PLANS

Scale: 1" = 20'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A1-0-1

TRASH OUT SECOND FLOOR

- Trash Route to Dumpster/Chute

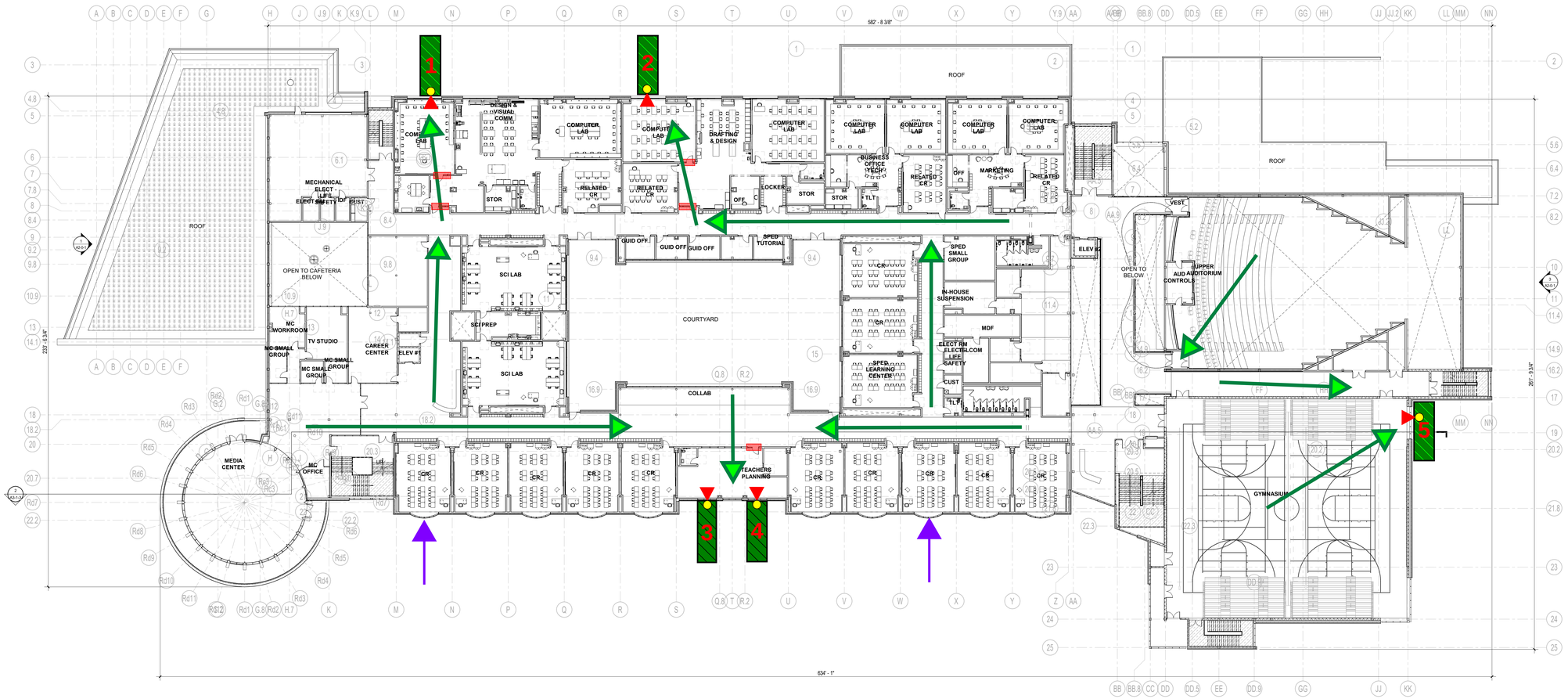
- Dumpster (typ.)

- Trash Chute to Dumpster

Tie Off Points Above Each Trash Chute Access

- Leave Out CW to Load In Material

- Interior Leave-Out Sections



1 SECOND FLOOR PLAN
1" = 20'-0"

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022

KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

OVERALL SECOND FLOOR PLAN

Scale: 1" = 20'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A1-0-2

TRASH OUT THIRD FLOOR

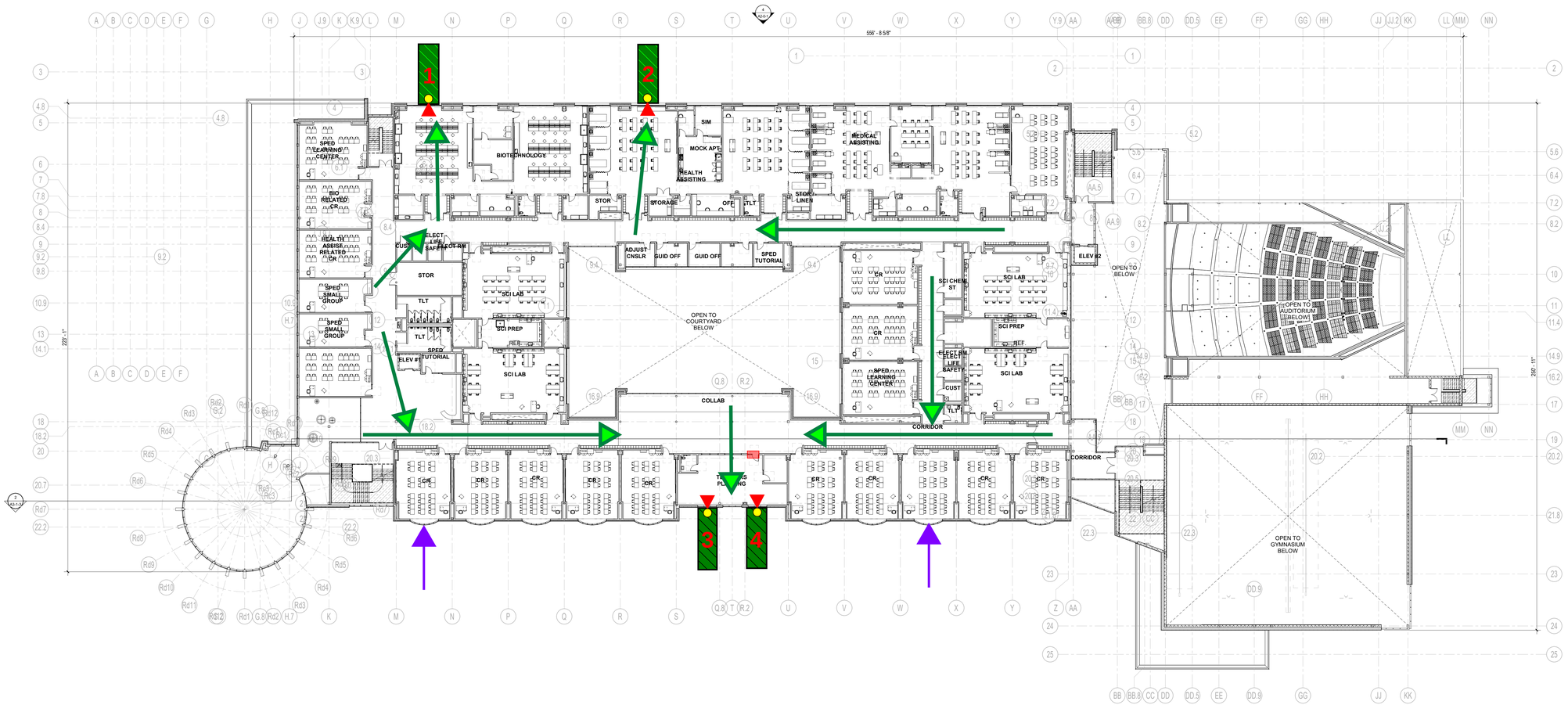
- Trash Route to Dumpster/Chute

- Dumpster (typ.)

- Trash Chute to Dumpster
  Tie Off Points Above Each Trash Chute Access

- Leave Out CW to Load In Material

- Interior Leave-Out Sections



1 THIRD FLOOR PLAN
1" = 20'-0"

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.draws.com

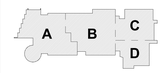
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

OVERALL THIRD FLOOR PLAN

Scale: 1" = 20'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A1-0-3

TRASH OUT FOURTH FLOOR

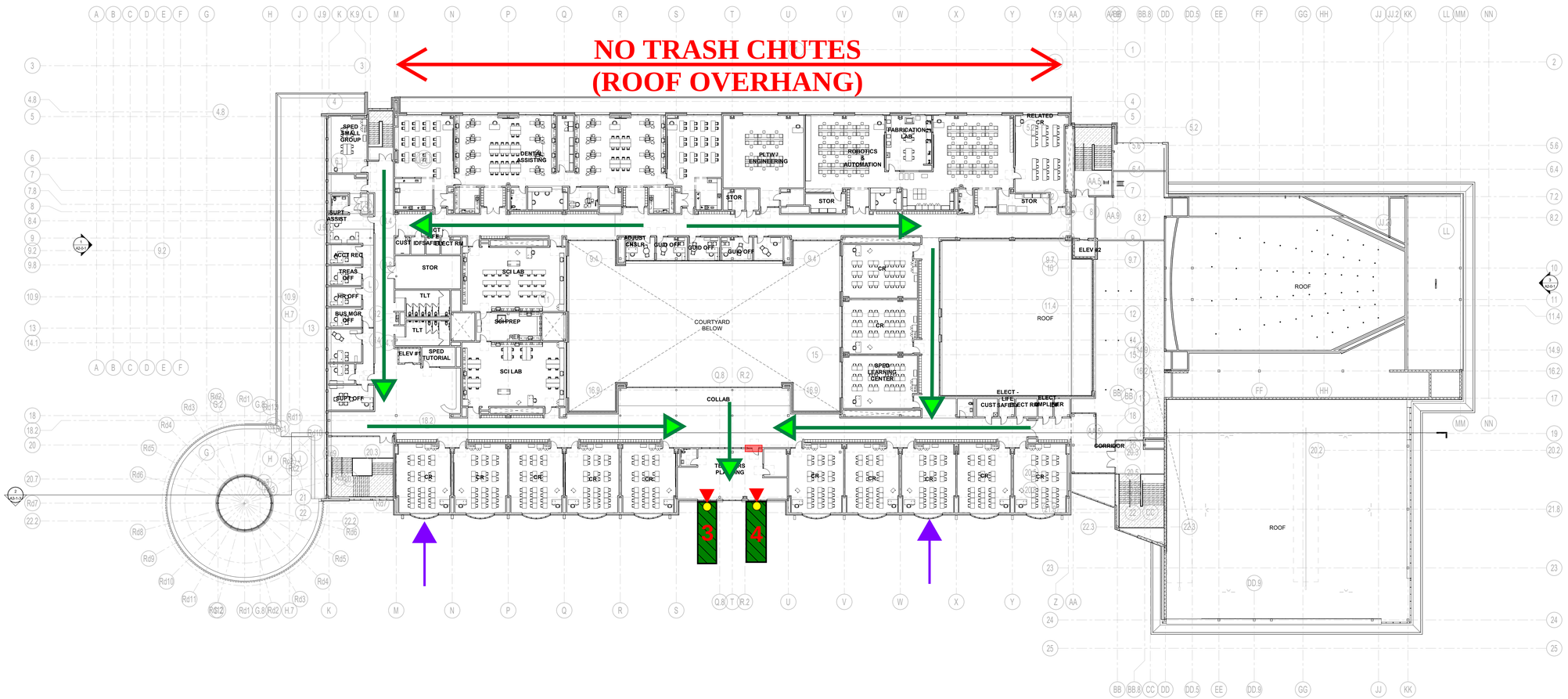
- Trash Route to Dumpster/Chute

- Dumpster (typ.)

- Trash Chute to Dumpster
  Tie Off Points Above Each Trash Chute Access

- Leave Out CW to Load In Material

- Interior Leave-Out Sections



1 4-Overall Fourth Floor Plan
1" = 20'-0"

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.draws.com

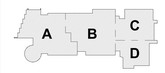
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

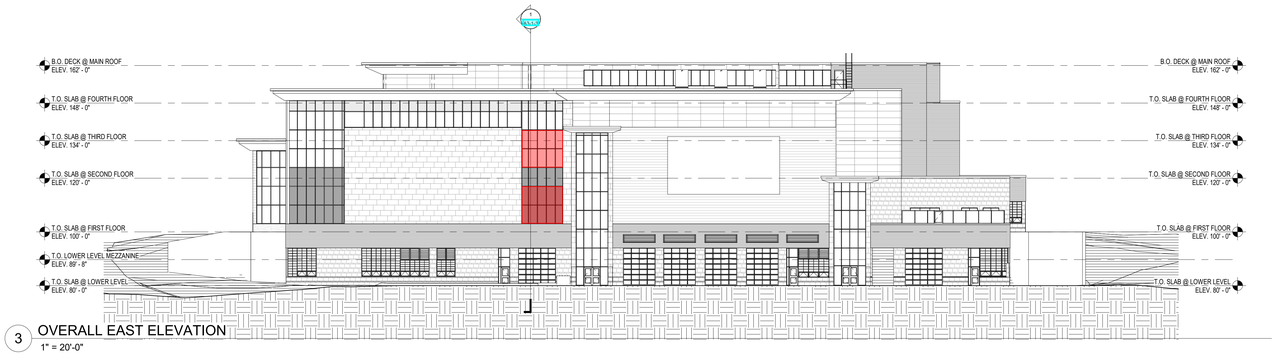
OVERALL FOURTH FLOOR PLAN

Scale: 1" = 20'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A1-0-4

LEAVE OUT OVERALL PLAN

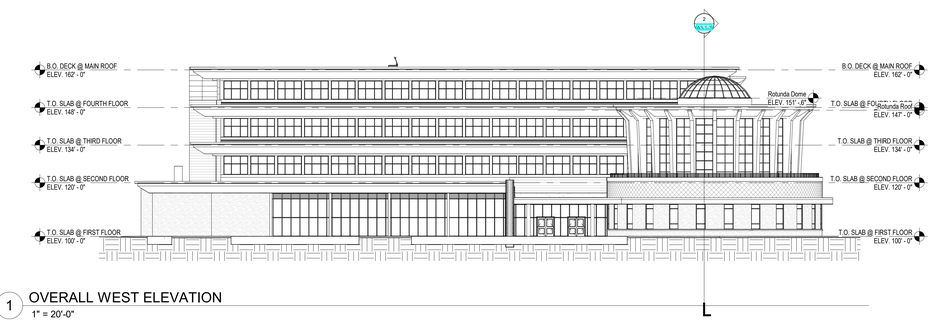
4 OVERALL NORTH ELEVATION
1" = 20'-0"



3 OVERALL EAST ELEVATION
1" = 20'-0"

2 OVERALL SOUTH ELEVATION
1" = 20'-0"

LEAVE OUT FOR MATERIAL LOAD-IN



1 OVERALL WEST ELEVATION
1" = 20'-0"

= Leave out section of wall/window/curtainwall for trash

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022

KEY PLAN

PROJECT NORTH

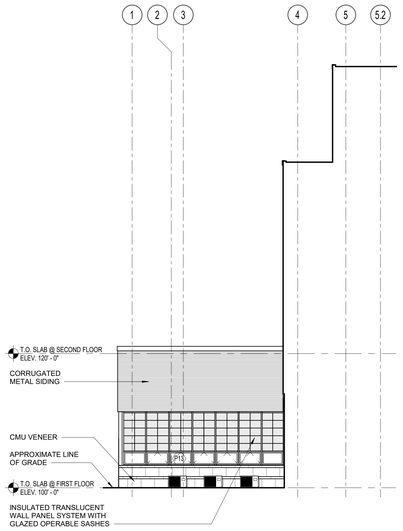
MAGNETIC NORTH

OVERALL BUILDING ELEVATIONS

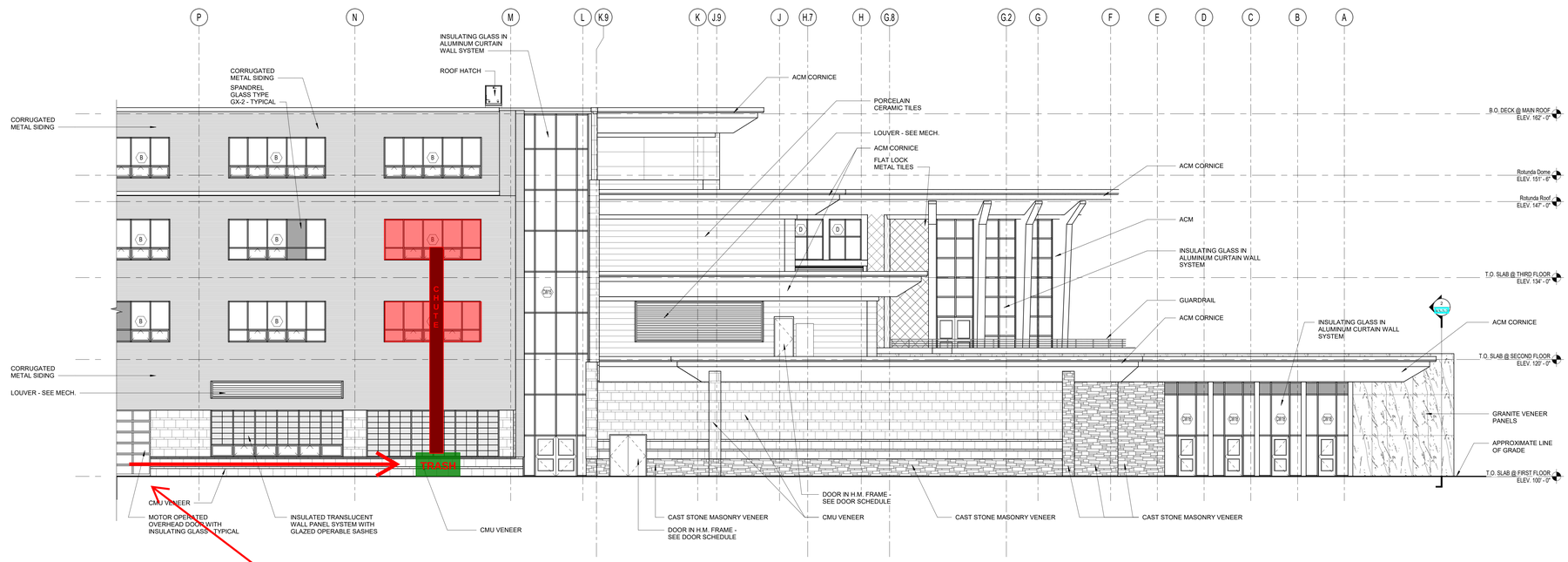
Scale: 1" = 20'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A2-0-1

LEAVE OUT - DUMPSTERS 1 & 2

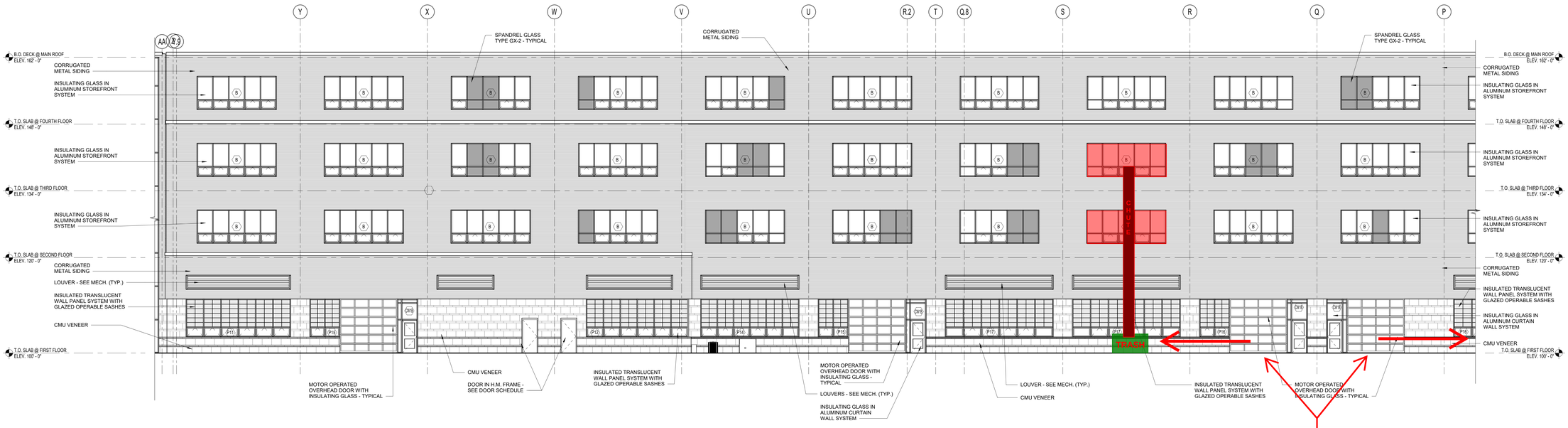


2 WEST ELEVATION
1/8" = 1'-0"



3 NORTH ELEVATION
1/8" = 1'-0"

First floor trash loadout through OH door to prevent leaveout of CW



1 NORTH ELEVATION
1/8" = 1'-0"

First floor trash loadout through OH door to prevent leaveout of CW

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022

KEY PLAN

PROJECT NORTH

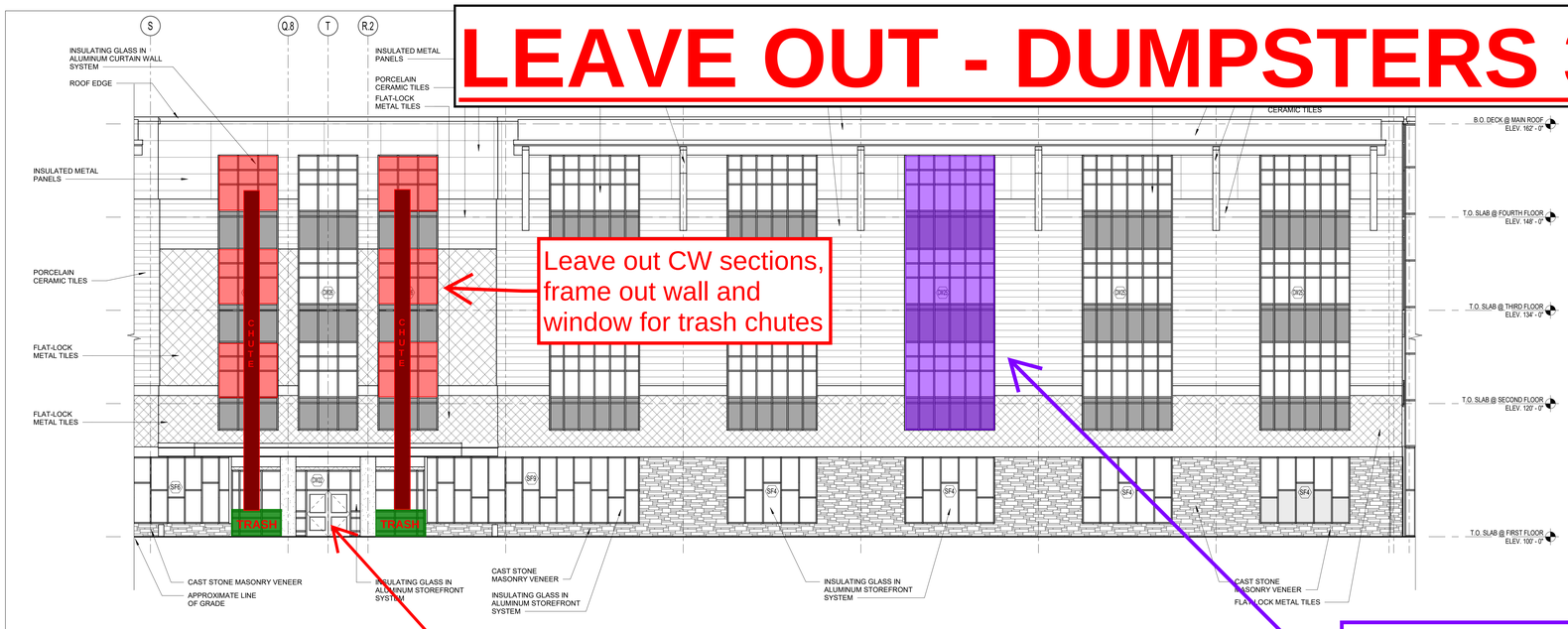
MAGNETIC NORTH

BUILDING ELEVATIONS

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A2-1-6

LEAVE OUT - DUMPSTERS 3 & 4

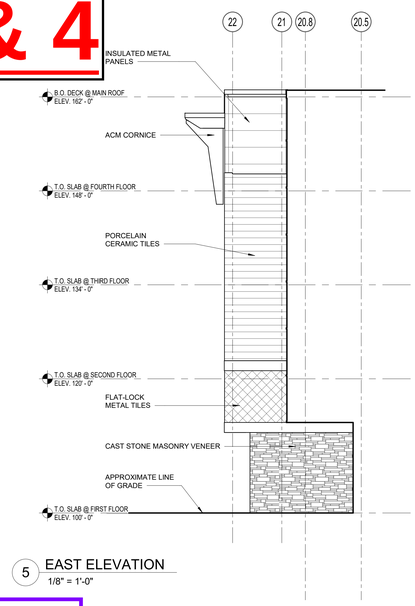


Leave out CW sections, frame out wall and window for trash chutes

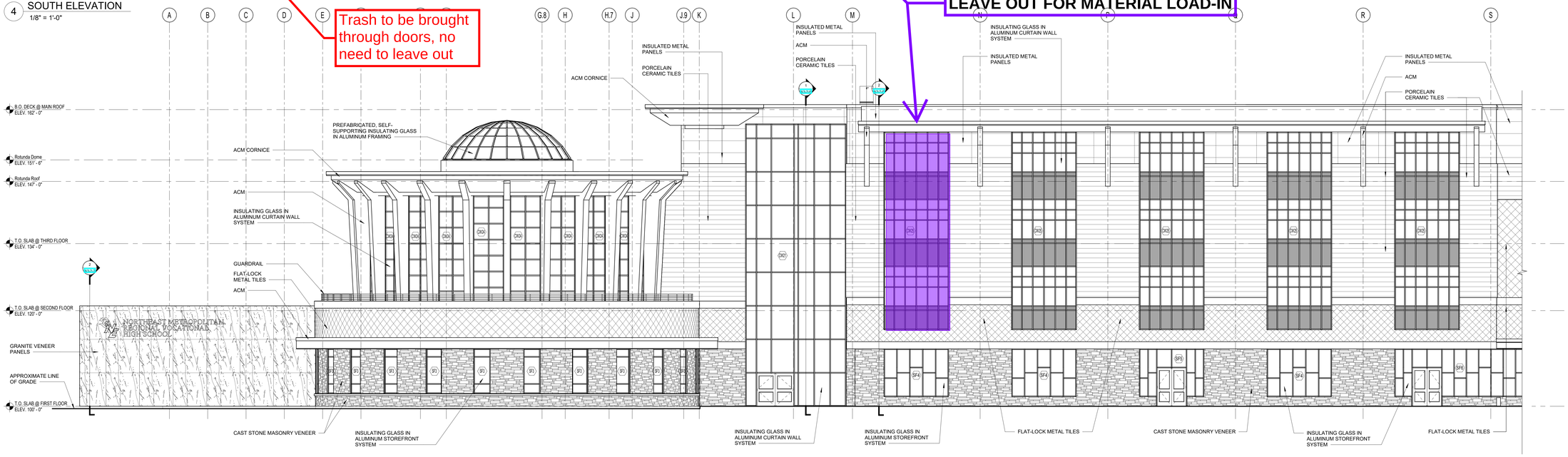
4 SOUTH ELEVATION
1/8" = 1'-0"

Trash to be brought through doors, no need to leave out

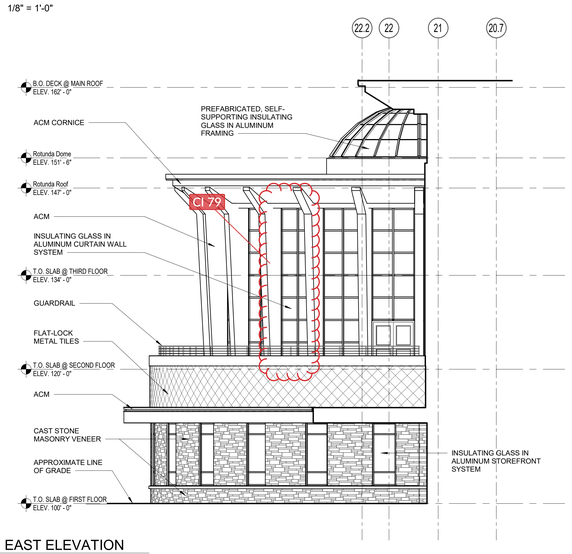
LEAVE OUT FOR MATERIAL LOAD-IN



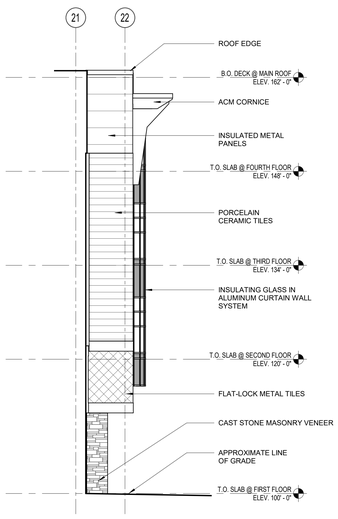
5 EAST ELEVATION
1/8" = 1'-0"



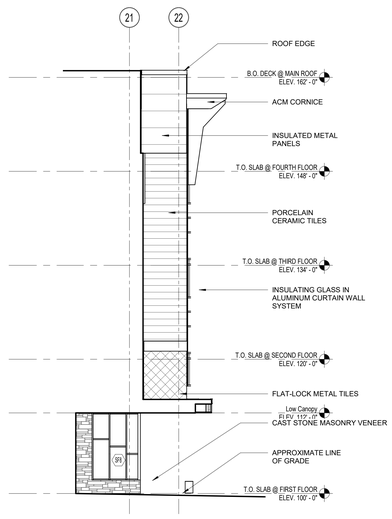
3 SOUTH ELEVATION
1/8" = 1'-0"



1 EAST ELEVATION
1/8" = 1'-0"



2 WEST ELEVATION
1/8" = 1'-0"



6 WEST ELEVATION
1/8" = 1'-0"

© COPYRIGHT 2021 · DRUMMEY ROSANE ANDERSON, INC.

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel. 617.964.1700
www.driaws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022

KEY PLAN

PROJECT NORTH

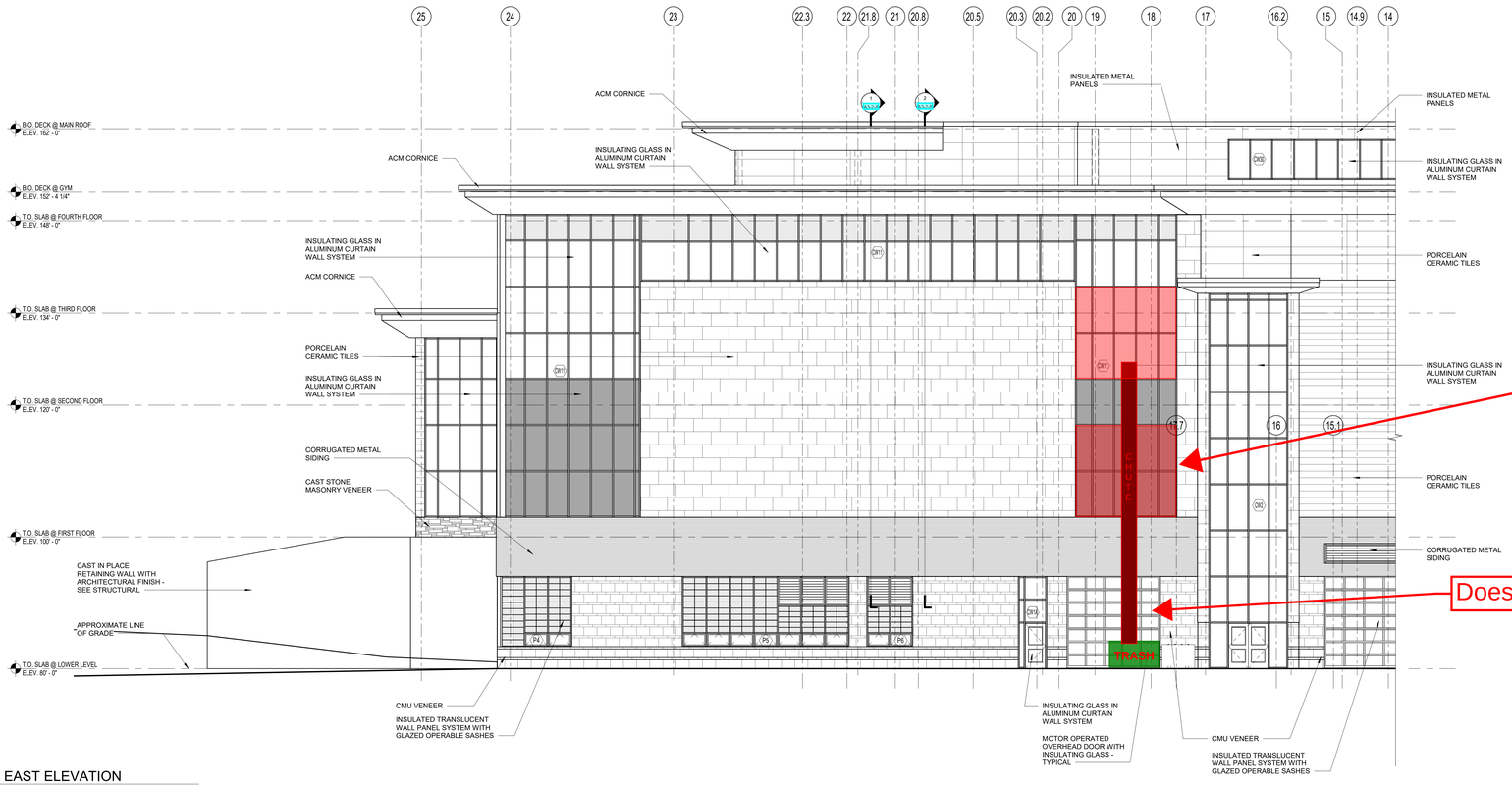
MAGNETIC NORTH

BUILDING ELEVATIONS

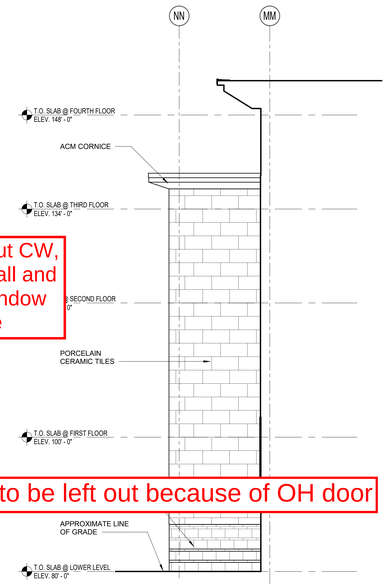
Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A2-1-2

LEAVE OUT - DUMPSTER 5



1 EAST ELEVATION
1/8" = 1'-0"



2 NORTH ELEVATION
1/8" = 1'-0"

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.draws.com

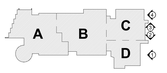
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

BUILDING ELEVATIONS

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A2-1-4

Facade Sequence Plan

Scheduled:	August, 2024 to Sept, 2025
Last Updated:	8/14/23

PROGRESS

= Starting Sequence

Gilbane

SITE UTILIZATION

Area A

Area B

Area C

Crew #3

3

Crew #1

1

Crew #3

2

Crew #2

2

Area D

1 SECOND FLOOR PLAN
1" = 20'-0"

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022

KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

OVERALL SECOND FLOOR PLAN

Scale: 1" = 20'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A1-0-2

Gilbane

SITE UTILIZATION

FRP CONCRETE SITE UTILIZATION PLAN

Scheduled:	June to November, 2023
Last Updated:	10/26/22

STORAGE BOXES

DUMPSTERS

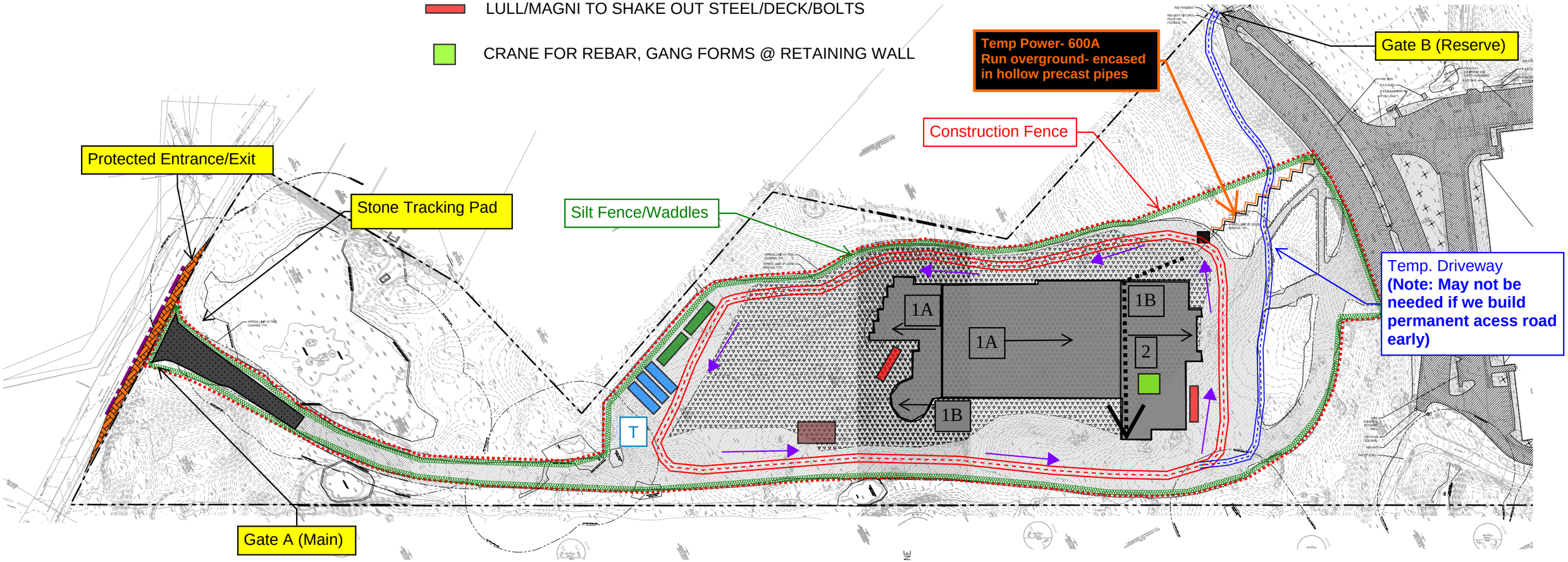
CONCRETE WASHOUT AREA

LULL/MAGNI TO SHAKE OUT STEEL/DECK/BOLTS

CRANE FOR REBAR, GANG FORMS @ RETAINING WALL

T OFFICE TRAILERS

SITE ACCESS ON LOOP ROAD



Contractor Parking and added laydown space will be provided in field behind existing high school.

Slab on Deck Placement Drawing

Scheduled:	
Last Updated:	10/14/22

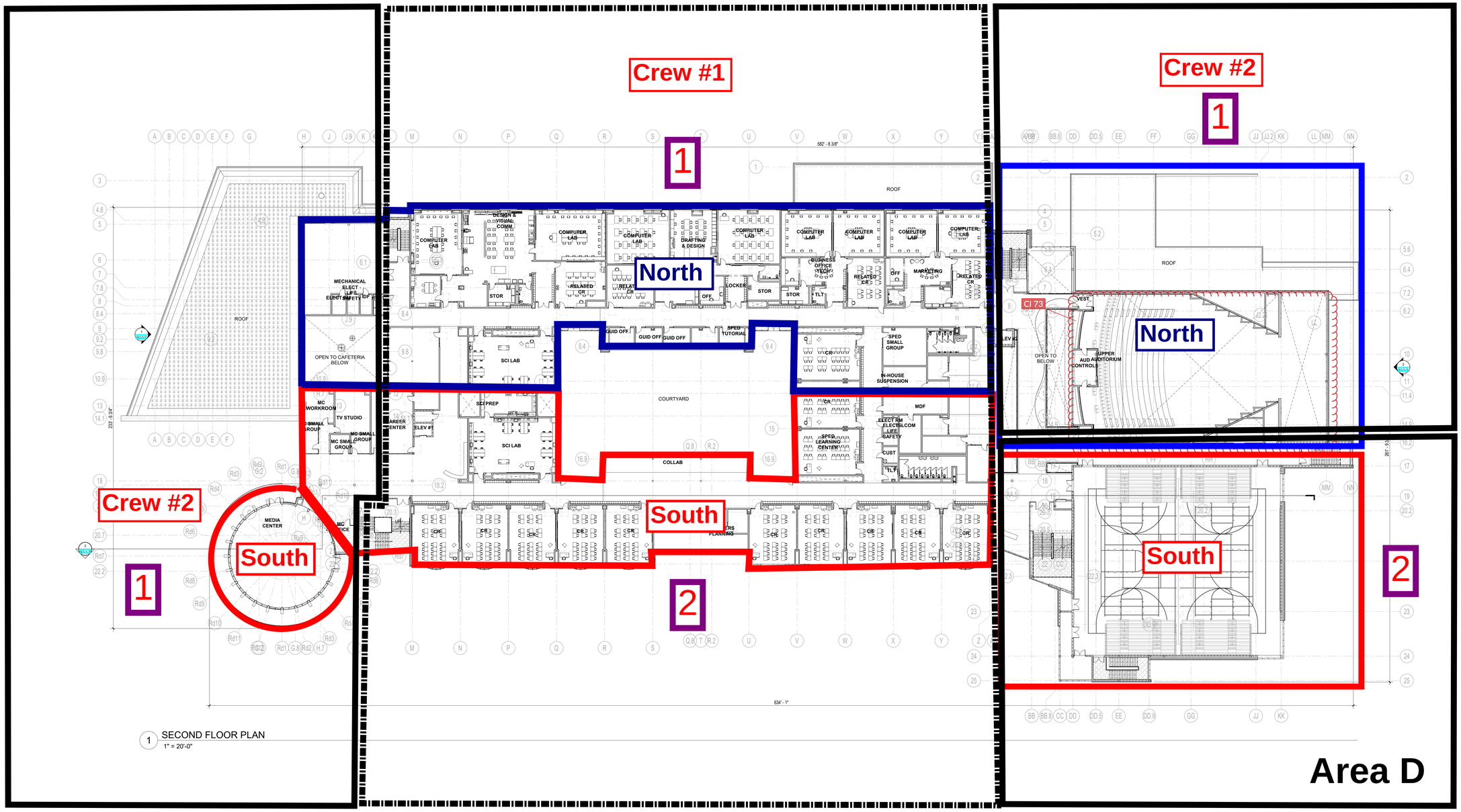
1 = Starting Sequence

Gilbane
SITE UTILIZATION

Area A

Area B

Area C



1 SECOND FLOOR PLAN
1" = 20'-0"

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.draws.com

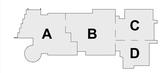
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DESIGN DEVELOPMENT COST ESTIMATE SET

June 23, 2022



KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

OVERALL SECOND FLOOR PLAN

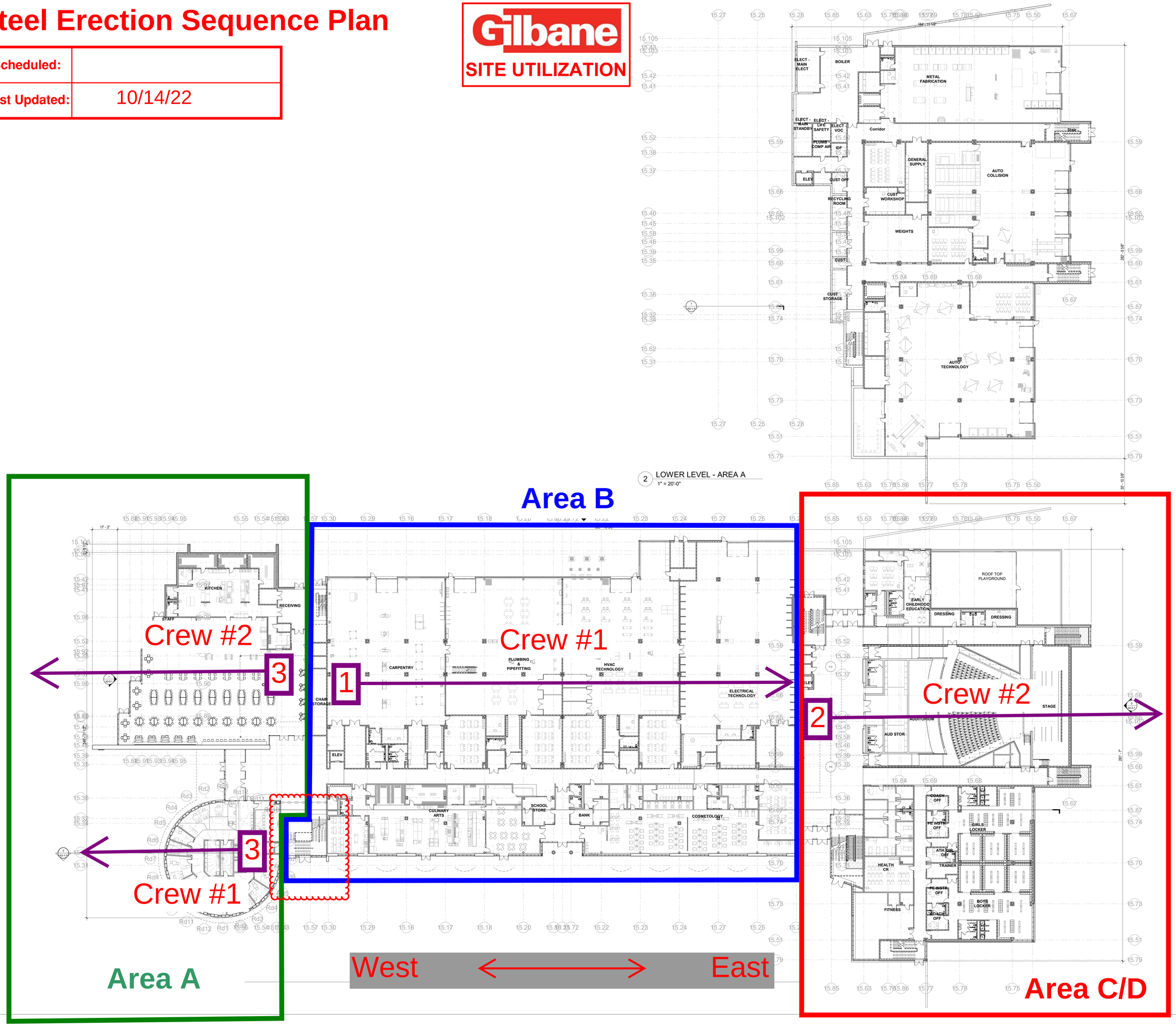
Scale: 1" = 20'-0"
Job No.: 20202
Drawn By: DRA
Date: June 23, 2022

A1-0-2

Steel Erection Sequence Plan

Scheduled:	
Last Updated:	10/14/22

Gilbane
SITE UTILIZATION



DRA

Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.drawa.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

MSBA SCHEMATIC DESIGN SUBMISSION

June 17, 2021

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

OVERALL LOWER LEVEL & FIRST FLOOR PLANS

Scale: 1" = 20'-0"
Job No.: 20202
Drawn By: DRA
Date: June 17, 2021

A1-0-1

Stormwater Pollution Prevention Plan (SWPPP)

For Construction Activities At:

Northeast Metropolitan Regional Vocational High School
100 Hemlock Road
Wakefield, MA 01880

SWPPP Prepared For:

Gilbane Building Company
10 Channel Center Street
Boston, MA, MA 02210
(617) 478-3300
hbenner@gilbaneco.com

SWPPP Prepared By:

Gilbane Building Company
7 Jackson Walkway
Providence, RI 02903

SWPPP Preparation Date:

12/08/2022 **Updated 8/1/23**

Estimated Project Dates:

Project Start Date: August 7, 2023

Project Completion Date: May 31, 2027

Contents

SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES 1
1.1 Operator(s) / Subcontractor(s) 1
1.2 Stormwater Team 2
SECTION 2: SITE EVALUATION, ASSESSMENT, AND PLANNING 3
2.1 Project/Site Information 3
2.2 Discharge Information 4
2.3 Nature of the Construction Activities 5
2.4 Sequence and Estimated Dates of Construction Activities 7
2.5 Authorized Non-Stormwater Discharges 8
2.6 Site Maps 9
SECTION 3: DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS 10
3.1 Endangered Species Protection 10
3.2 Historic Property Screening Process 11
3.3 Safe Drinking Water Act Underground Injection Control Requirements 11
SECTION 4: EROSION AND SEDIMENT CONTROLS AND DEWATERING PRACTICES 12
4.1 Natural Buffers or Equivalent Sediment Controls 12
4.2 Perimeter Controls 13
4.3 Sediment Track-Out 14
4.4 Stockpiles or Land Clearing Debris Piles Comprised of Sediment or Soil 15
4.5 Minimize Dust 17
4.6 Minimize Steep Slope Disturbances 17
4.7 Topsoil 18
4.8 Soil Compaction 19
4.9 Storm Drain Inlets 19
4.10 Constructed Site Drainage Feature 19
4.11 Sediment Basins or Similar Impoundments 20
4.12 Chemical Treatment 20
4.13 Dewatering Practices 21
4.14 Other Stormwater Controls 21
4.15 Site Stabilization 21
SECTION 5: POLLUTION PREVENTION CONTROLS 24
5.1 Potential Sources of Pollution 24
5.2 Spill Prevention and Response 26
5.3 Fueling and Maintenance of Equipment or Vehicles 26
5.4 Washing of Equipment and Vehicles 26
5.5 Storage, Handling, and Disposal of Building Products, Materials, and Wastes 27
5.6 Washing of Applicators and Containers used for Stucco, Paint, Concrete, Form Release Oils, Cutting Compounds, or Other Materials 31
5.7 Application of Fertilizers 31
5.8 Other Pollution Prevention Practices 32

6.1 Inspection Personnel and Procedures.....33
6.2 Corrective Action.....35
6.3 Delegation of Authority.....35
SECTION 7: TURBIDITY BENCHMARK MONITORING FOR DEWATERING DISCHARGES 36
SECTION 8: CERTIFICATION AND NOTIFICATION.....37
SWPPP APPENDICES.....38

SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES

1.1 Operator(s) / Subcontractor(s)

Operator(s):

Gilbane Building Company
Neil Benner
10 Channel Center Street
Boston, MA
617-478-3300
hbennerl@GilbaneCo.com

Subcontractor(s): TBD

J.R. Vinargro
Andrew Surmick
2208 Plainfield Pike
Johnston, RI 02919
401-408-8006
asurmick@jrvinagrocorp.com

Emergency 24-Hour Contact:

Gilbane Building Company
Andy Brodeur
abrodeur@GilbaneCo.com
617-960-2966

1.2 Stormwater Team

Stormwater Team

Name and/or Position, and Contact	Responsibilities	I Have Completed Training Required by CGP Part 6.2	I Have Read the CGP and Understand the Applicable Requirements
Neil Benner Project Executive hbenner@gilbaneco.com	Overall stormwater compliance	☒ Yes ☐ No	☒ Yes Date:
Andy Brodeur Sr. General Superintendent abrodeur@gilbaneco.com	Overall stormwater compliance	☒ Yes ☐ No	☒ Yes Date:

Stormwater Team Members Who Conduct Inspections Pursuant to CGP Part 4

Name and/or Position and Contact	Training(s) Received	Date Training(s) Completed	If Training is a Non-EPA Training, Confirm that it Satisfies the Minimum Elements of CGP Part 6.3.b
Andy Brodeur Sr. General Superintendent 617-275-1486 abrodeur@gilbaneco.com	US EPA Construction Inspection Training Course		☒ Principles and practices of erosion and sediment control and pollution prevention practices at construction sites ☒ Proper installation and maintenance of erosion and sediment controls and pollution prevention practices used at construction sites ☒ Performance of inspections, including the proper completion of required reports and documentation, consistent with the requirements of Part 4
J.R. Vinargro Andrew Surmick 2208 Plainfield Pike Johnston, RI 02919 401-408-8006 asurmick@jrvinagrocorp.com			☒ Principles and practices of erosion and sediment control and pollution prevention practices at construction sites ☒ Proper installation and maintenance of erosion and sediment controls and pollution prevention practices used at construction sites ☒ Performance of inspections, including the proper completion of required reports and documentation, consistent with the requirements of Part 4

SECTION 2: SITE EVALUATION, ASSESSMENT, AND PLANNING

2.1 Project/Site Information

Project Name and Address

Project/Site Name: Northeast Metropolitan Regional Vocational High School
Street/Location: 100 Hemlock Road
City: Wakefield
State: MA
ZIP Code: 01880
County or Similar Government Division: Essex County

Project Latitude/Longitude

Latitude: 42.49881 ° N
(decimal degrees)

Longitude: - 71.04268 ° W
(decimal degrees)

Latitude/longitude data source: ☐ Map ☐ GPS ☒ Other: MassMapper GIS

Horizontal Reference Datum: ☐ NAD 27 ☐ NAD 83 ☒ WGS 84

Additional Site Information

Is your site located on Indian country lands, or on a property of religious or cultural significance to an Indian Tribe? ☐ Yes ☒ No

If yes, provide the name of the Indian Tribe associated with the area of Indian country (including the name of Indian reservation if applicable), or if not in Indian country, provide the name of the Indian Tribe associated with the property:

2.2 Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☒ Yes ☐ No

Are there any waters of the U.S. within 50 feet of your project's earth disturbances? ☒ Yes ☐ No

For each point of discharge, provide a point of discharge ID (a unique 3-digit ID, e.g., 001, 002), the name of the first receiving water that receives stormwater directly from the point of discharge and/or from the MS4 that the point of discharge discharges to, and the following receiving water information, if applicable:

Point of Discharge ID	Name of receiving water that receives stormwater discharge:	Is the receiving water impaired (on the CWA 303(d) list)?	If yes, list the pollutants that are causing the impairment:	Has a TMDL been completed for this receiving waterbody?	If yes, list TMDL Name and ID:	Pollutant(s) for which there is a TMDL:	Is this receiving water designated as a Tier 2, Tier 2.5, or Tier 3 water?	If yes, specify which Tier (2, 2.5, or 3)?
[001]	Mill River	☒ Yes ☒ No	E. Coli Fecal Coliform Turbidity Dissolve Oxygen	☒ Yes ☐ No		Fecal Coliform Pathogens	☒ Yes ☒ No	N/A
[002]	Saugus River	☒ Yes ☒ No	E. Coli Fecal Coliform	☐ Yes ☒ No			☒ Yes ☒ No	N/A
[003]	Lower Pond	☒ Yes ☒ No		☒ Yes ☒ No		N/A	☒ Yes ☒ No	N/A

2.3 Nature of the Construction Activities

General Description of Project

Provide a general description of the nature of your construction activities, including the age or dates of past renovations for structures that are undergoing demolition:

The project consists of the construction of a new four-story high school at the site of the existing Northeast Metropolitan Regional Vocational High School (NEMT) in Wakefield, MA. Site work includes but not limited to significant ledge removal operation, construction of the new access driveway with traffic light and turn-off lanes at the new site entrance. The Work consists of a steel framed, concrete masonry, and light gauge metal framing walls with large scale CMU veneer, manufactured stone veneer, and high performance insulated rainscreen panels at exterior envelope of the building. The exterior envelope also includes metal shingles and insulated metal panels. The roofing system includes but not limited to low slope single-ply membrane roofing over tapered and non-tapered insulation, roof pavers plazas, and vegetated roof areas. The Work includes the demolition and removal of the existing Vocational High School after completion of the new construction.

Business days and hours for the project: M-F 7am to 5 pm

Size of Construction Site

Size of Property	57 acres
Total Area Expected to be Disturbed by Construction Activities	25 acres
Maximum Area Expected to be Disturbed at Any One Time, Including On-site and Off-site Construction Support Areas	25 acres

Type of Construction Site *(check all that apply):*

☐ Single-Family Residential ☐ Multi-Family Residential ☐ Commercial ☐ Industrial
☐ Institutional ☐ Highway or Road ☐ Utility ☒ Other (Municipal)

Will you be discharging dewatering water from your site? ☐ Yes ☒ No

All collected dewatering water will be sent to on-site temporary settling basins; no direct off-site discharge from dewatering activities will be permitted.

Pollutant-Generating Activities

List and describe all pollutant-generating activities and indicate for each activity the associated pollutants or pollutant constituents that could be discharged in stormwater from your construction site. Take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges, and any known hazardous or toxic substances, such as PCBs and asbestos, that will be disturbed during construction.

Pollutant-Generating Activity (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations)	**Pollutants or Pollutant Constituents** (e.g., sediment, fertilizers, pesticides, paints, caulks, sealants, fluorescent light ballasts, contaminated substrates, solvents, fuels)
Paving Operations	Petroleum
Concrete Foundation Work	Concrete/Portland Cement
Construction Waste	Discarded C&D waste placed in Dumpsters
Portable Toilets	Biocides, Dye, Fragrance and Detergents
On-site Fueling operations – wet hose delivery	Diesel Fuel
Landscaping	Fertilizers, Sediment
Construction Vehicles	Diesel Fuel, Gasoline, Oils

Construction Support Activities *(only provide if applicable)*

Describe any construction support activities for the project (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas):

Construction support activities will include equipment staging yards and materials storage areas. The construction staging and support areas are shown on the Site Preparation Plans and will occur within the construction disturbance area.

Contact information for construction support activity:
Andy Brodeur
Sr. General Superintendent
617-275-1486
abrodeur@gilbaneco.com

2.4 Sequence and Estimated Dates of Construction Activities

Pre-Phase I

Enabling work: Installing perimeter erosion controls, construction fence and entrance.	
Estimated Start Date of Construction Activities for this Phase	8/7/23
Estimated End Date of Construction Activities for this Phase	9/8/23
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	To be installed as needed
Estimated Date(s) when Stormwater Controls will be Removed	TBD based on when area has been stabilized

Phase 1

Construction of new school building, protection of existing school building & operations.	
Estimated Start Date of Construction Activities for this Phase	8/21/23
Estimated End Date of Construction Activities for this Phase	7/16/26
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	To be installed as needed
Estimated Date(s) when Stormwater Controls will be Removed	TBD based on when area has been stabilized

Phase 2a

Abatement and Demolition of existing school building	
Estimated Start Date of Construction Activities for this Phase	

Estimated End Date of Construction Activities for this Phase	xxxx
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	To be installed as needed
Estimated Date(s) when Stormwater Controls will be Removed	TBD based on when area has been stabilized

Phase 2b

Installation of proposed turf playing field; completion of remaining site construction	
Estimated Start Date of Construction Activities for this Phase	xxxx
Estimated End Date of Construction Activities for this Phase	5/31/2027
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	To be installed as needed
Estimated Date(s) when Stormwater Controls will be Removed	TBD based on when area has been stabilized]

2.5 Authorized Non-Stormwater Discharges

List of Authorized Non-Stormwater Discharges Present at the Site

Authorized Non-Stormwater Discharge	**Will or May Occur at Your Site?**
Discharges from emergency fire-fighting activities	☐ Yes ☒ No
Fire hydrant flushings	☒ Yes ☐ No
Landscape irrigation	☒ Yes ☐ No
Water used to wash vehicles and equipment	☐ Yes ☒ No
Water used to control dust	☒ Yes ☐ No
Potable water including uncontaminated water line flushings	☒ Yes ☐ No
External building washdown (soaps/solvents are not used and external surfaces do not contain hazardous substances)	☐ Yes ☒ No
Pavement wash waters	☐ Yes ☒ No
Uncontaminated air conditioning or compressor condensate	☐ Yes ☒ No
Uncontaminated, non-turbid discharges of ground water or spring water	☒ Yes ☐ No
Foundation or footing drains	☒ Yes ☐ No
Uncontaminated construction dewatering water	☒ Yes ☐ No

2.6 Site Maps

See Appendix A

SECTION 3: DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS

3.1 Endangered Species Protection

Eligibility Criterion

Following the process outlined in Appendix D, under which criterion are you eligible for coverage under this permit?

☒ **Criterion D**: Coordination with USFWS and/or NMFS has successfully concluded.

Coordination between you and the USFWS and/or NMFS has concluded. The coordination must have addressed the effects of your site's discharges and discharge-related activities on ESA-listed species and/or designated critical habitat under the jurisdiction of USFWS and/or NMFS and resulted in a written confirmation from USFWS and/or NMFS that the effects of your site's discharges and discharge-related activities are not likely to result in any short- or long-term adverse effects. By certifying eligibility under this criterion, you agree to comply with any conditions you must meet for your site's discharges and discharge-related activities to not likely result in any short- or long-term adverse effects. You must include copies of the correspondence with the participating agencies in your SWPPP and this NOI.

☒ Check to confirm you have provided documentation in your SWPPP as required by CGP Appendix D.

Documentation: An endangered species list generated from the U.S. Fish and Wildlife Service's Information for Planning and Consultation (IPAC) was used as the basis for selecting Criterion D above. The list states that no critical habitats are located in the project work area. The Northern Long-Eared bat was identified as an endangered species and the Monarch Butterfly was listed as a candidate species in the report. Based on this an informal conference with the US Fish and Wildlife Service was initiated. The following documents are attached to Appendix D documenting the correspond and final decision:

- Species List Project Code: 2023-0022548 dated April 13, 2023
- Determination for the Northern Long-Eared Bat Project Code: 2023-0022548 June 01, 2023
- Biological Assessment Form for Project-Level Consultation under the Interim Consultation Framework for the Northern Long-Eared Bat signed June, 8, 2023
- Interim Consultation Framework Biological Opinion Northeast Metro Vocational High School Project, Wakefield, MA Project Code: 2023-0022548; IPaC Record Locator: 926-124978189 July 5, 2023

The project's proposed stormwater discharges and discharge-related activities are not likely to adversely affect the Northern Long-Eared bat population. The discharges have been designed to attenuate peak flow rates relative to existing site conditions, and all stormwater generated by the site is proposed to exceed applicable state and local treatment regulations. Refer to the USFWS BO Letter with Terms and Conditions project must adhere to during construction, include reporting requirements.

3.2 Historic Property Screening Process

Appendix E, Step 1
Do you plan on installing any stormwater controls that require subsurface earth disturbance, including, but not limited to, any of the following stormwater controls at your site? Check all that apply below, and proceed to Appendix E, Step 2.

- ☒ Dike
- ☒ Berm
- ☒ Catch Basin
- ☒ Pond
- ☒ Constructed Site Drainage Feature (e.g., ditch, trench, perimeter drain, swale, etc.)
- ☒ Culvert
- ☐ Channel
- ☒ Other type of ground-disturbing stormwater control: Lined subsurface detention chamber systems

(Note: If you will not be installing any subsurface earth-disturbing stormwater controls, no further documentation is required for Section 3.2 of the Template.)

Appendix E, Step 2
If you answered yes in Step 1, have prior professional cultural resource surveys or other evaluations determined that historic properties do not exist, or have prior disturbances at the site have precluded the existence of historic properties? ☒ YES ☐ NO

- If yes, no further documentation is required for Section 3.2 of the Template and you may provide the prior documentation in your SWPPP.
    - Refer to Appendix L

3.3 Safe Drinking Water Act Underground Injection Control Requirements

Do you plan to install any of the following controls? Check all that apply below.

- ☐ Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)
- ☒ Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow
- ☐ Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)

Please see the attached Order of Conditions in Appendix M.

SECTION 4: EROSION AND SEDIMENT CONTROLS AND DEWATERING PRACTICES

4.1 Natural Buffers or Equivalent Sediment Controls

Buffer Compliance Alternatives

Are there any receiving waters within 50 feet of your project's earth disturbances? ☒ YES ☐ NO

Check the compliance alternative that you have chosen:

☐ (i) I will provide and maintain a 50-foot undisturbed natural buffer.

☒ (ii) I will provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls that achieve, in combination, the sediment load reduction equivalent to a 50-foot undisturbed natural buffer. Note: the width of the natural buffer to be maintained ranges from several feet to the required fifty feet. Please refer to the site development plans.

- The estimated sediment removal from a 50-foot buffer using applicable tables in Appendix F, Attachment 1. Include information about the buffer vegetation and soil type that predominate at your site

Table F-9 Estimated 50-foot Buffer Performance in Massachusetts and New Hampshire*

Type of Buffer Vegetation**	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Warm-season Grass (i.e., Switchgrass, Lemongrass)	79	90	90	90	90
Cool-season Dense Grass (Kentucky Bluegrass, Smooth Bromegrass, Timothy)	78	90	90	90	90
Tall Fescue Grass	76	90	81	89	90
Medium-density Weeds	66	76	60	72	66

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

  - Silty soil and glacial till were observed at portions throughout the site. Given the variable buffer vegetation on-site, it is expected that a hypothetical 50-foot buffer on-site would remove 70-90% of sediment.

- Insert the following information:
  - (1) Specify the model or other tool used to estimate sediment load reductions from the combination of the buffer area and additional erosion and sediment controls installed at your site, and
  - (2) Include the results of calculations showing that the combination of your buffer area and the additional erosion and sediment controls installed at your site will meet or exceed the sediment removal efficiency of a 50-foot buffer
    - Straw wattles in combination with siltation fence are proposed as perimeter erosion controls up-gradient of the wetlands on-site. It is well-documented that these two measures, when used in conjunction, achieve an estimated sediment removal that meets or exceeds the values targeted in Table F-9 as described above when maintained in accordance with this permit.

4.2 Perimeter Controls

General

- Several perimeter control practices will be installed adjacent to resource areas, down gradient of the limit of work, and where run-on occurs from adjacent sites to provide a perimeter to control overland flow.

Specific Perimeter Controls

Siltation Fence	
Installation	Prior to all earth disturbances
Maintenance Requirements	CGP Part 2.2.3.ci:" Remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control" CGP Part 2.2.3.cii: "After a storm event, if there is evidence of stormwater circumventing or undercutting the perimeter control, extend controls and/or repair undercut areas to fix the problem."
Design Specifications	The fence material shall be wire reinforced Mirafi #100 Sediment Control Fence. The fence should be keyed into the ground a minimum of 6-inches. Refer to the detail provided in the attached plan set. The drainage area should be limited to ¼ acre per 100 feet of fence and no more than 1.5 acres in total. The fence will be located at least 10-feet from the toe of steep slopes to provide storage for sediment and access for cleanout. While most of the fence line should be level, the last 10 to 20 feet of the barrier should be slightly uphill. Stabilized outlets may be required for bypass flow.

Straw Wattle	
Installation	Prior to all earth disturbances
Description	A temporary sediment barrier consisting of anchored straw wattles as shown on the Gilbane Stormwater Management Plan (dated 10/25/22) will be installed adjacent to siltation fence in areas down gradient of the limit of work prior to the start of any earthwork. No construction activities will occur down gradient of the barrier.
Maintenance Requirements	CGP Part 2.2.3.ci:" Remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control" CGP Part 2.2.3.cii: "After a storm event, if there is evidence of stormwater circumventing or undercutting the perimeter control, extend controls and/or repair undercut areas to fix the problem."
Design Specifications	Straw wattles should be placed along level ground in a single row and entrenched a depth of 4-inches. Each bale should be secured with a 1-inch square wooden post, as indicated in the construction details of the attached plan set.

Diversion Swales and Earthen Dikes	
Installation	As needed during construction
Description	Install temporary diversion swales and stabilized earthen dikes with straw wattles and/or filter fabric checks adjacent to areas of disturbed slopes, and as needed or directed by Gilbane, to minimize stormwater runoff velocities and divert runoff from disturbed areas.
Maintenance Requirements	Inspect swales and dikes at least once every 7 days and within 24 hours of ¼" storm event. Repair any damaged or improperly constructed portions of the swale/dike immediately upon observation, in accordance with corrective action requirements. Remove sediment when it has accumulated to one-half of the depth of the swale/dike.
Design Specifications	The maximum contributing drainage area to each diversion control is 3 acres. Temporary diversion shall have a peak runoff capacity of the 10-year storm, with a minimum width of 4 feet, maximum height of 18-inches, side slopes of 2H:1V, and a maximum channel grade of 1.0 percent.

4.3 Sediment Track-Out

General

- Construction vehicles will be limited to defined site entrance/exits for each phase on construction, where proper sediment track-out control will be placed.

Specific Track-Out Controls

Stabilized Construction Entrance	
Description: An entrance/exit path with crushed stone and 12' wide by 50' long (minimum)	
Installation	Prior to any trucking activity

Stabilized Construction Entrance	
Maintenance Requirements	CGP Part 2.2.4.d: "Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any constructed or natural site drainage feature, storm drain inlet, or receiving water." When gravel begins to clog the construction entrance, the pad will be top-dressed with new stone or replaced completely. If any damage or improper installation is observed during periodic site inspections, the stabilized construction entrance should be repaired in accordance with corrective action requirements.
Design Specifications	The construction entrance shall consist of 6-inch thick 1 to 3-inch stone, with minimum dimensions of 10 feet wide and 50 feet long. A geotextile filter fabric will be placed between the stone and the underlying soil to prevent soil migration. Refer to the location and detail in the attached plan set. The stabilized construction entrance will also serve as a truck wash area when site conditions warrant. Runoff from the wash down procedures will flow onto the construction site and be directed to a sediment control device.

4.4 Stockpiles or Land Clearing Debris Piles Comprised of Sediment or Soil

General

- Sediment or soil stockpiles will be located in the construction area upgradient of stormwater runoff flows to the extent possible.

Specific Stockpile Controls

Straw Wattle and Siltation Fence	
Description: A straw wattle and siltation fence barrier will be installed around the perimeter of any sediment or soil stockpile area to prevent runoff from eroding the stockpile.	
Installation	As needed to support stockpiles.
Maintenance Requirements	Sediment will be removed before it has accumulated to one-half of the above-ground height of the perimeter control. If any damage or improper installation is observed during periodic inspections, the perimeter control should be repaired in accordance with corrective action requirements.

Straw Wattle and Siltation Fence	
Design Specifications	The fence material shall be wire reinforced Mirafi #100 Sediment Control Fence. The fence should be keyed into the ground a minimum of 6-inches. Refer to the detail provided in the attached plan set. Straw wattles should be placed along level ground in a single row and entrenched a depth of 4-inches. Each bale should be secured with a 1-inch square wooden post as indicated in the construction details of the attached plan set.

Vegetative Stabilization	
Description: Stockpiles of soil stored for a period longer than 14 days will be stabilized by seeding with uniform vegetation.	
Installation	As needed to support stockpiles.
Maintenance Requirements	If any damage or improper installation is observed during periodic inspections, the perimeter control should be repaired in accordance with corrective action requirements. Soil or sediment accumulated on pavement or other impervious surfaces will not be hosed or swept into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.
Design Specifications	The seed mixture and application rate will consist of one of the following: Annual Rye (Lolium multiflorum) with a minimum 90 percent germination rate, 95 percent purity, and applied at 160 lbs/acre. Annual Rye spring seeding will be completed between April 15 and June 1, and the fall seeding will be completed between September 1 and October 15. Winter Rye (Secale cereale) with a minimum 90 percent germination rate, 95 percent purity and applied at 200 lbs/acre. Winter Rye fall seeding will be completed between September 1 and December 15.

Erosion Control Blankets	
Description: Erosion control blankets will be used to cover stockpiled soil to prevent erosion.	
Installation	As needed to support stockpiles.

Erosion Control Blankets	
Maintenance Requirements	If any damage or improper installation is observed during periodic inspections, the erosion control blanket should be repaired or replaced in accordance with corrective action requirements. Soil or sediment accumulated on pavement or other impervious surfaces will not be hosed or swept into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.
Design Specifications	Erosion control blakets shall consist of straw (0.35 lb./sq. yd.) and coconut fibers (0.15 lb./sq. yd) sewn with cotton biodegradable thread between two UV-stabilized nets such as North American Green SC 150, or an approved equal.

4.5 Minimize Dust

General

- Water, either applied from dedicated water trucks or handheld hoses, shall be utilized to control all visible emissions from particulate.

Specific Dust Controls

Spraying	
Description: Water will be applied to exposed soil surfaces to minimize the generation of dust.	
Installation	Applied at a frequency to prevent the visual observation of particulate
Maintenance Requirements	Respray as necessary to keep dust to a minimum.
Design Specifications	Excessive water use should be avoided to reduce the risk of creating a runoff problem. Spraying should be conducted as directed by the person responsible for inspections as noted in Section 6.1 or the General Contractor.

4.6 Minimize Steep Slope Disturbances

General

- The disturbance of steep slopes (greater than 15%) will be minimized as much as practicable. Disturbed slopes will be stabilized as noted below.

Specific Steep Slope Controls

Erosion Control Blankets	
Description: A sewn straw and fibrous blanket stabilized between nets and rolled onto a steep slope to promote slope stability.	
Installation	As needed

Erosion Control Blankets	
Maintenance Requirements	If any damage or improper installation is observed during periodic inspections, the erosion control blanket should be repaired or replaced in accordance with corrective action requirements.
Design Specifications	Erosion control blankets will be installed immediately whenever earth-disturbing activities have permanently or temporarily ceased (i.e. where construction will not resume for a period of 14 calendar days or more) on any portion of the site. Erosion control blankets shall consist of straw (0.35 lb./sq. yd.) and coconut fibers (0.15 lb./sq. yd) sewn with cotton biodegradable thread between two UV-stabilized nets such as North American Green SC 150, or an approved equal.

Vegetative Stabilization	
Description: Application of a seed mix to promote vegetative growth on a steep slope.	
Installation	As needed
Maintenance Requirements	Stockpiles of sediment or soil stored for a period longer than 14 days will be stabilized by seeding with uniform vegetation. The seed mixture and application rate will consist of one of the following: Annual Rye (Lolium multiflorum) with a minimum 90 percent germination rate, 95 percent purity, and applied at 160 lbs/acre. Annual Rye spring seeding will be completed between April 15 and June 1, and the fall seeding will be completed between September 1 and October 15. Winter Rye (Secale cereale) with a minimum 90 percent germination rate, 95 percent purity and applied at 200 lbs/acre. Winter Rye fall seeding will be completed between September 1 and December 15.
Design Specifications	If any damage or improper installation is observed during periodic inspections, the perimeter control should be repaired in accordance with corrective action requirements. Soil or sediment accumulated on pavement or other impervious surfaces will not be hosed or swept into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

4.7 Topsoil

General

- Due to the configuration of the site and the need for blasting to achieve final grades in and around the new building, all topsoil shall be stripped to prevent intermingling with underlying soils and stockpiled on-site for later reuse or off-site disposal. However, where feasible (existing fields to remain), topsoil shall be preserved and remain on site.

Specific Topsoil Controls

- Vegetative stabilization: See the table in section 4.6 above.

4.8 Soil Compaction

General

- Construction vehicle access will be restricted in areas where final vegetative stabilization will occur. Prior to seeding or planting, compacted soils will be conditioned to support vegetative growth.

Specific Soil Compaction Controls

- Refer to the project specifications for the implementation, maintenance, and design of soil compaction measures.

4.9 Storm Drain Inlets

General

- Catch basin filters will be installed at existing and proposed storm drain inlets to reduce sediment entering the stormwater system.

Specific Storm Drain Inlet Controls

Silt Sacks	
Description: Catch basin silt sacks designed to filter sediment from influent flows will be installed in each catch basin.	
Installation	Refer to the site plans and construction details (prior to all earth disturbances)
Maintenance Requirements	At a minimum, you must comply with following requirement in CGP Part 2.2.10.b: "Clean, or remove and replace, the inlet protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found or by the end of the following business day if removal by the same business day is not feasible."
Design Specifications	Refer to the site plans and construction details.

4.10 Constructed Site Drainage Feature

General

- Constructed stormwater conveyance ridges, channels, or a combination will be installed as needed to direct runoff away from unstabilized areas on the site and to reduce erosion.

Specific Constructed Site Drainage Features

Stormwater Conveyance Channel stabilization fabric
Description: Stormwater conveyance channels will be lined with soil stabilization fabric.

Stormwater Conveyance Channel stabilization fabric	
Installation	As needed
Maintenance Requirements	Sediment will be removed before it has accumulated to one-half of the depth of the channel or check dam. If any damage or improper installation is observed during periodic inspections, the conveyance channel should be repaired in accordance with corrective action requirements.
Design Specifications	Straw bales or filter fabric check dams will be used with the conveyance channel as needed to reduce the speed of the flow and allow sediment to settle out. The maximum contributing drainage area to each diversion control is 3 acres. Temporary diversion shall have a peak runoff capacity of the 10-year storm, with a minimum width of 4 feet, maximum height of 18-inches, side slopes of 2H:1V, and a maximum channel grade of 1.0 percent.

4.11 Sediment Basins or Similar Impoundments

General

- Sediment basins with primary outlet and emergency spillways will be used to receive surface runoff and discharge from conveyance channels. All sediment basins have been sized to address the volume of runoff from a 2-year, 24-hour storm (see https://www.epa.gov/npdes/construction-general-permit-2-year-24-hour-storm-frequencies),

Specific Sediment Basin Controls

General Sediment Basin Control Measures	
Description: Incorporate the following measures to meet basin storage and performance goals.	
Installation	Refer to the attached Stormwater Management drawings
Maintenance Requirements	The sediment basins will be kept in effective operating condition and accumulated sediment will be removed to maintain at least ½ of the design capacity of the sediment basin at all times. If any damage or improper installation is observed during periodic inspections, the sediment basin should be repaired in accordance with corrective action requirements.

4.12 Chemical Treatment

Chemical treatment is not anticipated on-site.

4.13 Dewatering Practices

General

- Dewatering may be accomplished by pumping water from excavation areas to a sediment basin or other appropriate device approved by the Stormwater Team; refer to the project specifications. Water collected as part of a dewatering activity shall not be permitted to be directly discharged into any wetlands or the existing on-site stormwater drainage system. All collected water shall be direction to on site controls to removal any collected sediment

Specific Dewatering Practices

Treatment of dewatered groundwater	
Description: If applicable, the contractor is responsible for the treatment of any groundwater that is to be dewatered during construction.	
Installation	Implement dewatering measures at the beginning of the appropriate construction phase and as needed when dewatering is required throughout the duration of construction.
Maintenance Requirements	At a minimum, you must comply with following requirement in CGP Part 2.4: "For backwash water [if applicable], either haul it away for disposal or return it to the beginning of the treatment process; replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications."
Design Specifications	Dewatering, if applicable, will be accomplished by pumping water from excavation areas to a sediment basin or other appropriate control device.

4.14 Other Stormwater Controls

Instructions:

– Describe any other stormwater controls that do not fit into the above categories.

Not applicable.

4.15 Site Stabilization

Total Amount of Land Disturbance Occurring at Any One Time

☐ *Five Acres or less*

☒ *More than Five Acres*

Use this template box if you are discharging to a sediment- or nutrient-impaired water or to a water that is identified by your State, Tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes.

Hydroseeding	
☒ *Vegetative* ☐ *Non-Vegetative* ☒ *Temporary* ☒ *Permanent*	
Description: ▪ Hydroseeding will be applied immediately whenever earth-disturbing activities have permanently or temporarily ceased (i.e. construction will not resume for a period of 7 calendar days or more) on any portion of the site.	
Installation	As needed
Completion	*(Must be completed as soon as practicable, but no later than seven calendar days after stabilization has been initiated)* Insert approximate completion date
Maintenance Requirements	If any damage or improper installation is observed during periodic inspections, the stabilization of disturbed areas will be repaired in accordance with corrective action requirements.
Design Specifications	Temporary seeding requirements include the following seed mixture and application rates: - Annual Rye (Lolium multiflorum) with a minimum 90 percent germination rate, 95 percent purity, and applied at 160 lbs/acre. Annual Rye spring seeding will be completed between April 15 and June 1, and the fall seeding will be completed between September 1 and October 15. - Winter Rye (Secale cereale) with a minimum 90 percent germination rate, 95 percent purity and applied at 200 lbs/acre. Winter Rye fall seeding will be completed between September 1 and December 15. Areas with slopes greater than 3H:1V will be covered with erosion control blankets to protect seeding while vegetation is being established. ▪ For permanent seeding requirements refer to the Specification for Turf and Grasses.

Erosion Control Blankets	
☐ *Vegetative* ☒ *Non-Vegetative* ☒ *Temporary* ☒ *Permanent*	
Description: ▪ Erosion control blankets will be installed immediately whenever earth-disturbing activities have permanently or temporarily ceased (i.e. where construction will not resume for a period of 7 calendar days or more) on any portion of the site.	
Installation	As needed
Completion	Must be completed as soon as practicable, but no later than seven calendar days after stabilization has been initiated.

Erosion Control Blankets	
Maintenance Requirements	If any damage or improper installation is observed during periodic inspections, the stabilization of disturbed areas will be repaired in accordance with corrective action requirements.
Design Specifications	Erosion control blankets shall consist of straw (0.35 lb./sq. yd.) and coconut fibers (0.15 lb./sq. yd) sewn with cotton biodegradable thread between two UV-stabilized nets such as North American Green SC 150, or an approved equal.

SECTION 5: POLLUTION PREVENTION CONTROLS

5.1 Potential Sources of Pollution

Construction Site Pollutants

Potential sources of sediment to stormwater runoff:

- Stockpiles and construction staging
- Clearing and grubbing operations
- Grading and site excavation
- Topsoil stripping
- Landscape operations
- Soil tracking offsite from construction vehicles
- Runoff from unstabilized areas
- Construction debris

Potential pollutants and sources, other than sediment, to stormwater runoff:

- Combined Staging Area – fueling activities, equipment maintenance, sanitary facilities, and hazardous waste storage
- Materials Storage Area – building materials, solvents, adhesives, paving materials, paints, aggregates, trash, etc.
- Construction Activity-paving, curb installation, concrete pouring, and building construction

Areas of Work	Stormwater Primary Pollutant	Other Pollutants						
	Sediment	Nutrients	Heavy Metals	Ph	Pesticides & Herbicides	Oil &Grease	Bacteria	Trash, Debris & Solids
Clearing, grading, excavating, and unstabilized areas	√	√	√	√				√
Demolition and debris disposal	√	√						√
Drilling and blasting operations	√							√
Dewatering operations	√	√						
Material delivery and storage		√		√		√		√
Contaminated soils	Not anticipated	-	-	-	-	-	-	-
Stockpiles of materials (e.g. gravel, loam)	√	√						

Areas of Work	Stormwater Primary Pollutant	Other Pollutants						
	Sediment	Nutrients	Heavy Metals	Ph	Pesticides & Herbicides	Oil &Grease	Bacteria	Trash, Debris & Solids
Paving operations	√	√	√		√			√
Structure construction								√
Concrete washout and waste		√						√
Solid waste	√							√
Hazardous waste	Not anticipated	-	-	-	-	-	-	-
Sanitary waste						√	√	√
Vehicle/equipment use and storage						√		√
Vehicle/equipment fueling and maintenance						√		√

5.2 Spill Prevention and Response

General Description

A spill contingency plan will be implemented during construction, including the following provisions:

- Equipment necessary to quickly attend to inadvertent spills or leaks will be stored on-site in a secure but accessible location. Such equipment shall include safety goggles, chemically resistant gloves and overshoe boots, water and chemical fire extinguishers, sand and shovels, suitable absorbent materials, hydrocarbon sorbent bats, storage containers and first aid equipment.
- Spills or leaks will be treated properly according to material type, volume of spillage, and location of the spill. Mitigation will include preventing further spillage, containing the spilled material in a safe and environmentally sound manner, and remediating any damage done to the environment.
- For spills of < 10 gallons of material, proceed with source control and containment, and clean up with absorbent materials or other applicable means, unless an imminent hazard or other circumstances dictate that the spill should be treated by a professional emergency response contractor.
- For spills of > 10 gallons of material, immediately contact the MA DEP Emergency Response Section at 888/304-1133. Provide information on the type of material spilled, the location of the spill, the quantity of the spill and the time of the spill to the emergency response contractor or coordinator, and proceed with prevention, containment and/or clean-up if so directed.
- If there is a Reportable Quantity (RQ) release during the construction period, immediately contact the MA DEP Emergency Response Section at 888/304-1133; within 14 days a report will be submitted to the EPA regional office describing the release, the date and circumstances of the release, and the steps taken to prevent another release. This Storm Water Prevention Plan must be updated to reflect any such steps or actions taken.
- Provide a 55-gallon spill containment kit for each area of the site where construction vehicles and equipment are present; maintain on site throughout the construction period.

Prohibited Discharges

The following discharges from the project site are prohibited.

- Wastewater from concrete washout, unless managed by an appropriate control.
- Wastewater from the washout of stucco, paint, form release oils, curing compounds, and other construction materials unless managed by an appropriate control.
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance
- Soaps, solvents, or detergents used in vehicle and equipment washing; and
- Toxic or hazardous substances from a spill or other release.

5.3 Fueling and Maintenance of Equipment or Vehicles

General

Minor vehicle and equipment emergency maintenance can be performed onsite away from drainage structures. Major vehicle and equipment maintenance must be performed offsite. Equipment/vehicle storage areas and any onsite fuel tanks will be inspected weekly and after storm events. Equipment and vehicles will be inspected for leaks, equipment damage, and other service problems on each day of use. Any leaks will be repaired immediately, or the equipment/vehicle will be removed from the site. Minor vehicle and equipment emergency maintenance shall occur when a vehicle cannot be safely removed from the site. The vehicle should be repaired so it can be

taken off-site so that the rest of the maintenance can occur. Major vehicle maintenance onsite is prohibited. Re-fueling or maintenance of vehicles within 25 feet of a drainage structure shall be prohibited. Drip pans, drip cloths, or absorbent pads should be used when replacing spent fluids. The fluids should be collected and stored prior to being disposed of offsite.

Specific Pollution Prevention Practices

Fueling of Vehicles and Minor Maintenance	
Description: If necessary, only minor equipment maintenance will occur on-site. All equipment fluids generated from maintenance activities will be disposed of into designated drums stored on spill pallets. Absorbent, spill-cleanup materials and spill kits will be available at the combined staging and materials storage area.	
Implementation	As Needed
Maintenance Requirements	Equipment shall be inspected daily
Design Specifications	N/A

5.4 Washing of Equipment and Vehicles

General

- Construction equipment and vehicles shall be rinsed of dirt and debris before being stored or leaving the site.

Specific Pollution Prevention Practices

Washing of Equipment and Vehicles	
Description: • Construction vehicles shall be rinsed thoroughly of dirt and debris at the construction entrance before leaving the site. • Concrete trucks will wash out, or discharge surplus concrete or drum wash water, at the site in the staging area. Concrete pours will not be conducted during or before an anticipated storm event. Concrete mixer trucks and chutes will be washed in the designated area or concrete will be properly disposed of off-site. • A washout area will be constructed before concrete pours occur on the site, if required. It shall be lined with a plastic sheet (6 mils thick) free of any holes or tears. Signs shall be posted marking designated washout areas to ensure the concrete equipment operators use the proper facility. • Washing requiring soap or solvents shall be conducted in a tub, bucket, or barrier to contain contaminated water runoff. Wash water shall be discarded in the concrete washout station.	
Installation	Washout area will be installed before concrete is poured,
Maintenance Requirements	The washout area will be inspected daily to ensure all concrete washing is being discharges to the washout area, and no tears or leaks are present. When the temporary washout is full or no longer needed for the project, the hardened concrete be removed and disposed of legally.
Design Specifications	N/A

5.5 Storage, Handling, and Disposal of Building Products, Materials, and Wastes

5.5.1 Building Materials and Building Products

General

- It is not anticipated that harmful chemicals associated with building products will be associated with the proposed project.

Specific Pollution Prevention Practices

Proper Storage of Chemicals (if appliable)	
Description: Building products will be stored under a cover such as sheeting or temporary roofs to prevent rainwater from coming into contact with harmful chemicals.	
Implementation	As needed
Maintenance Requirements	Building product storage areas will be inspected routinely and appropriate repairs or modifications will be made immediately.
Design Specifications	Chemicals including petroleum products such as diesel fuel, oil, and hydraulic fluids will be stored in water-tight containers.

5.5.2 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials

General

- The use of pesticides, herbicides, insecticides, fertilizers, and landscape materials will be kept to a minimum.

Specific Pollution Prevention Practices

Proper Storage (if applicable)	
Description: Harmful chemicals associated with landscaping products will be prevented from coming into contact with rainwater by storing them in sealed containers. Landscaping products will be stored under a cover such as sheeting or temporary roofs to prevent rainwater from coming into contact with harmful chemicals.	
Implementation	As needed
Maintenance Requirements	Landscaping product storage areas will be inspected routinely and appropriate repairs or modifications will be made immediately.

5.5.3 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

General

- Diesel fuel, oil, hydraulic fluids, other petroleum products and other chemicals shall be stored on site in the below manner. Truck beds shall be kept free of kerosene, gasoline, fuel, oil, solvents, or other materials.
- Contractor to provide off-site trucks to refuel on-site vehicles (backhoes, bulldozers, etc.).

Specific Pollution Prevention Practices

If any container has a storage **capacity of less than 55 gallons**:

- The containers must be water-tight, and must be kept closed, sealed, and secured when not being actively used
- If stored outside, use a spill containment pallet or similar device to capture small leaks or spills
- Have a spill kit available on site that is in good working condition (i.e., not damaged, expired, or used up) and ensure personnel are available to respond immediately in the event of a leak or spill.

If any container has a storage **capacity of 55 gallons or more**:

- The containers must be water-tight, and must be kept closed, sealed, and secured when not being actively used
- Store containers a minimum of 50 feet from receiving waters, constructed or natural site drainage features, and storm drain inlets. If infeasible due to site constraints, store containers as far away from these features as the site permits. If site constraints prevent you from storing containers 50 feet away from receiving waters or the other features identified, you must document in your SWPPP the specific reasons why the 50-foot setback is infeasible, and how you will store containers as far away as the site permits;
- Provide either
    - (1) cover (e.g., temporary roofs) to minimize the exposure of these containers to precipitation and to stormwater, or
    - (2) secondary containment (e.g., curbing, spill berms, dikes, spill containment pallets, double-wall, above-ground storage tank)
- Have a spill kit available on site that is in good working condition (i.e., not damaged, expired, or used up) and ensure personnel are available to respond immediately in the event of a leak or spill.

Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. You are prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

5.5.4 Hazardous or Toxic Waste

General

- Hazardous or toxic waste will be prevented from coming into contact with rainwater. It is not anticipated that there will be significant amounts of hazardous or toxic waste stored on-site.

Specific Pollution Prevention Practices

Proper Storage (if applicable)	
Description: Any hazardous or toxic waste will be stored in sealed containers of suitable materials to prevent leaking and corrosion. Containers that will be stored outside will be within appropriately sized secondary containment.	
Implementation	As needed

Proper Storage (if applicable)	
Maintenance Requirements	Hazardous and toxic waste storage areas will be inspected routinely and appropriate repairs or modifications will be made immediately.

5.5.5 Construction and Domestic Waste

General

- All waste materials will be collected and disposed of into metal trash dumpsters. Dumpsters will have a secure watertight lid, be placed away from stormwater conveyances and drains, and meet all federal, state, and municipal regulations. Only trash and construction debris from the site will be deposited in the dumpster. No construction materials will be buried on-site. All personnel will be instructed, during tailgate training sessions, regarding the correct disposal of trash and construction debris. Notices that state these practices will be posted in the office trailer and the individual who manages day-to-day site operations will be responsible for seeing that these practices are followed.

Specific Pollution Prevention Practices

Construction and Domestic Waste	
Description: Clean entire area daily. All trash and job-related debris shall be removed from the site or stored in an approved dumpster at the contractor's discretion. Dumpsters shall be covered at the end of each day and prior to any precipitation events.	
Installation	Prior to the start of Construction
Maintenance Requirements	Dumpsters shall be inspected once per week and immediately after storm events. Remove waste material promptly from premises. Store material and equipment in dry location, in neat and orderly fashion. Ensure adequate security for electrical material and equipment stored at job.
Design Specifications	N/A

5.5.6 Sanitary Waste

General

- Portable sanitary units will be provided for use by all workers throughout the life of the project. A licensed sanitary waste management contractor will regularly collect all sanitary waste from the portable units.

Specific Pollution Prevention Practices

Sanitary Waste	
Description: Portable toilets will be self-contained units meeting local, State and Federal requirements.	
Installation	• Prior to the start of Construction • The Contractor shall provide adequate sanitary facilities for the use of those employed on the Work. Such facilities shall be made available when the first employees arrive on the Site of the Work, shall be properly secluded from public observation, and shall be constructed and maintained during the progress of the Work.

Maintenance Requirements	• Waste for the portable toilets shall be collected a minimum of once a week. The toilets shall be inspected weekly for sign of leaking. Toilets that are leaking shall be removed from the site and replaced. • The Contractor shall maintain the sanitary facilities in a satisfactory and sanitary condition at all times and shall enforce their use.
Design Specifications	N/A

5.6 Washing of Applicators and Containers used for Stucco, Paint, Concrete, Form Release Oils, Cutting Compounds, or Other Materials

General

- Washwater from applicators and containers used for paint, concrete, form release oils, curing compounds, stucco, and other construction materials will be disposed of properly.

Specific Pollution Prevention Practices

General Washing Practices	
Description: Washout activities will be located as far away as possible from surface water and stormwater inlets or conveyances. Designated areas for these activities will be identified to the extent practicable.	
Implementation	As needed
Maintenance Requirements	Washout areas will be inspected routinely and appropriate repairs or modifications will be made immediately.

Washwater Handling and Disposal	
Description: All washwater will be directed to a leak-proof container or a leak-proof pit designed so that no overflows occur.	
Implementation	As needed
Maintenance Requirements	Washwater containment areas will be inspected routinely and appropriate repairs or modifications will be made immediately.

5.7 Application of Fertilizers

General

- Discharges or fertilizers containing nitrogen or phosphorus will be minimized.

Specific Pollution Prevention Practices

Fertilizing Practices	
Description: - Fertilizer will be applied at a rate and in amounts consistent with the manufacturer's specifications. - Fertilizer will be applied at appropriate times of year for the project location and timed as closely as possible with the period of maximum vegetation uptake. - Application of fertilizer will be avoided before a heavy rain. - Fertilizers will not be applied to stormwater conveyance channels with moving water or to frozen ground.	
Implementation	As needed
Maintenance Requirements	Stabilized areas that are fertilized to facilitate vegetation will be inspected routinely and any damage to the stabilized area will be repaired immediately.

5.8 Other Pollution Prevention Practices

Instructions:

Describe any additional pollution prevention practices that do not fit into the above categories.

General

- No additional pollution prevention practices are anticipated to be present on-site.

SECTION 6: INSPECTION, MAINTENANCE, AND CORRECTIVE ACTION

6.1 Inspection Personnel and Procedures

Site Inspection Schedule

Select the inspection frequency(ies) that applies, based on CGP Parts 4.2, 4.3, or 4.4

Standard Frequency:

☒ Every 7 calendar days

☐ Every 14 calendar days and within 24 hours of either:

- A storm event that produces 0.25 inches or more of rain within a 24-hour period (including when there are multiple, smaller storms that alone produce less than 0.25 inches but together produce 0.25 inches or more in 24 hours), or
- A storm event that produces 0.25 inches or more of rain within a 24-hour period on the first day of a storm and continues to produce 0.25 inches or more of rain on subsequent days (you conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the last day of the storm that produces 0.25 inches or more of rain (i.e., only two inspections would be required for such a storm event)), or
- A discharge caused by snowmelt from a storm event that produces 3.25 inches or more of snow within a 24-hour period.

Increased Frequency (if applicable):

For areas of sites discharging to sediment or nutrient-impaired waters or to waters designated as Tier 2, Tier 2.5, or Tier 3

☒ Every 7 days and within 24 hours of either:

- A storm event that produces 0.25 inches or more of rain within a 24-hour period, or
- A discharge caused by snowmelt from a storm event that produces 3.25 inches or more of snow within a 24-hour period.

Reduced Frequency (if applicable)

For stabilized areas

☐ Twice during first month, no more than 14 calendar days apart; then once per month after first month until permit coverage is terminated consistent with Part 9 in any area of your site where the stabilization steps in 2.2.14.a have been completed.

For stabilized areas on "linear construction sites" (as defined in Appendix A)

☐ Twice during first month, no more than 14 calendar days apart; then once more within 24 hours of a storm event that produces 0.25 inches or more of rain within a 24-hour period, or within 24 hours of a snowmelt discharge from a storm event that produces 3.25 inches or more of snow within a 24-hour period

- N/A
  (Note: It is likely that you will not be able to include this in your initial SWPPP. If you qualify for this reduction (see CGP Part 4.4.1), you will need to modify your SWPPP to include this information.)

For arid, semi-arid, or drought-stricken areas during seasonally dry periods or during drought ☐ Once per month and within 24 hours of either: ▪ A storm event that produces 0.25 inches or more of rain within a 24-hour period, or ▪ A snowmelt discharge from a storm event that produces 3.25 inches or more of snow within a 24-hour period. Insert beginning and ending month identified as the seasonally dry period for your area or the valid period of drought: ▪ Beginning month of the seasonally dry period: N/A ▪ Ending month of the seasonally dry period: N/A
For frozen conditions where construction activities are being conducted ☒ Once per month Insert beginning and ending dates of frozen conditions on your site: ▪ Beginning date of frozen conditions: as needed ▪ Ending date of frozen conditions: as needed
For frozen conditions where construction activities are suspended ☒ Inspections are temporarily suspended Insert beginning and ending dates of frozen conditions on your site: ▪ Beginning date of frozen conditions: as needed ▪ Ending date of frozen conditions: as needed

Dewatering Inspection Schedule

Select the inspection frequency that applies based on CGP Part 4.3.2

Dewatering Inspection
☒ Once per day on which the discharge of dewatering water occurs.

Rain Gauge Location (if applicable)
Laurence G Hanscom Field Airport - National Weather Service

Inspection Report Forms
Refer to Appendix D

6.2 Corrective Action

Personnel Responsible for Corrective Actions – TBD with oversight by the Gilbane project team members previous identified

Corrective Action Logs
Refer to Appendix E

6.3 Delegation of Authority

Duly Authorized Representative(s) or Position(s): TBD

Insert Company or Organization Name
Insert Name
Insert Position
Insert Address
Insert City, State, Zip Code
Insert Telephone Number
Insert Fax/Email

SECTION 7: TURBIDITY BENCHMARK MONITORING FOR DEWATERING DISCHARGES

Currently all dewatering discharges are prohibited from direct off-site discharges. All collected water from dewatering activities is to be routed to on-site settling basins for treatment and as such no monitoring of discharges are required at this time. If conditions change, the below information,

Procedures:

Collecting and evaluating samples	Describe how you will collect and evaluate samples
Reporting results and keeping monitoring information records	Describe how you will report results to EPA and keep monitoring information records
Taking corrective action when necessary	Describe how you will take corrective action when necesary

Turbidity Meter:

Type of turbidity meter	Insert the type of turbidity meter

Turbidity meter manuals and manufacturer instructions
Insert a copy of any manuals and manufacturer instructions in Appendix N of this SWPPP Template.

Coordinating Arrangements for Turbidity Monitoring (if applicable):

Permitted operator name	Insert operator name
Permitted operator NPDES ID	Insert operator NPDES ID
Coordinating Arrangement	Describe the coordinating arrangement including which parties are tasked with specifc responsibilities

Alternate turbidity benchmark (if applicable):

Alternate turbidity benchmark (NTU)	Insert alternate turbidity benchmark
Data and documentation used to request the alternate benchmark	Insert the data and documentation that was submitted to EPA to request the alternate benchmark

SECTION 8: CERTIFICATION AND NOTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Neil Benner Title: Project Executive

Signature: ***Neil Benner*** Date: 7/31/23

Appendix A – Site Maps

2021 Aerial Photograph
Northeast Metropolitan Regional Vocational High School
100 Hemlock Road
Wakefield, MA

Sequence of Work

Prerequisite Activities for Site Clearing Activities

1. Meet with Con Com on site if desired
2. Install all perimeter erosion control measures & perimeter fencing
3. Review erosion control installation with Con Com if desired

Construction Work (General Order of Work)

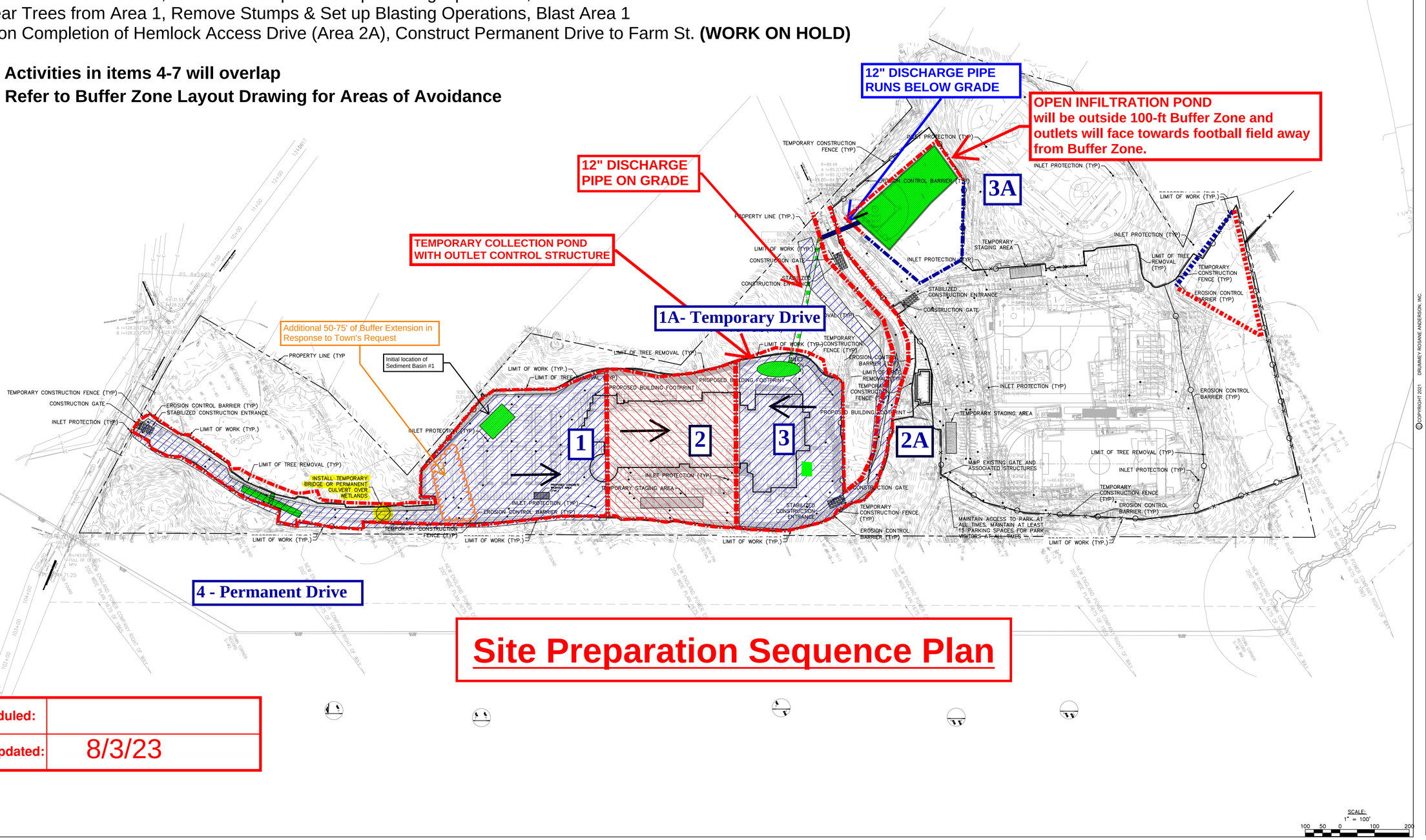
1 Perform Site Enabling work in School Parking Lot

2- Build Temporary Drive 1A

3- Establish Open Infiltration Pond on baseball field & downhill piping outside of 100' Buffer Zone
4- Clear Trees from Area 3, Remove Stumps & Set up Blasting Operations, Blast Area 3
5- Clear Trees from Area 2, Remove Stumps & Set up Blasting Operations, Blast Area 2
6- Clear Trees from Area 1, Remove Stumps & Set up Blasting Operations, Blast Area 1
7- Upon Completion of Hemlock Access Drive (Area 2A), Construct Permanent Drive to Farm St. **(WORK ON HOLD)**

Note: Activities in items 4-7 will overlap
Refer to Buffer Zone Layout Drawing for Areas of Avoidance

SITE UTILIZATION



Site Preparation Sequence Plan

Scheduled:	
Last Updated:	8/3/23

SCALE:
1" = 100'
100 50 0 100 200

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road Studio 205 South Windsor, CT 06074
260 Charles Street Studio 300 Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Nitsch Engineering
www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472
- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

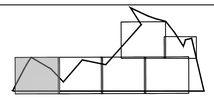
DESIGN DEVELOPMENT COST ESTIMATE SET

JUNE 23, 2022

SEDIMENTATION AND EROSION CONTROL PLAN

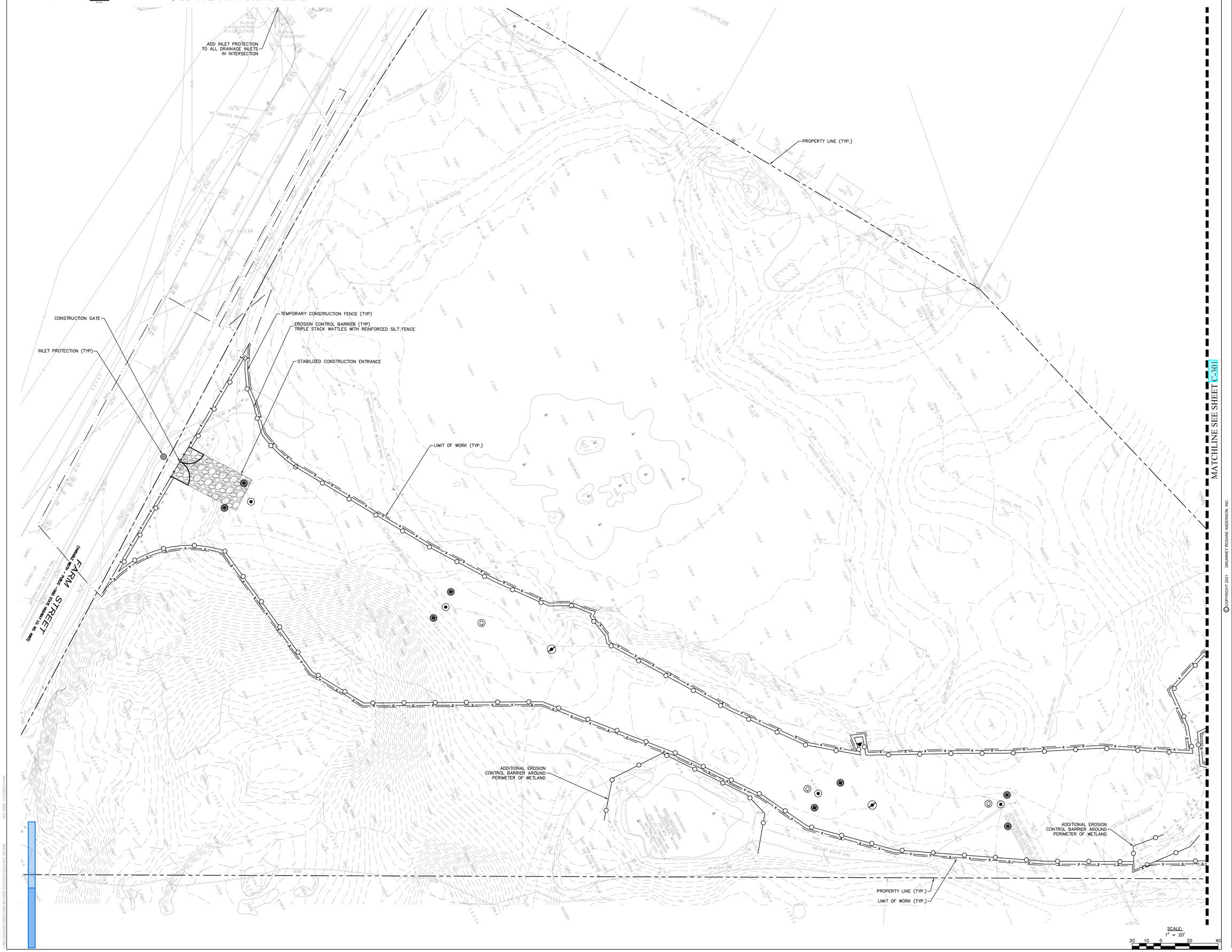
Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: JUNE 23, 2022

C-300



KEY MAP

NOTES:
1) ALL PROPOSED AND EXISTING DRAINAGE INLETS SHALL HAVE SILT SACS/INLET PROTECTION INSTALLED DURING CONSTRUCTION
2) LOCATION OF CONSTRUCTION FENCE AND EROSION CONTROL SET UP AND REMOVAL BETWEEN PHASES ARE THE CONTRACTOR'S RESPONSIBILITY
3) REFER TO SHEET C-000 FOR NOTES, LEGEND AND ABBREVIATIONS
4) REFER TO SHEET C-600 FOR EROSION CONTROL DETAILS



©COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering

www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

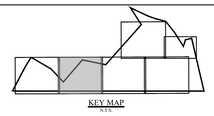
60% CONSTRUCTION DOCUMENT COST ESTIMATING SET

NOVEMBER 21, 2022

SEDIMENTATION AND EROSION CONTROL PLAN I

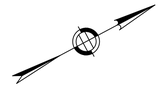
Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: NOVEMBER 21, 2022

C-300



KEY MAP
N.T.S.

NOTES:
1) ALL PROPOSED AND EXISTING DRAINAGE INLETS SHALL HAVE SILT SACS/INLET PROTECTION INSTALLED DURING CONSTRUCTION
2) LOCATION OF CONSTRUCTION FENCE AND EROSION CONTROL SET UP AND REMOVAL BETWEEN PHASES ARE THE CONTRACTOR'S RESPONSIBILITY
3) REFER TO SHEET C-000 FOR NOTES, LEGEND AND ABBREVIATIONS
4) REFER TO SHEET C-600 FOR EROSION CONTROL DETAILS



MATCHLINE SEE SHEET C-300

MATCHLINE SEE SHEET C-302

PROPERTY LINE (TYP.)

LIMIT OF WORK (TYP.)

TEMPORARY SEDIMENT BASIN 1
VOLUME=19,405 CF
CONTRACTOR TO DETERMINE FINAL LOCATION AND GRADING OF BASIN

PROPOSED BUILDING FOOTPRINT

CI 11

CI 14

INLET PROTECTION (TYP)

PROPOSED MAINTENANCE BUILDING FOOTPRINT

PROPOSED CONCRETE WASHOUT AREA (TYP.)

EROSION CONTROL BARRIER (TYP)
TRIPLE STACK WATTLES WITH REINFORCED SILT FENCE

TEMPORARY CONSTRUCTION FENCE (TYP)

ADDITIONAL EROSION CONTROL BARRIER AROUND PERIMETER OF WETLAND

25 FOOT WETLAND BUFFER

SCALE:
1" = 20'
20 10 0 20 40

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering

www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

60% CONSTRUCTION DOCUMENT COST ESTIMATING SET

NOVEMBER 21, 2022

SEDIMENTATION AND EROSION CONTROL PLAN II

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: NOVEMBER 21, 2022

C-301

LAST SAVED: 11/21/2022 3:34:49 PM
USER:JACK.SPOONER@NITSCHENG.COM
DWG:C:\Users\JACK.SPOONER\Documents\13872_CENTRAL_21_jack.spooner.rvt

KEY MAP
N.T.S.

NOTES:
1) ALL PROPOSED AND EXISTING DRAINAGE INLETS SHALL HAVE SILT SACS/INLET PROTECTION INSTALLED DURING CONSTRUCTION
2) LOCATION OF CONSTRUCTION FENCE AND EROSION CONTROL SET UP AND REMOVAL BETWEEN PHASES ARE THE CONTRACTOR'S RESPONSIBILITY
3) REFER TO SHEET C-000 FOR NOTES, LEGEND AND ABBREVIATIONS
4) REFER TO SHEET C-600 FOR EROSION CONTROL DETAILS

MATCHLINE SEE SHEET C-304

MATCHLINE SEE SHEET C-301

MATCHLINE SEE SHEET C-303

PROPERTY LINE (TYP.)

LIMIT OF WORK (TYP.)

EROSION CONTROL BARRIER (TYP)
TRIPLE STACK WATTLES WITH
REINFORCED SILT FENCE

TEMPORARY CONSTRUCTION FENCE (TYP)

CI 11

COLLECTION POND WITH
OUTLET CONTROL STRUCTURE

TEMPORARY ABOVE-GROUND
DRAINAGE DISCHARGE PIPE

PROPOSED BUILDING FOOTPRINT

INLET PROTECTION (TYP)

LOCKER ROOM BUILDING AND
ASSOCIATED UTILITIES
TO AS ALTERNATE

EROSION CONTROL BARRIER (TYP)
TRIPLE STACK WATTLES WITH
REINFORCED SILT FENCE

TEMPORARY
CONSTRUCTION
FENCE (TYP)

PROPOSED BUILDING FOOTPRINT

TEMPORARY SEDIMENT BASIN 3
VOLUME=15,840 CF
CONTRACTOR TO DETERMINE FINAL
LOCATION AND GRADING OF BASIN

INLET PROTECTION (TYP)

TEMPORARY STAGING AREA

CONSTRUCTION GATE

STABILIZED
CONSTRUCTION
ENTRANCE

TEMPORARY SEDIMENT BASIN 2
VOLUME=21,493 CF
CONTRACTOR TO DETERMINE FINAL
LOCATION AND GRADING OF BASIN

EROSION CONTROL BARRIER (TYP)
TRIPLE STACK WATTLES WITH
REINFORCED SILT FENCE

TEMPORARY CONSTRUCTION FENCE (TYP)

PROPERTY LINE (TYP.)

LIMIT OF WORK (TYP.)

SCALE:
1" = 20'
20 10 0 20 40

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering
www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472
- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

60% CONSTRUCTION
DOCUMENT COST
ESTIMATING SET

NOVEMBER 21, 2022

SEDIMENTATION AND EROSION CONTROL PLAN III

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: NOVEMBER 21, 2022

C-302

KEY MAP

NOTES:
1) ALL PROPOSED AND EXISTING DRAINAGE INLETS SHALL HAVE SILT SACS/INLET PROTECTION INSTALLED DURING CONSTRUCTION
2) LOCATION OF CONSTRUCTION FENCE AND EROSION CONTROL SET UP AND REMOVAL BETWEEN PHASES ARE THE CONTRACTOR'S RESPONSIBILITY
3) REFER TO SHEET C-000 FOR NOTES, LEGEND AND ABBREVIATIONS
4) REFER TO SHEET C-600 FOR EROSION CONTROL DETAILS

MATCHLINE SEE SHEET C-304

MATCHLINE SEE SHEET C-305

MATCHLINE SEE SHEET C-302

CI 14

CI 11

CI 11

INLET PROTECTION (TYP)

PROPOSED CONCESSIONS STAND FOOTPRINT

TEMPORARY STAGING AREA

EROSION CONTROL BARRIER (TYP)
TRIPLE STACK WATTLES WITH REINFORCED SILT FENCE

INLET PROTECTION (TYP)

MAINTAIN ACCESS TO PARK AT ALL TIMES. MAINTAIN AT LEAST 15 PARKING SPACES FOR PARK VISITORS AT ALL TIMES

TEMPORARY CONSTRUCTION FENCE (TYP)

EROSION CONTROL BARRIER (TYP)
TRIPLE STACK WATTLES WITH REINFORCED SILT FENCE

PROPERTY LINE (TYP.)

LIMIT OF WORK (TYP.)

SCALE:
1" = 20'
20 10 0 20 40

LAST SAVED: 11/15/2022 3:41 PM

UNCLASSIFIED\DRA\2020\11\13872 NRHP STGA\CIVIL\CAD\13872_C3D.DWG

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering
www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472
- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

60% CONSTRUCTION DOCUMENT COST ESTIMATING SET

NOVEMBER 21, 2022

SEDIMENTATION AND EROSION CONTROL PLAN IV

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: NOVEMBER 21, 2022

C-303

KEY MAP

NOTES:
1) ALL PROPOSED AND EXISTING DRAINAGE INLETS SHALL HAVE SILT SACS/INLET PROTECTION INSTALLED DURING CONSTRUCTION
2) LOCATION OF CONSTRUCTION FENCE AND EROSION CONTROL SET UP AND REMOVAL BETWEEN PHASES ARE THE CONTRACTOR'S RESPONSIBILITY
3) REFER TO SHEET C-000 FOR NOTES, LEGEND AND ABBREVIATIONS
4) REFER TO SHEET C-600 FOR EROSION CONTROL DETAILS

TEMPORARY SEDIMENT BASIN 4
VOLUME=132,945 CF
CONTRACTOR TO DETERMINE FINAL LOCATION AND GRADING OF BASIN

EROSION CONTROL BARRIER (TYP)
TRIPLE STACK WATTLES WITH REINFORCED SILT FENCE

TEMPORARY CONSTRUCTION FENCE (TYP)

Construct Emergency Spillway. Coordinate size and elevation in field

Construct a back-up under drain discharging to stone rip rap. Minimum piping size to be 6". Install similar to above photo. Coordinate size and elevation in field

HEMLOCK ROAD
(60' WIDE GRANITE CURB FROM TERMINUS OF MAYFIELD TO NOC
BOX BEAM RAIL 21" FOR 1200' OF 1050)

TEMPORARY UNDERGROUND DRAINAGE DISCHARGE PIPE

PROPERTY LINE (TYP.)

Construct a sediment forebay; size to 10% of total basin

BENCH MARK (BM1)
ELEVATION=92.60(NAVD88)

CONSTRUCTION GATE

LIMIT OF WORK (TYP.)

STABILIZED CONSTRUCTION ENTRANCE

STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION GATE

TEMPORARY ABOVE-GROUND DRAINAGE DISCHARGE PIPE

INLET PROTECTION (TYP)

TEMPORARY STAGING AREA

MATCHLINE SEE SHEET C-303

MATCHLINE SEE SHEET C-305

SCALE:
1" = 20'
20 10 0 20 40

©COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering
www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472
- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS
NITSCH PROJECT No. 13872

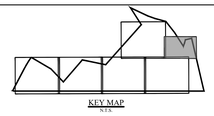
60% CONSTRUCTION DOCUMENT COST ESTIMATING SET

NOVEMBER 21, 2022

SEDIMENTATION AND EROSION CONTROL PLAN V

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: NOVEMBER 21, 2022

C-304



KEY MAP
N.T.S.

NOTES:
1) ALL PROPOSED AND EXISTING DRAINAGE INLETS SHALL HAVE SILT SACS/INLET PROTECTION INSTALLED DURING CONSTRUCTION
2) LOCATION OF CONSTRUCTION FENCE AND EROSION CONTROL SET UP AND REMOVAL BETWEEN PHASES ARE THE CONTRACTOR'S RESPONSIBILITY
3) REFER TO SHEET C-000 FOR NOTES, LEGEND AND ABBREVIATIONS
4) REFER TO SHEET C-600 FOR EROSION CONTROL DETAILS

SCALE:
1" = 20'
20 10 0 20 40

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering

www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

60% CONSTRUCTION DOCUMENT COST ESTIMATING SET

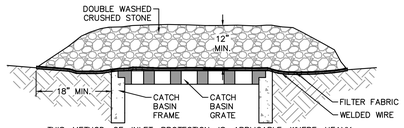
NOVEMBER 21, 2022

SEDIMENTATION AND EROSION CONTROL PLAN VI

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: NOVEMBER 21, 2022

C-305

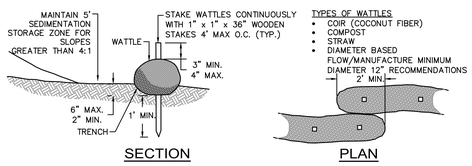
LAST SAVED: 11/17/2022 3:14 PM
C:\BELLDATA\DPW\13000\13872\REPORTS\EROSION\EROS_EPLAN.DWG



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS. THIS METHOD NOT ACCEPTABLE IN ACTIVE TRAFFIC AREAS.

INLET PROTECTION ① CATCH BASIN W/ GRAVEL

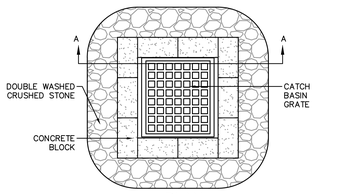
NOT TO SCALE



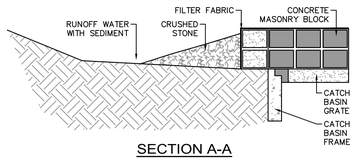
SECTION PLAN

WATTLES - SLOPE PROTECTION FOR SLOPES LESS THAN 10:1

NOT TO SCALE



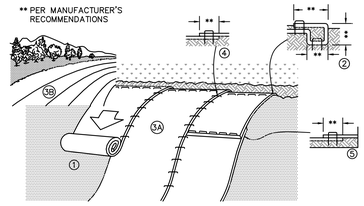
PLAN



SECTION A-A

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND STRUCTURE.

INLET PROTECTION CATCH BASIN W/ BLOCK AND GRAVEL



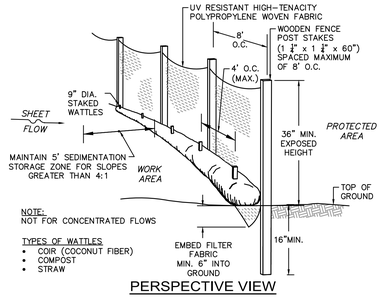
SLOPE INSTALLATION

NOTES:

1. PREPARE SOIL BEFORE INSTALLING EROSION CONTROL BLANKETS (ECB's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE ECB's IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING PORTION OF ECB's BACK OVER SEED AND COMPACTED SOIL. SECURE ECB's OVER COMPACTED SOIL WITH A ROW OF STAKES/STAPLES SPACED ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATIONS ACROSS THE WIDTH OF THE ECB's.
3. ROLL THE ECB's DOWN (A) OR HORIZONTALLY (B) ACROSS THE SLOPE. ECB's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL ECB's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAKES/STAPLES IN APPROPRIATE LOCATIONS AS SHOWN ON THE STAKE/STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL ECB's MUST BE STAKED/STAPLED WITH OVERLAP DEPENDING ON ECB's TYPE. SEE THE MANUFACTURER'S RECOMMENDATIONS.
5. CONSECUTIVE ECB's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN OVERLAP (SEE THE MANUFACTURER'S RECOMMENDATIONS). STAKE/STAPLE THROUGH OVERLAPPED AREA, ACROSS ENTIRE ECB's WIDTH PER MANUFACTURER'S RECOMMENDATIONS.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAKE OR STAPLE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE ECB's.
7. THE CONTRACTOR SHALL FOLLOW ALL INSTALLATION INSTRUCTIONS AS RECOMMENDED BY THE MANUFACTURER.

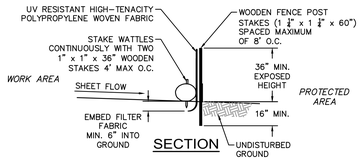
TEMPORARY EROSION CONTROL BLANKET FOR STEEP SLOPES DETAIL

NOT TO SCALE



PERSPECTIVE VIEW

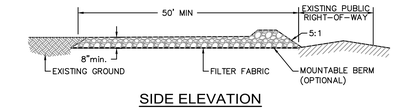
Refer to Perimeter control details on the Gilbane Stormwater Management Plan dated 10/25/2022



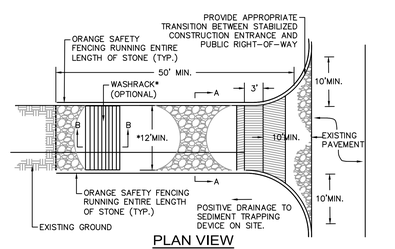
SECTION

PERIMETER PROTECTION BARRIER SILT FENCE DETAIL WITH WATTLES

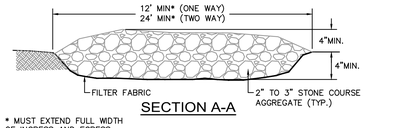
NOT TO SCALE



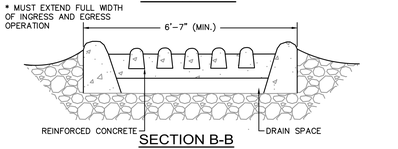
SIDE ELEVATION



PLAN VIEW



SECTION A-A



SECTION B-B

CONSTRUCTION SPECIFICATIONS

CONSTRUCTION SPECIFICATIONS

LENGTH – GREATER THAN OR EQUAL TO 50 FEET

WIDTH – TWELVE FOOT MINIMUM (ONE WAY), TWENTY FOUR FOOT MINIMUM (TWO WAY), BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.

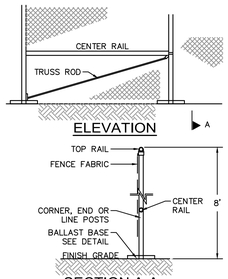
SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM SHALL BE PERMITTED.

THICKNESS – 8"

MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

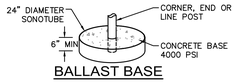
PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED.

STABILIZED CONSTRUCTION ENTRANCE



NOTES

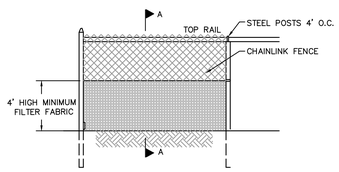
1. END, GATE AND CORNER POSTS SHALL BE BRACED TO ADJACENT LINE POSTS. (MORE THAN 30° CHANGE IN DIRECTION CONSTITUTES A CORNER)
2. FABRIC SHALL BE 0.148" GAUGE MIN. WIRE, WOVEN INTO APPROXIMATELY 2" DIAMOND MESH.
3. ZINC-COATED STEEL FABRIC BASE METAL SHALL BE COATED WITH PRIME WESTERN SPELTER OR EQUAL.
4. ALUMINUM COATED STEEL FABRIC BASE METAL SHALL BE COATED WITH ALUMINUM ALLOY.
5. LINE POSTS SHALL BE 2½" O.D. END OR CORNER POSTS SHALL BE 3" O.D.
6. THE CONTRACTOR IS RESPONSIBLE FOR SURFACE RESTORATION ONCE THE FENCE IS REMOVED.
7. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE TEMPORARY CONSTRUCTION FENCE AT THE CONCLUSION OF THE PROJECT.



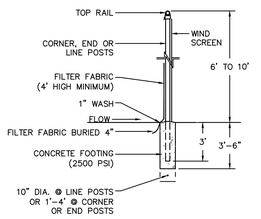
BALLAST BASE

TEMPORARY CONSTRUCTION CHAIN LINK FENCE WITH BALLAST BASE

NOT TO SCALE



ELEVATION

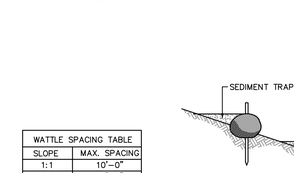


SECTION

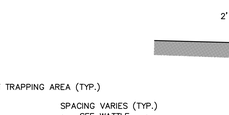
1. CHAINLINK FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
2. FILTER FABRIC SHALL BE FASTENED SECURELY TO CHAINLINK FENCE WITH TIES SPACED HORIZONTALLY 24" AS THE TOP AND MIDSECTION.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6"
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN SEDIMENT BUILD-UP REACHES 50% OF THE HEIGHT OF THE FILTER FABRIC.
5. MAINTENANCE OF SILT FENCE SHALL BE RECORDED TO IN THE SWPPP

EROSION CONTROL BARRIER SUPER SILT FENCE

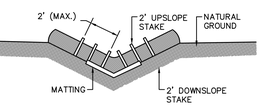
NOT TO SCALE



PLAN VIEW



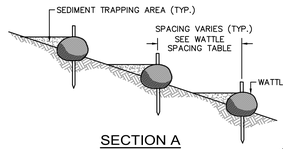
TYPICAL SECTION WATTLE DETAIL



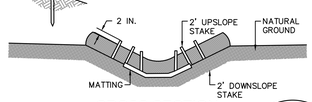
ISOMETRIC VIEW

CROSS SECTION VEE DITCH

WATTLE SPACING TABLE	
SLOPE	MAX. SPACING
1:1	10'-0"
2:1	20'-0"
3:1	30'-0"
4:1	40'-0"



SECTION A

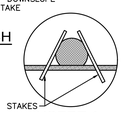


CROSS SECTION TRAPEZOIDAL DITCH

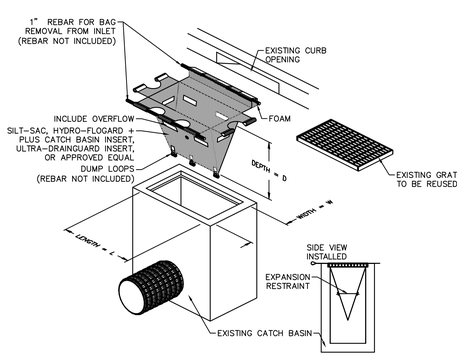
WATTLE SLOPE PROTECTION NOTES:

1. SECURELY KNOT EACH END OF WATTLE, ABUT ADJACENT WATTLES TIGHTLY, END TO END, WITHOUT OVERLAPPING THE ENDS.
2. PILOT HOLES MAY BE DRIVEN THROUGH THE WATTLES AND INTO THE SOIL WHEN SOIL CONDITIONS REQUIRE
3. WATTLES SHALL BE INSPECTED REGULARLY, AND IMMEDIATELY AFTER A RAINFALL PRODUCES RUNOFF, TO ENSURE THEY REMAIN THOROUGHLY ENTRENCHED AND IN CONTACT WITH THE SOIL.
4. ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

TYPES OF WATTLES
- COIR (COCONUT FIBER)
- COMPOST
- STRAW



INSERT A



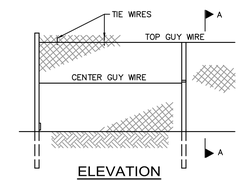
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS SHEET, OVERLAND OR CONCENTRATED FLOWS (NOT GREATER THAN 1 CFS). THE METHOD CAN DRAIN FLAT AREA TO STEEP SLOPES. INLET CAPACITY WILL BE DECREASED WITH THIS METHOD AND THE CONTRACTOR SHALL EXPECT PONDING DURING HIGH FLOW EVENTS.

INLET PROTECTION CATCH BASIN W/ SILTATION SACK

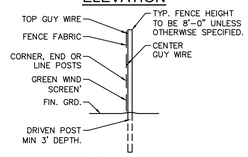
NOT TO SCALE

EROSION CONTROL BARRIER WATTLES - STEEP SLOPE PROTECTION

NOT TO SCALE



ELEVATION



SECTION A-A

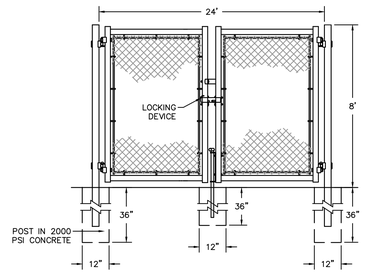
CONSTRUCTION FENCE AND GATE NOTES

1. FABRIC SHALL BE 0.148" WIRE, WOVEN INTO APPROXIMATELY 2" DIAMOND MESH.
2. THE FENCE FABRIC SHALL BE ZINC COATED STEEL OR ALUMINUM COATED STEEL.
3. FENCE POSTS SHALL RECEIVE THE SAME COATING AND TREATMENT AS THE FENCE FABRIC (DESCRIBED ABOVE).
4. THE CONTRACTOR SHALL ADD A GREEN WIND SCREEN
5. LINE POSTS SHALL BE 2½" O.D. END OR CORNER POSTS SHALL BE 3" O.D.
6. THE CONTRACTOR IS RESPONSIBLE FOR SURFACE RESTORATION ONCE THE FENCE IS REMOVED.
7. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE TEMPORARY CONSTRUCTION FENCE AT THE CONCLUSION OF THE PROJECT.

CHAIN LINK CONSTRUCTION FENCE

NOT TO SCALE

GATE PLAN

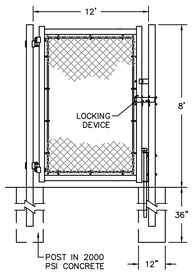


DOUBLE GATE ELEVATION

24' WIDE DOUBLE GATE

NOT TO SCALE

GATE PLAN



SINGLE GATE ELEVATION

12' WIDE EMERGENCY GATE

NOT TO SCALE

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd, Wakefield, MA 01880

Nitsch Engineering
www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

©COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

60% CONSTRUCTION DOCUMENT COST ESTIMATING SET

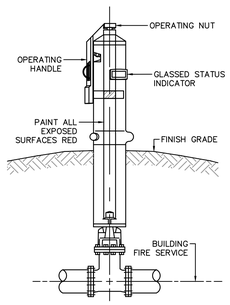
NOVEMBER 21, 2022

CIVIL SITE DETAILS I

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: NOVEMBER 21, 2022

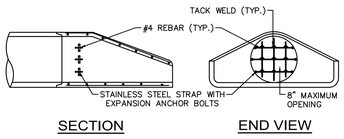
C-600

LAST SAVED: 11/14/2022 3:53 PM



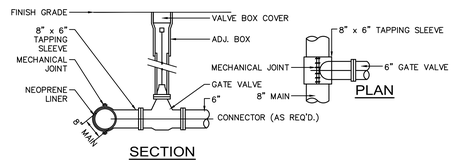
POST INDICATOR VALVE DETAIL

NOT TO SCALE



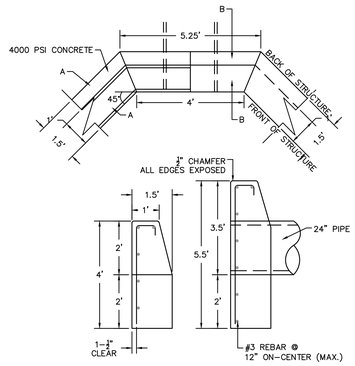
CONCRETE FLARED END SECTION WITH SAFETY GRATE

NOT TO SCALE



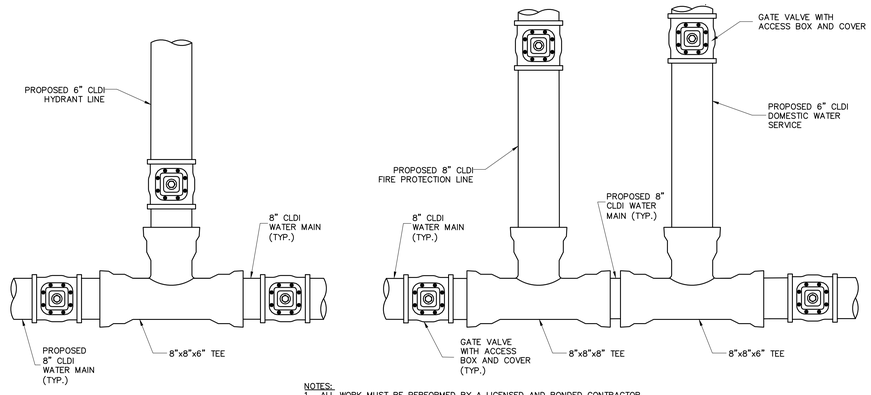
TAPPING SLEEVE, VALVE & BOX DETAIL

NOT TO SCALE



HEADWALL DETAIL

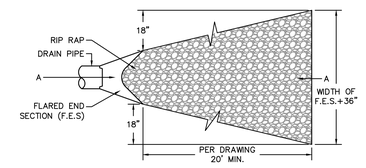
NOT TO SCALE

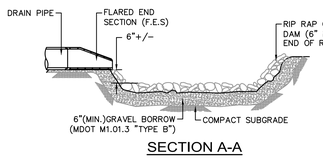


NOTES:
1. ALL WORK MUST BE PERFORMED BY A LICENSED AND BONDED CONTRACTOR.
2. IF THIS PROCEDURE WILL INVOLVE A MAIN LINE SHUT DOWN, THE CONTRACTOR WILL COORDINATE WITH THE WAKEFIELD DPW.
3. 48-HOUR PRIOR WRITTEN NOTIFICATION OF ALL AFFECTED CUSTOMERS MUST BE PERFORMED BY THE CONTRACTOR.
4. ALL WORK MUST BE INSPECTED BY WAKEFIELD DPW INSPECTOR OR DESIGNEE PRIOR TO BACKFILLING.

DOMESTIC/FIRE/HYDRANT WATER PIPE CONNECTIONS TO PROPOSED 8" WATER MAIN DETAIL

NOT TO SCALE

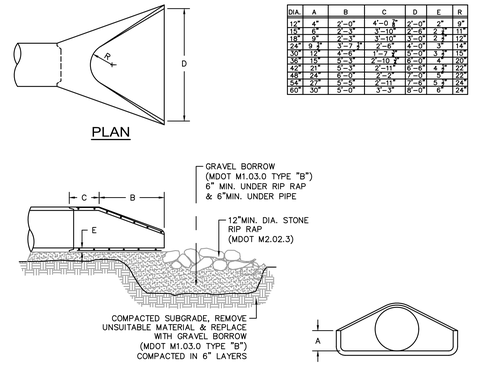




NOTE:
RIP RAP SHALL BE DUMPED AND MACHINE GRADED (HAND GRADE AS NEEDED)

RIP RAP DETAIL

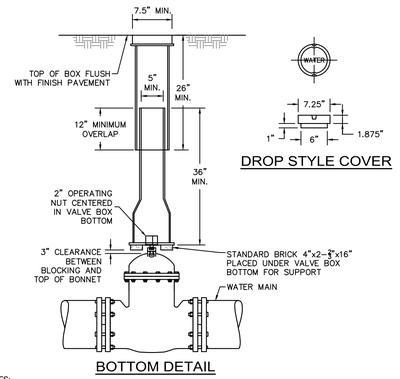
NOT TO SCALE



DIA.	A	B	C	D	E	R
12"	4"	2'-0"	4'-0 ½"	2'-0"	2"	9"
15"	6"	2'-3"	3'-10"	2'-6"	2 ½"	11"
18"	9"	2'-3"	3'-10"	3'-0"	2 ½"	12"
24"	9 ½"	3'-7 ½"	4'-0"	4'-0"	3"	14"
30"	12"	4'-0"	4'-3"	5'-0"	3 ½"	15"
36"	15"	5'-3"	4'-10 ½"	6'-0"	4"	20"
42"	21"	5'-3"	5'-1"	6'-6"	4 ½"	22"
48"	24"	6'-0"	5'-2"	7'-0"	5"	22"
54"	27"	5'-3"	5'-11"	7'-6"	5 ½"	24"
60"	30"	5'-0"	5'-3"	8'-0"	6"	24"

PRECAST CONCRETE FLARED END SECTION

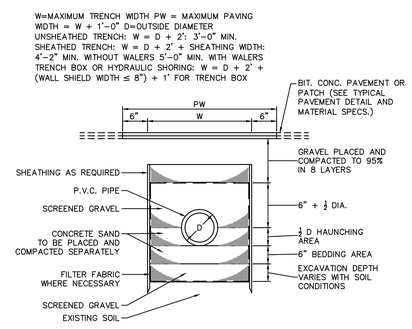
NOT TO SCALE



NOTES:
1. ALL WATER MAINS SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
2. COVER MUST BE MARKED "WATER".

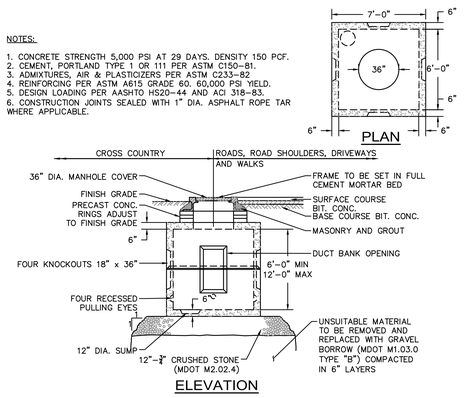
GATE VALVE BOX DETAIL

NOT TO SCALE



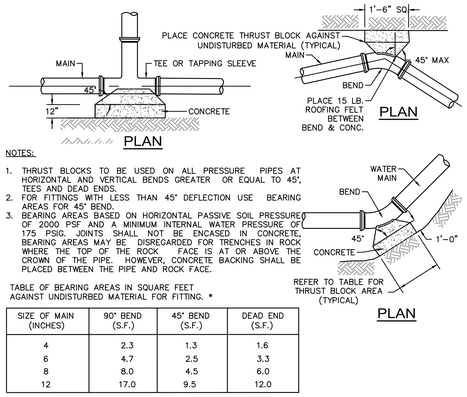
PVC PIPE TRENCH DETAIL

NOT TO SCALE



ELECTRICAL MANHOLE DETAIL

NOT TO SCALE



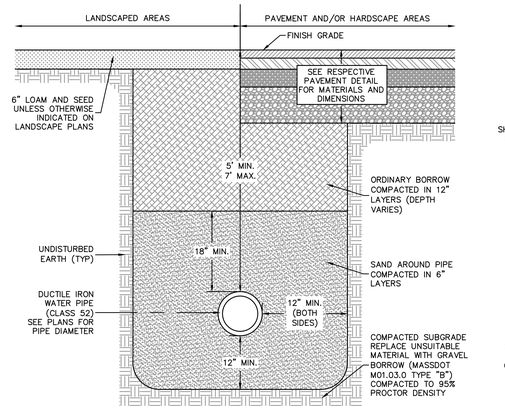
NOTES:
1. THRUST BLOCKS TO BE USED ON ALL PRESSURE PIPES AT HORIZONTAL AND VERTICAL BENDS GREATER OR EQUAL TO 45°, TEES AND DEAD ENDS.
2. FOR FITTINGS WITH LESS THAN 45° DEFLECTION USE BEARING AREAS FOR 45° BEND.
3. BEARING AREAS BASED ON HORIZONTAL PASSIVE SOIL PRESSURE OF 2000 PSF AND A MINIMUM INTERNAL WATER PRESSURE OF 175 PSIG. JOINTS SHALL NOT BE ENCASED IN CONCRETE. BEARING AREAS MAY BE DISREGARDED FOR TRENCHES IN ROCK WHERE THE TOP OF THE ROCK FACE IS AT OR ABOVE THE CROWN OF THE PIPE. HOWEVER, CONCRETE BACKING SHALL BE PLACED BETWEEN THE PIPE AND ROCK FACE.

TABLE OF BEARING AREAS IN SQUARE FEET AGAINST UNDISTURBED MATERIAL FOR FITTING. *

SIZE OF MAIN (INCHES)	90° BEND (S.F.)	45° BEND (S.F.)	DEAD END (S.F.)
4	2.3	1.3	1.6
6	4.7	2.5	3.3
8	8.0	4.5	6.0
12	17.0	9.5	12.0

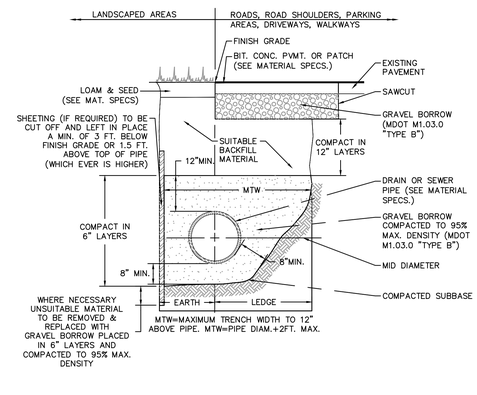
THRUST BLOCK DETAILS

NOT TO SCALE



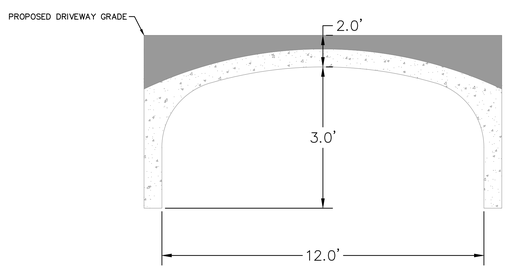
WATER TRENCH DETAIL

NOT TO SCALE



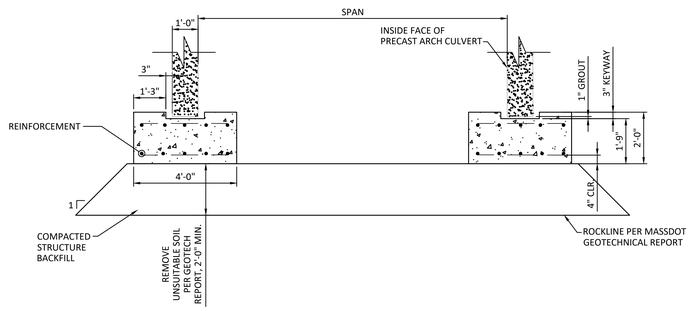
STANDARD TRENCH DETAIL FOR UTILITY PIPE

NOT TO SCALE



12' PRECAST CULVERT

NOT TO SCALE



12' PRECAST CULVERT - FOUNDATION DETAIL

NOT TO SCALE

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering
www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472
- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS
NITSCH PROJECT No. 13872

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

60% CONSTRUCTION DOCUMENT COST ESTIMATING SET

NOVEMBER 21, 2022

CIVIL SITE DETAILS III

Scale: AS NOTED
Job No.: 13872
Drawn By: WIL
Date: NOVEMBER 21, 2022

C-602

LAST SAVED: 11/15/2022 3:01 PM
I:\MEL\DOCS\PROJ\2020\13872.001 HSFP STDNTS\CAD\CSP\CSP_CRTV.DWG

Appendix B – Copy of 2022 CGP

(Note: The 2022 CGP is available at https://www.epa.gov/npdes/2022-construction-general-permit-cgp)

Appendix C – Copy of NOI and EPA Authorization Email

NPDES FORM 3510-9	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF INTENT (NOI) FOR THE 2022 NPDES CONSTRUCTION PERMIT	FORM Approved OMB No. 2040-0305

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in Section III of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section II of this form. Submission of this NOI also constitutes notice that the operator identified in Section III of this form meets the eligibility requirements of Part 1.1 CGP for the project identified in Section IV of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in Part 8 of the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage. Refer to the instructions at the end of this form.

Permit Information

NPDES ID: MAR1004ND

State/Territory to which your project/site is discharging: MA

Is your project/site located on federally recognized Indian Country lands? No

Are you requesting coverage under this NOI as a *"Federal Operator"* or a *"Federal Facility"* as defined in Appendix A (https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-a-definitions.pdf)? No

Have stormwater discharges from your current construction site been covered previously under an NPDES permit? No

Will you use polymers, flocculants, or other treatment chemicals at your construction site? No

Has a Stormwater Pollution Prevention Plan (SWPPP) been prepared in advance of filling this NOI, as required? Yes

Are you able to demonstrate that you meet one of the criteria listed in Appendix D (https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-d-endangered-species-protection.pdf) with respect to protection of threatened or endangered species listed under the Endangered Species Act (ESA) and federally designated critical habitat? Yes

Have you completed the screening process in Appendix E (https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-e-historic-properties.pdf) relating to the protection of historic properties? Yes

Indicating "Yes" below, I confirm that I understand that CGP only authorized the allowable stormwater discharges in Part 1.2.1 and the allowable non-stormwater discharges listed in Part 1.2.2. Any discharges not expressly authorized in this permit cannot become authorized or shielded from liability under CWA section 402(k) by disclosure to EPA, state or local authorities after issuance of this permit via any means, Including the Notice of Intent (NOI) to be covered by the permit, the Stormwater Pollution Prevention Plan (SWPPP), during an Inspection, etc. If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.2.1 and 1.2.2 will be discharged, they must be covered under another NPDES permit.
Yes

Operator Information

Operator Information

Operator Name: Gilbane Building Company

Operator Mailing Address:
Address Line 1: 10 Channel Center Street

Address Line 2:

City: Boston

ZIP/Postal Code: 02210

State: MA

County or Similar Division: Suffolk

Country: US

Operator Point of Contact Information

First Name Middle Initial Last Name: Neil _ Benner

Title: Project Executive

Phone: 617-478-3300

Ext.:

Email: hbenner@gilbaneco.com

NOI Preparer Information

☑ **This NOI is being prepared by someone other than the certifier.**

First Name Middle Initial Last Name: Mark _ Winslow

Organization: GILBANE BUILDING COMPANY

Phone: (401) 456-5506

Ext.:

Email: mwinslow@gilbaneco.com

Project/Site Information

Project/Site Name: Northeast Metropolitan Regional Vocational High School

Project/Site Address

Address Line 1: 100 Hemlock Road

Address Line 2:

City: Wakefield

ZIP/Postal Code: 01880

State: MA

County or Similar Division: Essex

Latitude/Longitude: 42.492061°N, 71.04559°W

Latitude/Longitude Data Source: MassMapper

Horizontal Reference Datum: WGS 84

Project Start Date: 08/01/2023

Project End Date: 05/31/2027

Estimated Area to be Disturbed: 15

Types of Construction Sites:
- Institutional

Will there be demolition of any structure built or renovated before January 1, 1980? Yes

➔ **Do any of the structures being demolished have at least 10,000 square feet of floor space?** Yes

Will you be discharging dewatering water from your site? No

Was the pre-development land use used for agriculture? No

Are there other operators that are covered under this permit for the same project site? No

Have earth-disturbing activities commenced on your project/site? No

Is your project/site located on federally recognized Indian Country lands? No

Is your project/site located on a property of religious or cultural significance to an Indian tribe? No

Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? Yes

Are there any waters of the U.S. within 50 feet of your project's earth disturbances? Yes

Are any of the waters of the U.S. to which you discharge designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) or as a Tier 3 water (Outstanding National Resource Water)? See Resources, Tools and Templates (https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates)
No

001: Lower Pond

Latitude/Longitude:

Tier Designation: N/A

Is this receiving water impaired (on the CWA 303(d) list)? No

Has a TMDL been completed for this receiving waterbody? No

002: Upper Pond

Latitude/Longitude:

Tier Designation: N/A

Is this receiving water impaired (on the CWA 303(d) list)? No

Has a TMDL been completed for this receiving waterbody? No

003: Saugus River

Latitude/Longitude:

Tier Designation: N/A

Is this receiving water impaired (on the CWA 303(d) list)? Yes

Impaired Pollutants:

- E. coli
- Coliform, fecal general

Has a TMDL been completed for this receiving waterbody? Yes

TMDL ID: 50120 **Name:** North Coastal Pathogen

TMDL Pollutants:

- E. coli

004: Mill River

Latitude/Longitude:

Tier Designation: N/A

Is this receiving water impaired (on the CWA 303(d) list)? Yes

Impaired Pollutants:

- E. coli
- Coliform, fecal general
- Turbidity
- Oxygen demand, dissolved

Has a TMDL been completed for this receiving waterbody? Yes

TMDL ID: 501200 **Name:** North Coastal Pathogen

TMDL Pollutants:

- E. coli
- E. coli

Stormwater Pollution Prevention Plan (SWPPP)

Will all required personnel, including those conducting inspections at your site, meet the training requirements in Part 6 of this permit? Yes

First Name **Middle Initial** **Last Name:** Neil _ Benner

Title: Project Executive

Phone: 617-478-3300 **Ext.:**

Email: hbenner@gilbaneco.com

Endangered Species Protection Worksheet: Criterion D

Determine ESA Eligibility Criterion

Are your discharges and discharge-related activities already addressed in another operator's valid certification of eligibility for your "action area" under the current 2022 CGP? No

Has consultation between you, a Federal Agency, and the USFWS and/or the NMFS under section 7 of the Endangered Species Act (ESA) concluded? No

Are your construction activities the subject of a permit under section 10 of the ESA by the USFWS and/or NMFS, and this authorization addresses the effects of your site's discharges and discharge-related activities on ESA-listed species and/or designated critical habitat? No

You must determine whether species listed as either threatened or endangered, or their critical habitat(s) are located in your site's action area (i.e., all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action, including areas beyond the footprint of the site that are likely to be affected by stormwater discharges, discharge-related activities, and authorized non-stormwater discharges).

Determine your Action Area

You must consider the following in determining the action area for your site, and **confirm that all the following are true**:

➜ **In determining my "action area", I have considered that discharges of pollutants into downstream areas can expand the action area well beyond the footprint of my site and the discharge point(s). I have taken into account the controls I will be implementing to minimize pollutants and the receiving waterbody characteristics (e.g., perennial, intermittent, ephemeral) in determining the extent of physical, chemical, and/or biotic effects of the discharges. I confirm that all receiving waterbodies that could receive pollutants from my site are included in my action area.**

True

➜ **In determining my "action area", I have considered that discharge-related activities must also be accounted for in determining my action area. I understand that discharge-related activities are any activities that cause, contribute to, or result in stormwater and authorized non-stormwater point source discharges, and measures such as the siting, construction timing, and operation of stormwater controls to control, reduce, or prevent pollutants from being discharged. I understand that any new or modified stormwater controls that will have noise or other similar effects, and any disturbances associated with construction of controls, are part of my action area.**

True

Determine is ESA-listed species and/or critical habitat are in your site action area.

ESA-listed species and designated critical habitat are under the purview of the NMFS and the USFWS, and in many cases, you will need to acquire species and critical habitat lists from both federal agencies.

National Marine Fisheries Service (NMFS)

For NMFS species and designated critical habitat information, use the following webpage::

- https://www.epa.gov/npdes/construction-general-permit-cgp-threatened-and-endangered-species-eligibility (https://www.epa.gov/npdes/construction-general-permit-cgp-threatened-and-endangered-species-eligibility)

I have checked the webpage listed above and confirmed that:

- ◉ There are no NMFS-protected species and/or designated critical habitat in my action area.
- ○ There are NMFS-protected species and/or designated critical habitat in my action area.

U.S. Fish and Wildlife Service (USFWS)

For USFWS species and critical habitat information, use the following webpage:

- https://www.epa.gov/npdes/construction-general-permit-cgp-threatened-and-endangered-species-eligibility (https://www.epa.gov/npdes/construction-general-permit-cgp-threatened-and-endangered-species-eligibility)

I have checked the webpage listed above and confirmed that:

- ○ There are no FWS-protected species and/or designated critical habitat in my action area.
- ◉ There are FWS-protected species and/or designated critical habitat in my action area.

For FWS species, include the full printout from your IPaC query/Official Species List.

Name	Uploaded Date	Size
NEMT_Species List_ New England Ecological Services Field Office_4.13.23.pdf (attachment/1694292)	07/07/2023	244.97 KB

You may be eligible under **Criterion C**. You must assess whether your discharges or discharge-related activities are likely to result in short- or long-term adverse effects to ESA-listed threatened or endangered species or designated critical habitat. In order to make a determination of your site's likelihood of short- or long-term adverse effects, you must complete the Criterion C Eligibility fields below.

Discharges not likely to result in any short- or long-term adverse effects to ESA-listed species and/or designated critical habitat. False

If you make a preliminary decision in that short- or long-term adverse effects from your construction activity's discharges or discharge-related activities are likely to occur, you can still receive coverage under eligibility **Criterion C** of the CGP if appropriate measures are undertaken to avoid or eliminate the likelihood of short- or long-term adverse effects prior to applying for CGP coverage.

These measures may involve relatively simple changes to construction activities such as re-routing a stormwater discharge to bypass an area where species are located, relocating stormwater controls, or by modifying the "footprint" of the construction activity. If you are unable to ascertain which measures to implement to avoid the likelihood of short- or long-term adverse effects, you must coordinate with USFWS and/or NMFS and should respond "False" to the question below.

I am able to install and implement appropriate measures to avoid the likelihood of short- or long-term adverse effects. False

You may be eligible for **Criterion D**. Since you were unable to determine which measures to implement to avoid the likelihood of adverse effects, you must contact USFWS and/or NMFS. You may still be eligible for CGP coverage if likely adverse effects can be addressed. If you are not eligible for Criterion D you will need to contact your EPA Regional office to apply for an individual permit.

Coordination with USFWS and/or NMFS has successfully concluded. True

You are eligible under **Criterion D**.

Identify the federal action agency(ies) involved:

☑ **U.S. Fish and Wildlife Service**

☐ **National Marine Fisheries Service**

Identify the field and/or regional office(s) that provided the coordination:

David Simmons
Supervisor, Endangered Species & FERC/Hydro Programs
U.S. Fish and Wildlife Service, New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301

Provide the date the coordination concluded: 07/05/2023

Attach copies of any letters or other correspondence with USFWS or NMFS documenting concurrence.

Name	Uploaded Date	Size
NEMT_MA Consistency Letter_ Northern Long-eared Bat Rangewide Determination Key 2023-06-01.pdf (attachment/1694291)	07/07/2023	315.29 KB
NEMT_USFWS Biological Opinion Letter_7.5.23.pdf (attachment/1694289)	07/07/2023	335.07 KB
NEMT_emails associated with FWS adn EPA.pdf (attachment/1694290)	07/07/2023	195.02 KB
NEMT_App B Biological Assessment Form Interim Consultation Framework_6.8.23.GBC.sig.pdf (attachment/1694288)	07/07/2023	380.84 KB

Have you provided documentation in your SWPPP supporting your eligibility under Criterion D? Yes

Historic Preservation

Are you installing any stormwater controls as described in Appendix E (https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-e-historic-properties.pdf) that require subsurface earth disturbances? (Appendix E (https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-e-historic-properties.pdf), Step 1) Yes

➜ **Have prior surveys or evaluations conducted on the site already determined historic properties do not exist, or that prior disturbances have precluded the existence of historic properties? (Appendix E (https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-e-historic-properties.pdf), Step 2)**: Yes

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Signing an electronic document on behalf of another person is subject to criminal, civil, administrative, or other lawful action.

Certified By: Neil Benner

Certifier Title: Project Executive

Certifier Email: hbenner@gilbaneco.com

Certified On: 07/07/2023 6:20 PM ET

Appendix D – Copy of Site and Dewatering Inspection Forms

Project Name: _____
NPDES ID Number: _____

Section A – General Information (If necessary, complete additional inspection reports for each separate inspection location.)	
Inspector Information	
Inspector Name:	**Title:**
Company Name:	**Email:**
Address:	**Phone Number:**
Inspection Details	
Inspection Date:	**Inspection Location:**
Inspection Start Time:	**Inspection End Time:**
Current Phase of Construction:	**Weather Conditions During Inspection:**

Did you determine that any portion of your site was unsafe for inspection per CGP Part 4.5? ☐ Yes ☐ No

If "Yes," provide the following information:

Location of unsafe conditions:

The conditions that prevented you inspecting this location:

Indicate the required inspection frequency: (Check all that apply. You may be subject to different inspection frequencies in different areas of the site.)

Standard Frequency (CGP Part 4.2):

☐ At least once every 7 calendar days; **OR**

☐ Once every 14 calendar days *and* within 24 hours of the occurrence of either:

- A storm event that produces 0.25 inches or more of rain within a 24-hour period, or
- A snowmelt discharge from a storm event that produces 3.25 inches or more of snow within a 24-hour period

Increased Frequency (CGP Part 4.3.1) (If site discharges to sediment or nutrient-impaired waters or to waters designated as Tier 2, Tier 2.5, or Tier 3):

☐ Once every 7 calendar days *and* within 24 hours of the occurrence of either:

- A storm event that produces 0.25 inches or more of rain within a 24-hour period, or
- A snowmelt discharge from a storm event that produces 3.25 inches or more of snow within a 24-hour period

Reduced Frequency (CGP Part 4.4):

☐ For stabilized areas: Twice during first month, no more than 14 calendar days apart; then once per month after first month until permit coverage is terminated

☐ For stabilized areas on "linear construction sites": Twice during first month, no more than 14 calendar days apart; then once more within 24 hours of the occurrence of either:

- A storm event that produces 0.25 inches or more of rain within a 24-hour period, or
- A snowmelt discharge from a storm event that produces 3.25 inches or more of snow within a 24-hour period

☐ For arid, semi-arid, or drought-stricken areas during seasonally dry periods or during drought: Once per month and within 24 hours of the occurrence of either:

- A storm event that produces 0.25 inches or more of rain within a 24-hour period, or
- A snowmelt discharge from a storm event that produces 3.25 inches or more of snow within a 24-hour period

☐ For frozen conditions where construction activities are being conducted: Once per month

Was this inspection triggered by a storm event producing 0.25 inches or more of rain within a 24-hour period? ☐ Yes ☐ No

If "Yes," how did you determine whether the storm produced 0.25 inches or more of rain?

☐ On-site rain gauge
☐ Weather station representative of site.
Weather station location:

Total rainfall amount that triggered the inspection (inches):

Was this inspection triggered by a snowmelt discharge from a storm event producing 3.25 inches or more of snow within a 24-hour period? ☐ Yes ☐ No

If "Yes," how did you determine whether the storm produced 3.25 inches or more of snow?

☐ On-site rain gauge
☐ Weather station representative of site.
Weather station location:

Total snowfall amount that triggered the inspection (inches):

Project Name: _____
NPDES ID Number: _____

Section B – Condition and Effectiveness of Erosion and Sediment (E&S) Controls (CGP Part 2.2) (Insert additional rows if needed)					
Type and Location of E&S Control	**Conditions Requiring Routine Maintenance?[1]**	**If "Yes," How Many Times (Including This Occurrence) Has This Condition Been Identified?**	**Conditions Requiring Corrective Action?[2, 3]**	**Date on Which Condition First Observed (If Applicable)?**	**Description of Conditions Observed**
1.	☐ Yes ☐ No		☐ Yes ☐ No		
2.	☐ Yes ☐ No		☐ Yes ☐ No		
3.	☐ Yes ☐ No		☐ Yes ☐ No		
4.	☐ Yes ☐ No		☐ Yes ☐ No		
5.	☐ Yes ☐ No		☐ Yes ☐ No		
If the same routine maintenance was found to be necessary three or more times for the same control at the same location (including this occurrence), follow the corrective action requirements and record the required information in your corrective action log, or describe here why you believe the specific condition should still be addressed as routine maintenance:					

[1] Routine maintenance includes minor repairs or other upkeep performed to ensure that the site's stormwater controls remain in effective operating condition, not including significant repairs or the need to install a new or replacement control. Routine maintenance is also required for specific conditions: (1) for perimeter controls, whenever sediment has accumulated to half or more the above-ground height of the control (CGP Part 2.2.3.c.i); (2) where sediment has been tracked-out from the site onto paved roads, sidewalks, or other paved areas (CGP Part 2.2.4.d); (3) for inlet protection measures, when sediment accumulates, the filter becomes clogged, and/or performance is compromised (CGP Part 2.2.10.b); and (4) for sediment basins, as necessary to maintain at least half of the design capacity of the basin (CGP Part 2.2.12.f)

[2] Corrective actions are triggered only for specific conditions (CGP Part 5.1):

1. A stormwater control needs a significant repair or a new or replacement control is needed, or, in accordance with Part 2.1.4.c, you find it necessary to repeatedly (i.e., three (3) or more times) conduct the same routine maintenance fix to the same control at the same location (unless you document in your inspection report under Part 4.7.1.c that the specific reoccurrence of this same problem should still be addressed as a routine maintenance fix under 2.1.4); or
2. A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or
3. Your discharges are not meeting applicable water quality standards; or
4. A prohibited discharge has occurred (see CGP Part 1.3); or
5. During the discharge from site dewatering activities:
   a. The weekly average of your turbidity monitoring results exceeds the 50 NTU benchmark (or alternate benchmark if approved by EPA pursuant to Part 3.3.2.b); or
   b. You observe or you are informed by EPA, State, or local authorities of the presence of the conditions specified in Part 4.6.3.e.

[3] If a condition on your site requires a corrective action, you must also fill out a corrective action log found at https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates. See CGP Part 5.4 for more information.

Section C – Condition and Effectiveness of Pollution Prevention (P2) Practices and Controls (CGP Part 2.3) (Insert additional rows if needed)					
Type and Location of P2 Practices and Controls	**Conditions Requiring Routine Maintenance?[1]**	**If "Yes," How Many Times (Including This Occurrence) Has This Condition Been Identified?**	**Conditions Requiring Corrective Action?[2, 3]**	**Date on Which Condition First Observed (If Applicable)?**	**Description of Conditions Observed**
1.	☐ Yes ☐ No		☐ Yes ☐ No		
2.	☐ Yes ☐ No		☐ Yes ☐ No		
3.	☐ Yes ☐ No		☐ Yes ☐ No		
4.	☐ Yes ☐ No		☐ Yes ☐ No		
5.	☐ Yes ☐ No		☐ Yes ☐ No		
If the same routine maintenance was found to be necessary three or more times for the same control at the same location (including this occurrence), follow the corrective action requirements and record the required information in your corrective action log, or describe here why you believe the specific condition should still be addressed as routine maintenance:					

Section D – Stabilization of Exposed Soil (CGP Part 2.2.14) (Insert additional rows if needed)					
Specific Location That Has Been or Will Be Stabilized	**Stabilization Method and Applicable Deadline**	**Stabilization Initiated?**	**Final Stabilization Criteria Met?**	**Final Stabilization Photos Taken?**	**Notes**
1.		☐ Yes ☐ No If "Yes," date initiated:	☐ Yes ☐ No If "Yes," date criteria met:	☐ Yes ☐ No	
2.		☐ Yes ☐ No If "Yes," date initiated:	☐ Yes ☐ No If "Yes," date criteria met:	☐ Yes ☐ No	
3.		☐ Yes ☐ No If "Yes," date initiated:	☐ Yes ☐ No If "Yes," date criteria met:	☐ Yes ☐ No	
4.		☐ Yes ☐ No If "Yes," date initiated:	☐ Yes ☐ No If "Yes," date criteria met:	☐ Yes ☐ No	
5.		☐ Yes ☐ No If "Yes," date initiated:	☐ Yes ☐ No If "Yes," date criteria met:	☐ Yes ☐ No	

Section E – Description of Discharges (CGP Part 4.6.2)

(Insert additional rows if needed)

Was a discharge (not including dewatering) occurring from any part of your site at the time of the inspection?[4] ☐ Yes ☐ No

If "Yes," for each point of discharge, document the following:

- The visual quality of the discharge.
- The characteristics of the discharge, including color; odor; floating, settled, or suspended solids; foam; oil sheen; and other indicators of stormwater pollutants.
- Signs of the above pollutant characteristics that are visible from your site and attributable to your discharge in receiving waters or in other constructed or natural site drainage features.

Discharge Location	Observations
1.	
2.	
3.	
4.	
5.	

[4] If a dewatering discharge was occurring, you must conduct a dewatering inspection pursuant to CGP Part 4.3.2 and complete a separate dewatering inspection report.

Section F – Signature and Certification (CGP Part 4.7.2)	
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."	
MANDATORY: Signature of Operator or "Duly Authorized Representative:"	
Signature:	**Date:**
Printed Name:	**Affiliation:**
OPTIONAL: Signature of Contractor or Subcontractor	
Signature:	**Date:**
Printed Name:	**Affiliation:**

General Tips for Using This Template

This Site Inspection Report Template is provided to assist you in preparing site inspection reports for EPA's 2022 Construction General Permit (CGP). If you are covered under the 2022 CGP, you can use this template to create a site inspection report form that is customized to the specific circumstances of your site and that complies with the minimum reporting requirements of Part 4.7 of the permit. Note that the use of this form is optional; you may use your own site inspection report form provided it includes the minimum information required in Part 4.7 of the CGP.

This template does not address the CGP's inspection reporting requirements related to dewatering activities. A separate inspection template has been developed specifically for dewatering activities and is available at https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates.

Keep in mind that this document is a template and not an "off-the-shelf" inspection report that is ready to use without some modification. You must first customize this form to include the specifics of your project in order for it to be useable for your inspection reports. Once you have entered all of your site-specific information into the blank fields, you may use this form to complete inspection reports.

The following tips for using this template will help you ensure that the minimum permit requirements are met:

- **Review the inspection requirements.** Before you start developing your inspection report form, read the CGP's Part 4 inspection requirements. This will ensure that you have a working understanding of the permit's underlying inspection requirements.
- **Complete all required blank fields.** Fill out all blank fields. Only by filling out all fields will the template be compliant with the requirements of the permit. (Note: Where you do not need the number of rows provided in the template form for your inspection, you may delete these or cross them off as you see fit. Or, if you need more space to document your findings, you may insert additional rows in the electronic version of this form or use the bottom of the page in the field version of this form.)
- **Use your site map to document inspection findings.** In several places in the template, you are directed to specify the location of certain features of your site, including where stormwater controls are installed and where you will be stabilizing exposed soil. You are also asked to fill in location information for unsafe conditions and the locations of any discharges occurring during your inspections. Where you are asked for location information, EPA encourages you to reference the point on your SWPPP site map that corresponds to the requested location on the inspection form. Using the site map as a tool in this way will help you conduct efficient inspections, will assist you in evaluating problems found, and will ensure proper documentation.
- **Complete the inspection report within 24 hours of completing a site inspection.** You must complete an inspection report in accordance with Part 4.7.1 of the CGP.
- **Include the inspection form with your SWPPP.** Once your form is complete, make sure to include a copy of the inspection form in your SWPPP in accordance with Part 7.2.7.e of the CGP.
- **Retain copies of all inspection reports with your records.** You must also retain in your records copies of all inspection reports in accordance with the requirements in Part 4.7.3 of the CGP. These reports must be retained for at least 3 years from the date your permit coverage expires or is terminated in accordance with the requirements in Part 4.7.4 of the CGP.

Instructions for Section A

Inspector Name

Enter the name of the person that conducted the inspection. Include the person's contact information (title, affiliated company name, address, email, and phone number).

Inspection Date and Time

Enter the date you performed the inspection and the time you started and ended the inspection.

Weather Conditions During Inspection

Enter the weather conditions occurring during the inspection, e.g., sunny, overcast, light rain, heavy rain, snowing, icy, windy.

Current Phase of Construction
If this project is being completed in more than one phase, indicate which phase it is currently in.

Inspection Location
If your project has multiple locations where you conduct separate inspections, specify the location where this inspection is being conducted. If only one inspection is conducted for your entire project, enter "Entire Site." If necessary, complete additional inspection report forms for each separate inspection location.

Unsafe Conditions for Inspection (CGP Part 4.5.7)
Inspections are not required where a portion of the site or the entire site is subject to unsafe conditions. These conditions should not regularly occur and should not be consistently present on a site. Generally, unsafe conditions are those that render the site (or a portion of it) inaccessible or that would pose a significant probability of injury to applicable personnel. Examples could include severe storm or flood conditions, high winds, and downed electrical wires.

If your site, or a portion of it, is affected by unsafe conditions during the time of your inspection, provide a description of the conditions that prevented you from conducting the inspection and what parts of the site were affected. If the entire site was considered unsafe, specify the location as "Entire Site."

Inspection Frequency
Check all the inspection frequencies that apply to your project. Note that you may be subject to different inspection frequencies in different areas of your site.

Inspection Triggered by a Storm Event
If you were required to conduct this inspection because of a storm event that produced 0.25 inches or more of rain within a 24-hour period, indicate whether you relied on an on-site rain gauge or a nearby weather station (and where the weather station is located). Also, specify the total amount of rainfall for this specific storm event.

If you were required to conduct this inspection because of a snowmelt discharge from a storm event that produced 3.25 inches or more of snow within a 24-hour period, then indicate whether you relied on an on-site measurement or a nearby weather station (and where the weather station is located). Also, specify the total amount of snowfall for this specific storm event.

Instructions for Section B

Type and Location of Erosion and Sediment (E&S) Controls
Provide a list of all erosion and sediment (E&S) controls that your SWPPP indicates will be installed and implemented at your site. This list must include at a minimum all E&S controls required by CGP Part 2.2. Include also any natural buffers established under CGP Part 2.2.1. Buffer requirements apply if your project's earth-disturbing activities will occur within 50 feet of a discharge to receiving water. You may group your E&S controls on your form if you have several of the same type of controls (e.g., you may group "Inlet Protection Measures," "Perimeter Controls," and "Stockpile Controls" together on one line), but if there are any problems with a specific control, you must separately identify the location of the control, whether routine maintenance or corrective action is necessary, and in the notes section you must describe the specifics about the problem you observed.

Conditions Requiring Routine Maintenance?
Answer "Yes" if the E&S control requires routine maintenance as defined in footnote 1 of this template. Note that in many cases, "Yes" answers are expected and indicate a project with an active operation and maintenance program. You should also answer "Yes" if work to fix the problem is still ongoing from the previous inspection, though necessary work must be initiated immediately and completed by the end of the next business day or within seven calendar days if documented in accordance with CGP Part 2.1.4.b.

If "Yes," How Many Times (Including this Occurrence) Has this Condition Been Identified?
Indicate how many times the routine maintenance has been required for the same control at the same location.

Conditions Requiring Corrective Action?
Answer "Yes" if you found any of the conditions listed in footnote 2 in this template to be present during your inspection (CGP Part 5.1). If you answer "Yes," you must take corrective action and complete a corrective action log, found at https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates. You should also answer "Yes" if work to fix the problem from a previous inspection is still ongoing, though the operator must comply with the corrective action deadlines in CGP Part 5.2.

Date on Which Condition First Observed (If Applicable)?
Provide the date on which the condition that triggered the need for routine maintenance or corrective action was first identified. If the condition was just discovered during this inspection, enter the inspection date. If the condition is a carryover from a previous inspection, enter the original date of the condition's discovery.

Description of Conditions Observed
For each E&S control and the area immediately surrounding it, describe whether the control is properly installed and whether it appears to be working to minimize sediment discharge. Indicate also whether a new or modified control is necessary to comply with the permit. Describe any problem condition(s) you observed such as the following:

1. Failure to install or to properly install a required E&S control
2. Damage or destruction to an E&S control caused by vehicles, equipment, or personnel, a storm event, or other event
3. Mud or sediment deposits found downslope from E&S controls, including in receiving waters, or on nearby streets, curbs, or open conveyance channels
4. Sediment tracked out onto paved areas by vehicles leaving construction site
5. Noticeable erosion or sedimentation at discharge outlets or at adjacent streambanks or channels
6. Erosion of the site's sloped areas (e.g., formation of rills or gullies)
7. E&S control is no longer working due to lack of maintenance
8. Other incidents of noncompliance

Describe also why you think the problem condition(s) occurred as well as actions (e.g., routine maintenance or corrective action) you will take or have taken to fix the problem.

For buffer areas, make note of whether they are marked off as required, whether there are signs of construction disturbance within the buffer, which is prohibited under the CGP, and whether there are visible signs of erosion resulting from discharges through the area.

If routine maintenance or corrective action is required, briefly note the reason. If routine maintenance or corrective action has been completed, make a note of the date it was completed and what was done. *If corrective action is required, note that you will need to complete a separate corrective action log describing the condition and your work to fix the problem*.

Routine Maintenance Need Has Been Found to be Necessary Three (3) or More Times for the Same Control at the Same Location (Including this Occurrence)
If routine maintenance has been required three (3) or more times for the same control at the same location, the permit requires (CGP Part 2.1.4.c) you to fix the problem using the corrective action procedures in CGP Part 5 or to document why you believe the reoccurring problem can be addressed as a routine maintenance fix. If you believe the problem can continue to be fixed as routine maintenance, describe why you believe the specific condition should still be addressed as routine maintenance.

Instructions for Section C

Type and Location of Pollution Prevention (P2) Practices and Controls
Provide a list of all pollution prevention (P2) practices and controls that are implemented at your site. This list must include all P2 practices and controls required by CGP Part 2.3 and those that are described in your SWPPP.

Conditions Requiring Routine Maintenance?
Answer "Yes" if the P2 practice or control requires routine maintenance as defined in footnote 1of this template. Note that in many cases, "Yes" answers are expected and indicate a project with an active operation and maintenance program. You should also answer "Yes" if work to fix the problem is still ongoing

from the previous inspection, though necessary work must be initiated immediately and completed by the end of the next business day or within seven calendar days if documented in accordance with CGP Part 2.1.4.b.

If "Yes," How Many Times (Including this Occurrence) Has this Condition Been Identified?
Indicate how many times the routine maintenance has been required for the same practice or control at the same location.

Conditions Requiring Corrective Action?
Answer "Yes" if you found any of the conditions listed in footnote 2 in this template to be present during your inspection (CGP Part 5.1). If you answer "Yes," you must take corrective action and complete a corrective action log, found at https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates. You should also answer "Yes" if work to fix the problem from a previous inspection is still ongoing, though the operator must comply with the corrective action deadlines in CGP Part 5.2.

Date on Which Condition First Observed (If Applicable)?
Provide the date on which the condition that triggered the need for maintenance or corrective action was first identified. If the condition was just discovered during this inspection, enter the inspection date. If the condition is a carryover from a previous inspection, enter the original date of the condition's discovery.

Description of Conditions Observed
For each P2 control and the area immediately surrounding it, describe whether the control is properly installed, and whether it appears to be working to minimize or eliminate pollutant discharges. Indicate also whether a new or modified control is necessary to comply with the permit. Describe any problem condition(s) you observed such as the following:

1. Failure to install or to properly install a required P2 control
2. Damage or destruction to a P2 control caused by vehicles, equipment, or personnel, or a storm event
3. Evidence of a spill, leak, or other type of pollutant discharge, or failure to have properly cleaned up a previous spill, leak, or other type of pollutant discharge
4. Spill response supplies are absent, insufficient, or not where they are supposed to be located
5. Improper storage, handling, or disposal of chemicals, building materials or products, fuels, or wastes
6. P2 control is no longer working due to lack of maintenance
7. Other incidents of noncompliance

Describe also why you think the problem condition(s) occurred as well as actions (e.g., routine maintenance or corrective action) you will take or have taken to fix the problem.

If routine maintenance or corrective action is required, briefly note the reason. If routine maintenance or corrective action has been completed, make a note of the date it was completed and what was done. *If corrective action is required, note that you will need to complete a separate corrective action log describing the condition and your work to fix the problem*.

Routine Maintenance Need Was Found to be Necessary Three (3) or More Times for the Same Control at the Same Location (Including this Occurrence)
If routine maintenance has been required three (3) or more times for the same control at the same location, the permit requires (CGP Part 2.1.4.c) you to fix the problem using the corrective action procedures in CGP Part 5 or to document why you believe the reoccurring problem can be addressed as a routine maintenance fix. If you believe the problem can continue to be fixed as routine maintenance, describe why you believe the specific condition should still be addressed as routine maintenance.

Instructions for Section D

Specific Location That Has Been or Will Be Stabilized
List all areas where soil stabilization is required to begin because construction work in that area has permanently stopped or temporarily stopped (i.e., work will stop for 14 or more days), and all areas where stabilization has been implemented (CGP Part 2.2.14).

Stabilization Method and Applicable Deadline
For each area, specify the method of stabilization (e.g., hydroseed, sod, planted vegetation, erosion control blanket, mulch, rock).

Specify also which of the following stabilization deadlines apply to this location:

1. 5 acres or less of land disturbance occurring at any one time at site: Complete no later than 14 calendar days after stabilization initiated.
2. More than 5 acres of land disturbance occurring at any one time at site: Complete no later than 7 calendar days after stabilization initiated.
3. Arid, semi-arid, and drought-stricken areas: See CGP Part 2.2.14.b.i.
4. Unforeseen circumstances: See CGP Part 2.2.14.b.ii.
5. Discharges to a sediment- or nutrient-impaired water or to a water identified as Tier 2, 2.5, or 3 for antidegradation purposes: Complete no later than 7 days after stabilization initiated.

Stabilization Initiated?
For each area, indicate whether stabilization has been initiated. If "Yes," then enter the date stabilization was initiated.

Final Stabilization Criteria Met?
For each area, indicate whether the final stabilization criteria in CGP Part 2.2.14.c have been met. If "Yes," then enter the date final stabilization criteria were met.

Final Stabilization Photos Taken?
Answer "Yes" if you have taken photos before and after meeting the stabilization criteria as required in CGP Part 8.2.1.a.

Notes
For each area where stabilization has been initiated, describe the progress that has been made and what additional actions are necessary to complete stabilization. Note the effectiveness of stabilization in preventing erosion. If stabilization has been initiated but not completed, make a note of the date it is to be completed. If stabilization has been completed, make a note of the date it was completed. If stabilization has not yet been initiated, make a note of the date it is to be initiated and the date it is to be completed.

Instructions for Section E

You are only required to complete this section if a discharge is occurring at the time of the inspection (CGP Part 4.6.2).

Was a discharge (not including dewatering) occurring from any part of your site at the time of the inspection?
During your inspection, examine all points of discharge from your site, and determine whether a discharge is occurring. If a dewatering discharge was occurring, you must conduct a dewatering inspection pursuant to CGP Part 4.3.2. If there is a discharge, answer "Yes" and complete the questions below regarding the specific discharge. If there is not a discharge, answer "No" and skip to the next page.

Discharge Location (Repeat as necessary if there are multiple points of discharge.)
Specify the location on your site where the discharge is occurring. The location may be an outlet from a stormwater control or constructed stormwater channel, a discharge into a storm sewer inlet, or a specific point on the site. Be as specific as possible; it is recommended that you refer to a precise point on your site map.

Observations
Document the visual quality of the discharge and take note of the characteristics of the stormwater discharge, including color; odor; floating, settled, or suspended solids; foam; oily sheen; and other indicators of stormwater pollutants. Also, document signs of these same pollutant characteristics that are visible from your site and attributable to your discharge in receiving waters or in other constructed or natural site drainage features.

Instructions for Section F

Each inspection report must be signed and certified to be considered complete (CGP Part 4.7.2).

Operator or "Duly Authorized Representative" – MANDATORY (CGP Appendix G Part G.11.2 and CGP Appendix H Section X)

At a minimum, the site inspection report must be signed by either (1) the person who signed the NOI, or (2) a duly authorized representative of that person. The following requirements apply:

If the signatory will be the person who signed the NOI for permit coverage, as a reminder, that person must be one of the following types of individuals:

- *For a corporation*: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- *For a partnership or sole proprietorship*: By a general partner or the proprietor, respectively.
- *For a municipality, State, Federal, or other public agency*: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a Federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

If the signatory will be a duly authorized representative, the following requirements must be met:

- The authorization is made in writing by the person who signed the NOI (see above);
- The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

Sign, date and print your name and affiliation.

Contractor or Subcontractor - OPTIONAL

Where you rely on a contractor or subcontractor to complete the site inspection report, you should consider requiring the individual(s) to sign and certify each report. Note that this does not relieve you, the permitted operator, of the requirement to sign and certify the site inspection report as well. If applicable, sign, date, and print your name and affiliation.

Note

While EPA has made every effort to ensure the accuracy of all instructions contained in this template, it is the permit, not this template, that determines the actual obligations of regulated construction stormwater discharges. In the event of a conflict between this template and any corresponding provision of the CGP, you must abide by the requirements in the permit. EPA welcomes comments on this Site Inspection Report Template at any time and will consider those comments in any future revision. You may contact EPA for CGP-related inquiries at cgp@epa.gov

2022 Construction General Permit Dewatering Inspection Report

Project Name: _____

NPDES ID Number: _____

Section A – Dewatering Discharges (CGP Part 4.6.3) Complete this section within 24 hours of completing the inspection. (If necessary, complete additional inspection reports for each separate inspection location.)	
Inspector Information	
Inspector Name:	**Title:**
Company Name:	**Email:**
Address:	**Phone Number:**
Inspection Details	
Inspection Date:	**Inspection Location:**
Discharge Start Time:	**Discharge End Time:**
Rate of Discharge (gallons per day):	**Corrective Action Required?**[1] ☐ Yes ☐ No
Describe Indicators of Pollutant Discharge at Point of Dewatering Discharge:[1]	
Attach Photographs of: 1. Dewatering water prior to treatment by a dewatering control(s) and the final discharge after treatment; and 2. Dewatering control(s); and 3. Point of discharge to any receiving waters flowing through or immediately adjacent to the site and/or to constructed or natural site drainage features, storm drain inlets, and other conveyances to receiving waters.	

[1] If you observe any of the following indicators of pollutant discharge, you are required to take corrective action under Part 5.1.5.b:

- a sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, or presence of foam; or
- a visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the receiving water.

Project Name: _____

NPDES ID Number: _____

Section B – Signature and Certification (CGP Part 4.7.2)	
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."	
MANDATORY: Signature of Operator or "Duly Authorized Representative:"	
Signature:	**Date:**
Printed Name:	**Affiliation:**
OPTIONAL: Signature of Contractor or Subcontractor	
Signature:	**Date:**
Printed Name:	**Affiliation:**

General Tips for Using This Template

This Dewatering Inspection Report Template is provided to assist you in preparing dewatering inspection reports for EPA's 2022 Construction General Permit (CGP). If you are covered under the 2022 CGP, you can use this template to create a dewatering inspection report form that complies with the minimum reporting requirements of Part 4.6.3 of the permit. Note that the use of this form is optional; you may use your own inspection report form provided it includes the minimum information required in Part 4.6.3 of the CGP.

This template is for dewatering inspections only. A separate site inspection report template that does not include dewatering inspections and complies with the minimum reporting requirements of Part 4.7 of the permit is available at https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates.

If you are covered under a State CGP, this template may be helpful in developing a report that can be used for that permit; however, it will need to be modified to meet the specific requirements of that permit. If your permitting authority requires you to use a specific inspection report form, you should not use this form.

The following tips for using this template will help you ensure that the minimum permit requirements are met:

- **Review the inspection requirements.** Before you start developing your inspection report form, read the CGP's Part 4 inspection requirements. This will ensure that you have a working understanding of the permit's underlying inspection requirements.
- **Complete all required blank fields.** Fill out all blank fields. Only by filling out all fields will the template be compliant with the requirements of the permit. (Note: Where you do not need the number of rows provided in the template form for your inspection, you may delete these as you see fit. Or, if you need more space to document your findings, you may insert additional rows in the electronic version of this form or use the bottom of the page in the field version of this form.)
- **Use your site map to document inspection findings.** In several places in the template, you are directed to specify the location of certain features of your site, including where stormwater controls are installed and where you will be stabilizing exposed soil. You are also asked to fill in location information for unsafe conditions and the locations of any discharges occurring during your inspections. Where you are asked for location information, EPA encourages you to reference the point on your SWPPP site map that corresponds to the requested location on the inspection form. Using the site map as a tool in this way will help you conduct efficient inspections, will assist you in evaluating problems found, and will ensure proper documentation.
- **Include the inspection form with your SWPPP.** Once your form is complete, make sure to include a copy of the inspection form in your SWPPP in accordance with Part 7.2.7.e of the CGP.
- **Retain copies of all inspection reports with your records.** You must also retain copies of all inspection reports in your records in accordance with the requirements in Part 4.7.3 of the CGP. These reports must be retained for at least 3 years from the date your permit coverage expires or is terminated in accordance with the requirements in Part 4.7.4 of the CGP.

Instructions for Section A

Inspector Name

Enter the name of the person that conducted the inspection. Include the person's contact information (title, affiliated company name, address, email, and phone number).

Inspection Date

Enter the date you performed the inspection.

Inspection Location

If your project has multiple locations where you conduct separate dewatering inspections, specify the location where this inspection is being conducted. Otherwise, you can enter "dewatering operation."

Discharge Start and End Times

Enter the approximate time the dewatering discharge started and ended on the day of the inspection.

Rate of Discharge
Enter the rate of discharge in gallons per day on the day of inspection.

To estimate the approximate discharge rate on the day of dewatering inspection, one approach is to use the manufacturer's design pump rating for the pump model in use. For example, a pump rated at 164 gpm (gallons per minute) by the manufacturer can be assumed to be discharging at 164 gpm in most cases. To convert to gallons per day, multiply the rate in gpm by the ratio of minutes in one-day (1,440 minutes per day), resulting in a discharge rate of 236,160 gallons per day.

In cases where the dewatering discharge is being pumped over long distances or a substantial distance uphill, which will result in a reduced pump rate relative to manufacturer's specification, the operator may improve the accuracy of the estimate by estimating the time required to fill a container of a known volume. For example, if it takes 60 seconds to fill an empty 55-gallon barrel, the estimated discharge rate is 55 gpm, or 79,200 gallons per day.

Indicators of Pollutant Discharge
For the point of discharge, describe any observed sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, or presence of foam; and/or a visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the receiving water.

Corrective Action Required?
Answer "Yes" if during your inspection you found any of the conditions listed above in the instructions for the Indicators of Pollutant Discharge section. If you answer "Yes," you must take corrective action and complete a corrective action log, found at https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates. Answer "No" if you did not observe any of the listed pollutant indicators.

Photographs
As required in CGP Part 8.2.1.a, attach photos of: (1) dewatering water prior to treatment by a dewatering control(s) and the final discharge after treatment; (2) the dewatering control(s); and (3) the point of discharge to any receiving waters flowing through or immediately adjacent to the site and/or to constructed or natural site drainage features, storm drain inlets, and other conveyances to receiving waters.

Instructions for Section B

Each inspection report must be signed and certified to be considered complete (CGP Part 4.7.2).

Operator or "Duly Authorized Representative" – MANDATORY (CGP Appendix G Part G.11.2 and CGP Appendix H Section X)
At a minimum, the dewatering inspection report must be signed by either (1) the person who signed the NOI, or (2) a duly authorized representative of that person. The following requirements apply:

If the signatory will be the person who signed the NOI for permit coverage, as a reminder, that person must be one of the following types of individuals:

- *For a corporation*: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- *For a partnership or sole proprietorship*: By a general partner or the proprietor, respectively.

- *For a municipality, State, Federal, or other public agency*: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a Federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

If the signatory will be a duly authorized representative, the following requirements must be met:

- The authorization is made in writing by the person who signed the NOI (see above);
- The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

Sign, date and print your name and affiliation.

Contractor or Subcontractor - OPTIONAL

Where you rely on a contractor or subcontractor to complete the dewatering inspection report, you should consider requiring the individual(s) to sign and certify each report. Note that this does not relieve you, the permitted operator, of the requirement to sign and certify the dewatering inspection report as well. If applicable, sign, date, and print your name and affiliation.

Note

While EPA has made every effort to ensure the accuracy of all instructions contained in this template, it is the permit, not this template, that determines the actual obligations of regulated construction stormwater discharges. In the event of a conflict between this template and any corresponding provision of the CGP, you must abide by the requirements in the permit. EPA welcomes comments on this Dewatering Inspection Report Template at any time and will consider those comments in any future revision. You may contact EPA for CGP-related inquiries at cgp@epa.gov

Appendix E – Copy of Corrective Action Log

2022 CGP Corrective Action Log
Project Name: _____
NPDES ID Number: _____

Section A – Individual Completing this Log	
Name:	**Title:**
Company Name:	**Email:**
Address:	**Phone Number:**
Section B – Details of the Problem (CGP Part 5.4.1.a) Complete this section within 24 hours of discovering the condition that triggered corrective action.	
Date problem was first identified:	**Time problem was first identified**:
What site conditions triggered this corrective action? *(Check the box that applies. See instructions for a description of each triggering condition (1 thru 6).)* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5a ☐ 5b ☐ 6	
Specific location where problem identified:	
Provide a description of the specific condition that triggered the need for corrective action and the cause (if identifiable):	
Section C – Corrective Action Completion (CGP Part 5.4.1.b) Complete this section within 24 hours after completing the corrective action.	
For site condition # 1, 2, 3, 4, or 6 (those not related to a dewatering discharge) confirm that you met the following deadlines (CGP Part 5.2.1):	
☐ Immediately took all reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. **AND**	
☐ Completed corrective action by the close of the next business day, unless a new or replacement control, or significant repair, was required. **OR**	
☐ Completed corrective action within seven (7) calendar days from the time of discovery because a new or replacement control, or significant repair, was necessary to complete the installation of the new or modified control or complete the repair. **OR**	
☐ It was infeasible to complete the installation or repair within 7 calendar days from the time of discovery. Provide the following additional information: Explain why 7 calendar days was infeasible to complete the installation or repair:	

Provide your schedule for installing the stormwater control and making it operational as soon as feasible after the 7 calendar days:

For site condition # 5a, 5b, or 6 (those related to a dewatering discharge), confirm that you met the following deadlines:

- ☐ Immediately took all reasonable steps to minimize or prevent the discharge of pollutants until a solution could be implemented, including shutting off the dewatering discharge as soon as possible depending on the severity of the condition taking safety considerations into account.
- ☐ Determined whether the dewatering controls were operating effectively and whether they were causing the conditions.
- ☐ Made any necessary adjustments, repairs, or replacements to the dewatering controls to lower the turbidity levels below the benchmark or remove the visible plume or sheen.

Describe any modification(s) made as part of corrective action: (Insert additional rows below if applicable)	**Date of completion:**	**SWPPP update necessary?**	**If yes, date SWPPP was updated:**
1.		☐ Yes ☐ No	
2.		☐ Yes ☐ No	

Section D - Signature and Certification (CGP Part 5.4.2)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

MANDATORY: Signature of Operator or "Duly Authorized Representative:"	
Signature:	**Date:**
Printed Name:	**Affiliation:**
OPTIONAL: Signature of Contractor or Subcontractor	
Signature:	**Date:**
Printed Name:	**Affiliation:**

General Instructions

This Corrective Action Log Template is provided to assist you creating a corrective action log that complies with the minimum reporting requirements of Part 5.4 of the EPA's Construction General Permit (CGP). For each triggering condition on your site, you will need to fill out a separate corrective action log.

The entire form must be completed to be compliant with the requirements of the permit. (Note: In Section C, if you do not need the number of rows provided in the corrective action log, you may delete these or cross them off. Alternatively, if you need more space to describe any modifications, you may insert additional rows in the electronic version of this form or use the bottom of the page in the field version of this form.)

If you are covered under a State CGP, this template may be helpful in developing a log that can be used for that permit; however, you will likely need to modify this form to meet the specific requirements of any State-issued permit. If your permitting authority requires you to use a specific corrective action log, you should not use this template.

Instructions for Section A

Individual completing this form Enter the name of the person completing this log. Include the person's contact information (title, affiliated company name, address, email, and phone number).

Instructions for Section B

You must complete Section B within 24 hours of discovering the condition that triggered corrective action. (CGP Part 5.4)

When was the problem first discovered?
Specify the date and time when the triggering condition was first discovered.

What site conditions triggered this corrective action? (CGP Parts 5.1 and 5.3)
Check the box corresponding to the numbered triggering condition below that applies to your site.

1. A stormwater control needs a significant repair or a new or replacement control is needed, or, in accordance with Part Error! Reference source not found., you find it necessary to repeatedly (i.e., 3 or more times) conduct the same routine maintenance fix to the same control at the same location (unless you document in your inspection report under Part Error! Reference source not found. that the specific reoccurrence of this same problem should still be addressed as a routine maintenance fix under Part Error! Reference source not found.);
2. A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly;
3. Your discharges are not meeting applicable water quality standards;
4. A prohibited discharge has occurred (see Part 1.3);
5. During discharge from site dewatering activities:
   a. The weekly average of your turbidity monitoring results exceeds the 50 NTU benchmark (or alternate benchmark if approved by EPA pursuant to Part **Error! Reference source not found.**); or
   b. You observe or you are informed by EPA, State, or local authorities of the presence of any of the following at the point of discharge to a receiving water flowing through or immediately adjacent to your site and/or to constructed or natural site drainage features or storm drain inlets:
      - sediment plume
      - suspended solids
      - unusual color
      - presence of odor
      - decreased clarity
      - presence of foam
      - visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the receiving water
6. EPA requires corrective action as a result of permit violations found during an inspection carried out under Part 4.8.

Provide a description of the problem (CGP Part 5.4.1.a)
Provide a summary description of the condition you found that triggered corrective action, the cause of the problem (if identifiable), and the specific location where it was found. Be as specific as possible about the location; it is recommended that you refer to a precise point on your site map.

Instructions for Section C

You must complete Section C within 24 hours after completing the correction action. (CGP Part 5.4)

Deadlines for completing corrective action for condition # 1, 2, 3, 4, or 6 (if not relating to a dewatering discharge) (CGP Part 5.2.1)
Check the box to confirm that you met the deadlines that apply to each triggering condition. You are always required to check the first box (i.e., Immediately took all reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events.). Only one of the next three boxes should be checked depending on the situation that applies to this corrective action.

Check the second box if the corrective action for this particular triggering condition does not require a new or replacement control, or a significant repair. These actions must be completed by the close of the next business day from the time of discovery of the condition.

Check the third box if the corrective action for this particular triggering condition requires a new or replacement control, or a significant repair. These actions must be completed by no later than seven calendar days from the time of discover of the condition.

Check the fourth box if the corrective action for this particular triggering condition requires a new or replacement control, or a significant repair, and if it is infeasible to complete the work within seven calendar days. Additionally, you will need to fill out the table below the checkbox that requires:

1. An explanation as to why it was infeasible to complete the installation or repair within seven calendar days of discovering the condition.
2. Provide the schedule you will adhere to for installing the stormwater control and making it operational as soon as feasible after the seventh day following discovery.

Note: Per Part 5.2.1.c, where these actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within seven calendar days of completing this work.

Deadlines for completing corrective action for condition # 5a, 5b, or 6 related to a dewatering discharge (CGP Part 5.2.2)
These deadlines apply to conditions relating to construction dewatering activities. Check the box to confirm that you met the deadlines that apply to each triggering condition. You are required to check all of the boxes in this section to indicate your compliance with the corrective action deadlines.

List of modification(s) to correct problem
Provide a list of modifications you completed to correct the problem.

Date of completion
Enter the date you completed the modification. The work must be completed by the deadline you indicated above.

SWPPP update necessary?
Check "Yes" or "No" to indicate if a SWPPP update is necessary consistent with Part 7.4.1.a in order to reflect changes implemented at your site. If "Yes," then enter the date you updated your SWPPP. The SWPPP updates must be made within seven calendar days of completing a corrective action. (CGP Part 5.2.1.c)

Instructions for Section D

Each corrective action log entry must be signed and certified following completion of Section D to be considered complete. (CGP Part 5.4.2)

Operator or "Duly Authorized Representative" – MANDATORY (CGP Appendix G Part G.11.2 and CGP Appendix H Section X)

At a minimum, the corrective action log must be signed by either (1) the person who signed the NOI, or (2) a duly authorized representative of that person. The following requirements apply:

If the signatory will be the person who signed the NOI for permit coverage, as a reminder, that person must be one of the following types of individuals:

- *For a corporation*: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- *For a partnership or sole proprietorship*: By a general partner or the proprietor, respectively.
- *For a municipality, State, Federal, or other public agency*: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a Federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

If the signatory will be a duly authorized representative, the following requirements must be met:

- The authorization is made in writing by the person who signed the NOI (see above);
- The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

Sign, date and print your name and affiliation.

Contractor or Subcontractor - OPTIONAL
Where you rely on a contractor or subcontractor to complete this log and the associated corrective action, you should consider requiring the individual(s) to sign and certify each log entry. Note that this does not relieve you, the permitted operator, of the requirement to sign and certify the log as well. If applicable, sign, date, and print your name and affiliation.

Recordkeeping

Logs must be retained for at least 3 years from the date your permit coverage expires or is terminated. (CGP Part 5.4.4)

Keep copies of your signed corrective action log entries at the site or at an easily accessible location so that it can be made immediately available at the time of an on-site inspection or upon request by EPA. (CGP Part 5.4.3) Include a copy of the corrective action log in your SWPPP. (CGP Part 7.2.7.e)

Note

While EPA has made every effort to ensure the accuracy of all instructions contained in this template, it is the permit, not this template, that determines the actual obligations of regulated construction stormwater discharges. In the event of a conflict between this template and any corresponding provision of the CGP, you must abide by the requirements in the permit. EPA welcomes comments on this Corrective Action Log Template at any time and will consider those comments in any future revision. You may contact EPA for CGP-related inquiries at cgp@epa.gov

Appendix F – SWPPP Amendment Log

Instructions (see CGP Part 7.4):

- Create a log here of changes and updates to the SWPPP. You may use the table below to track these modifications.
- SWPPP modifications are required pursuant to CGP Part 7.4.1 in the following circumstances:
  - ✓ Whenever new operators become active in construction activities on your site, or you make changes to your construction plans, stormwater controls, or other activities at your site that are no longer accurately reflected in your SWPPP (this includes changes made in response to corrective actions triggered under CGP Part 5);
  - ✓ To reflect areas on your site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;
  - ✓ If inspections or investigations determine that SWPPP modifications are necessary for compliance with this permit;
  - ✓ Where EPA determines it is necessary to install and/or implement additional controls at your site in order to meet requirements of the permit;
  - ✓ To reflect any revisions to applicable Federal, State, Tribal, or local requirements that affect the stormwater control measures implemented at the site; and
  - ✓ If applicable, if a change in chemical treatment systems or chemically-enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]
		INSERT DATE	
		INSERT DATE	
		INSERT DATE	
		INSERT DATE	
		INSERT DATE	
		INSERT DATE	
		INSERT DATE	
		INSERT DATE	

Appendix G – Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: _____

Project Title: Northeast Metropolitan Regional Vocational High School

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

_____

_____

Signature: _____

Title: _____

Date: _____

Appendix H – Grading and Stabilization Activities Log

Date Grading Activity Initiated	**Description of Grading Activity**	**Description of Stabilization Measure and Location**	**Date Grading Activity Ceased** (Indicate Temporary or Permanent)	**Date When Stabilization Measures Initiated**
INSERT DATE			INSERT DATE ☐ Temporary ☐ Permanent	INSERT DATE
INSERT DATE			INSERT DATE ☐ Temporary ☐ Permanent	INSERT DATE
INSERT DATE			INSERT DATE ☐ Temporary ☐ Permanent	INSERT DATE
INSERT DATE			INSERT DATE ☐ Temporary ☐ Permanent	INSERT DATE
INSERT DATE			INSERT DATE ☐ Temporary ☐ Permanent	INSERT DATE
INSERT DATE			INSERT DATE ☐ Temporary ☐ Permanent	INSERT DATE
INSERT DATE			INSERT DATE ☐ Temporary ☐ Permanent	INSERT DATE
INSERT DATE			INSERT DATE ☐ Temporary ☐ Permanent	INSERT DATE

Appendix I –Training Documentation

Stormwater Pollution Prevention Training Log

Project Name: Northeast Metropolitan Regional Vocational High School

Project Location: 100 Hemlock Road Wakefield, MA 01880

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ☐ **Sediment and Erosion Controls**
- ☐ **Stabilization Controls**
- ☐ **Pollution Prevention Measures**
- ☐ **Emergency Procedures**
- ☐ **Inspections/Corrective Actions**

Specific Training Objective:_____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		

Appendix J – Delegation of Authority Form

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the EPA's Construction General Permit (CGP), at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, State, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix G of EPA's CGP, and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix G.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

Appendix K – Endangered Species Documentation

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:
Project Code: 2023-0022548
Project Name: Northeast Metropolitan Vocational High School Replacement Project

April 13, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Updated 3/8/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the "**New England Field Office Endangered Species Project Review and Consultation**" website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (Updated 3/8/2023) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule will go into effect on **March 31, 2023**. After that date, the current 4(d) rule for NLEB will be invalid, and the 4(d) determination key will no longer be available. New compliance tools will be available in March 2023, and information will be posted in this section on our website and on the northern long-eared bat species page, so please check this site often for updates.

Depending on the type of effects a project has on NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project may result in incidental take of NLEB after the new listing goes into effect, this will need to be addressed in an updated consultation that includes an Incidental Take Statement. Many of these situations will be addressed through the new compliance tools. If your project may require re-initiation of consultation, please wait for information on the new tools to appear on this site or contact our office for additional guidance.

Additional Info About Section 7 of the Act
Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/service/section-7-consultations

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/program/migratory-bird-permit

https://www.fws.gov/library/collections/bald-and-golden-eagle-management

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

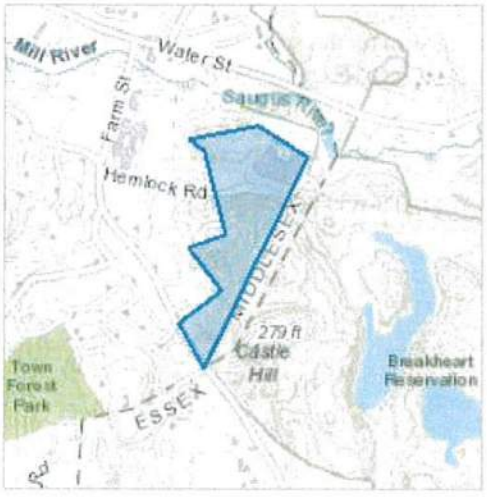
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

PROJECT SUMMARY

Project Code: 2023-0022548
Project Name: Northeast Metropolitan Vocational High School Replacement Project
Project Type: New Constr - Above Ground
Project Description: The project consists of the construction of a new four-story high school at the site of the existing Northeast Metropolitan Regional Vocational High School (NEMT) in Wakefield, MA. Site work includes but not limited to significant ledge removal operation, construction of the new access driveway with traffic light and turn-off lanes at the new site entrance. The Work consists of a steel framed, concrete masonry, and light gauge metal framing walls with large scale CMU veneer, manufactured stone veneer, and high performance insulated rainscreen panels at exterior envelope of the building. The exterior envelope also includes metal shingles and insulated metal panels. The roofing system includes but not limited to low slope single-ply membrane roofing over tapered and non-tapered insulation, roof pavers plazas, and vegetated roof areas. Upon completion of the replacement school, the existing high school shall be demolished.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.49160895,-71.04571763556996,14z



Counties: Essex and Middlesex counties, Massachusetts

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPAC USER CONTACT INFORMATION

Agency: Gilbane Building Company
Name: mark winslow
Address: 7 Jackson Walkway
City: Providence
State: RI
Zip: 02903
Email mwinslow@gilbaneco.com
Phone: 4014565800

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Environmental Protection Agency

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:
Project code: 2023-0022548
Project Name: Northeast Metropolitan Vocational High School Replacement Project

June 01, 2023

Federal Nexus: yes
Federal Action Agency (if applicable): Environmental Protection Agency

Subject: Technical assistance for 'Northeast Metropolitan Vocational High School Replacement Project'

Dear mark winslow:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on June 01, 2023, for 'Northeast Metropolitan Vocational High School Replacement Project' (here forward, Project). This project has been assigned Project Code 2023-0022548 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. **Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter.**

Determination for the Northern Long-Eared Bat

Based on your IPaC submission and the standing analysis for the Dkey, your project has reached the determination of "May Affect" the northern long-eared bat.

Next Steps

Your action may qualify for the Interim Consultation Framework for the northern long-eared bat. To determine if it qualifies, review the Interim Consultation Framework posted here https://www.fws.gov/library/collections/interim-consultation-framework-northern-long-eared-bat. If you

determine it meets the requirements of the Interim Consultation Framework, follow the procedures outlined there to complete section 7 consultation.

If your project does **not** meet the requirements of the Interim Consultation Framework, please contact the New England Ecological Services Field Office for further coordination on this project. Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of "May Affect".

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may cause prohibited take of the species listed above.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

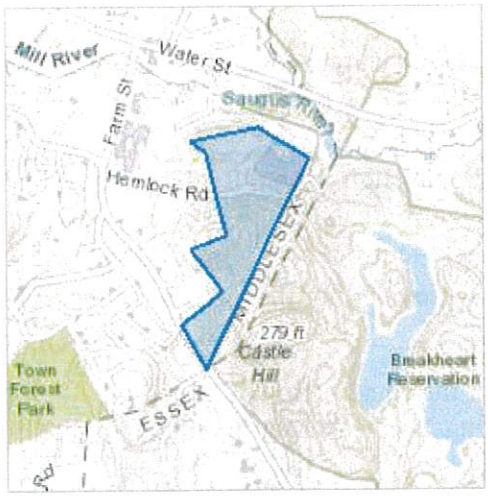
Northeast Metropolitan Vocational High School Replacement Project

2. Description

The following description was provided for the project 'Northeast Metropolitan Vocational High School Replacement Project':

> The project consists of the construction of a new four-story high school at the site of the existing Northeast Metropolitan Regional Vocational High School (NEMT) in Wakefield, MA. Site work includes but not limited to significant ledge removal operation, construction of the new access driveway with traffic light and turn-off lanes at the new site entrance. The Work consists of a steel framed, concrete masonry, and light gauge metal framing walls with large scale CMU veneer, manufactured stone veneer, and high performance insulated rainscreen panels at exterior envelope of the building. The exterior envelope also includes metal shingles and insulated metal panels. The roofing system includes but not limited to low slope single-ply membrane roofing over tapered and non-tapered insulation, roof pavers plazas, and vegetated roof areas. Upon completion of the replacement school, the existing high school shall be demolished.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.49160895,-71.04571763556996,14z


Mill River
Water St
Saugus River
Farm St
Hemlock Rd
MIDDLESEX
279 ft
Castle
Hill
Breakheart
Reservation
Town
Forest
Park
ESSEX
Rd

DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of "may affect" for the Endangered northern long-eared bat (*Myotis septentrionalis*).

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

   Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   No

2. Do you have post-white nose syndrome occurrence data that indicates that northern long-eared bats (NLEB) are likely to be present in the action area?

   Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed acoustic detections. With this question, we are looking for data that, for some reason, may have not yet been made available to U.S. Fish and Wildlife Service.

   No

3. Does any component of the action involve construction or operation of wind turbines?

   Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

   No

4. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Yes

5. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

   No

6. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

   Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

   No

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

   Yes

8. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the effects of any activities that would not occur but for the proposed action.

   If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer "No" below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project's action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a "no effect" determination for the northern long-eared bat.

   Note: Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer "No" and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of Effects of the Action can be found here: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

   No

9. Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating northern long-eared bats?

   No

10. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?
(If unsure, answer "Yes.")

    Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags ≥3 inches (12.7 centimeter) dbh), answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    Yes

11. Will the action cause effects to a bridge?

    No

12. Will the action result in effects to a culvert or tunnel?

    No

13. Does the action include the intentional exclusion of northern long-eared bats from a building or structure?

    Note: Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local U.S. Fish and Wildlife Services Ecological Services Field Office to help assess whether northern long-eared bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures

    No

14. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats?**

    No

15. Will the action cause construction of one or more new roads open to the public?

    For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

    Yes

16. Will any new road go through any area of contiguous forest that is greater than or equal to 10 acres in total extent?

    Note: "Contiguous forest" of 10 acres or more may includes areas where multiple forest patches are separated by less than 1,000 feet of non-forest if the forested patches, added together, comprise at least 10 acres.

    Yes

17. For every 1,000 feet of new road that crosses between contiguous forest patches, will there be at least one place where bats could cross the road corridor by flying less than 33 feet (10 meters) between trees whose tops are at least 66 feet (20 meters) higher than the road surface?

    Yes

18. Will the proposed action involve the creation of a new water-borne contaminant source (e.g., leachate pond pits containing chemicals that are not NSF/ANSI 60 compliant)?

    No

19. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

    No

20. Will the action include drilling or blasting?

    Yes

21. Will the drilling or blasting affect known or potentially suitable hibernacula, summer habitat, or active year-round habitat (where applicable) for the northern long-eared bat?

    Note: In addition to direct impacts to hibernacula, consider impacts to hydrology or air flow that may impact the suitability of hibernacula. Additional information defining suitable summer habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    No

22. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

    No

23. Will the proposed action involve the use of herbicides or pesticides other than herbicides (e.g., fungicides, insecticides, or rodenticides)?

    No

24. Will the action include or cause activities that are reasonably certain to cause chronic nighttime noise in suitable summer habitat for the northern long-eared bat? Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time.

    Note: Additional information defining suitable summer habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    No

25. Does the action include, or is it reasonably certain to cause, the use of artificial lighting within 1000 feet of suitable northern long-eared bat roosting habitat?

    Note: Additional information defining suitable roosting habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    Yes

26. Will the action use only downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting)
when installing new or replacing existing permanent lights? Or for those transportation agencies using the Backlight, Uplight, Glare (BUG) system developed by the Illuminating Engineering Society, will all three ratings (backlight, uplight, and glare) be as close to zero as is possible, with a priority of "uplight" of 0?

    Yes

27. Will the action direct any temporary lighting away from suitable northern long-eared bat roosting habitat during the active season?

    Note: Active season dates for northern long-eared bat can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas.

    Yes

28. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

    Yes

29. Does the action include emergency cutting or trimming of hazard trees in order to remove an imminent threat to human safety or property? See hazard tree note at the bottom of the key for text that will be added to response letters

    Note: A "hazard tree" is a tree that is an immediate threat to lives, public health and safety, or improved property and has a diameter breast height of six inches or greater.

    No

30. Are any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming suitable for northern long-eared bat roosting (i.e., live trees and/or snags ≥3 inches dbh that have exfoliating bark, cracks, crevices, and/or cavities)?

    Yes

31. [Semantic] Does your project intersect a known sensitive area for the northern long-eared bat?

    Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state agency or USFWS field office

    Automatically answered
    No

32. Will all tree cutting/trimming or other knocking or bringing down of trees be restricted to the inactive (hibernation) season for northern long-eared bat?

    Note: Inactive Season dates for spring staging/fall swarming areas can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas.

    Yes

33. Will the action cause trees to be cut, knocked down, or otherwise brought down across an area greater than 10 acres?

Yes

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

14.2

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the inactive (hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas

0

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the active (non-hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas

14.2

Will all potential northern long-eared bat (NLEB) roost trees (trees ≥3 inches diameter at breast height, dbh) be cut, knocked, or brought down from any portion of the action area greater than or equal to 0.1 acre? If all NLEB roost trees will be removed from multiple areas, select 'Yes' if the cumulative extent of those areas meets or exceeds 0.1 acre.

Yes

Enter the extent of the action area (in acres) from which all potential NLEB roost trees will be removed. If all NLEB roost trees will be removed from multiple areas, entire the total extent of those areas. Round up to the nearest tenth of an acre.

14.2

For the area from which all potential northern long-eared bat (NLEB) roost trees will be removed, on how many acres (round to the nearest tenth of an acre) will trees be allowed to regrow? Enter '0' if the entire area from which all potential NLEB roost trees are removed will be developed or otherwise converted to non-forest for the foreseeable future.

0

Will any snags (standing dead trees) ≥3 inches dbh be left standing in the area(s) in which all northern long-eared bat roost trees will be cut, knocked down, or otherwise brought down?

Yes

Will all project activities by completed by April 1, 2024?

No

IPAC USER CONTACT INFORMATION

Agency: Gilbane Building Company
Name: mark winslow
Address: 7 Jackson Walkway
City: Providence
State: RI
Zip: 02903
Email mwinslow@gilbaneco.com
Phone: 4014565800

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Environmental Protection Agency

Version Date: March 6, 2023

U.S. Fish & Wildlife Service

APPENDIX B. Biological Assessment Form for Project-Level Consultation under the Interim Consultation Framework for the Northern Long-Eared Bat

Valid from March 31, 2023 through April 1, 2024

This Biological Assessment Form (BA Form) is intended for use by Federal agencies as part of the Interim Consultation Framework for the northern long-eared bat (NLEB). Federal agencies must ensure the proposed action meets the requirements and follow the "Steps to Complete Consultation under the Interim Consultation Framework" section of the Interim Consultation Framework. This framework allows Federal agencies to rely on the Standing Analysis developed by the U.S. Fish and Wildlife Service (Service) for section 7(a)(2) compliance by: (1) notifying the Service that an action agency will use the Interim Consultation Framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the Service to track effects and determine if reinitiation of consultation is required per 50 CFR 402.16. Providing this information also does not address section 7(a)(2) compliance for any other listed species. For questions about filling out this form, please contact your local Ecological Services Field Office.

I. PROJECT INFORMATION

Project Name:

Northeast Metropolitan Vocational High School Replacement Project

Action Agency:

Environmental Protection Agency

Point of Contact:

N/A

Project Location (state, county, coordinates):

Massachusetts, Essex and Middlesex County, 42.49881 ° N - 71.04268 ° W

IPaC Record Locator:

926-124978189

Project Code:

2023-0022548

Project Description:

The project consists of the construction of a new four-story high school at the site of the existing Northeast Metropolitan Regional Vocational High School (NEMT) in Wakefield, MA. Site work includes but not limited to significant ledge removal operation, construction of the new access driveway with traffic light and turn-off lanes at the new site entrance. The Work includes the demolition and removal of the existing Vocational High School after completion of the new construction

II. DEFINING THE ACTION AREA

The action area is defined as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action" (50 CFR 402.02). The action area is not limited to the "footprint" of the project but rather encompasses the aerial extent of the biotic, chemical, and physical impacts to the environment resulting from the action.

Define the action area for associated with the project.

Refer to Action Area delineated in IPaC review

III. DETERMINING SPECIES PRESENCE

Based on known locations, the NLEB is reasonably certain to occur within the action area. You must contact the appropriate agency to determine if the action area is within 0.25 miles of a known hibernacula or 150-ft of known maternity roost trees in order to ensure you are following the required conservation measures described in the next section (Section IV).

1. Has the appropriate agency informed you that the action area is within 0.25 miles of a known hibernacula or 150-ft of known maternity roost trees?

No, project site is located greater than 0.25 miles from known hibernacula

2. Are you aware of any type of surveys that detected NLEBs within 3 miles of the action area?

No

IV. CONSERVATION MEASURES

Indicate in the text box below which conservation measures will be implemented to avoid or minimize adverse effects to the NLEB. If your project will implement other conservation measures to reduce impacts to NLEBs, you can elect to add them to the text box.

Required Conservation Measures:

1. The project will not disturb hibernating NLEBs in a known hibernaculum during hibernation. Disturbance could include entry into a known hibernacula or the following activities within 0.25 miles of a known hibernacula: prescribed fire, blasting, pile driving, drilling, and certain military operations. Smaller buffer sizes may be appropriate depending on the intensity of the activity.
2. The project will not alter the entrance or interior environment of a known hibernaculum at any time of the year. Hibernacula alteration could include the following activities within 0.25 miles of a known hibernacula: prescribed fire, blasting, pile driving, drilling, certain pesticide use, and certain military operations. Smaller buffer sizes may be appropriate depending on the intensity of the activity.
3. The project will not remove any trees within 0.25 miles of a known hibernaculum at any time of year.
4. The project will not cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree, from June 1 through July 31.

Note: winter roosts in areas where the species may be active year-round (see Areas Where the NLEB is Active Year-Round, below) were not subject to any restrictions under the former 4(d) rule; therefore, no conservation measures or restrictions apply to these areas.

Indicate if your project includes the Required Conservation Measures in the text box. Briefly describe any other relevant conservation measures if applicable:

Required Conservation Measures #1-4 will be implemented

V. EVALUATING EFFECTS TO THE SPECIES

Because the species is reasonably certain to occur within the action area, the NLEB is likely to be exposed to the stressors that could be caused by the proposed action. The Standing Analysis for the Interim Consultation Framework describes the biological response of the NLEB to potential stressors (i.e., adverse effects) that correspond to the statutory and regulatory definitions of take[1]. The following questions indicate the potential stressors that could result in take. Indicate the question numbers that correspond to your project in the text box below. Dates

[1] The ESA and its implementing regulations (50 CFR 17) define take as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Incidental taking" is defined at 50 CFR 17.3 as "any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, an otherwise lawful activity."

associated with seasons can be found in Table 1. If your project will continue past April 1, 2024, only include the stressors for activities that will occur through April 1, 2024 (any stressors after April 1, 2024 require reinitiation at that time in order to insure compliance with section 7 of the ESA).

Does your project include any of the following stressors that can result in take under the Interim Consultation Framework?

1. Removal of occupied roost trees via the removal of roosting habitat[2] during the active season. This can cause harm (death or injury) of pups and adults from predation resulting from fleeing roost trees during the day.
2. Removal of occupied roost trees via the removal of roosting habitat during the maternity season. This can cause harm (death or injury) of pups and adults when the tree falls or from predation.
3. Removal of occupied roost trees via the removal of roosting habitat during the swarming or staging season. This can cause harm (death or injury) of adults and juveniles when the tree falls or from predation.
4. Removal of occupied roost trees via the removal of roosting habitat in forested wetlands during the cold winter months (December 15- February 15) in areas where the NLEB may be active year-round, which is the Southeast Coastal Plain from the James River in Virginia south to the border of Georgia and the species' entire range in Louisiana. We only anticipate these effects if they occur in forested wetlands because nearly all winter tree roosts have been located in forested wetlands. If bats are in torpor (i.e., state of mental or physical inactivity), this can cause harm (death or injury) of adults and juveniles when the tree falls or from predation.
5. Removal of unoccupied roost trees via the permanent removal of roosting habitat during the inactive season. This does not apply to forest management activities. This can cause harm through reduced fitness by fragmenting maternity colonies and significantly affecting behavioral patterns associated with breeding.
6. Disturbance associated with human activities (e.g., noise, exhaust, vibration, detonations, military aircraft, etc.) occurring during the active season that is significant enough to result in result in NLEBs fleeing occupied roost tree(s) during the day time. This can cause harm (death or injury) of adults and pups from predation resulting from fleeing roost trees during the day.
7. Prescribed fire conducted during the active season. This can cause harm (death or injury) of adults and pups from predation resulting from fleeing roost trees during the day.

[2] Roosting habitat consists of forests and woodlots containing potential roost trees, which are defined as live and/or dead trees (i.e., snags) ≥3 inches diameter at breast height (dbh) that have exfoliating bark, cracks, crevices, and/or cavities.

8. Prescribed fire conducted during the pup season. Exposure to heat and smoke during fires can cause harm (death or injury) of pups and females caring for pups.
9. Prescribed fire conducted during the cold winter months (December 15- February 15) in areas where the NLEB may be active year-round. If bats are in torpor, exposure to heat and smoke during fires can cause harm (death or injury) of adults and juveniles.
10. Use of military training smoke and obscurants during the active season. Exposure to smoke and obscurants can cause harm (death or injury) of pups and adults.
11. Work on bridges (maintenance and demolition) and culverts >4ft in diameter (removal and sliplining) where NLEBs are roosting during the active season. This can cause harm (death or injury) of adults and pups during construction activities or from predation resulting from fleeing the structure during the day.
12. Collision risk resulting from construction of new roads within 1,000-ft of documented habitat. NLEBs colliding with vehicles can cause harm (death or injury) of adults and juveniles during the active season.
13. Use of waste pits and tanks containing water and contaminants during the active season. This can cause harm (death or injury) when NLEBs drink contaminated water or become trapped in waste pits or tanks.

Project will involve tree cutting and construction activities, involving noise/vibrations from machinery and blasting, within the active season. No occupied roost trees are known to occur within the action area.

Other stressors that can also result in adverse effects are evaluated in the Standing Analysis, but these stressors are not reasonably certain to result in incidental take. Indicate the question numbers that correspond to your project in the text box below. Dates associated with seasons can be found in Table 1. If your project will continue past April 1, 2024, only include the stressors for activities that will occur through April 1, 2024.

Does your project include any of these additional stressors that can also adversely affect the NLEB?

1. Removal of unoccupied roost trees via the removal of roosting habitat during the inactive season associated with forest management activities. This can affect fitness by temporarily disturbing behavioral patterns associated with breeding, feeding, and sheltering.
2. Removal of foraging, swarming, or staging habitat during the inactive season. This can affect fitness by temporarily disturbing behavioral patterns associated with feeding and sheltering.
3. Installation of new lighting sources can affect fitness by disturbing foraging patterns.

4. Use of pesticides can cause adverse effects by temporarily disturbing behavioral patterns associated with feeding and sheltering.
5. Water quality alteration can cause temporary effects on water quality and reduce insect populations. This could affect fitness by temporarily disturbing behavioral patterns associated with feeding and sheltering.
6. Work on bridges (maintenance and demolition) and culverts >4ft in diameter (removal and sliplining) during the inactive season that renders a structure unsuitable for roosting. This can affect fitness by temporarily disturbing behavioral patterns associated with sheltering.

3. New Lighting is proposed; however, site lighting has been designed to protect adjacent wetland resource areas and wildlife. Specifically, fixtures are dark sky compliant in accordance with the International Dark-Sky Association (IDA). Fixtures will be downward directed, equipped with shields, and appropriately spaced. In addition, lighting will have a color temperature of no more than 3000 Kelvins, as recommended by the IDA and all the fixtures have 0 upplight in the BUG rating.

The following activities can also result in beneficial effects to the species: forest management and prescribed fire. More information about the benefits of forest management and prescribed fire can be found in the Standing Analysis. Does your project include any of these activities or other beneficial effects? Briefly describe beneficial effects in the text box below.

N/A

VI. EFFECT DETERMINATION

As described in the Interim Consultation Framework (see Steps to Complete Consultation Section), the use of this BA Form is only needed for projects that are located within an area where NLEBs are reasonably certain to occur, and the project is likely to adversely affect the NLEB. If your project includes any of the stressors listed above, and you have not included any additional conservation measures to avoid adverse effect, the most likely logical determination for your project is may affect, likely to adversely affect the NLEB. However, the determination must be made by you, the action agency. Make your determination is the text box below and include a justification if you have determined your project is not likely to adversely affect the NLEB.

The Project meets the requirements of the Interim Consultation Framework

VII. ADDITIONAL INFORMATION REQUIRED FOR FORMAL CONSULTATION

Providing the information below will aid the Service in developing the project-specific biological opinion (BO) and incidental take statement (ITS), which will typically follow the BO and ITS Form included in Appendix C of the Interim Consultation Framework.

Other Activities Caused by the Action

Within a biological opinion, all consequences to species or critical habitat caused by the proposed Federal action are evaluated, including the consequences of other activities caused by the proposed action, that are reasonably certain to occur (see definition of "effects of the action" at 50 CFR 402.02). Additional regulations at 50 CFR 402.17(a) identify factors to consider when determining whether activities caused by the proposed action (but not part of the proposed action) are reasonably certain to occur. These factors include, but are not limited to:

1. past experiences with activities that have resulted from actions that are similar in scope, nature, and magnitude to the proposed action;
2. existing plans for the activity; and
3. any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

Describe below any other activities caused by the proposed action if applicable.

N/A

Cumulative Effects

Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation (50 CFR 402.02). Additional regulations at 50 CFR 402.17(a) identify factors to consider when determining whether activities are reasonably certain to occur. These factors include but are not limited to: existing plans for the activity; and any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

The Standing Analysis lists the following potential State or private activities that could result in cumulative effects within the Action Area and may need to be considered during project-specific consultation: wind facility development or operation; activities that may impact known hibernacula or hibernating bats; use of pesticides; water quality alteration; road construction that could result in collision risk; bridge maintenance, repair, or replacement; subsurface drilling or blasting for utility line and road installation; purposeful take; or other activities that may affect NLEBs not listed here. You do not need to include the following activities because they are accounted for in the Standing Analysis: forest management, prescribed fire, and habitat removal. Describe below any anticipated cumulative effects within the action area. If none are anticipated, note "none".

Project will involve tree cutting and construction activities, involving noise/vibrations from machinery and blasting, within the active season. No occupied roost trees are known to occur within the action area.

Incidental Take Statement

Provide the spatial extent (acres) for each activity and time period listed below. If your project will continue past April 1, 2024, only include the spatial extent (acres) that will occur through April 1, 2024.

Activity where Take is Reasonably Certain	Time Period	Areal Extent of Impacts (acres)
Removal of roosting habitat	Active Season	14.2
Removal of roosting habitat	Maternity Season	0
Removal of roosting habitat in forested wetlands where NLEBs occur year-round	December 15 - February 15	N/A
Permanent removal of roosting habitat. Note: this does not apply to forest management activities.	Inactive Season	0
Prescribed fire	Active Season	0
Prescribed fire	Pup Season	0
Prescribed fire in areas where NLEBs occur year-round	December 15 - February 15	0
Military training smoke and obscurants	Active Season	0

Provide the number of structures and linear distance that will be affected during the corresponding time period for activities where take is reasonably certain to occur. If known, provide the estimated number of individuals that may be present. Leave it blank if unknown. If your project will continue past April 1, 2024, only include the structures that be affected through April 1, 2024.

Structures	Time Period	Number of Structures	Linear Distance of Structures	Estimated number of individuals present (if known)
Bridges	Active Season	0		
Culverts >4ft in diameter	Active Season	0		
Roads with collision potential	Year-Round	0		
Waste Pits or tanks	Active Season	0		

The Standing Analysis and Interim Consultation Framework only consider and address the effects of covered actions that are expected to occur from March 2023 until April 1, 2024. In other words, the Standing Analysis and Interim Consultation Framework do not consider any effects (i.e., incidental take) of the covered actions that may occur after April 1, 2024. Therefore, after April 1, 2024, any action agency that was issued an individual BO that relied on this Standing Analysis and Interim Consultation Framework will need to reinitiate consultation if its continuing, discretionary action is expected to affect the NLEB (i.e., cause incidental take). If the action agency fails to reinitiate consultation on or before April 1, 2024, its individual BO will no longer be based on the best available information, which means the action agency's section 7 compliance and incidental take exemptions provided by section 7(o)(2) may lapse. Will any of the stressors that can result in take (see Section V), occur past April 1, 2024? Briefly describe in the text box below.

Construction activities will occur past April 1, 2024, potentially including tree removal and blasting.

VIII. SUBMISSION OF FORM

By signing this form, the action agency is 1) confirming that it evaluated its project in accordance with the Interim Consultation Framework and that its project activities are within the scope of the Service's 2023 Standing Analysis, 2) confirming that anticipated effects are consistent with the effects analysis in the Standing Analysis, and 3) conveying your determination that your project is Likely to Adversely Affect the NLEB.

The action agency understands that the conclusions contained in any biological opinion rendered by the Service are conditioned on the action agency implementing all activities as described herein. Any departures from the described activities must be reported to the local Ecological Services Field Office.

Signature: Henry M. Benner Digitally signed by Henry M. Benner DN: C=US, E=hbenner@gilbaneco.com, O=Gilbane Building Co., CN=Henry M. Benner Date: 2023.06.08 10:05:21-04'00' Date Submitted: _____

Table 1. Seasonal dates for each state in the range of the NLEB.

State	Active Season[1]	Inactive Season[2]	Maternity Season[3]	Pup Season[4]
Alabama	April 1- November 15	November 16 to March 31	April 1 - July 30	April 15- July 30
Arkansas	March 16- November 14	November 15 to March 15	March 16- July 30	April 15- July 30
Connecticut	April 15- October 31	November 1 to April 14	April 15 - August 15	May 15 - August 15
Delaware	April 1- November 14	November 15 to March 31	April 1 - July 31	May 15 - July 31
District of Columbia	April 1- November 14	November 15- March 31	April 1 - July 31	May 15 - July 31
Georgia	April 1- October 31	November 1- March 31	April 1 - July 30	April 15- July 30
Illinois	April 1- November 15	November 16 - March 31	April 1 - July 31	May 15 - July 31
Indiana	April 1- November 15	November 16 to March 31	April 1 - July 31	May 15 - July 31
Iowa	April 1- November 15	November 16 - March 31	April 1 - July 31	May 15 - July 31
Kansas	March 16- October 31	November 1 - March 15	March 16 - August 10	May 25 - August 10
Kentucky	April 1- November 14	November 15 - March 31	April 1 - July 31	May 15 - July 31
Louisiana	Year round	None	April 15- July 30	April 15- July 30
Maine	April 15- October 31	November 1 - April 14	April 15 - August 15	May 15 - August 15
Maryland	April 1- November 14	November 15- March 31	April 1- July 31	May 15 - July 31
Massachusetts	April 15- October 31	November 1 - April 14	April 15 - August 15	May 15 - August 15
Michigan	April 1- November 14	November 15- March 31	April 1- July 31	May 15 - July 31
Minnesota	April 1- November 14	November 15- March 31	April 1- August 15	May 15 - August 15
Mississippi	Year round	None	April 15- July 30	April 15- July 30
Missouri	April 1- October 31	November 1 - March 31	April 1 - July 31	May 15 - July 31
Montana	May 2- October 14	Oct 15 - May 1	May 2 - August 7	June 10 - August 7
Nebraska	March 16- November 14	November 15 - March 15	March 16 - August 10	May 11- August 10
New Hampshire	April 15- October 31	November 1 - April 14	April 15 - August 15	May 15 - August 15

New Jersey	April 1- November 15	November 16 to March 31	April 1 - July 30	May 15- July 30
New York	April 1- October 31	November 1 - March 31	April 1- July 30	May 15 - July 30
North Carolina - Outside of Coastal Plain	April 1- November 14	November 15 - March 31	April 1 - July 31	May 15 - July 31
North Dakota	April 1- November 14	November 15- March 31	April 1-August 15	May 15 -August 15
Ohio	March 16- November 14	November 15 - March 15	March 16 - July 31	May 15 - July 31
Oklahoma	April 1- November 15	November 16 - March 31	April 1 - August 15	May 15 - August 15
Pennsylvania	April 1- November 14	November 15 to March 31	April 1 - August 15	May 15 - August 15
Rhode Island	April 15- October 31	November 1 - April 14	April 15 - August 15	May 15 - August 15
South Carolina - Outside of Coastal Plain	April 1- November 14	November 15 - March 31	April 1- July 30	April 15- July 30
South Dakota	May 16- September 30	Oct 1 - May 15	May 16 - August 31	May 15 -August 31
Tennessee	March 16- October 31	November 1 - March 15	March 16 - July 31	May 15 - July 31
Vermont	April 15- October 31	November 1 - April 14	April 15 - August 15	May 15 - August 15
Virginia - Outside of Coastal Plain	April 1- November 14	November 15 - March 31	April 1 - July 31	May 15 - July 31
West Virginia	April 1- November 14	November 15 to March 31	April 1 - August 15	May 15 - August 15
Wisconsin	April 1- November 14	November 15- March 31	April 1 - August 15	May 15 - August 15
Wyoming	May 2- October 14	Oct 15 - May 1	May 2 - August 15	May 15 - August 15
North Carolina - Coastal Plain	Year round	None	April 15 - July 30	April 15 - July 30
South Carolina - Coastal Plain	Year round	None	April 15 – July 30	April 15 - July 30
Virginia- Coastal Plain	Year round	None	April 15 – July 30	April 15 – July 30

[1] The active season includes the range of time when NLEBs may be present outside of hibernacula and using trees for roosting.

[2] The inactive season includes the range of time when NLEBs are hibernating. This season does not apply to coastal areas of Virginia, North Carolina, South Carolina, and Louisiana where NLEBs are expected to be active year-round.

[3] The maternity season includes the range of time when NLEBs are concentrated in maternity colonies.

[4] The pup season includes the range of time when females are close to giving birth (two weeks prior to birth) and have non-volant (i.e., unable to fly) young.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
https://www.fws.gov/office/new-england-ecological-services

July 5, 2023

John H. Nagle
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, MA 02109

Subject: Interim Consultation Framework Biological Opinion
Northeast Metro Vocational High School Project, Wakefield, MA
Project Code: 2023-0022548; IPaC Record Locator: 926-124978189

Dear John H. Nagle:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion (BO) based on our review of the proposed action. Gilbane Building Company, on behalf of the project proponent, submitted a Biological Assessment Form (BA Form) for the Northeast Metro Vocational High School Project and will be applying for a permit from the Environmental Protection Agency (EPA or Action Agency) for this proposed action. Formal consultation was initiated on June 8, which is the date we received the BA Form. Supplemental information regarding conservation measures (see Conservation Measures section below) was received on June 29. This project qualifies for consultation under the Interim Consultation Framework for the northern long-eared bat (*Myotis septentrionalis*; NLEB). This BO is submitted in accordance with section 7(a)(2) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). It is based on information in the Service's Standing Analysis for the Interim Consultation Framework[1], the BA Form, and other sources of information, as appropriate.

The EPA is the lead Federal agency for this consultation. If the EPA does not include the project description and conservation measures, as described in the BA Form and this BO, along with the reasonable and prudent measures and terms and conditions in the incidental take statement

[1] https://www.fws.gov/sites/default/files/documents/App%20A%20Standing%20Analysis%20Interim%20Consultation%20Framework_6Mar23.pdf (accessed 07 April 2023)

accompanying this BO, as binding measures of a permit or other approval of the proposed action issued by the EPA, reinitiation of formal consultation may be warranted (see section IX below).

The NLEB was previously listed as threatened under the Endangered Species Act (ESA) in 2015, and a special rule pursuant to section 4(d) of the ESA was finalized in 2016. The Service reclassified the NLEB as endangered on November 30, 2022, which rendered the 4(d) rule obsolete on the effective date of March 31, 2023, as 4(d) rules are not available for endangered species. All take[2] is now prohibited by section 9 of the ESA. All new and ongoing Federal[3] actions that are reasonably certain to result in incidental take need exemption from the taking prohibitions of section 9, which is provided by the Service in an Incidental Take Statement (ITS).

The Interim Consultation Framework provides a mechanism to improve the efficiency and consistency of completing formal section 7 consultation for the NLEB for projects consistent with the former 4(d) rule, and provides for exemptions from section 9 prohibitions for incidental take that is reasonably certain to occur before April 1, 2024. The Interim Consultation Framework includes a Standing Analysis, in which the Service examined whether potential Federal actions covered by the Interim Consultation Framework are likely to jeopardize the continued existence of the NLEB. The Standing Analysis was used to streamline the development of this BO and ITS Form. It is incorporated by reference in this document.

I. DESCRIPTION OF THE PROPOSED ACTION

The action that is the subject of this BO will be implemented under the Interim Consultation Framework. The Action Agency provided the following Project Description in the BA Form:

The project consists of the construction of a new four-story high school at the site of the existing Northeast Metropolitan Regional Vocational High School (NEMT) in Wakefield, MA. Site work includes but is not limited to significant ledge removal operation, construction of the new access driveway with traffic light and turn-off lanes at the new site entrance. The work includes the demolition and removal of the existing vocational high school after completion of the new construction.

Other Activities Caused by the Action in Section

Within a biological opinion, all consequences to species or critical habitat caused by the proposed Federal action are evaluated, including the consequences of other activities caused by the proposed action, that are reasonably certain to occur (see definition of "effects of the action"

[2] The ESA and its implementing regulations (50 CFR 17) define take as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Incidental taking" is defined at 50 CFR 17.3 as "any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, an otherwise lawful activity."

[3] Federal actions include all activities or programs authorized, funded, carried out, or permitted, in whole or in part, by Federal agencies in the United States or on the high seas.

at 50 CFR §402.02). Additional regulations at 50 CFR §402.17(a) identify factors to consider when determining whether activities caused by the proposed action (but not part of the proposed action) are reasonably certain to occur. These factors include, but are not limited to:

1. past experiences with activities that have resulted from actions that are similar in scope, nature, and magnitude to the proposed action;
2. existing plans for the activity; and
3. any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

Conservation Measures

Conservation measures represent actions outlined in the project description that the Action Agency will implement to further the recovery of the NLEB.

The Action Agency will implement required conservation measures 1, 2, 3, and 4 listed in section IV of the BA form.

In addition, the applicant committed to avoiding tree clearing during June and July to avoid the NLEB maternity season (Neil Benner, applicant representative; June 29, 2023; pers. comm. to David Simmons, US Fish and Wildlife Service).

We offer additional, discretionary conservation recommendations in section X, Conservation Recommendations.

II. ACTION AREA

The action area is defined as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action" (50 CFR 402.02). The action area is not limited to the "footprint" of the project but rather encompasses the spatial extent of the modifications to the land, water, air that is caused by the action.

The Action Area is near the end of Hemlock Rd. in Wakefield, Massachusetts, and is defined by the polygon submitted to IPAC.

III. STATUS OF THE SPECIES

See the Status of the Species in the Standing Analysis for a description of the species and its life history, range and distribution, population status and size, threats, and conservation needs.

IV. ENVIRONMENTAL BASELINE

In accordance with 50 CFR 402.02, the environmental baseline refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the

action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline. The environmental baseline is a "snapshot" of the species' health in the action area at the time of the consultation and does not include the effects of the action under review.

Status of the Species within the Action Area

Projects that qualify for formal consultation under the Interim Consultation Framework occur within areas where NLEBs are reasonably certain to occur and may be within a known maternity colony area, known swarming or staging area, or known winter habitat in areas where the species is active year-round[4].

The NLEB is reasonably certain to be present within the action area. Surveys have detected NLEB in several locations around the action area. There are large tracts of forest in and around the action area that provide suitable roosting habitat for the NLEB. We are not aware of any other specific information on the number, distribution, reproduction, or habitat use of NLEBs in the action area.

Factors affecting species environment within the action area

This analysis describes factors affecting the environment of the species in the action area. The primary threat affecting the northern long-eared bat range-wide and in the action area is the ongoing effects of white-nose syndrome. The Standing Analysis evaluates at least nine categories of actions in four general activity types that may affect the NLEB. One or more of these may be affecting the species in the action area. The northern long-eared bat is reasonably certain to occur in the action area. Given the dramatic decline in this species, all areas where individuals persist are important to the species' survival and recovery.

V. EFFECTS OF THE ACTION

For a description of the effects of the activities that will occur during implementation of this project, see the Standing Analysis for the Interim Consultation Framework. Because the species is reasonably certain to occur within the action area, the NLEB is likely to be exposed to the stressors that could be caused by the proposed action.

The Action Agency provided additional information regarding the specific actions that are subject to this BO in the BA Form. In the Standing Analysis, the Service described how the general categories of activities are implemented, and the nature of their likely effects to the NLEB. The Action Agency provided the stressors (numbers 1 and 6) associated with this project

[4] The northern long-eared bat is active year-round in the Southeast Coastal Plain from the James River in Virginia south to the border of Georgia and in the species' entire range in Louisiana.

that will occur through April 1, 2024. The BA Form and the Standing Analysis describe the likely effects on the NLEB that would occur from these stressors.

VI. CUMULATIVE EFFECTS

Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation (50 CFR §402.02). Additional regulations at 50 CFR §402.17(a) identify factors to consider when determining whether activities are reasonably certain to occur. These factors include but are not limited to: existing plans for the activity; and any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

The Standing Analysis already considered the effects of the total amount of forest management, prescribed fire, and habitat removal that may occur range-wide (within the U.S.) until April 1, 2024. We were not able to distinguish between Federal and non-Federal projects when we estimated the total amount of these activities. Therefore, any cumulative effects from those activities occurring within the action area do not need to be evaluated separately here. The Service is not aware of any future State, tribal, local, or private actions that are reasonably certain to occur within the action area at this time; therefore, no cumulative effects are anticipated beyond the effect of non-Federal forest management, prescribed fire, and habitat removal analyzed in the Standing Analysis.

VII. CONCLUSION

Section 7(a)(2) of the ESA requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. "Jeopardize the continued existence of" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution (RND) of that species (50 CFR 402.02). The Service adds the effects of the action and the cumulative effects to the status of the species and to the environmental baseline to determine if the proposed action is likely to appreciably reduce the likelihood of both the survival and recovery of a listed species in the wild by reducing the RND of that species.

Summary of Effects to Individuals

Forest management, prescribed fire, and habitat removal activities are likely to result in injury and mortality of pups and adults through the removal of occupied roost trees. We expect impacts during the maternity season, especially the pup season, and during swarming/staging seasons. Range-wide, we expect individual bats from 32 different maternity colonies to be exposed to these activities, and of those, a small number are expected to be directly harmed. We anticipate no more than three bats will be harmed in each maternity colony. We do not anticipate the loss of any colonies, but we do anticipate one maternity colony could be fragmented by permanent maternity roosting habitat removal, which would cause a reduction in reproductive fitness. We

also anticipate additional beneficial and adverse effects to NLEBs as a result of these activities. Additional adverse effects are anticipated for unquantified effects from "other" activities that may affect the NLEB. We are unable to quantify the effects due to the programmatic nature of this standing analysis; however, we do not expect the additional impacts to substantially increase the number of individuals affected or number of maternity colonies affected due to the low likelihood of activities impacting maternity colonies (occupancy rates are typically less than 5 percent) and the widely dispersed nature of activities across the landscape. We expect projects that qualify for the Interim Consultation Framework to reduce the number of NLEBs and reduce reproductive success. The potential impacts of the Action Agency's proposed action are consistent with, and encompassed by, the analysis of effects in the Standing Analysis.

Summary of Effects to Populations

Because we expect impacts to individuals, we assess how the potential adverse effects to individuals affect the overall health and viability of NLEB populations. Therefore, we analyzed effects to representation units (RPU) to better understand whether these local effects could affect the species' resilience, redundancy, and representation. Our analysis predicts that there is a low likelihood that individual activities within these categories will intersect NLEBs and that few NLEBs will be affected within each RPU (Table 4, Table 5, and Table 6 from the Standing Analysis). Less than 1 percent of all maternity colonies will be affected in each RPU. Even if the impacts were severe enough to result in the loss of a maternity colony, the resilience, redundancy, and representation would not be significantly affected in any RPU.

Where the species has substantially declined as a result of WNS, the surviving members of the population may be resilient or resistant to WNS. These surviving populations are particularly important to the persistence of the populations. The individual effects analysis indicates that some additional impacts will occur as a result this action. We do not know at this time if the impacts from this action are additive to the effects of WNS; however, even if the potential mortality from these activities is additive to the impacts from WNS, our analysis suggests that the proportion of maternity colonies that will be affected in each RPU is small and would not significantly affect the species' likelihood of persisting in any these RPUs. Reproduction, numbers, and distribution (RND) changes at the RPU level are not likely. Based on the relatively small numbers affected annually compared to the RPU population sizes, we do not anticipate population-level effects to the NLEB. Based on this Standing Analysis, we conclude that adverse effects from forest management, prescribed fire, habitat removal, and other activities will not significantly affect the species' RND at the population level.

WNS is the primary factor causing the decline of the NLEB. Our analysis of the effects of activities that may occur between March 2023 and April 2024 indicates that the additional loss of individual NLEB resulting from these activities would not exacerbate the effects of WNS at the scale of the RPUs within its range.

The Service determined that projects consistent with the Interim Consultation Framework are not likely to jeopardize the continued existence of the NLEB based on the status of the species, total effects of the potential Federal actions that may be conducted under the Interim Consultation

Framework, and cumulative effects of non-Federal forest management, prescribed fire, and habitat removal expected to occur range-wide over the next year. At the project-specific level, we need to evaluate both the environmental baseline within the action area and cumulative effects within the action area in order to determine if our conclusion in the Standing Analysis is valid for this specific project. If the action area of a specific project has critical significance to the conservation of the NLEB, or if the cumulative effects within the action area exceed those contemplated by the Standing Analysis, we may need to re-visit our conclusion.

The specific effects of this project, together with the environmental baseline and cumulative effects within the action area, is consistent with the Standing Analysis and therefore we conclude that this project will not jeopardize the continued existence of the NLEB for the following reasons: (1) adverse impacts all have a low likelihood of occurrence, and severe, localized effects are not expected; (2) less than 1 percent of all maternity colonies will be affected in each RPU. Even if the impacts were severe enough to result in the loss of a maternity colony, the resilience, redundancy, and representation would not be significantly affected in any RPU; (3) while impacts could occur to individuals or populations, we do not consider these impacts to affect the survival or recovery of NLEBs in the RPUs or range-wide; and (4) WNS is the primary factor causing the decline of the NLEB. Our analysis of the effects of activities that may occur between March 2023 and April 2024 indicates that the additional loss of individual NLEB resulting from this project will not exacerbate the effects of WNS at the scale of the RPUs within its range.

VIII. INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and Federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. Harm is further defined by regulation at 50 CFR 17.3. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement (ITS).

The measures described below are non-discretionary and must be undertaken by the Action Agency, as applicable, for the exemption in section 7(o)(2) to apply. The Action Agency has a continuing duty to regulate the activity covered by this ITS. If the Action Agency fails to assume and implement the terms and conditions as part of the proposed action, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the Action Agency must document the progress of the action and its impact on the species as specified in the ITS. [50 CFR §402.14(i)(3)]

Amount or Extent of Take

This section specifies the amount or extent of take of the NLEB that the action is reasonably certain to cause. We anticipate that take is reasonably certain to occur resulting from tree removal, forest thinning, etc. during the active season.

For impacts from tree removal, the following ITS will use acres of habitat as a surrogate for quantifying the amount or extent of incidental take because determining the exact numerical

limits on the amount of incidental take are not practical and cannot be feasibly used as a trigger for determining when reinitiation would be required. In this situation, acres of habitat impacted will serve as a reasonable and appropriate surrogate for quantifying and tracking incidental take of the NLEB, because any activities within suitable habitat where NLEB exist are reasonably certain to directly and indirectly cause the anticipated incidental take of NLEBs within the bounds of the identified acres of habitat.

The ESA does not require use of precise, empirical scientific data to make decisions, but instead requires use of the best available scientific and commercial data to make determinations within specified statutory time frames. Therefore, when lacking empirical data, the Service must make science-based assumptions in its decision-making process. This is often the case when the Service must complete its effects analysis, jeopardy and adverse modification determinations, and ITS based on data that are incomplete or when the Service lacks site-specific, empirical data.

For the NLEB, it is not practical to express the amount of anticipated take in terms of individuals because there is no density or abundance estimate for the portion of the action area where take is anticipated. As a result, predicting the precise number of individuals that will be taken is not possible. Additionally, it is not practical to monitor take-related impacts in terms of individual NLEBs for the following reasons: (1) the NLEB has a small body size, is drab in color, which makes encountering dead or injured individuals unlikely; (2) NLEBs occupy summer habitats (heavily forested) where they are difficult to locate (multiple roosts located within and outside of the action area); (3) NLEBs spend a substantial portion of their lifespan underground; (4) take may occur offsite (e.g., the bat dies outside of the action area); (5) starvation or failure to reproduce cannot be detected; and (6) losses may be masked by fluctuations in numbers associated with WNS.

Because the location, timing, and acreage of habitat impacts can be readily identified, measured, and monitored, this surrogate is the most reasonable means for detecting when take may be exceeded. While working outside of the evaluated parameters (e.g., work zones, seasonal or timing restrictions, and specified acreages) does not automatically mean that take has been exceeded, these events provide a clear trigger that requires the Action Agency to reinitiate consultation. During this consultation, the Service will determine whether incidental take has been exceeded since detection of individuals taken, as described above, is not practical.

The anticipated take is described in the table below.

Activity	Time Period	Amount of Take Anticipated (# of Individuals)	Amount of Take Anticipated (Surrogate of Areal Extent of Impacts)
Removal of roosting habitat	Active Season	NA	14.2 acres

Effect of Take

In the accompanying BO, the Service determined that the level of anticipated take is not likely to jeopardize the continued existence of the NLEB.

Reasonable and Prudent Measures

The USFWS considers the following reasonable and prudent measure(s) to be necessary and appropriate to minimize the incidental take of the NLEB.

RPM 1 – Conservation Measures

All conservation measures, as described in the BA Form and restated in the Conservation Measures section of this BO, shall be fully implemented.

RPM 2 – Monitoring and Reporting Requirements

Report to the Service annually about the status of the Project activities until the Project and all terms and conditions have been implemented. Report any injured or dead NLEBs incidentally observed to the Service.

Terms and Conditions

The Action Agency must comply with the terms and conditions of this statement, provided below, which include monitoring and reporting requirements. Any taking which is subject to this ITS that is in compliance with the following terms and conditions is not a prohibited taking under the ESA, and no other authorization or permit under the ESA is required.

Term & Condition 1.1 (RPM 1 – Conservation Measures)

The Action Agency shall require and include full implementation and adherence to the conservation measures identified in the BA Form, whether as a condition of any permit or contract issued for the Project, or by another mechanism under the Action Agency's discretion.

Term & Condition 1.2 (RPM 1 – Conservation Measures)

If any conservation measures cannot be implemented or require modification, the Action Agency will contact the Service for further discussion before proceeding.

Term & Condition 2.1 (RPM 2 – Monitoring and Reporting Requirements)

The Action Agency will notify contractors and construction staff of conservation measures and ensure compliance with these measures.

Term & Condition 2.3 (RPM 2 – Monitoring and Reporting Requirements)

The Action Agency, and applicant, if applicable, will make all reasonable efforts to educate personnel to report any sick, injured, and/or dead bats (regardless of species) located in the project action area during construction, operations, maintenance, or monitoring activities, immediately to the New England Field Office at newengland@fws.gov and 603-223-2541. When

injured or dead bats are found, the Action Agency shall follow the steps outlined in conditions 2.4 and 2.5 below.

Term & Condition 2.4 (RPM 2 – Monitoring and Reporting Requirements)

Injured listed species must be cared for by a licensed veterinarian or other qualified persons. Dead individuals must be sealed in a resealable plastic bag containing a paper with the date and time when the animal was found, the location where it was found, and the name of the person who found it, and the bag containing the specimen frozen in a freezer located in a secure site, until instructions are received from the Service regarding the disposition of the dead specimen. If individuals on-site lack the training or personal protective equipment to safely collect, bag, and freeze a dead bat, they must take photos of the animal from all sides and collect the other information listed above. Mark the location of the dead bat and notify the Service with 24 hours.

Term & Condition 2.5 (RPM 2 – Monitoring and Reporting Requirements)

To monitor the impacts of incidental take, the Action Agency must report the progress of the action and its impact on the NLEB as specified below. The Action Agency will report the progress and impacts for each activity no later than May 1, 2024.

To report on the extent and nature of incidental take each year, the Action Agency will provide the Service with the following information, or alternative information that the Action Agency and the Service agree is appropriate.

- The completion status of the project,
- The conservation measures that were applied,
- The acreage of tree removal by activity type in the take table,
- The status and results of the RPMs and Terms and Conditions, and
- Any listed species survey or habitat reports, or structure assessments, if applicable.

IX. REINTIATION NOTICE

This concludes formal consultation on the proposed project. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the Action Agency that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the action is subsequently modified in a manner that causes an effect to listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

X. CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the ESA [16 USC 1536(a)(1)] directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary

agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

The Service has identified the following actions that, if undertaken by the Action Agency, would further the conservation of the NLEB:

- To the extent possible, during this project and in future projects, implement a time-of-year restriction on project activities that may affect the NLEB outside hibernacula. Requiring these activities to occur from November 1 through April 14 would minimize impacts on all life stages of the species.

Thank you for your coordination. Please contact Maria Tur of this office at maria_tur@fws.gov or 603-568-4871 with any questions regarding this consultation.

Sincerely yours,

AUDREY MAYER

Digitally signed by AUDREY MAYER
Date: 2023.07.05 09:31:19 -04'00'

Audrey Mayer
Supervisor
New England Field Office

cc:

Neil Benner (HBenner@gilbaneco.com)
John Nagle (nagle.john@epa.gov)
Michelle Vuto (vuto.michelle@epa.gov)
David Simmons (david_simmons@fws.gov)

Appendix L – Historic Properties Documentation

Massachusetts Cultural Resource Information System
Scanned Record Cover Page

Inventory No:	WAK.J
Historic Name:	Breakheart Reservation
Common Name:	Camp Nihan - Curley Tract
City/Town:	Wakefield
Village/Neighborhood:	
Local No:	262/015.8-1-10;
Year Constructed:	
Architect(s):	Civilian Conservation Corps; Shurcliff, Arthur Asahel;
Use(s):	Camp; Other Recreational; Park; Playground;
Significance:	Archaeology, Historic; Engineering; Landscape Architecture; Politics Government; Recreation; Transportation;
Designation(s):	
Building Materials:	
Demolished	No

The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

The MACRIS database and scanned files are highly dynamic; new information is added daily and both database records and related scanned files may be updated as new information is incorporated into MHC files. Users should note that there may be a considerable lag time between the receipt of new or updated records by MHC and the appearance of related information in MACRIS. Users should also note that not all source materials for the MACRIS database are made available as scanned images. Users may consult the records, files and maps available in MHC's public research area at its offices at the State Archives Building, 220 Morrissey Boulevard, Boston, open M-F, 9-5.

Users of this digital material acknowledge that they have read and understood the MACRIS Information and Disclaimer (http://mhc-macris.net/macrisdisclaimer.htm)

Data available via the MACRIS web interface, and associated scanned files are for information purposes only. THE ACT OF CHECKING THIS DATABASE AND ASSOCIATED SCANNED FILES DOES NOT SUBSTITUTE FOR COMPLIANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL LAWS AND REGULATIONS. IF YOU ARE REPRESENTING A DEVELOPER AND/OR A PROPOSED PROJECT THAT WILL REQUIRE A PERMIT, LICENSE OR FUNDING FROM ANY STATE OR FEDERAL AGENCY YOU MUST SUBMIT A PROJECT NOTIFICATION FORM TO MHC FOR MHC'S REVIEW AND COMMENT. You can obtain a copy of a PNF through the MHC web site (www.sec.state.ma.us/mhc) under the subject heading "MHC Forms."

Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Monday, June 19, 2023 at 3:42 PM

SAU.X /WAK.J

In 1939, the double driveway entrance road from Lynn Fells Parkway was completed. Parking areas at Lower Pond and Pine Top were also completed. Two gravel pits were filled in and graded, and the small log cabin on the east side of the lower pond was razed (MDC 1938:18).

CCC presence at Breakheart continued for about three years. The project provided employment for young men of poor families, usually between 17 and 24. Each received $30 per month; $25 of this was sent home to their families while the workers kept the remaining $5 (Ruggeri 1985).

In 1940, Walter Hatch, superintendent of the Breakheart project recommended that a one-way park road be opened to the public on Saturday, Sunday and holidays. In March 1942, 25 soldiers of the 704th Military Police, U.S. Army, moved into the CCC barracks with more to follow (MPS card file:3). In March 1943, Breakheart and its 26 former CCC buildings were leased to the United States Army for the duration of the war. The lease was cancelled in February 1945. Later that year, Boys and Girl Scouts applied to camp in the Reservation. The first groups included the Everett Boy Scouts and the Saugus Girl Scouts (MPS card file:4).

With the end of the war, the need for the former CCC buildings was gone. In July 1945, the MPC accepted the bid of Mystic Building Wrecking Company of $3,175 for removal of buildings and cleanup afterwards. The buildings had been removed and the site cleaned by early in 1946 (MPS card file:5-6). In 1949, a request was approved for the Lynn YMCA to use a portion of the Reservation as a day camp for boys (MPS card file:7).

In 1954, the MDC began development and construction of a play area in Breakheart, building the playground off the road leading into the reservation from Lynn Fells Parkway. After constructing picnic areas, putting through roads, and creating a protected beach at the lower pond, the MDC opened the reservation to the public in 1960 (Anonymous n.d.)

In 1959, the Metropolitan District Commission retained the consulting engineering firm of J.L. Hayden Associates, Inc. to prepare a report on the proposed development of the Reservation. Major changes they recommended included: 1) construct 10,000 feet of additional access roads; 2) construct an additional parking area to accommodate 250 cars; 3) develop a bathing beach on Lower Pond with bath house facilities, food concession, and boat house; 4) develop seven picnic areas complete with picnic tables, fireplaces, shelters, and latrines; 5) develop a winter sports area at Breakheart Hill; and 6) develop a maintenance area and building at the southern entrance to the Reservation (Hayden 1959).

In 1960, the MDC announced plans for a "vast expansion" of the reservation to turn it into a recreation area capable of accommodating 300,000 people each year. $5,000,000 was scheduled to be spent to widen trails, improve bathing facilities, and expand picnic areas (Cunningham 1960). In the same year, the fire roads were paved for public use, and modern picnic shelters were installed at picnic areas. Prisoners cleared brush and trees in the area of the newly named Pearce Bond and Silver Pond. A bathing beach was being constructed at Silver Pond (Figure 10). In the 1960s, the MDC built the present beaches and visitor facilities at Lower Pond (Pearce Lake).

In the early 1960s, as depicted on a MDC map, the reservation was occupied by a number of Boy Scout day and overnight camp areas and picnic areas. Standing structures included a maintenance building near the Forest Street entrance, as well as a boathouse, comfort station, and recreation building near the beach (MDC 1961).

In 1965, MDC sold 60 acres in the western (Wakefield) portion of the reservation for $50,000 for the campus of a new vocational high school, present Northeast Metro Tech. In 1972, MDC took control of Camp Nihan, a Boy Scout camp located adjacent to the northeast portion of the Reservation, off Forest Street in Saugus. In the early 1980s, the reservation was refurbished by MDC with the cleanup of fallen trees and clearing of overgrown trails.

In 1988, the Curley Property, located south of Water Street, was added to the Reservation. In 1997, the Breakheart Reservation was closed to vehicular traffic (Friedberg et al. 2003:8:3). The Christopher P. Dunne Visitor Center officially opened in August 2004.

UTM REFERENCES

1.	19	331880	4706500
2.	19	333240	4705920
3.	19	332460	4705500
4.	19	333440	4704800

BOUNDARY DESCRIPTION AND JUSTIFICATION

The National Register boundary for the Breakheart Reservation Parkways includes the parkways and the land that extends 10-feet back from the current edge of the park drives. The boundary does not include parking areas or adjacent MDC-owned parkland that is not directly related to the parkway. More specifically, the termini for each parkway are as follows:

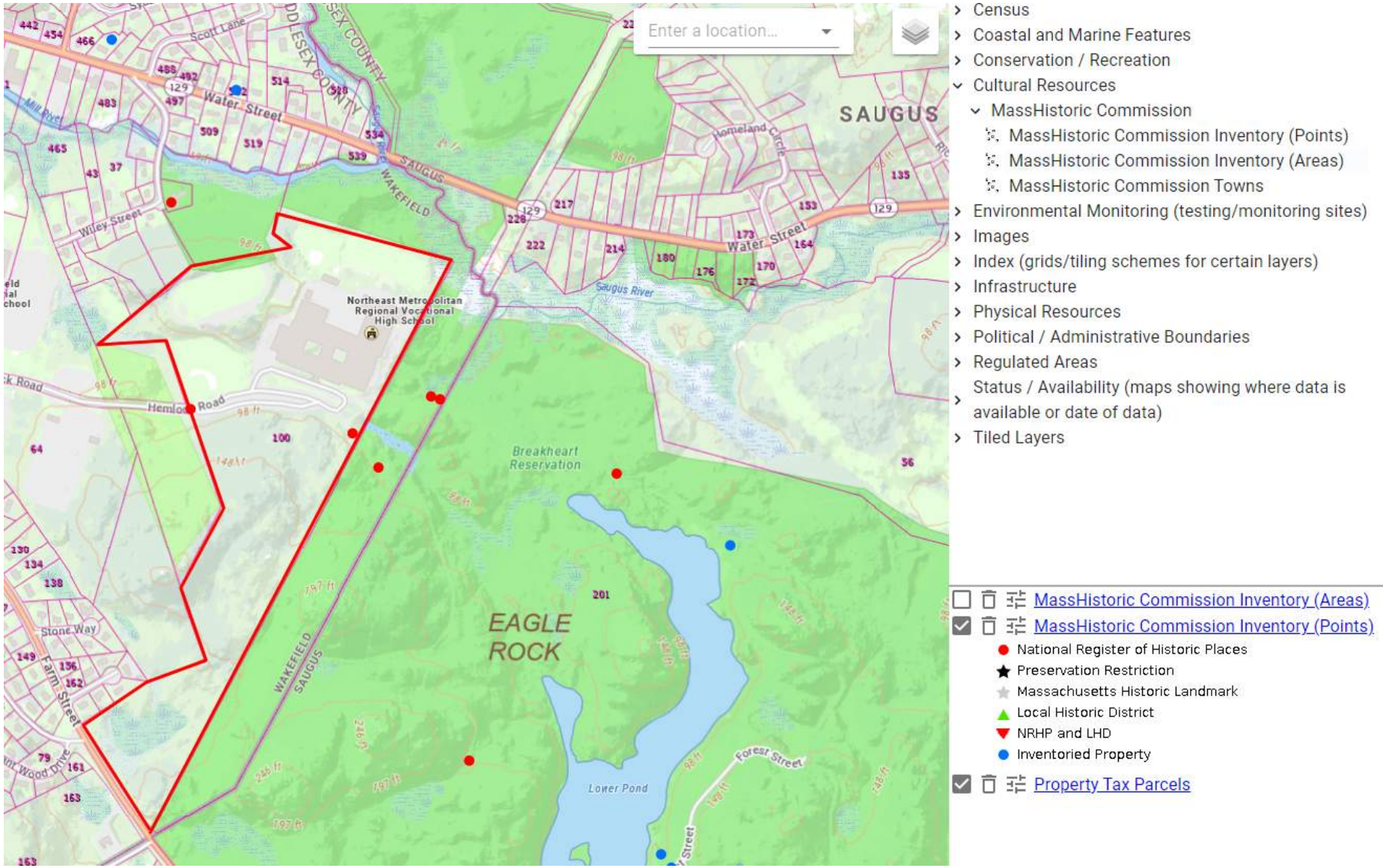
Forest Street: The southern terminus for Forest Street corresponds to a line of convenience drawn along the northern edge of Lynn Fells Parkway (discussed in a separate nomination) in Saugus. The northern terminus for the parkway corresponds to a line of convenience drawn across the southern side of the Modern Swinging Bar Gates at the main entrance (Pine Tops Road continues north of this gate) to the Breakheart Reservation.

Pine Tops Road: Pine Tops Road forms a loop. As such, it has a single terminus. The roadway begins and ends at the northern side of the Modern Swinging Bar Gates at the main entrance (Forest Street continues south of this gate) to the Breakheart Reservation. A line of convenience that corresponds to the north side of the gate has been drawn across the roadway marking this point. Where the parkway passes through the visitor's parking lot, because this boundary does not include parking areas not directly related to the parkway, the boundary to the north and south of the road corresponds to the edge of pavement.

Elm Road: The northeastern terminus for Elm Road corresponds to a line of convenience drawn along the northwestern edge of Pine Tops Road. The western terminus for the road corresponds to a line of convenience drawn across the northwestern edge of Hemlock Road near the western edge of the Breakheart Reservation.

Hemlock Road: The northwestern edge of the Breakheart Reservation marks the western terminus for Hemlock Road. A line of convenience has been drawn across the parkway at the western edge of the reservation immediately west of the Modern Breakheart Entrance Gates. The southeastern terminus for the roadway corresponds to a line of convenience drawn along the southwestern edge of Pine Tops Road.

(end)



Historical Review
Northeast Metropolitan Regional Vocational High School
100 Hemlock Road
Wakefield, MA

LEC WETLANDS WILDLIFE WATERWAYS

June 28, 2023

Email (106review@mwtribe-nsn.gov; David.weeden@mwtribe-nsn.gov)

David Weeden
Mashpee Wampanoag Tribe
Tribal Historic Preservation Officer
483 Great Neck Road South
Mashpee, MA 02649

Re: Historic Property Notification Form [LEC File #: NEI\20-009.04]
Northeast Metropolitan Regional Vocational School
100 Hemlock Road
Map 40A, Lot 0RS
Wakefield, Massachusetts

Dear Mr. Weeden:

In accordance with the procedures and requirements for filing a Self-Verification Notification Form with the U.S. Army Corps of Engineers (USACE) and a NPDES Construction General Permit with the Environmental Protection Agency (EPA), LEC Environmental Consultants, Inc. is forwarding you a copy of the Project Notification Form, USGS Map, Soils Map, and Site Plans (link) depicting the area of work for the proposed replacement of the existing Northeast Metropolitan Regional Vocational School.

I may be contacted at 781-245-2500 or akendall@lecenvironmental.com should you have any questions or comments. If you have no comments, please indicate in an email to me at your earliest convenience, as this will expedite our permitting with the USACE and EPA.

Sincerely,

LEC Environmental Consultants, Inc.

Andrea Kendall, PWS
Senior Environmental Scientist

20-009 NEI\Mashpee Wampanoag Tribe Letter

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Northeast Metropolitan Regional Vocational High School

Location / Address: 100 Hemlock Road (Map 40A, Lot 0RS) Latitude: 42.49422, Longitude: -71.04434

City / Town: Wakefield, Massachusetts 01880

Project Proponent

Name: Northeast Metropolitan Regional Vocational High School District

Address: 100 Hemlock Road

City/Town/Zip/Telephone: Wakefield, Massachusetts 01880 781-246-0810 x 1612

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
Massachusetts School Building Authority (MSBA)	School Construction Funding Grant
MassDEP	Superseding Order of Conditions
US Army Corps of Engineers (USACE)	Self Verification Notification
US Environmental Protection Agency (EPA)	NPDES Construction General Permit

Project Description (narrative):

The project includes construction of a new regional vocational high school serving 12 communities. The project involves construction of a new 135,000 sf school building with three auxiliary buildings, new and refurbished athletic fields, a new access drive off Farm Street, parking lots, walkways, and associated utilities and stormwater management.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

Yes, the existing school building and several small appurtenances will require demolition.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

No

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

Yes, refer to the above project description and attached Site Plans.

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify. No, per MACRIS and associated coordination with the Massachusetts Historical Commission

What is the total acreage of the project area?

Woodland	32.95 acres	Productive Resources:	
Wetland	2.58 acres	Agriculture	0 acres
Floodplain	0 acres	Forestry	0 acres
(athletic fields) Open space	8.96 acres	Mining/Extraction	0 acres
Developed	14.51 acres	Total Project Acreage	59 acres

What is the acreage of the proposed new construction? 21.67 acres

What is the present land use of the project area?

School building with associated driveways, parking, athletic fields, and forested areas.

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

See attached.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: Andrea Kendall Date: June 28, 2023

Name: Andrea Kendall, LEC Environmental Consultants, Inc.

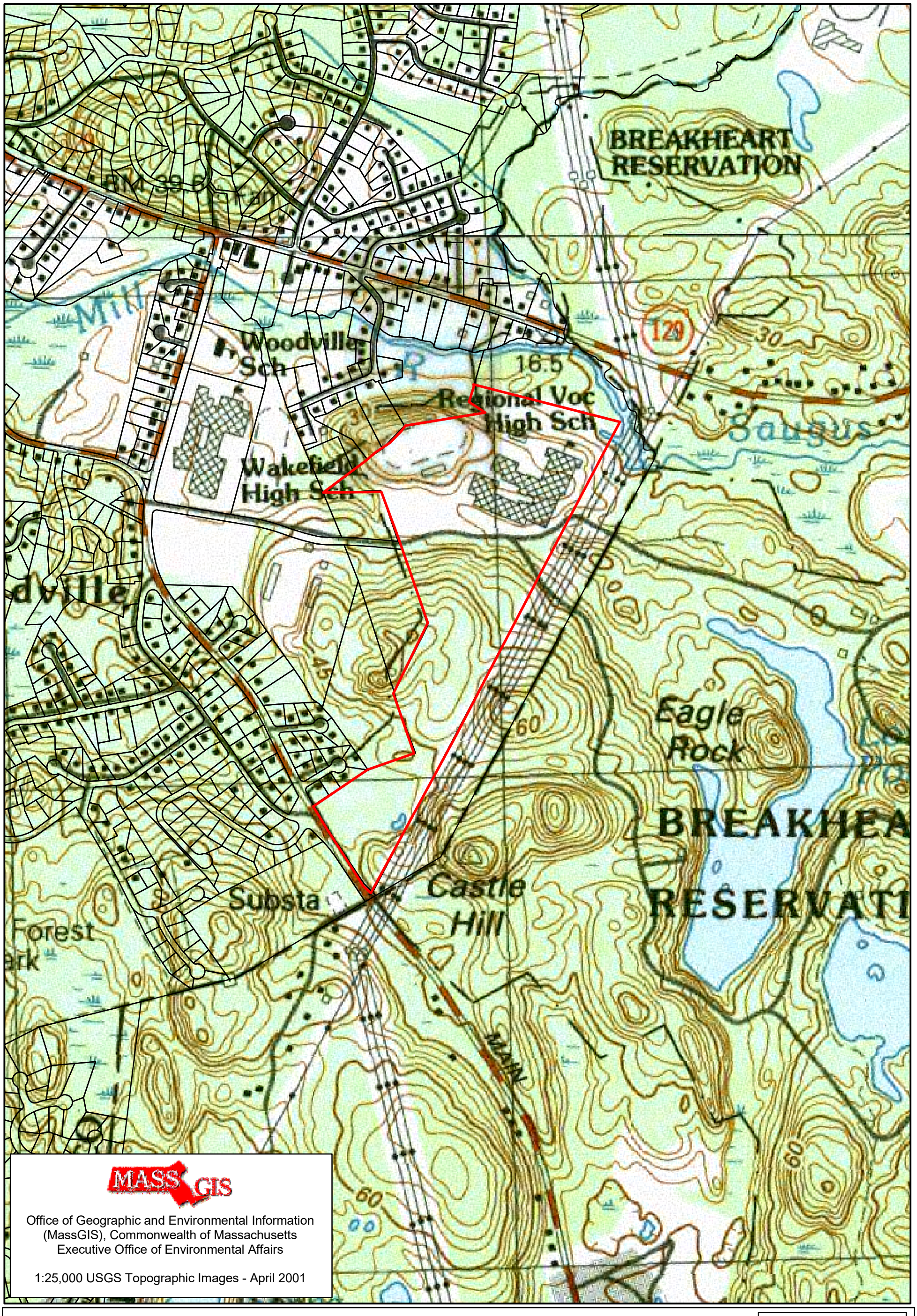
Address: 100 Grove Street, Suite 302

City/Town/Zip: Worcester, MA 01605

Telephone: 781-245-2500

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.



MASS GIS

Office of Geographic and Environmental Information
(MassGIS), Commonwealth of Massachusetts
Executive Office of Environmental Affairs

1:25,000 USGS Topographic Images - April 2001

LEC
Environmental Consultants, Inc.
Wakefield, MA
781.245.2500

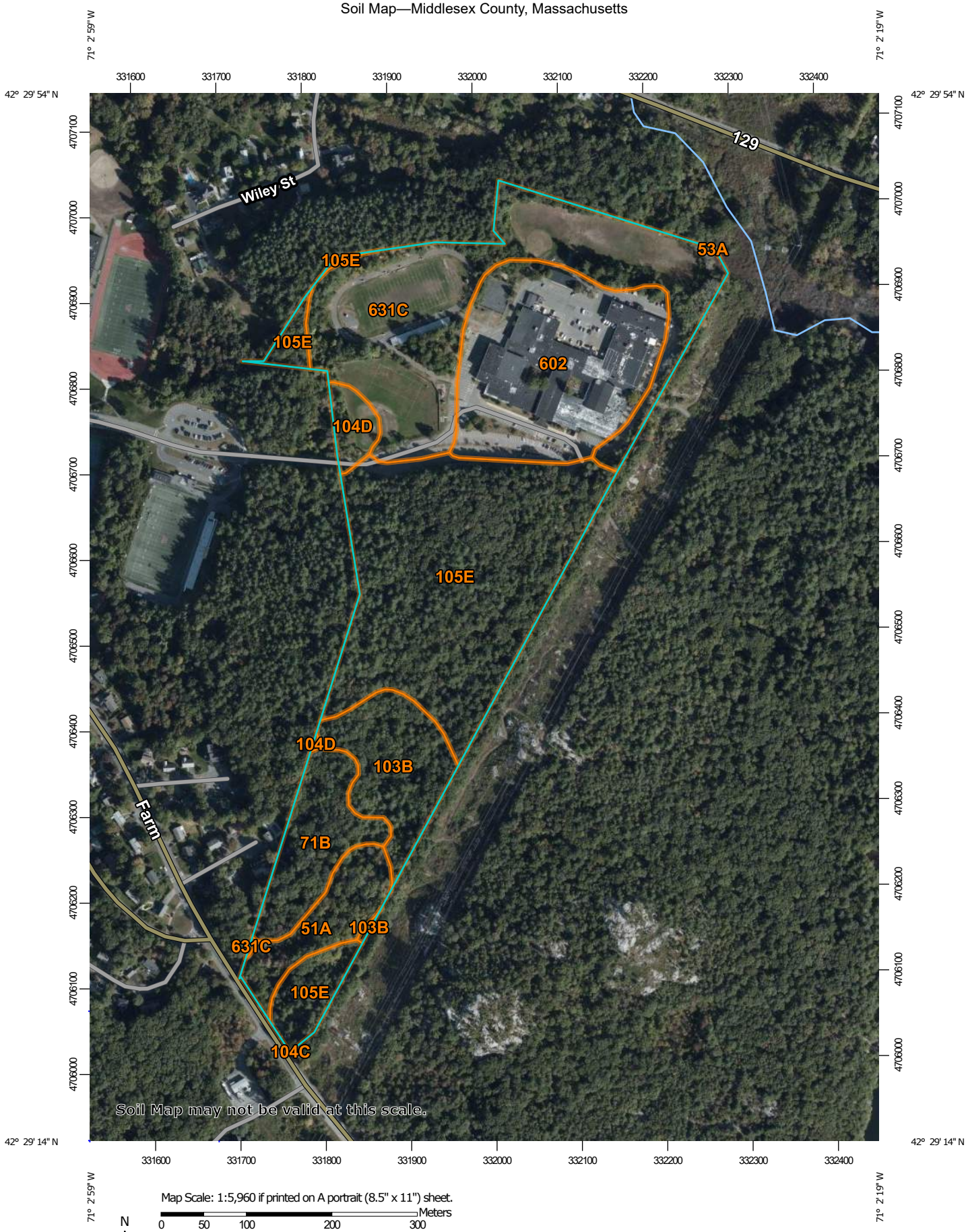
www.lecenvironmental.com

Northeast Metropolitan Regional Vocational School
100 Hemlock Road
Wakefield, MA

June 22, 2023

N

0 300 600 Feet



Map Scale: 1:5,960 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 19, Sep 12, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 13, 2019—Oct 5, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
51A	Swansea muck, 0 to 1 percent slopes	3.0	5.0%
53A	Freetown muck, ponded, 0 to 1 percent slopes	0.0	0.0%
71B	Ridgebury fine sandy loam, 3 to 8 percent slopes, extremely stony	3.9	6.5%
103B	Charlton-Hollis-Rock outcrop complex, 3 to 8 percent slopes	4.6	7.7%
104C	Hollis-Rock outcrop-Charlton complex, 0 to 15 percent slopes	0.0	0.0%
104D	Hollis-Rock outcrop-Charlton complex, 15 to 25 percent slopes	1.1	1.8%
105E	Rock outcrop-Hollis complex, 3 to 35 percent slopes	20.4	33.8%
602	Urban land	11.7	19.3%
631C	Charlton-Urban land-Hollis complex, 3 to 15 percent slopes, rocky	15.8	26.0%
Totals for Area of Interest		**60.5**	**100.0%**

LEC WETLANDS WILDLIFE WATERWAYS

June 28, 2023

Email (tashtesook@aol.com)

John Brown
Tribal Historic Preservation Officer
Narragansett Indian Tribe
Narragansett Indian Longhouse
4425 South County Trail
Charlestown, Rhode Island 02813

Re: Historic Property Notification Form [LEC File #: NEI\20-009.04]
Northeast Metropolitan Regional Vocational School
100 Hemlock Road
Map 40A, Lot 0RS
Wakefield, Massachusetts

Dear Mr. Brown:

In accordance with the procedures and requirements for filing a Self-Verification Notification Form with the U.S. Army Corps of Engineers (USACE) and a NPDES Construction General Permit with the Environmental Protection Agency (EPA), LEC Environmental Consultants, Inc. is forwarding you a copy of the Project Notification Form, USGS Map, Soils Map, and Site Plans (link) depicting the area of work for the proposed replacement of the existing Northeast Metropolitan Regional Vocational School.

I may be contacted at 781-245-2500 or akendall@lecenvironmental.com should you have any questions or comments. If you have no comments, please indicate in an email to me at your earliest convenience, as this will expedite our permitting with the USACE and EPA.

Sincerely,

LEC Environmental Consultants, Inc.

Andrea Kendall, PWS
Senior Environmental Scientist

20-009 NEI\Narragansett Indian Tribe Letter

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Northeast Metropolitan Regional Vocational High School

Location / Address: 100 Hemlock Road (Map 40A, Lot 0RS) Latitude: 42.49422, Longitude: -71.04434

City / Town: Wakefield, Massachusetts 01880

Project Proponent

Name: Northeast Metropolitan Regional Vocational High School District

Address: 100 Hemlock Road

City/Town/Zip/Telephone: Wakefield, Massachusetts 01880 781-246-0810 x 1612

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
Massachusetts School Building Authority (MSBA)	School Construction Funding Grant
MassDEP	Superseding Order of Conditions
US Army Corps of Engineers (USACE)	Self Verification Notification
US Environmental Protection Agency (EPA)	NPDES Construction General Permit

Project Description (narrative):

The project includes construction of a new regional vocational high school serving 12 communities. The project involves construction of a new 135,000 sf school building with three auxiliary buildings, new and refurbished athletic fields, a new access drive off Farm Street, parking lots, walkways, and associated utilities and stormwater management.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

Yes, the existing school building and several small appurtenances will require demolition.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

No

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

Yes, refer to the above project description and attached Site Plans.

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify. No, per MACRIS and associated coordination with the Massachusetts Historical Commission

What is the total acreage of the project area?

Woodland	32.95 acres	Productive Resources:	
Wetland	2.58 acres	Agriculture	0 acres
Floodplain	0 acres	Forestry	0 acres
(athletic fields) Open space	8.96 acres	Mining/Extraction	0 acres
Developed	14.51 acres	Total Project Acreage	59 acres

What is the acreage of the proposed new construction? 21.67 acres

What is the present land use of the project area?

School building with associated driveways, parking, athletic fields, and forested areas.

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

See attached.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: Andrea Kendall Date: June 28, 2023

Name: Andrea Kendall, LEC Environmental Consultants, Inc.

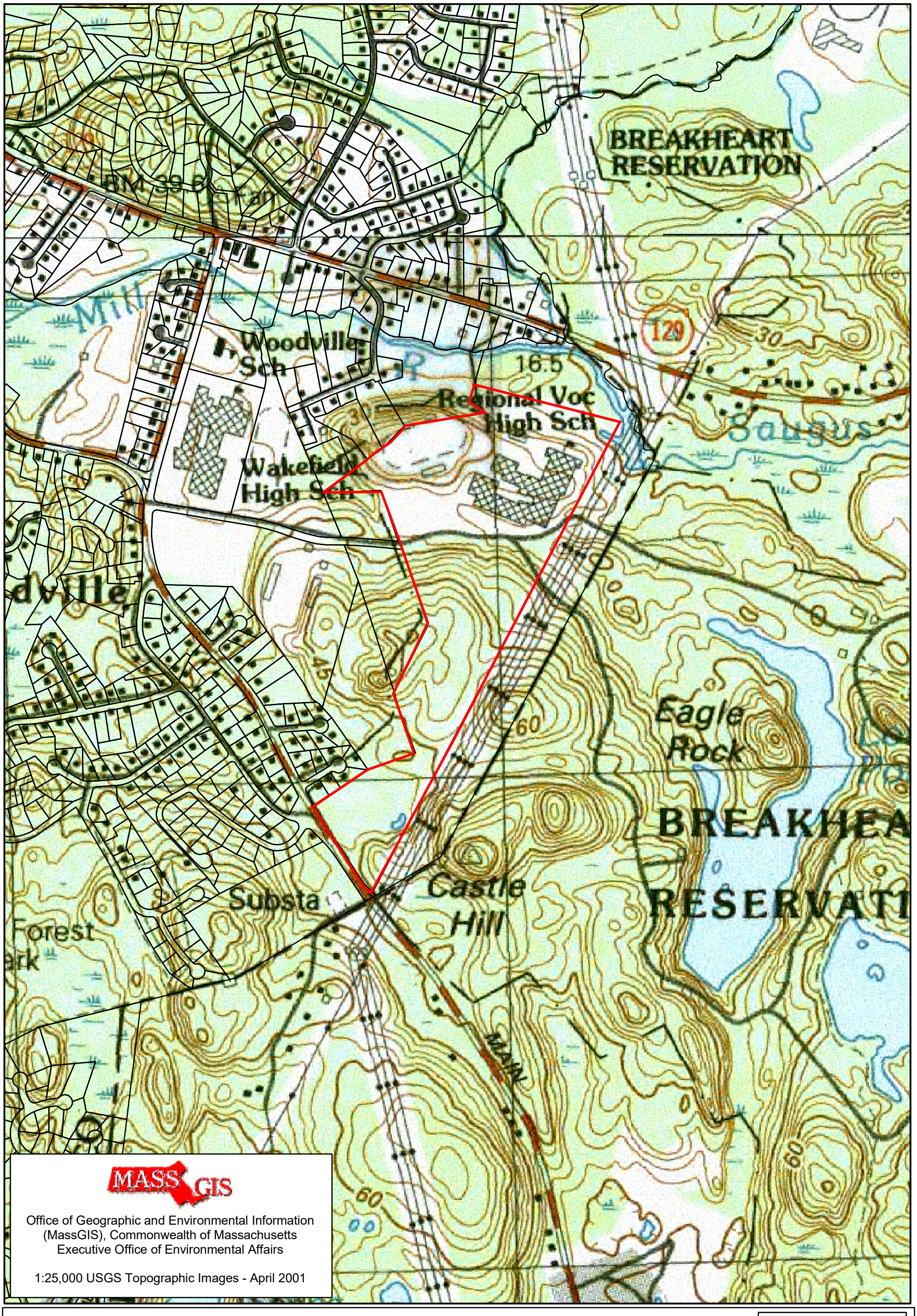
Address: 100 Grove Street, Suite 302

City/Town/Zip: Worcester, MA 01605

Telephone: 781-245-2500

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.



MASS GIS

Office of Geographic and Environmental Information
(MassGIS), Commonwealth of Massachusetts
Executive Office of Environmental Affairs

1:25,000 USGS Topographic Images - April 2001

LEC
Environmental Consultants, Inc.
Wakefield, MA
781.245.2500

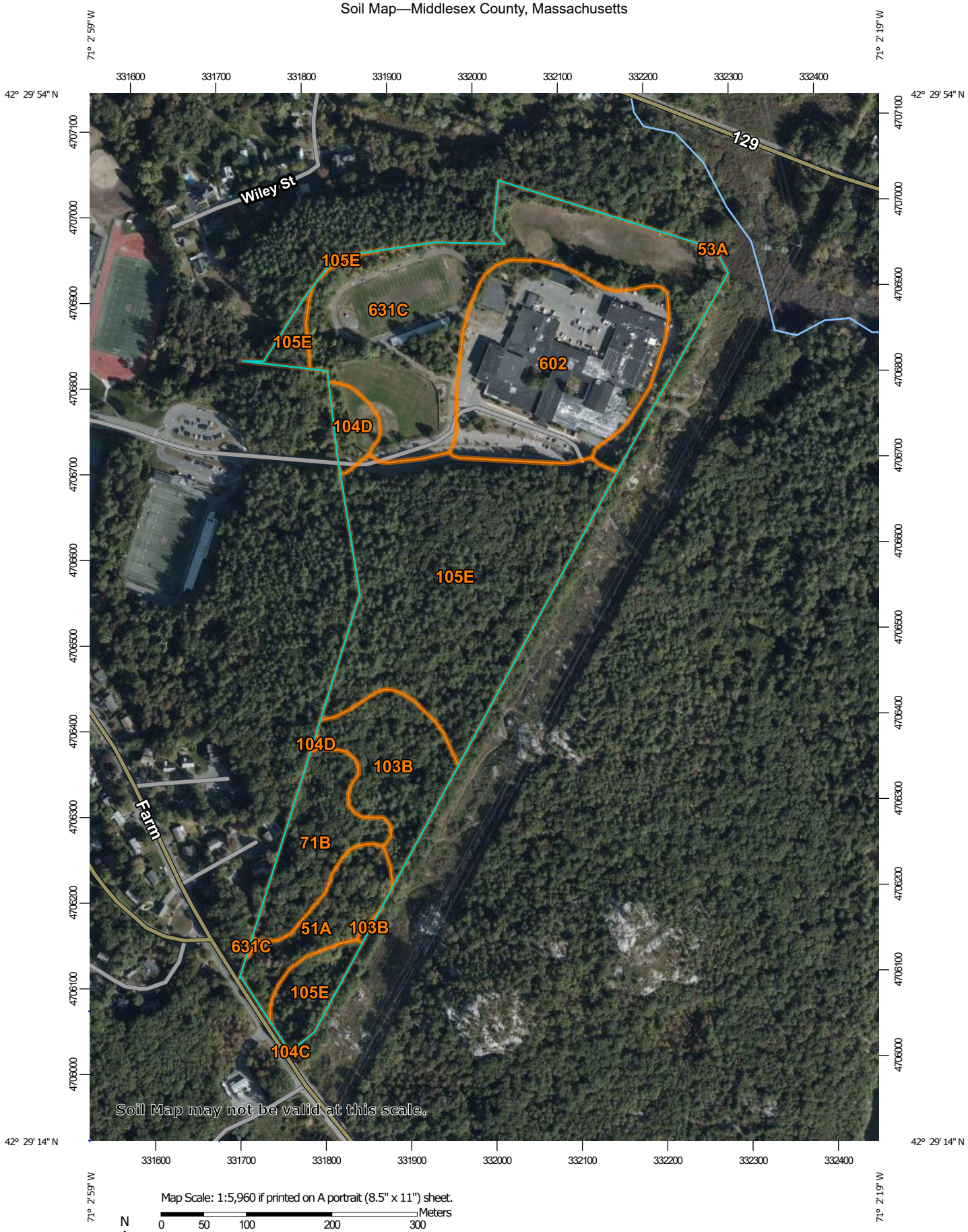
www.lecenvironmental.com

Northeast Metropolitan Regional Vocational School
100 Hemlock Road
Wakefield, MA

June 22, 2023

N

0 300 600 Feet



Map Scale: 1:5,960 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 19, Sep 12, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 13, 2019—Oct 5, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
51A	Swansea muck, 0 to 1 percent slopes	3.0	5.0%
53A	Freetown muck, ponded, 0 to 1 percent slopes	0.0	0.0%
71B	Ridgebury fine sandy loam, 3 to 8 percent slopes, extremely stony	3.9	6.5%
103B	Charlton-Hollis-Rock outcrop complex, 3 to 8 percent slopes	4.6	7.7%
104C	Hollis-Rock outcrop-Charlton complex, 0 to 15 percent slopes	0.0	0.0%
104D	Hollis-Rock outcrop-Charlton complex, 15 to 25 percent slopes	1.1	1.8%
105E	Rock outcrop-Hollis complex, 3 to 35 percent slopes	20.4	33.8%
602	Urban land	11.7	19.3%
631C	Charlton-Urban land-Hollis complex, 3 to 15 percent slopes, rocky	15.8	26.0%
Totals for Area of Interest		**60.5**	**100.0%**

LEC WETLANDS WILDLIFE WATERWAYS

June 28, 2023

Email (thpo@wampanoagtribe-nsn.gov)

Bettina Washington
Wampanoag Tribe of Gay Head (Aquinnah)
Tribal Historic Preservation Officer
20 Black Brook Road
Aquinnah, MA 02535

Re: Historic Property Notification Form [LEC File #: NEI\20-009.04]
Northeast Metropolitan Regional Vocational School
100 Hemlock Road
Map 40A, Lot 0RS
Wakefield, Massachusetts

Dear Ms. Washington:

In accordance with the procedures and requirements for filing a Self-Verification Notification Form with the U.S. Army Corps of Engineers (USACE) and a NPDES Construction General Permit with the Environmental Protection Agency (EPA), LEC Environmental Consultants, Inc. is forwarding you a copy of the Project Notification Form, USGS Map, Soils Map, and Site Plans (link) depicting the area of work for the proposed replacement of the existing Northeast Metropolitan Regional Vocational School.

I may be contacted at 781-245-2500 or akendall@lecenvironmental.com should you have any questions or comments. If you have no comments, please indicate in an email to me at your earliest convenience, as this will expedite our permitting with the USACE and EPA.

Sincerely,

LEC Environmental Consultants, Inc.

Andrea Kendall, PWS
Senior Environmental Scientist

20-009 NEI\Wampanoag Tribe of Gay Head (Aquinnah) Letter

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Northeast Metropolitan Regional Vocational High School

Location / Address: 100 Hemlock Road (Map 40A, Lot 0RS) Latitude: 42.49422, Longitude: -71.04434

City / Town: Wakefield, Massachusetts 01880

Project Proponent

Name: Northeast Metropolitan Regional Vocational High School District

Address: 100 Hemlock Road

City/Town/Zip/Telephone: Wakefield, Massachusetts 01880 781-246-0810 x 1612

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
Massachusetts School Building Authority (MSBA)	School Construction Funding Grant
MassDEP	Superseding Order of Conditions
US Army Corps of Engineers (USACE)	Self Verification Notification
US Environmental Protection Agency (EPA)	NPDES Construction General Permit

Project Description (narrative):

The project includes construction of a new regional vocational high school serving 12 communities. The project involves construction of a new 135,000 sf school building with three auxiliary buildings, new and refurbished athletic fields, a new access drive off Farm Street, parking lots, walkways, and associated utilities and stormwater management.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

Yes, the existing school building and several small appurtenances will require demolition.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

No

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

Yes, refer to the above project description and attached Site Plans.

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify. No, per MACRIS and associated coordination with the Massachusetts Historical Commission

What is the total acreage of the project area?

Woodland	32.95 acres	Productive Resources:	
Wetland	2.58 acres	Agriculture	0 acres
Floodplain	0 acres	Forestry	0 acres
(athletic fields) Open space	8.96 acres	Mining/Extraction	0 acres
Developed	14.51 acres	Total Project Acreage	59 acres

What is the acreage of the proposed new construction? 21.67 acres

What is the present land use of the project area?

School building with associated driveways, parking, athletic fields, and forested areas.

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

See attached.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: Andrea Kendall Date: June 28, 2023

Name: Andrea Kendall, LEC Environmental Consultants, Inc.

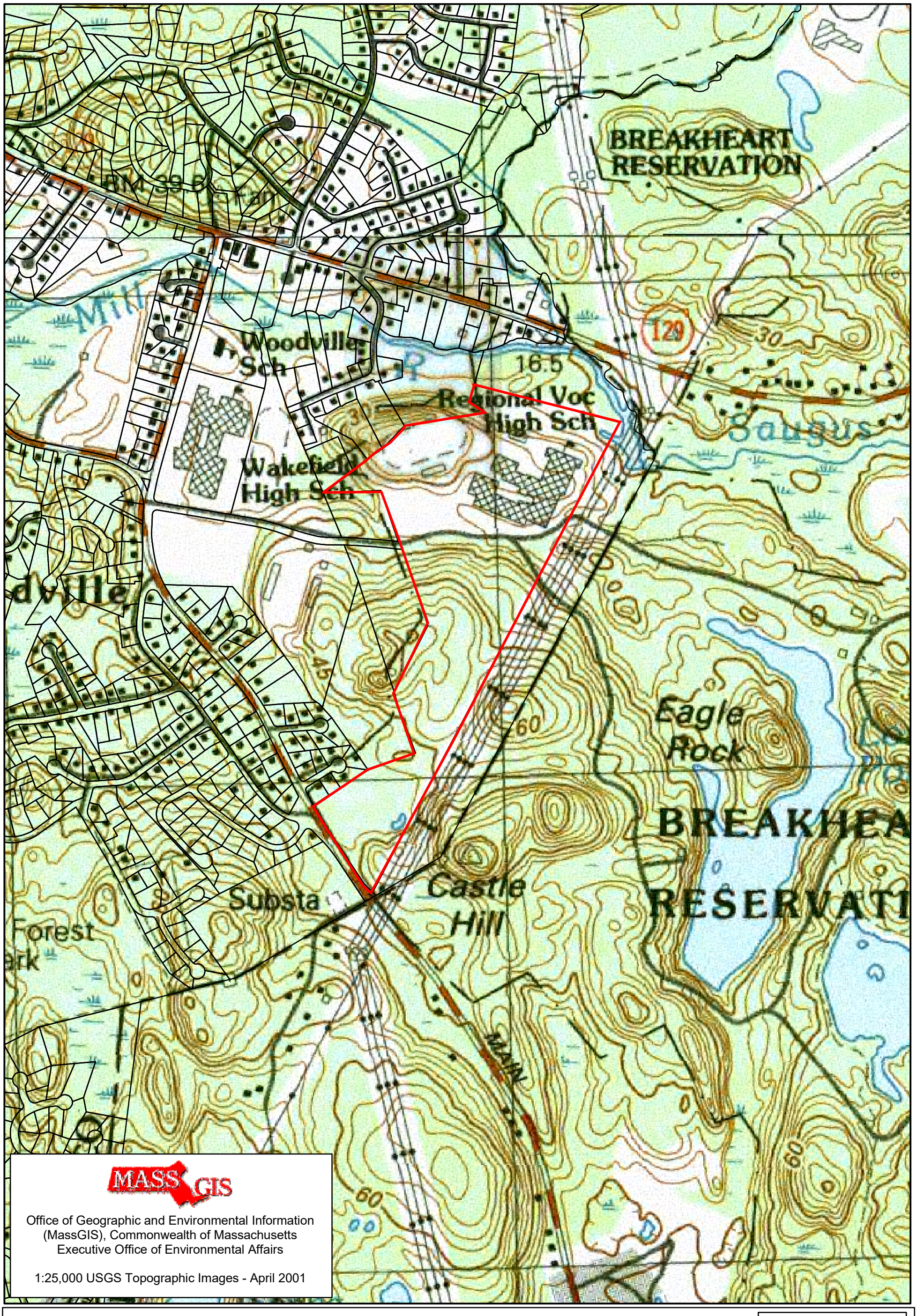
Address: 100 Grove Street, Suite 302

City/Town/Zip: Worcester, MA 01605

Telephone: 781-245-2500

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.



MASS GIS

Office of Geographic and Environmental Information
(MassGIS), Commonwealth of Massachusetts
Executive Office of Environmental Affairs

1:25,000 USGS Topographic Images - April 2001

LEC
Environmental Consultants, Inc.
Wakefield, MA
781.245.2500

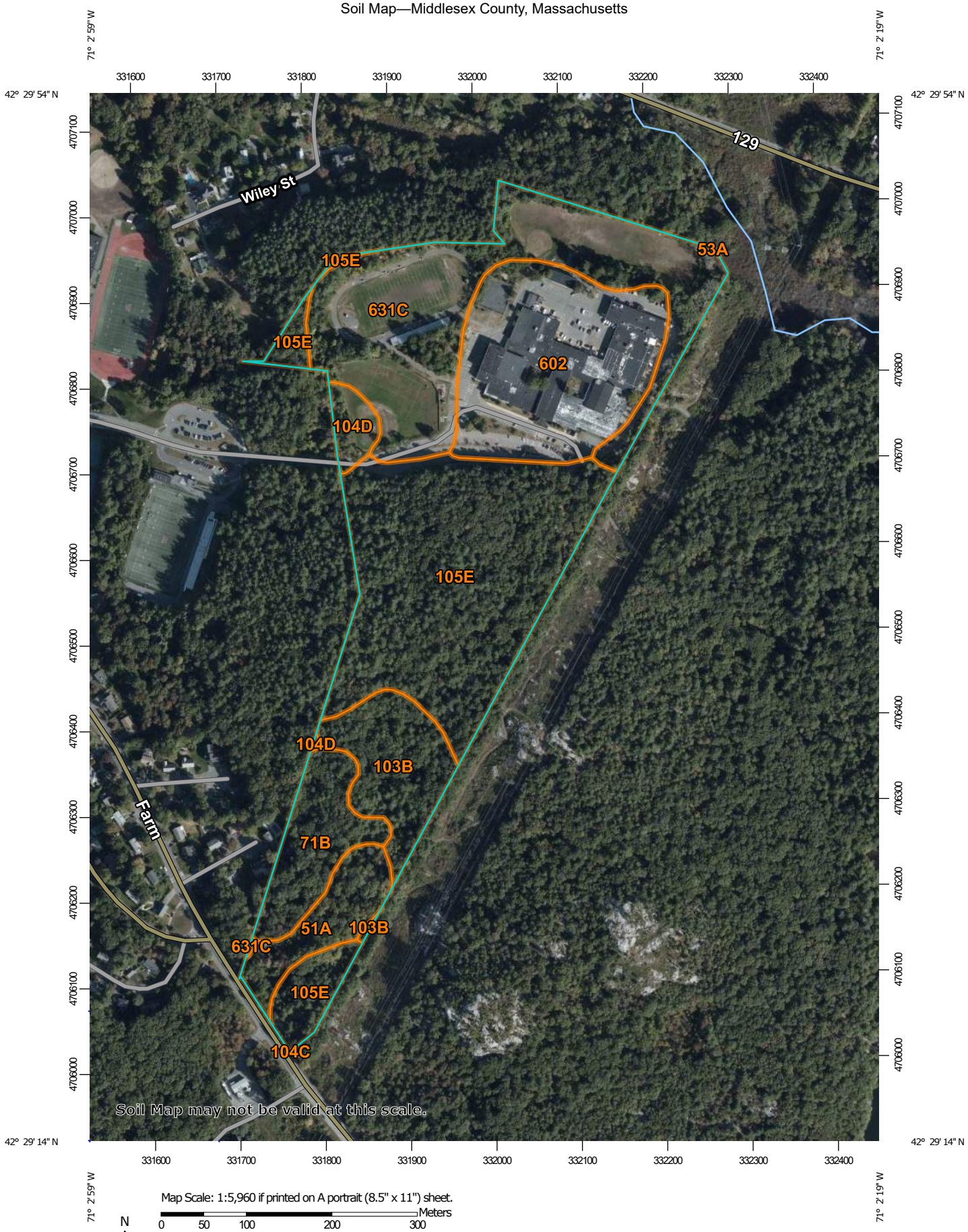
www.lecenvironmental.com

Northeast Metropolitan Regional Vocational School
100 Hemlock Road
Wakefield, MA

June 22, 2023

N

0 300 600 Feet



Map Scale: 1:5,960 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 19, Sep 12, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 13, 2019—Oct 5, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
51A	Swansea muck, 0 to 1 percent slopes	3.0	5.0%
53A	Freetown muck, ponded, 0 to 1 percent slopes	0.0	0.0%
71B	Ridgebury fine sandy loam, 3 to 8 percent slopes, extremely stony	3.9	6.5%
103B	Charlton-Hollis-Rock outcrop complex, 3 to 8 percent slopes	4.6	7.7%
104C	Hollis-Rock outcrop-Charlton complex, 0 to 15 percent slopes	0.0	0.0%
104D	Hollis-Rock outcrop-Charlton complex, 15 to 25 percent slopes	1.1	1.8%
105E	Rock outcrop-Hollis complex, 3 to 35 percent slopes	20.4	33.8%
602	Urban land	11.7	19.3%
631C	Charlton-Urban land-Hollis complex, 3 to 15 percent slopes, rocky	15.8	26.0%
Totals for Area of Interest		**60.5**	**100.0%**

Appendix M – Order of Conditions

Appendix N – Rainfall Gauge Recording

Use the table below to record the rainfall gauge readings at the beginning and end of each work day. An example table follows.

Month/Year			Month/Year			Month/Year		
Day	Start time	End time	Day	Start time	End time	Day	Start time	End time
1			1			1		
2			2			2		
3			3			3		
4			4			4		
5			5			5		
6			6			6		
7			7			7		
8			8			8		
9			9			9		
10			10			10		
11			11			11		
12			12			12		
13			13			13		
14			14			14		
15			15			15		
16			16			16		
17			17			17		
18			18			18		
19			19			19		
20			20			20		
21			21			21		
22			22			22		
23			23			23		
24			24			24		
25			25			25		
26			26			26		
27			27			27		
28			28			28		
29			29			29		
30			30			30		
31			31			31		

Appendix O – Turbidity Monitoring Sampling Documentation

Gilbane Building Company

BIM Standards & Specifications: Trade Contractor

Project Specific:

Northeast Metro Tech High School

Project Version Revit:

2021

Table of Contents

1. Introduction

1.1. Statement of Intent
1.2. General Obligations

2. Team Structure and Responsibilities

2.1. Roles and Responsibilities
2.1.1. Gilbane
2.1.2. Trade Contractor

3. Model-Based Shop Drawing Process

3.1. Platforms
3.1.1. File Sharing
3.1.2. Modeling

3.2. Coordination Requirements
3.2.1. Coordination Model
3.2.2. Issue Tracking
3.2.3. Submittals & RFIs

3.3. Modeling Requirements
3.3.1. General Modeling Requirements
3.3.2. LOD (Level of Development) Specification
3.3.3. Trade Contractor Specific Modeling Requirements

3.4. Schedule Requirements
3.4.1. Uploading Models
3.4.2. Model-Based Shop Drawing Production for Design Team Approval
3.4.3. Field Execution
3.4.4. Turnover

3.5. Issue Tracking
3.5.1. Procore Coordination Issues
3.5.2. RFIs

4. Deliverables

4.1. Definitions
4.2. Coordination Deliverables
4.2.1. Model Population Phase
4.2.2. Coordination Phase
4.2.3. Individual Trade Draft Shop Drawing
4.2.4. Composite Coordination Drawing

4.3. Shop Drawing Submittals
4.3.1. Shop Drawing Submittal Process for Design Team Approval
4.3.2. Shop Drawing Updates for Field Use
4.3.3. Additional Shop Drawing Deliverables Required for Approval
4.3.4. Additional For Field Use Deliverables Required on Separate Drawing Submittal

4.4. Turnover Documents
4.4.1. As-Builts

5. Appendices

5.1. Appendix for Trade Specific Modeling Requirements (CSI Master Format)

1. General Requirements
2. Existing Conditions
3. Concrete
4. Masonry
5. Metals
6. Wood, Plastics, & Composites
7. Thermal & Moisture Protection
8. Openings
9. Finishes
10. Specialties
11. Equipment
12. Furnishings
13. Special Construction
14. Conveying Equipment
15. Intentionally Left Blank
16. Intentionally Left Blank
17. Intentionally Left Blank
18. Intentionally Left Blank
19. Intentionally Left Blank
20. Intentionally Left Blank
21. Fire Suppression
22. Plumbing
23. Heating, Ventilating, and Air Conditioning (HVAC)
24. Intentionally Left Blank
25. Building Automation
26. Electrical
27. Communications
28. Electronic Safety and Security
29. Intentionally Left Blank
30. Intentionally Left Blank
31. Earthwork
32. Exterior Improvements
33. Utilities

5.2. Appendix for Surveying Scope of Work (as it applies to Coordination)

5.2.1. Surveying for Coordination Utilization

5.3. Appendix for Building Information Model(s) Release and Hold Harmless Agreement

1. Introduction

1.1. Statement of Intent

a. The intent of the Gilbane BIM Standards and Specifications is to consolidate project information into a virtual model with the primary goal of producing a constructable building, while reducing project risk.
b. These processes include, but are not limited to: maximizing efficiency in the design and construction; coordinating trades effectively by identifying and managing conflict resolution in the design prior to field execution; aiding stakeholders in visualizing their project and enhance the communal recognition of the architect's design intent; increasing productivity by validating sequence of work and logic of project's schedule; enhancing the quality of RFI's and reduce change orders resulting from installation rework; enhancing opportunities for pre-fabrication to accelerate installation, reducing on-site manpower, improving quality of end product and accelerating inspection process; delivering contractual submittal requirements; increasing quality of as-built turnover packages and opportunities for facility management integration.
c. The intent is to coordinate amongst the identified trades, as well as between other overlapping trade's scopes of work. The goal is a digital version of the project which can be feasibly built in the field without delaying the project's critical path. The finished model can be used as the basis for shop drawings and as a reference when unexpected clashes appear during construction.
d. The following sections describe the participants, processes, and deliverables required by this contract.

1.2. General Obligations

a. The BIM Standards & Specifications ("BIM Standards") are incorporated into the Project Manual and any Trade Contractor Agreement and/or Consultant Agreement ("Agreement") executed and shall apply to any scope that includes, but is not limited to, BIM, use of 3D models, 2D native files, or any data that aids the project in coordination of scopes of work and modeling processes. If any actual conflicts, inconsistencies, or ambiguities between the BIM Standards and the Owner's contract are discovered, the Owner's contract BIM standard shall take precedence. If there are any conflicts, inconsistencies, or ambiguities between the BIM Standards and other documents within the Agreement or Project Manual, this document will govern. Any clarifications or exceptions to these standards shall be in writing and approved by Gilbane and attached to and incorporated into the Agreement. All Trade Contractors shall comply with all processes, software and deliveries requirements defined below. Trade Contractor shall be liable for any Damages arising from, related to or caused by Trade Contractor's failure to comply with the requirements of the BIM Standards, including, but not limited to, any re-work associated with non-compliance with this specification.

b. The BIM Standards shall be included in all sub-tier contracts to the Trade Contractor that include, but are not limited to, BIM, use of 3D models, 2D native files, or any data that aids the project in coordination of scopes of work and modeling processes. Trade Contractor shall ensure that all sub-tier contractors comply with the BIM Standards and Trade Contractor shall be liable for any Damages arising from, related to or caused by sub-tier contractor's failure to comply with the requirements of the BIM Standards Trade Contractor shall ensure that all sub-tier contractors comply with the BIM Standards. Trade Contractor shall be liable for any Damages arising from, related to or caused by sub-tier contractor's failure to comply with the requirements of the BIM Standards
c. Design Model / Release and Hold Harmless –Gilbane will provide the available design models/files, associated sub-discipline files, in addition to other Trade Contractor's files for reference. Execution of this Agreement indicates acknowledgement and acceptance of the BIM Release/Hold Harmless rider provided in the Appendix. The Project may require the execution of a Design Release, in addition to the Gilbane Release and Hold Harmless. The intent of these documents is to facilitate and protect parties in an open sharing environment. Any design models are only to be used as reference and are not intended to replace the permit or Contract Documents and are provided "as-is". They are provided as a tool to assist in the Coordination and construction process and to aid in the overall BIM goals set out for the Project. Should any discrepancies between models and the Project documents be discovered, the design documents will take precedence.
d. Trade Contractor shall always utilize the most current design documents available.

2. Team Structure and Responsibilities

2.1. Roles and Responsibilities

2.1.1. Gilbane

a. Gilbane will lead the Coordination process. Meetings will occur on a consistent day(s) each week at a location determined by Gilbane in the initial Trade Contractor kickoff meeting.
b. Gilbane will assign the primary point of contact for all participants throughout the Coordination Process.
c. Gilbane will facilitate communication between the Gilbane Project Team members, Trade Contractors, and the design team regarding coordination issues, RFI directives, design model questions, etc.
d. During the Coordination process, defined below, Gilbane will communicate issues/action items on a as needed basis to specific Trade Contractors as defined in the kickoff meeting.

2.1.2. Trade Contractor

a. BIM Lead
    1. Each Trade Contractor is required to participate in Coordination and must provide a lead drafter/modeler (BIM Lead) who will attend Coordination kickoff meeting at a location determined by Gilbane. The BIM Lead MUST be a different individual than the Trade Contractor Project Manager or Foreman. The Trade Contractor's Project Manager and BIM Lead are both required to be in attendance at every Coordination meeting.
    2. BIM Lead is required to attend every assigned Coordination meeting. If the firm cannot provide a single person that can create the shop drawings and understand the constructability behind each system, there shall be multiple persons at each Coordination meeting (e.g.: a detailer who knows the software and a field-person who understands the building systems). At any point in time, up to final Coordination sign-off, Gilbane reserves the right to deem a drafter/modeler unacceptable for the role of BIM Lead for a particular Trade Contractor. At that point, the Trade Contractor must replace the BIM Lead within 10 days' notice with a Gilbane-approved acceptable alternative.
    3. Trade Contractors shall communicate with each other throughout the Coordination process to resolve any system conflicts prior to scheduled meetings. Coordination meetings shall be used to address critical coordination issues that reasonably cannot be addressed between scopes of work.
    4. Trade Contractors will generate RFIs as requested during the Coordination process.
b. Project Manager
    1. The Trade Contractor Project Manager is responsible for staffing and assigning roles to support the coordination effort while maintaining the schedule for all deliverables.
    2. The Trade Contactor Project Manager is responsible for ensuring that their respective field teams are installing work based on the most current coordination shop drawings.
    3. The Trade Contractor Project Manager is responsible for working with their BIM Lead to incorporate any design changes into the shop drawing and/or coordination process in a timely and collaborative manner, with notification to Gilbane BIM Lead of any anticipated coordination issues between trades.
c. Field Foreman
    1. The Trade Contractor Field Foreman is responsible for working with the BIM Lead and Project Manager to ensure that all systems are modeled in a way consistent with the installation process.
    2. The Trade Contractor Field Foreman is responsible for identifying and communicating issues that exist in the field which will impact coordination of their system back to the BIM Lead for incorporation into for record/as-built drawings.

3. Model-Based Shop Drawing Process

3.1. Platforms

3.1.1. File Sharing

a. Model Based File Sharing will be hosted on a digital cloud based server (Common Data Environment). The Common Data Environment will be specified at the Coordination Kickoff Meeting. Unless specified otherwise, no cost needs to be carried for this.

3.1.2. Modeling

a. The Trade Contractor will maintain any software, equipment and personnel necessary to fully participate in the Coordination process. This includes license(s) all appropriate/required modeling software as specified below and the project version of Autodesk Navisworks Manage. No substitutions for the specified software shown below will be accepted.

b. Gilbane reserves the right to change the Project Software Version at any time if deemed necessary.

Package	Project Version Software Platform	Iterative Deliverable Format	Milestone Deliverable Format
03 - Precast Concrete	Autodesk Revit	RVT	Model & 2D PDF
03 - Structural Concrete	Autodesk Revit/Tekla	RVT/IFC	Model & 2D PDF
04 - Masonry	Autodesk Revit	RVT	Model & 2D PDF
05 - Exterior Framing	Autodesk Revit	RVT	Model & 2D PDF
05 - Miscellaneous Metals	Autodesk Revit	RVT	Model & 2D PDF
05 - Structural Steel	Autodesk Revit/Tekla/SDS2	RVT/IFC	Model & 2D PDF
08 - Curtain Wall, Metal Panel, & Glazing Systems	Autodesk Revit	RVT	Model & 2D PDF
09 - Ceiling Systems	Autodesk Revit	RVT	Model & 2D PDF
09 - Drywall and Interior Framing	Autodesk Revit	RVT	Model & 2D PDF
09 - Raised Access Flooring	Autodesk Revit	RVT	Model & 2D PDF
11 - Kitchen Casework & Equipment	Autodesk Revit	RVT	Model & 2D PDF
11 - Lab Casework & Equipment	Autodesk Revit	RVT	Model & 2D PDF
14 – Elevator/Conveying Systems	Autodesk Revit	RVT	Model & 2D PDF
21 - Fire Protection	Autodesk Revit/SpinkCAD or equal	RVT/DWG	Model & 2D PDF
22 - Plumbing	Autodesk Revit	RVT	Model & 2D PDF
23 - Fuel Systems (If Separate TC from Mechanical)	Autodesk Revit	RVT	Model & 2D PDF
23 - Mechanical Duct	Autodesk Revit	RVT	Model & 2D PDF
23 - Mechanical Piping/Lab Piping/High Purity Piping	Autodesk Revit	RVT	Model & 2D PDF
26 - Electrical, Building Automation Systems, Fire Alarm, and/or Building Controls	Autodesk Revit	RVT	Model & 2D PDF
27 - Security/Cameras/Audio-Visual	Autodesk Revit	RVT	Model & 2D PDF
31 - Civil – Utilities, Site, and Grading	Autodesk Revit/AutoCAD Civil 3D	RVT/DWG	Model & 2D PDF

Figure 3.1.1

3.2. Coordination Requirements

3.2.1. Coordination Model

a. A coordination model consisting of all aggregate Trade Contractor and Design models (if available) will be provided by Gilbane in the Project Version of Autodesk Navisworks on a schedule determined at the Coordination Kickoff meeting.

3.2.2. Issue Tracking

a. Procore Coordination Issues will be utilized for coordination communication and resolution by Trade Contractors.

3.2.3. Submittals & RFIs

a. Refer to Project Manual for Submittal and RFI Platform Requirements

3.3. Modeling Requirements

3.3.1. General Modeling Requirements

a. All Trade Contractors shall model the entirety of their scope of work, for the entirety of the process of shop drawing production and construction, in accordance with Section 3.1.1.

b. Models must be provided in their native, specified file format. Models must also be exported and provided in a file format usable by Navisworks. Gilbane shall give direction on which exported file format is required from your software application at the kickoff meeting.

c. If Gilbane provides design background 3D models, , Trade Contractors shall export their own 2D backgrounds, at their own risk. If Gilbane does not provide design backgrounds, Trade Contractor shall produce their own backgrounds to facilitate their scope of work.

1. Gilbane shall not be responsible for any error or omission in the design backgrounds. Trade Contractor waives any and all claims against Gilbane related to, arising out of or caused by design backgrounds provided or not provided by Gilbane, use of the design backgrounds or Trade Contractor's export. Lack of Gilbane to provide design backgrounds shall not be the basis for any claim by Trade Contractor and shall not limit Trade Contractor's ability to create coordination backgrounds or to begin or complete their modeling responsibility.

d. Each Trade Contractor shall be responsible for providing models which have been properly coordinated and drawn with the building architecture and structure dictated in the current contract drawings as well as other Trade Contractor's systems.

e. Each Trade Contractor's native and exported file format shall have the following:

1. The units shall be in (imperial) 'feet and fractional inches.
2. Model Origins and alignment will be specified by Gilbane.
3. All objects must be 3D solids, parametric components, or AEC (Architecture, Engineering, and Construction) objects.
4. All 3D models submitted to Gilbane shall be purged and free of references.
5. Multiple files based on zone or area may be required for coordination efforts. The boundaries of these area files shall be specified by Gilbane.
6. Gilbane shall establish file naming convention at the BIM Kickoff Meeting.
7. Add-ons, plug-ins and object enablers must be the appropriate version for the software and made available to all project participants in a timely manner needed to comply with this document.

f. All objects shall incorporate all construction, installation, operational and maintenance clearances needed to install, operate, and maintain the building through its operational lifespan on a separate visual style, workset/layer.

g. All penetrations must be modeled, in 3D, to the outermost dimension needed for any scope to pass. Penetrations shall be placed on a separate workset/layer based on type (ex. structural vs. non-structural).

h. All access panels needed to maintain a system in ceilings, walls, floors, roofs, etc shall be modeled in 3D (linework not acceptable). Access panels shall be placed on a separate workset/layer named 'Access Panels'.

i. All building MEPF systems are to be modeled up to their connection/supply points (at no less than 15' distance from exterior of foundation wall) outside the building, or as defined at BIM Kickoff Meeting.
j. All MEPF systems are to include all 3D geometry related to underground systems, piping, and conduit necessary to complete the system.
k. All changes affecting coordination, including but not limited to those listed below, shall be incorporated into the model and shop drawings as needed to facilitate the coordination process or within five (5) business (or as defined by the project) days of notification to proceed:
    1. RFIs (Requests for Information)
    2. CCAs (Construction Change Authorizations)
    3. ASIs (Architect's Supplemental Information)
    4. Bulletins
    5. Owner changes
    6. Changes in the sequence of work
    7. Field modifications
    8. Shop drawing review comments
    9. Multiple coordination meeting review comments
    10. Changes requested by Gilbane Building Company
    11. Temporary construction such as man-lifts, tower cranes, temporary risers, temporary or permanent shoring etc.

3.3.2. LOD (Level of Development) Specification
a. All For all participating trades, model and shop drawing LODs shall be equal to 400 or higher per the AGC (association of general contractors) LOD Spec. See Section 5 Appendices.

3.3.3. Trade Contractor Specific Modeling Requirements
a. This section is dedicated to a discipline-by-discipline explanation of what scope shall be modeled to what level of completion. Please see Section 5 Appendices

3.4. Schedule Requirements

3.4.1. Uploading Models
a. Trade Contractors will be responsible for updating their models to Gilbane at least 24 hours prior to all scheduled coordination meetings. If the meetings are conducted daily, uploads must occur by the end of the day for the next morning's coordination meeting. Files which are not submitted on time will be given lowest coordination priority.

3.4.2. Model-Based Shop Drawing Production for Design Team Approval
a. Milestone deliverable dates laid out in the Model-Based Shop Drawing Schedule are contractually binding.
b. The Model Population Phase shall include the modeling of 100% of the Trade Contractors scope per the construction documents.
c. The Coordination phase consists of the resolution of all issues not resolved during population.
    1. During the Coordination phase, the Trade Contractor must submit a draft shop drawing to Gilbane documenting 100% population.
    2. Coordination signoff is achieved by trades submitting their Shop Drawings for Design Team Approval. The intent of signoff is for each trade to certify that they are able to install their scope.
d. The 2D Drawing Annotation/Submission phase is to be dedicated to production of 2D shop drawings derived from the Trade Contractor's 3D Model to be submitted to the Design Team by the Trade Contractor for approval in the traditional fashion as required by their contract. These files will be uploaded by the Trade Contractor to Gilbane's submittal system. Do not send Gilbane Shop Drawings by email.
    1. Shop drawings that are returned revise & resubmit/approved as noted must be re-submitted in parallel to shop drawing schedule. The Trade Contractor is responsible for identifying any issues that come about as a result of a

revise & resubmit/approved notation on any shop drawings and notifying other affected trades as well as Gilbane Team.

3.4.3. Field Execution

a. Any 'uncoordinated' or 'field coordinated' work must be installed around all trades present in coordinated BIM. Work not in compliance is assumed to be 'at-risk' for rework, as directed by Gilbane, through completion of the building. The offending Trade Contractor is not entitled to any assistance as it relates to overtime or material cost to re-work uncoordinated elements.
b. All systems will be placed using tools that allow the model's accuracy to be executed in the field.
c. No compensation will be considered for improperly coordinated or uncoordinated installations; uncoordinated or incorrectly modeled (per this document) work will be removed and replaced at the Trade Contractor's expense, including Trade Contractor overtime to meet the contract schedule, as directed by Gilbane.
d. The design drawings and associated design models must be assumed to be diagrammatic in nature. The respective Trade Contractors are responsible for:
    1. Installation of a complete, functional, and code-compliant system that matches the design intent.
    2. Field verification of all on-site conditions relevant to their work
    3. All associated cost of installing the final coordinated systems

3.4.4. Turnover

a. All BIM as-builts will be provided concurrent with project close-out in file format dictated in Figure 3.1.1 (Trade Package Specific Modeling Platform Requirements).
b. Facilities Management Data is to be delivered concurrent with project close-out.

3.5. Issue Tracking

3.5.1. ProCore Coordination Issues

a. Procore Coordination Issues will be the mutual tool for flagging, assigning, tracking, and resolving Coordination issues, including clashes, conflicts, and design issues.
b. It is incumbent upon the Trade Contractor BIM Lead to identify issues that cannot be resolved and assign them to the appropriate party via Procore Coordination Issues. Issues should be assigned to the Trade Contractor BIM Lead most likely to resolve the issue. A notification must also be sent to the VDC Engineer/Manager via the activity panel. For multi-trade issues (3 or more issues), assign to VDC Engineer/Manager.
c. Procore Coordination Issues identified must be resolved by assigned due date.
d. Upon resolving an issue that has been assigned to you, notify Gilbane.
e. Use the Activity panel for communication surrounding specific issues.

3.5.2. RFIs

a. If required information is lacking, the Trade Contractor is responsible for submitting an RFI to Gilbane in accordance with the Project Manual.
b. A Procore Coordination Issue from the BIM coordination process that requires input from the design team or has material impact to the basis of design shall be escalated to an RFI by the Trade Contractor in accordance with the Project Manual.

4. Deliverables

4.1. Definitions

Design Drawings

Project documents issued from design team and is intended to establish the basis of design and define project scope.

Coordination Drawings

Document generated by Trade Contractors that represents basis of design per coordination schedule and confirms the routing and layout in relation to all other trade scopes and architectural/structural backgrounds. Trade Contractors shall establish a method for exporting Coordination Drawings from their model files at the beginning of the coordination effort, so that a published PDF set of Coordination Drawings is created at each Sign Off in the coordination schedule. Intended as early iteration of Shop Drawings. This includes composite coordination drawings.

Shop Drawings

Trade contractor document that further defines coordination drawings to facilitate execution, fabrication, and installation of their scope of work. Shop Drawings are to be uploaded as a formal submittal, complete with annotations, dimensions, and any relevant notes or details. Shop Drawings are to be submitted no more than 14 days after an official coordination Sign Off.

As-Built Drawings

Trade Contractor document that represents the final as constructed condition, including any field modifications of the scope of work. The final deliverable for record of that system or scope of work

4.2. Coordination Deliverables

4.2.1. Model Population Phase

a. At the end of the model population phase, the Trade Contractor must have all scope for that active coordination zone captured in their model.
b. During the model population phase, the Trade Contractor shall upload multiple progress model files of their respective scope. A minimum of one model update per coordination meeting is required for each active coordination zone. These files will be uploaded following the Project Schedule dictated above.
c. The Trade Contractor is expected to coordinate their scope around other Trade Contractors during this phase to the best of their ability.

4.2.2. Coordination Phase

a. At the end of the coordination phase, the BIM participants must have all scope for that active coordination zone coordinated in the combined model.
b. During the coordination phase, Trade Contractors shall coordinate their work around all other Trade Contractors' work. This phase is a group effort and will be facilitated by Gilbane.
c. Gilbane will assist in clash identification and suggest potential resolutions. This does not alleviate any Trade Contractor from doing their own clash detection, potential issue resolutions, or coordination around others scope.

4.2.3. Individual Trade Draft Shop Drawing

a. During the Coordination Phase, a draft shop drawing shall be developed by each Trade Contractor as designated on the milestone coordination schedule.
b. The .pdf draft shop drawing shall include:
    1. All elements visible in the model at the end of the coordination sequence.
    2. Drawing scale
    3. Current architectural and structural background
    4. All applicable annotations needed for scope clarification
c. The draft shop drawing shall be accompanied by the model from which it was derived.

4.2.4. Composite Coordination Drawing

a. The mechanical Trade Contractor shall be responsible for producing a composite drawing consisting of all BIM participating trades' scope corresponding to date of sign-off.

b. The .pdf composite coordination drawing shall include:

1. All MEPF elements visible in the model, but not limited to, at the end of the coordination sequence.
2. Drawing scale
3. Current architectural and structural background
4. Any other coordination items requested by Gilbane.

4.3. Shop Drawings Submittals

4.3.1. Shop Drawing Submittal Process for Design Team Approval

a. Shop drawings have the following characteristics:

1. Orthographic floor (or ceiling) plan with grids, dimensions, and scope of work shown.
2. Current architectural and structural drawing backgrounds.
3. Background conditions (including other contractors' scopes of work if the scope of work being shown interfaces in any way)
4. Is to-scale
5. All applicable dimensions and annotations required for review, approval, and installation.
6. Legible graphic standards as required for review, approval, and installation.
7. Includes dimensional information from the approved product data as the basis of the scope of work
8. Is produced from coordinated model geometry (see General Requirements of this document)

b. Shop drawings are the contractual means by which Gilbane manages the installation of the scope of work. While Shop Drawings do not supersede contract drawings for purposes of scope capture, they do supersede contract documents for the purposes of locations in space and overall size.

c. Shop drawings must be submitted by the Trade Contractor and approved by the Design Team prior to work shown on the drawing being performed in the field. Any work that proceeds without a Design Team reviewed/approved shop drawing, will place the contractor at risk for both its rework and any offending downstream rework.

d. Shop drawings must be submitted per the Coordination Schedule milestone dates.

4.3.2. Shop Drawing Updates For Field Use

a. Updated versions of trade's submitted-for-approval shop drawings are required by Gilbane as defined by the coordination schedule.

b. The deliverable's requirements of the drawing equal the deliverable requirements of the shop drawings.

c. These drawings incorporate any changes subsequent to the shop drawings submittal for design team approval that do not require design team approval. This may include, but not limited to, revised routing due to field conditions, optimized routing, or updated equipment submittals.

d. For field use drawing will be uploaded to Procore on the established coordination schedule milestones

4.3.3. Additional Shop Drawing Deliverables Required for Approval

a. Penetration drawing by area – must be provided by MEP,FP, and applicable Trade Contractor.

1. Showing all cores, sleeves, and rectangular openings, and other penetrations.
2. Due upon submittal of shop drawing or as dictated by project schedule.
3. Penetrations must be separated based on what is being penetrated (eg. structural concrete, steel, curtain wall, precast, etc.)
4. Drawing scale, format, and annotations must match shop drawing standards.

b. Pad drawing by floor- must be provided by MEP, FP and applicable Trade Contractor.
    1. Showing all needed pads with size shown and depth annotated
    2. Due upon equipment product data sheet submittal
c. Access panel RCP/Plan drawing by floor- ust be provided by MEP, FP, and Trade Contractor.
    1. Showing all needed access panels.
    2. All wall based access panels are to be shown/dimensioned in elevation drawings showing context.
    3. Trade Contractor is to carry three iterations of this to allow for the designer and Gilbane to combine needed panels amongst Trade Contractors.
d. Valve drawing by floor– required by MEP, FP, and applicable Trade Contractor.
    1. Need to have every valve tagged and keyed to the mechanical schedule
    2. Due upon submittal of shop drawing

4.3.4. Additional For Field Use Deliverables Required on Separate Drawing Submittal

a. System isometric drawing by floor:
    1. Must be provided by MEP, FP, and Trade Contractor
    2. Trade Contractor is to submit a 3D system Axon in PDF, with equipment shown, and valves tagged.
    3. Required to be a full isometric system.
    4. Due upon submittal of shop drawing.
b. Critical wall Identification Floor Plan by floor:
    1. Must be provided by Trade Contractors
    2. Trade Contractor is to identify all critical walls throughout the building.
    3. Drawing due upon submittal of shop drawing.
    4. Critical Walls are defined as walls that need to be topped off prior to installation of overhead MEP, FP scope.
c. Heat trace identification drawing by floor:
    1. Must be provided by MEP, FP, and Trade Contractors
    2. Drawing to show all piping that is using the heat trace system.
    3. Drawing due upon submittal of shop drawing.
d. Composite Reflected Ceiling Plan by floor:
    1. Must be provided by ceiling Trade Contractor
    2. Drawing required to show all scope interactions with other Trades.
    3. Drawing due upon submittal of shop drawing.
e. Concrete boxout locations by floor:
    1. Must be provided by concrete contractor
    2. Drawing required to show all areas where concrete was boxed out for miscellaneous MEP, FP, and general trades systems.
    3. Drawing due upon submittal of shop drawing.
f. Pour sequence shop drawing by floor:
    1. Must be provided by concrete contractor
    2. Drawing required to show the areas and order of the concrete pours
    3. Drawing due upon submittal of shop drawing.
g. Hangers, sleepers, and seismic support drawing by floor:
    1. Must be provided by MEP and FP Trade Contractors
    2. Drawing required to show hangers, sleepers, and seismic supports attachment locations by trade's scope.
    3. Drawing due upon submittal of shop drawing.
h. Wall hydrants and fire department cabinets drawing by floor:
    1. Must be provided by the Fire Protection Trade Contractor.
    2. Drawing required to show all interior and exterior fire hydrants as well as fire department cabinets and must include elevation drawings.
    3. Drawing due upon submittal of shop drawing.
i. Blocking and backing drawing by floor:
    1. Required by Trade Contractors

2. Drawing required to show all blocking and backing for equipment, casework, and any other items that require blocking or backing and must include elevation drawings.
3. Drawing due upon submittal of shop drawing.

j. Any drawing required for installation that is not listed above needs to be submitted to Gilbane for approval

4.4. Turnover Documents

4.4.1. As-Builts

a. All models by the Trade Contractors shall be submitted to Gilbane at the completion of substantial field installation (building-official signoff). Models shall be submitted in file format dictated in Figure 3.1.1 (Trade Package Specific Modeling Platform Requirements).
b. As-Built model must match As-Built drawings.
c. LOD defined in LOD section of coordination area above.
d. See Project Specifications in the Contract Drawings.

5. Appendices

5.1. Appendix for Trade Specific Modeling Requirements (CSI Master Format)

1. General Requirements
   i. This section is dedicated to a discipline-by-discipline explanation of what scope shall be modeled to what level of completion. Please see also the section labeled “General Modeling Requirements (LOD Spec.)” above.
   ii. All the following Trade Contractors shall model the following items in the software dictated within this document.
   iii. If contractually applicable, this Trade Contractor shall provide Gilbane with a deduct-alternate to remove the modeling scope of work from its contract. This does not alleviate or limit the responsibility of the Trade Contractor to coordinate work with the 3D model, the coordination drawings, or the contract set/specifications.
2. Existing Conditions
   i. Renovation, Adaptive Reuse, and Retrofit Work
   ii. All contractors must field verify and be aware of the ETR (existing-to-remain), existing to be modified, & Sequential Existing to be demolished condition at every phase of the job. Any Trade Contractor who violates ETR, existing to be modified, or out of sequence existing to be demolished scope by modeling new scope in its place shall be considered in violation of the BIM Scopes of Work.
   iii. If a Gilbane provided point cloud is made available to Trade Contractors, Gilbane’s expectation is that it is used during the shop drawing phase to coordinate their scope. This is a tool and does not replace the responsibility to field verify scope above.
   iv. The contractor is not required to model all existing-to-remain elements of their trade within a geometric bounding box of the space where work is being performed.
   v. The contractor IS required to measure, and model, any and all existing-to-remain scope that meets a below condition, if any of the below conditions are true with respect to a specific scope instance:
      1. The contractor needs to move (temporarily or permanently) the existing element and/or its associated distribution to a new location in order to coordinate new scope.
   vi. The Trade Contractor must modify the existing scope to facilitate new scope. Modifications include, but are not limited to:
      1. Providing any new distribution to said scope (power, data, liquid or air)
      2. Attaching any element of new scope to existing scope.
      3. The Trade Contractor provides any new branching to an existing main service
   vii. If more than one Trade Contractor touches/modifies an existing element, all Trade Contractors shall model the element, and Gilbane will provide direction on which Trade Contractor shall remove the scope from their model for the construction and as-built condition.
   viii. If a Trade Contractor (#2) is picking up scope left off by another Trade Contractor (#1) from a previous package under the “Agreement”, the Trade Trade Ccontractor’s (#1) model-based-shop-drawings in addition to the Contract Documents. The Trade Contractor (#2) is obligated to notify Gilbane of any and all deviations from the field condition (if any).

3. Concrete
    i. Structural Concrete
        1. This Trade Contractor shall model the following items:
            a. Primary Concrete slabs (including penetrations and openings)
            b. Foundation walls and other structural walls
            c. Caissons and footings
            d. Grade beams
            e. Concrete beams
            f. Concrete columns
            g. Shear walls
            h. Other concrete pours (stoops, wells, monolithic stairs, etc)
            i. Structural stair components
            j. Slab camber, slope and chamfered corners
            k. Concrete deck coordinated with steel camber deck (including penetrations and openings)
            l. Steel concrete embeds
            m. Any other elements included with or attached to this scope of work which occupies more than 1^3" of space, including, but not limited to: consolidated or sacrificial pours, 'deadmen', concrete encasement of beams/columns shown on any drawing including arch.
        2. This Trade Contractor shall model using the following methods:
            a. Concrete and steel structural framing to be modeled in separate pre-installation objects or in the step by step fashion that it will be poured or assembled.
            b. Holes are needed in floors if they will be sleeved. For holes that will be drilled afterwards, no 3D holes shall be made in the objects.
            c. Concrete shall be modeled as separate objects according to the pour sequence.
            d. Metal decks to be modeled separate from concrete slabs.
            e. Concrete infills around column bases to be modeled as separate objects.
            f. The Trade Contractor shall coordinate with other trades to incorporate into the 3D model all items embedded in the concrete. This shall include, but is not limited to the following items:
                1. All embedded structural steel plates, anchor bolts, slab edge conditions, etc.
                2. Boxouts for all embedded miscellaneous steel for railings, stairs, elevators, anchor plates, etc.
                3. Boxouts for all mechanical sleeves, openings, penetrations and embeds in walls and slabs.
                4. Boxouts for all electrical conduit, floor boxes, wall boxes, etc., embedded in the concrete
                5. All blockouts required for future equipment, temporary shoring, etc.
                6. All floor mounted door closure, door rails, operable partitions, etc.
                7. All steps and changes in grade in structural floor.
                8. All entry mat embeds and blockouts.
                9. Boxouts for all miscellaneous metal embeds for door support, elevator sills, etc.
                10. The Trade Contractor shall define in the 3D model a proposed pour sequence of each element. Generate from the pour sequence model 2D pour drawings for each sequence. All sequence cover drawings are to

show a 3D image of that sequence with a tabulated list of layout coordinates required for that sequence.

11. The 2D drawings shall include as a minimum, the dimensions to all, sleeves, openings, penetrations, construction joints, expansion joints, control joints, etc.

ii. Precast Concrete

1. This Trade Contractor shall model the following items:
   a. All precast panels, including openings shall be modeled
   b. Any chamfers, reveals or slotted openings
   c. Any clips, embeds or supports.
   d. Sealant systems such as backer rod shall be modeled in order to coordinate with other trades.
   e. All construction or expansion joints
   f. The Trade Contractor shall coordinate with other trades to incorporate into the 3D model all items embedded in the concrete. This shall include, but is not limited to the following items:
      1. All embedded structural steel plates, anchor bolts, slab edge conditions, etc.
      2. All embedded miscellaneous steel for railings, stairs, elevators, anchor plates, etc.
      3. All mechanical sleeves, openings, penetrations and embeds in walls and slabs.
      4. All electrical conduit, floor boxes, wall boxes, etc., embedded in the concrete
      5. All blockouts required for future equipment, temporary shoring, etc.
      6. All floor mounted door closure, door rails, operable partitions, etc.
      7. All steps and changes in grade in structural floor.
      8. All entry mat embeds and blockouts.
      9. All miscellaneous metal embeds for door support, elevator sills, etc.
   g. Any other elements included in this scope of work.

4. Masonry
    i. Masonry
        1. This Trade Contractor shall model the following items:
            a. All masonry, including all penetrations, openings, and embeds identified in the construction documents, will be modeled in 3D. All edges, coursing and joint locations shall be accurately represented in the 3D model based on the coordinate system defined.
            b. Several typical locations will be developed to a level of detail necessary to show flashing, caulking, and interfaces with surrounding construction. For example a typical exterior door, a typical exterior window, and typical relieving angle details will modeled complete showing all flashing, caulking, and interfaces.
            c. This Trade Contractor will submit all layout and shop drawings in both 2D and 3D model format. The 2D shop drawings generated from the 3D model will be used for approval.
            d. This Trade Contractor shall coordinate with other trades to accurately locate all items to be imbedded in concrete and masonry.
            e. The 2D drawings shall include, at a minimum, the dimensions to all embeds, sleeves, openings, penetrations, construction joints, expansion joints, control joints, etc.
            f. Any other elements included in this scope of work.

5. Metal
    i. Structural Steel
        1. This Trade Contractor shall model the following items:
            a. Primary steel members (columns, beams, trusses and joists)
            b. Secondary steel members (X-bracing, façade support angles, lintels, gusset plates, braces, equipment supports, kickers, clip angles, framed openings, etc.)
            c. Any known prefabricated penetrations in primary or secondary members
            d. Structural stair components
            e. Decks (metal, prefab penetrations and openings)
            f. Misc. Metals used in the support of interior systems such as projection screens, projectors, won doors, fire doors, fire shutters, etc.
            g. Steel camber or slope.
            h. Steel/concrete embeds for curtain walls, precast panels or other systems.
            i. Reinforcing steel in slab edges
            j. Any other elements included with or attached to this scope of work which occupies more than 1^3" of space
    ii. Exterior Framing
        1. This Trade Contractor shall model the following items:
            a. All exterior framing, sheathing, and insulation, including all penetrations, openings, and embeds identified in the construction documents, will be modeled in 3D as an overall thickness of the wall system. Studs and individual layers of sheathing and insulation will not be modeled.
            b. Several typical locations will be developed to a level of detail necessary to show flashing, caulking, and interfaces with surrounding construction. For example a typical exterior door, a typical exterior window, and typical slab edge firestopping details will be modeled complete showing all flashing, caulking, fire safeing and interfaces.
            c. All penetrations, openings, and embeds shall be accurately located in the model, based on the coordinate system defined.
            d. This Trade Contractor will submit all layout and shop drawings in both 2D and 3D model format.
            e. This Trade Contractor shall coordinate with other trades to accurately locate all items to be contained within the wall system.
            f. The 2D drawings shall include, at a minimum, the dimensions to all embeds, sleeves, openings, penetrations, construction joints, expansion joints, control joints, etc.
            g. Any other elements included in this scope of work.
    iii. Miscellaneous Metals
        1. This Trade Contractor shall model the following items:
            a. All elements provided under scope of work of this Bid Package shall be modeled accurate and complete.
            b. All miscellaneous metal supports extending above ceilings shall be modeled.
            c. The 3D models submitted by the Trade Contractor for overall coordination are required to be checked and coordinated with the structure and the Trade Contractor's own work prior to submittal.
            d. Any other elements included in this scope of work.
6. Intentionally Left Blank
7. Intentionally Left Blank

8. Openings
    i. Curtain Wall, Metal Panel, & Glazing Systems
        1. This Trade Contractor shall model the following items:
            a. All Windows, curtain walls, Metal Panel Systems, storefront systems, skylights, borrowed lites and windows leaves
            b. Frames and mullions
            c. Any clips, embed or supports
            d. Sealant systems such as backer rod
            e. Several typical locations will be developed to a level of detail necessary to show flashing, caulking, and interfaces with surrounding construction. For example a typical exterior door, a typical exterior window, and typical slab edge fire stopping details will be modeled complete showing all flashing, caulking, fire-safeing and interfaces.
            f. All temporary cranes, hoists, and staging required to complete the scope of work
            g. Any other elements included in this scope of work.
9. Finishes
    i. Ceiling Systems
        1. This Trade Contractor shall model the following items:
            a. All individual elements provided under scope of work of this Bid Package shall be modeled accurate and complete.
            b. All clearances required for installation and maintenance of the ceiling systems.
            c. All support elements, including but not limited to T-grid (differentiate between main and secondary runners), compression struts, sway cables, sonic isolation, seismic supports, security supports/bracing, wall/perimeter attachments, and light gage metal framing members.
            d. This Trade Contractor shall coordinate with other trades to accurately locate all items that will be attached to or penetrate the ceiling systems.
            e. The 3D models submitted by the Trade Contractor for overall coordination are required to be checked and coordinated with the structure, other trades, and the Trade Contractor's own work prior to submittal.
            f. The 2D drawings shall include, at a minimum, the locations/dimensions to main runners, grid spacing and layout/starting points, compression struts, openings/penetrations, etc.
            g. Any other elements included in this scope of work.
    ii. Drywall and Interior Framing
        1. This Trade Contractor shall model the following items:
            a. All individual framing, sheathing, and insulation will be modeled in 3D Revit. Studs and individual layers of sheathing and insulation will be modeled to their correct height and location in the wall and above ceiling.
            b. Framing will include (but is not limited to) top and bottom tracks, king studs, regular studs, strapping, bracing, blocking, kickers, soffit/ceiling framing, hat channels, box-outs, as well as any clips or attachment brackets.
            c. Typical locations will be developed to a level of detail necessary to show flashing, caulking, and interfaces with surrounding construction. For example, a typical exterior door, a typical exterior window, and typical slab edge fire-stopping details will be modeled complete showing all flashing, caulking, insulation, and fire stop.

d. All box outs, penetrations, openings, and embeds shall be accurately located in the model, based on the coordinate system defined.
e. This Trade Contractor shall coordinate with other trades to accurately locate all items to be contained within the wall system, locations of high-wall drywall/priority walls, and potential conflicts with required framing members, such as top tracks, bottom tracks, bracing, king studs, etc.
f. The shop drawings shall include, at a minimum, the dimensions to all embeds, sleeves, openings, penetrations, construction joints, expansion joints, control joints.
g. Any other elements included in this scope of work.

iii. Raised Access Flooring

1. This Trade Contractor shall model the following items:
   a. All elements provided under scope of work of this Bid Package shall be modeled accurate and complete.
   b. Support elements of the system, including but not limited to: pedestals/stands, perimeter pedestals/stands, stringers, and bracing.
   c. Flooring panels/tiles, separated by element type and/or layer to differentiate between all different types used, such as regular panels, heavy duty panels, perforated panels, and vision/transparent panels.
   d. Any other equipment related or attached to the raised access flooring system, such as dampers, plenum fans, and plenum dividers.
   e. The 3D models submitted by the Trade Contractor for overall coordination are required to be checked and coordinated with the structure, other trades, and the Trade Contractor's own work prior to submittal.
   f. Any other elements included in this scope of work.

10. Intentionally Left Blank

11. Equipment
    i. Kitchen Equipment
        1. This Trade Contractor shall model the following items:
            a. All casework, including work surfaces and casework chases
            b. All equipment shall include clearance zones modeled based on manufacturer's recommendations for operation and maintenance
            c. Kitchen Equipment Included in Specifications, Including
                1. Ovens
                2. Ranges
                3. Freezers
                4. Refrigerators
                5. Microwaves
                6. Mop Sinks
                7. Ice Maker
                8. Grinders, Slicers, Disposal Systems
            d. MEPFP Tie-In Locations
                1. Gas
                2. Electricity
                3. Outlet Locations, both 120 and 210
                4. Mechanical Connections (Hoods, exhaust fans)
                5. Plumbing (Sinks, Drains, grease interceptors,)
                6. Shutoff Valves
                7. Fire Suppression
            e. Sleeves through walls and roofs that shall be needed early in construction
            f. For larger equipment ensure all associated equipment is modeled (i.e. control panels, compressors, pumps, condenser units, condensate drains, etc.)
            g. For walk-in equipment, ensure all utilities and devices within the equipment are modeled (i.e. shelves, racks, lighting, fire suppression, etc.) with the correct elevations and dimensions
            h. Framing, structural, in-wall backing, blocking, or other supports for casework.
    ii. Lab Casework & Equipment
        1. This Trade Contractor shall model the following items:
            a. All casework, including benches, work surfaces, and casework chases
            b. All equipment shall include clearance zones modeled based on manufacturer's recommendations for operation and maintenance
            c. Framing, structural, in-wall backing, blocking, or other supports for casework
            d. Specialty Equipment
                1. Fume Hoods
                2. Flammables Cabinet
                3. Acid Storage Cabinet
                4. First Aid Cabinet
                5. Fire Blanket
                6. Fire Extinguisher
                7. Glassware/General Storage Cabinets
                8. TV/AV Equipment Cabinet
                9. Centrifuges
                10. Drying Oven
                11. Desiccator
                12. Incubator
                13. Autoclave/Pressure Cooker

14. Fermentation Chamber
15. Refrigerator Cabinet

e. MEP/FP Tie-In Locations at Equipment and/ or Casework
   1. Lab Gas
   2. Electricity
   3. Outlet Locations
   4. Mechanical Connections (Fume Hoods, etc.)
   5. Plumbing (Sinks, Drains)
   6. Emergency Eye Wash & Shower
   7. Shutoff Valves
   8. Fire Suppression
   9. Tel/Data Connections

f. Sleeves through walls and roofs that may be needed early in construction

g. For larger equipment ensure all associated equipment is modeled (i.e. control panels, compressors, pumps, condenser units, condensate drains, etc.)

h. For walk-in equipment, ensure all utilities and devices within the equipment is modelled (i.e. shelves, racks, lighting, fire suppression, etc.) with the correct elevations and dimensions

iii. Lab Process Equipment

1. This Trade Contractor shall model the following items:
   a. All Skids.
   b. Skids, or Super Skids, or Prefabricated/ Preassembled Collections of Equipment and Piping shall be remodeled by the installing Trade Contractor (regardless of the completion of the model by the design team) as a separate and distinct Revit Family File (.rfa). The Revit Family shall be re-natively created, comprising only Revit Geometry, and not contain any CAD blocks (2D or 3D).
   c. The installing Trade Contractor may not model multiple skids within one family. Every family must be unique to each piece of equipment. If this causes confusion, Gilbane will provide direction.
   d. The Trade Contractor shall model all elements of the scope of work within a bounding box, scaled and delineated by the furthest endpoint (on every plane) of the furthest pipe/conduit/connection from the volumetric centroid of the equipment skid.
   e. All elements occupying a volume larger than 1^3" shall be modeled within this bounding box.
   f. Pads: The Installing Trade Contractor shall model the pad or support upon which the skid sits or rests, and shall specify on the shop drawings whether they will be providing said support. It is the responsibility of the Installing Trade Contractor to model all needed support back to building frame or slab.
   g. Supplemental Iron/Steel/Strongbacks/Unistrut
   h. The installing Trade Contractor shall model all supporting structure of all equipment, even if supplied by a miscellaneous metal/structural fabrication within or without their contractual structure.

12. Intentionally Left Blank
13. Intentionally Left Blank
14. Conveying Equipment

i. Elevators

1. This Trade Contractor shall model the following items:

a. All Model in 3D all elevator components located within elevator machine rooms. Hydraulic lines will also be accurately located and modeled in 3D.
b. Provide a list of minimum typical clearances for all model components and coordinate necessary clearances within the model. The 3D model is to include clearances and access requirements for equipment – included as a modeled volume such that clash detection and coordination can be accommodated relating to required clearances.
c. Elevator machine rooms shall have all items modeled with a level of intelligence associated with them that accurately identifies at a minimum the material type, model number, and manufacturer.
d. The 3D models submitted by the Trade Contractor for overall coordination are required to be checked and coordinated with the structure and the Trade Contractor's own work prior to submittal.
e. Any other elements included in this scope of work.

ii. Pneumatic Conveying Systems
1. This Trade Contractor shall model the following items:
a. All equipment/panels associated with the system including transfer units, blowers, stations etc.
b. Piping (all hard piping 1" in diameter or greater) on a system specific layer, workset, system type or object style
c. Valves, fittings, accessories.
d. Equipment pads (regardless of inclusion in their scope of work)
e. Required clearance areas and access zones (modeled as separate semi-transparent components on their own layer)
f. Hard insulation or fireproofing around objects (modeled as separate semi-transparent components on their own layer)
g. Any object or collection of objects that occupy more than 1^3" of space – this includes a ½" pipe with ½" of insulation, or two (2) 5/8" pipes that are run together.
h. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, as well as zones of influence around hanger attachments. Bang-its shall be identified as distinctly different from other hangers.
i. Soft insulation around objects (clearly identified as different from hard insulation)
j. Any other elements included with or attached to this scope of work which occupies more than 1^3" of space

15. Intentionally Left Blank
16. Intentionally Left Blank
17. Intentionally Left Blank
18. Intentionally Left Blank
19. Intentionally Left Blank
20. Intentionally Left Blank

21. Fire Suppression
    i. Fire Protection
        1. This Trade Contractor shall model the following items:
            a. Tanks
            b. Fire pumps, and all temporary equipment associated with fabrication and installation.
            c. Other equipment
            d. Piping (all hard piping 1” in diameter or greater – modeled pipes must reflect slopes)
            e. Valves, backflow preventers, fittings and sprinkler heads
            f. Required clearance areas and access zones (modeled as separate semi-transparent components on their own layer)
            g. Hard insulation or fireproofing around objects (modeled as separate semi-transparent components on their own layer)
            h. Any object or collection of objects that occupy more than 1^3” of space – this includes a ½” pipe with ½” of insulation, or four (4) 5/8” pipes that are run together.
            i. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, as well as zones of influence around hanger attachments. Bang-its shall be identified as distinctly different from other hangers.
            j. Soft insulation around objects (clearly identified as different from hard insulation)
            k. Wall hydrants, Fire Department Cabinets
            l. Any other elements included with or attached to this scope of work which occupies more than 1^3” of space

22. Plumbing
    i. Plumbing Systems
        1. This Trade Contractor shall model the following items:
            a. Tanks
            b. Pumps, sumps, grease interceptors, and any other equipment that would show on a ¼" Plan
            c. Any other equipment shown on a design schedule or in the specifications.
            d. Piping (all hard piping 1" in diameter or greater whether it is for water, gas, drainage, etc. – modeled pipes must reflect slopes) and be on a system specific layer, workset, system type or object style
            e. Condensate drain piping irrespective of diameter
            f. Floor and roof drains
            g. Plumbing fixtures and carriers
            h. Electrical equipment associated with plumbing equipment
            i. Valves, backflow preventers, fittings, cleanouts, drains, floors, sinks and traps.
            j. Equipment pads (regardless of inclusion in their scope of work)
            k. Required clearance areas and access zones (modeled as separate semi-transparent components on their own layer)
            l. Hard insulation or fireproofing around objects (modeled as separate semi-transparent components on their own layer)
            m. Any object or collection of objects that occupy more than 1^3" of space – this includes a ½" pipe with ½" of insulation, or two (2) 5/8" pipes that are run together.
            n. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, as well as zones of influence around hanger attachments. Bang-its shall be identified as distinctly different from other hangers.
            o. Soft insulation around objects (clearly identified as different from hard insulation)
            p. Any other elements included with or attached to this scope of work which occupies more than 1^3" of space

23. Heating, Ventilating, and Air Conditioning (HVAC)
    i. Mechanical
        1. This Trade Contractor shall model the following items:
            a. Cooling Towers
            b. Chillers
            c. Boilers
            d. Pumps
            e. Heaters
            f. Compressors
            g. Dryers
            h. Tanks
            i. All mechanical and air handling equipment
            j. Ductwork
            k. Diffusers, return air ducts and flex duct
            l. Piping associated with mechanical equipment and not included in the Plumbing model
            m. Electrical that is solely associated with mechanical equipment
            n. Equipment pads (regardless of their inclusion in their scope of work)
            o. Valves and fittings
            p. Required clearance areas or access zones (modeled as separate semi-transparent components on their own layer)
            q. Hard insulation or fireproofing around objects (modeled as separate semi-transparent components on their own layer)
            r. Embeds and sleeves
            s. Duct joints and flanges
            t. All other items consisting of temporary HVAC or mechanical pipe scope of work, including, but not limited to: temporary heating, temporary cooling.
            u. Soft insulation around objects (clearly identified as different from hard insulation)
            v. Any object or collection of objects that occupy more than 1^3" of space – this includes a ½" pipe with ½" of insulation, or two (2) 5/8" pipes that are run together.
            w. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, as well as zones of influence around hanger attachments. Bang-its shall be identified as distinctly different from other hangers.
            x. Control panels and conduits, weather stations and any other systems that would show up on a ¼" Scale Plan
            y. Any other elements included with or attached to this scope of work which occupies more than 1^3" of space
    ii. Mechanical Piping/Lab Piping/High Purity Piping
        1. This Trade Contractor shall model the following items:
            a. Tanks, pumps, controllers, and any other equipment that would show on a ¼" Plan
            b. All High Purity/'Clean' Valves with parameter data embedded along with required clearances.
            c. Equipment pads (as included in their scope of work)
            d. Piping (all hard piping 1" in diameter or greater – modeled pipes must reflect slopes) and be on a system specific layer, workset, system type or object style
            e. Condenser unit and Condensate drain piping irrespective of diameter
            f. 'Dirty' Valves, Backflow preventers, and fittings

g. Required clearance areas and access zones (modeled as separate semi-transparent, 3D, components on their own layer)
h. Hard insulation or fireproofing around objects (modeled as separate semi-transparent components on their own layer)
i. Any object or collection of objects that occupy more than 1^3" of space – this includes a ½" pipe with ½" of insulation, or two (2) 5/8" pipes that are run together.
j. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, as well as zones of influence around hanger attachments. Bang-its shall be identified as distinctly different from other hangers.
k. Soft insulation around objects (clearly identified as different from hard insulation)
l. Any other elements included with or attached to this scope of work which occupies more than 1^3" of space

iii. Fuel Systems (if separate Trade Contractor from Mechanical)
1. This Trade Contractor shall model the following items:
a. All elements provided under scope of work of this Bid Package shall be modeled accurate and complete.
b. Generator sets, mufflers, exhaust connections, and other connection points for fuel or other trades' systems.
c. Equipment required for the system to function and be complete, including but not limited to: Fuel Tanks, fuel lines/piping, backflow preventers, pressure regulators, gas trains, bollards, etc.
d. Support equipment for elements in this scope, including but not limited to hangers, trapeze hangers, seismic hangers, bracing, and unistrut.
e. The 3D models submitted by the Trade Contractor for overall coordination are required to be checked and coordinated with the structure, other trades, and the Trade Contractor's own work prior to submittal.
f. Any other elements included in this scope of work.

24. Intentionally Left Blank

25. Integrated Automation
    i. Building Automation Systems and/or Building Controls and/or Specific Equipment Instrumentation and Controls
        1. This Trade Contractor shall model the following items:
            a. Power feeds
            b. Switch gear
            c. Transformers
            d. Panelboards
            e. Generators (with access in the form of ladders, et al forms of egress/access)
            f. Any other electrical equipment shown on a design schedule or in the specifications.
            g. Light fixtures with junction boxes and required installation space.
            h. All tray and wireway exceeding 1” in diameter on the short end, including, but not limited to: Cable trays, Data Trays, Snake Trays, etc
            i. Security cameras (if no Security Contractor)
            j. Specialty systems (generators, UPS, etc.)
            k. Conduit and fittings (all conduit 3/4” in diameter or greater)
            l. Pull boxes
            m. Equipment pads (regardless of their inclusion in their scope of work)
            n. Required clearance areas or access zones (modeled as separate semi-transparent, 3D components on their own layer)
            o. Hard insulation or fireproofing around objects (modeled as separate semi-transparent components on their own layer)
            p. Additionally, the Trade Contractor shall model any object or collection of objects (MC, MI, EMT, Low Voltage wiring, etc) that occupy more than 1^{3}” of space – this includes a ½” conduit with ½” of clearance, or two (2) 5/8” conduits that are run together.
            q. Soft insulation or clearance around objects (clearly identified as different from hard insulation)
            r. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, as well as zones of influence around hanger attachments. Bang-its shall be identified as distinctly different from other hangers.
            s. Outlets, switches and junction boxes
            t. Flexible conduit that occupies more than 1” of space – this includes a ½” conduit with ½” of clearance, or two (2) 5/8” conduits that are run together.
            u. Groups of wires and MC greater than 1”
            v. Groups of Low Voltage Wiring greater than 3/4” in diameter.
            w. Groups of Mineral Insulated cable greater than or equal to 3/4” in diameter.
            x. Any other elements included with or attached to this scope of work which occupies more than 1^{3}” of space
            y. All Fire-Alarm Devices (Conduit, Speakers (annunciators), Strobes, Fire Alarm Pull Devices, smoke detectors, heat detectors)

26. Electrical
    i. Electrical
        1. This Trade Contractor shall model the following items:
            a. Power feeds
            b. Switch gear
            c. Transformers
            d. Panelboards
            e. Generators (with access in the form of ladders, et al forms of egress/access)
            f. Any other electrical routing/equipment shown on a design schedule, riser diagram, or in the specifications.
            g. Light fixtures with junction boxes and required installation space.
            h. All tray and wireway exceeding 1” in diameter on the short end, including, but not limited to: Cable trays, Data Trays, Snake Trays, etc
            i. Security cameras (if no Security Contractor)
            j. Specialty systems (generators, UPS, etc.)
            k. Conduit and fittings (all conduit 3/4” in diameter or greater)
            l. Pull boxes
            m. Equipment pads (regardless of their inclusion in their scope of work)
            n. Required clearance areas or access zones (modeled as separate semi-transparent, 3D components on their own layer)
            o. Hard insulation or fireproofing around objects (modeled as separate semi-transparent components on their own layer)
            p. Additionally, the Trade Contractor shall model any object or collection of objects (MC, MI, EMT, Low Voltage wiring, etc) that occupy more than 1” of space – this includes a ½” conduit with ½” of clearance, or two (2) 5/8” conduits that are run together.
            q. Soft insulation or clearance around objects (clearly identified as different from hard insulation)
            r. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, as well as zones of influence around hanger attachments. Bang-its shall be identified as distinctly different from other hangers.
            s. Outlets, switches and junction boxes
            t. Flexible conduit that occupies more than 1” of space – this includes a ½” conduit with ½” of clearance, or two (2) 5/8” conduits that are run together.
            u. Groups of wires and MC greater than 1”
            v. Groups of Low Voltage Wiring greater than 3/4” in diameter.
            w. Groups of Mineral Insulated cable greater than or equal to 3/4” in diameter.
            x. Any other elements included with or attached to this scope of work which occupies more than 1^{3}” of space
            y. All Fire-Alarm Devices (Conduit, Speakers (annunciators), Strobes, Fire Alarm Pull Devices, smoke detectors, heat detectors)

27. Communications
    i. Building Automation Systems, VDS (Voice, Data, Security), and/or Building Controls
        1. This Trade Contractor shall model the following items:
            a. Power feeds
            b. Switch gear
            c. Transformers
            d. Panelboards
            e. Generators (with access in the form of ladders, et al forms of egress/access)
            f. Any other electrical equipment shown on a design schedule or in the specifications.
            g. Light fixtures with junction boxes and required installation space.
            h. All tray and wireway exceeding 1” in diameter on the short end, including, but not limited to: Cable trays, Data Trays, Snake Trays, etc
            i. Security cameras (if no Security Contractor)
            j. Specialty systems (generators, UPS, etc.)
            k. Conduit and fittings (all conduit 3/4” in diameter or greater)
            l. Pull boxes
            m. Equipment pads (regardless of their inclusion in their scope of work)
            n. Required clearance areas or access zones (modeled as separate semi-transparent, 3D components on their own layer)
            o. Hard insulation or fireproofing around objects (modeled as separate semi-transparent components on their own layer)
            p. Additionally, the Trade Contractor shall model any object or collection of objects (MC, MI, EMT, Low Voltage wiring, etc) that occupy more than 1” of space – this includes a ½” conduit with ½” of clearance, or two (2) 5/8” conduits that are run together.
            q. Soft insulation or clearance around objects (clearly identified as different from hard insulation)
            r. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, as well as zones of influence around hanger attachments. Bang-its shall be identified as distinctly different from other hangers.
            s. Outlets, switches and junction boxes
            t. Flexible conduit that occupies more than 1” of space – this includes a ½” conduit with ½” of clearance, or two (2) 5/8” conduits that are run together.
            u. Groups of wires and MC greater than 1”
            v. Groups of Low Voltage Wiring greater than 3/4” in diameter.
            w. Groups of Mineral Insulated cable greater than or equal to 3/4” in diameter.
            x. Any other elements included with or attached to this scope of work which occupies more than 1^{3}” of space
            y. All Fire-Alarm Devices (Conduit, Speakers (annunciators), Strobes, Fire Alarm Pull Devices, smoke detectors, heat detectors)

28. Electronic Safety and Security
    i. Electrical and Fire Alarm
        1. This Trade Contractor shall model the following items:
            a. Power feeds
            b. Switch gear
            c. Transformers
            d. Panelboards
            e. Generators (with access in the form of ladders, et al forms of egress/access)
            f. Any other electrical equipment shown on a design schedule or in the specifications.
            g. Light fixtures with junction boxes and required installation space.
            h. All tray and wireway exceeding 1” in diameter on the short end, including, but not limited to: Cable trays, Data Trays, Snake Trays, etc
            i. Security cameras (if no Security Contractor)
            j. Specialty systems (generators, UPS, etc.)
            k. Conduit and fittings (all conduit 3/4” in diameter or greater)
            l. Pull boxes
            m. Equipment pads (regardless of their inclusion in their scope of work)
            n. Required clearance areas or access zones (modeled as separate semi-transparent, 3D components on their own layer)
            o. Hard insulation or fireproofing around objects (modeled as separate semi-transparent components on their own layer)
            p. Additionally, the Trade Contractor shall model any object or collection of objects (MC, MI, EMT, Low Voltage wiring, etc) that occupy more than 1” of space – this includes a ½” conduit with ½” of clearance, or two (2) 5/8” conduits that are run together.
            q. Soft insulation or clearance around objects (clearly identified as different from hard insulation)
            r. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, as well as zones of influence around hanger attachments. Bang-its shall be identified as distinctly different from other hangers.
            s. Outlets, switches and junction boxes
            t. Flexible conduit that occupies more than 1” of space – this includes a ½” conduit with ½” of clearance, or two (2) 5/8” conduits that are run together.
            u. Groups of wires and MC greater than 1”
            v. Groups of Low Voltage Wiring greater than 3/4” in diameter.
            w. Groups of Mineral Insulated cable greater than or equal to 3/4” in diameter.
            x. Any other elements included with or attached to this scope of work which occupies more than 1^{3}” of space
            y. All Fire-Alarm Devices (Conduit, Speakers (annunciators), Strobes, Fire Alarm Pull Devices, smoke detectors, heat detectors)
    ii. Security/Cameras/Audio-Visual
        1. This Trade Contractor shall model the following items:
            a. Power All elements provided under scope of work of this Bid Package shall be modeled accurate and complete.
            b. All equipment included in this scope of work, including but not limited to security cameras, card readers, information

displays, projectors, projector screens, televisions, control panels, conduit, and cable trays. Reference Electrical above for size/LOD requirements.

c. All equipment required to complete the systems in this scope of work.
d. All Scope Supporting Elements, including, but not limited to Strut, Hangers, stands, sleepers, and seismic support, any zones of influence around hanger attachments and any required clearances for visibility, maintenance and access. Bang-its shall be identified as distinctly different from other hangers.
e. The 3D models submitted by the Trade Contractor for overall coordination are required to be checked and coordinated with the structure, other trades, and the Trade Contractor's own work prior to submittal.
f. Any other elements included in this scope of work.

29. Intentionally Left Blank
30. Intentionally Left Blank

31. Earthwork
    i. Civil Site & Grading
        1. This Trade Contractor shall model the following items:
            a. All horizontal utilities beyond 3'-0" of building perimeter within the Package Scope of Work.
            b. Vaults, manholes, catch basins, tanks, underground storage containers and other underground structures.
            c. Ductbanks
            d. All bundled conduit and piping
            e. Light poles and bases
            f. Bollards with foundations
            g. Backflow preventers and control valves
            h. Site structures
            i. Fire hydrants, parking meters, bike racks, etc.
            j. Fencing and playground equipment
            k. Temporary and Permanent Stormwater management structures pump stations, fueling systems, manholes and other major items that impact on the overall project understanding or which may become project design constraints. All items must be geo-referenced such that all elements can be viewed as an overlay in the building information model or the State's GIS system correctly positioned in the correct location, at all times.
            l. Topography (existing to remain, existing to cut and new fill)
            m. Major asphalt and concrete paving (roads, parking lots, drives, turnarounds, etc.)
            n. Minor asphalt and concrete paving (sidewalks, curbs, gutters, etc.)
            o. The site and grading model shall extend from 15 feet beyond the scope of work to within five feet of the building footprint, including any courtyards or ancillary scopes of work.
            p. Landscaping elements: planting areas, such as raised planting beds and berms, parking islands, pools/ponds/other water features, terraces and other items not included elsewhere in the design model.
            q. Existing site conditions (other than topography)
            r. Utilities – underground and overhead (as described above).
            s. Sediment and erosion controls
            t. Trees and shrubs
            u. Paving, curbs, gutters, striping
            v. Site amenities or structures
            w. Any other elements included with or attached to this scope of work which occupies more than 1^3" of space
32. Intentionally Left Blank

33. Utilities
    i. Civil Utilities
        1. This Trade Contractor shall model the following items:
            a. All horizontal utilities beyond 3’-0” of building perimeter within the Package Scope of Work.
            b. Vaults, manholes, catch basins, tanks, underground storage containers and other underground structures.
            c. Ductbanks
            d. All bundled conduit and piping
            e. Light poles and bases
            f. Bollards with foundations
            g. Backflow preventers and control valves
            h. Site structures
            i. Fire hydrants, parking meters, bike racks, etc.
            j. Fencing and playground equipment
            k. Temporary and Permanent Stormwater management structures pump stations, fueling systems, manholes and other major items that impact on the overall project understanding or which may become project design constraints. All items must be geo-referenced such that all elements can be viewed as an overlay in the building information model or the State’s GIS system correctly positioned in the correct location, at all times.
            l. Topography (existing to remain, existing to cut and new fill)
            m. Major asphalt and concrete paving (roads, parking lots, drives, turnarounds, etc.)
            n. Minor asphalt and concrete paving (sidewalks, curbs, gutters, etc.)
            o. The site and grading model shall extend from 15 feet beyond the scope of work to within five feet of the building footprint, including any courtyards or ancillary scopes of work.
            p. Landscaping elements: planting areas, such as raised planting beds and berms, parking islands, pools/ponds/other water features, terraces and other items not included elsewhere in the design model.
            q. Existing site conditions (other than topography)
            r. Utilities – underground and overhead (as described above).
            s. Sediment and erosion controls
            t. Trees and shrubs
            u. Paving, curbs, gutters, striping
            v. Site amenities or structures
            w. Any other elements included with or attached to this scope of work which occupies more than 1^3” of space

5.2. Appendix for Surveying Scope of Work (as it applies to Coordination)

5.2.1. Surveying for Coordination Utilization

a. Upon approval of the surveyor, a kickoff meeting with the surveyor shall be held to discuss survey deliverables.

b. The surveyor shall provide the following:

1. A site plan, stamped by an Engineer Registered in the State of that project, showing:
    i. Northing, Easting, & Elevation in Decimal Northing and Easting from Gilbane Project Zero Point (Master Benchmark)
        1. A physical monument will be established by surveyor. Scribed lines or gunpowder actuated pins will not be permissible for this master benchmark.
    ii. Additional Northing, Easting, and Elevation pins (no less than 4 additional spread evenly across the site) – These should be within Line of Sight of the master benchmark to ensure clear transference and backshooting of points.
2. Excel File giving all the points in decimal Northing and Easting. Cutout or scan of Surveyor's notebook will not be considered acceptable.
3. On the same plan, a physical Existing monument shown that has been referenced on a civil contract document with a spot coordinate (again, decimal Northing and Easting) and backchecked to within 0'-1/8" from all benchmarks. Any deviations shall be submitted as a deviation report.

c. Gilbane and all Trade Contactors will use this master benchmark as our 0,0,0 for the project with all of our trades. No other benchmarks shall be used by any Trade Contractor, and the prime surveyor shall be the accountable party for the entire site.

d. All Gridline layout on site shall be dimensioned from this point orthographically, and shall be issued on a separate site plan, having been stamped by the surveyor.

5.3. Appendix for Building Information Model(s) Release and Hold Harmless Agreement

Project:
Date:
Name:
Company: ("You/Your")
Address:

Building Information Model(s) Release and Hold Harmless Agreement

Gilbane Building Company ("Gilbane"), upon receipt of a signed copy of this Release and Hold Harmless Agreement, will grant access to the Building Information Model(s) (BIM) that has been created or will be created for the _____Project, and which Project is located in _____.

You hereby accept the BIM in its "AS IS" condition. Gilbane makes no representation or warranty of any kind, express or implied, with respect to the BIM, including any and all amendments thereto or information contained therein. Any use which You make of the BIM and any action which You take based upon the information contained therein will be at Your sole risk, expense and liability. In consideration of Gilbane providing You with the BIM, You shall waive any and all claims against Gilbane or any other party, including, but not limited to, any architect, engineer, consultant, other Trade Contactor or any other third party who prepared or assisted in preparation of the BIM. If the BIM differs from the design documents, for whatever reason, the design documents will take precedent as the contractual documents and will define the original design intent. Furthermore, neither Gilbane nor any other third party, such as an architect, engineer, or consultant, Trade Contactor will be liable for any direct, indirect, consequential, special or any other damages resulting from Your use of the BIM, and You hereby release all claims and agree to hold said parties harmless from any and all such damages, costs and liabilities which you may incur. The BIM is provided solely and exclusively for use in completion of the Project. You shall indemnify, defend and hold harmless Gilbane and any other third party, such as an architect, engineer, consultant, Trade Contactor who prepared or assisted in preparation of the BIM for any use by You of the BIM outside the BIM scope of the Project.

You will maintain sufficient controls on the Model to ensure the security, integrity and copyrights of these files. You shall further ensure that the obligations identified in this agreement will be included in any contracts You issue to vendors or subcontractors retained on this Project. You shall be liable for any damages arising from a breach of the terms of this agreement by Your vendors or subcontractors.

You hereby acknowledge that You have voluntarily executed this Release and Hold Harmless Agreement and further warrant and represent that You understand the legal ramifications of having executed it, especially as it relates to the release and hold harmless provisions as set forth above.

This agreement shall be binding upon and inure to the benefit of the parties hereto, their successors, assigns and legal representatives.

_____

Recipient Signature Date

Lean Construction Program

Northeast Metropolitan Regional Vocational High School

J09299.000

Wakefield, MA

Gilbane has an expectation that all Trade Contractors focus on the continuous improvement of the construction process to maximize value to the Client. It is through the implementation of Lean principles and methods that this goal will be accomplished. This Attachment includes basic tools and standards that will be implemented on all Gilbane projects. Any additional project specific requirements will be identified in the Specific Scope of Work, Exhibit B.

Sort

- On-Time Deliveries
    - Materials to be installed within 7-10 days of delivery.
    - Amount of materials delivered not to exceed the 7-10 days expectation.
    - Material delivery schedule to be approved by Gilbane Project Team
        - Materials delivered without approval will be subject to being sent away at Trade Contractor's expense.
- Organized and Sequenced Deliveries
    - Materials to be sequenced, packaged and delivered in accordance with project schedule.
        - Shaking out/sorting of materials to be performed off-site.
            - If off-site storage is required, Trade Contractor is responsible
- Upon approximately 90% completion, Trade Contractor shall remove all excess materials, equipment, and tools from jobsite.
    - Any excess materials, equipment, and tools not removed within a 48 hour notice will be removed by Gilbane at the Trade Contractors' expense. This includes but not limited to the following; labor, equipment, disposal, or any other disposal means, and associated administrative costs.

Set-In-Order

- All materials to be labeled with the following: company name, location of installation, date delivered, date to be installed by, and specification section.
    - Any un-labeled materials will not be allowed onsite.
- All materials placed in specified areas as designated by Gilbane.
- All materials to be crated or palletized (shrink wrapped, if necessary) and on wheels.
    - Designated color to be assigned to each Trade Contractor.
- All tools/equipment to be tagged with company name and stored in designated areas.
    - Designated color to be assigned to each Trade Contractor.
- Ladders Compliance & Lift
    - All ladders and lifts to be labeled with company's name and contact information.
        - Ladders are to be podium and/or platform type with laminated inspection tag.

Shine

- No trash/excess materials should hit the floor at any time. All work to be performed in such a manner that debris goes directly into trash carts.
- Daily clean-up organization of materials.
    - Broom sweep daily with wax base sweeping compound as work progresses.
- Materials not installed to be put back on pallet or crate daily.
    - Any material past installation date to be removed from site.
- All trash/materials no longer required to be removed from the site daily.
- For each five people onsite, the Trade Contractor shall provide one trash cart with wheels.

Standardize

- All Trade Contractors to participate in program as part of their contract requirement.
- Program requirement to be communicated in Scope of Work and specifics discussed in Scope Review Meeting.
- Deliveries shall all be to site designated areas per direction of Gilbane
    - Any specialized means of unloading and/or distribution of materials shall be provided by the Trade Contractor.
- Trade Contractors shall provide a means of easy identification for all people onsite. This can include hard hats, hard hat stickers, safety vest, shirts, etc.
- All Trade Contractors' vehicles to park in the designated parking location. No exceptions.
- No food or beverage should be brought into the building during construction except for designated areas.

Sustain

- Periodic inspections to be performed by the Gilbane Project Team
- Any materials/tools not in compliance will be either discarded or removed from site within 48 hours
    - Trade Contractors responsible for replacement at their own expense.
- Trade Contractors will be charged for clean-up if performed by others.
- At 90-day intervals the Trade Contractors' management personnel shall meet, walk the site and discuss continuous improvement with the Gilbane Project Team.

Scheduling Procedures

Northeast Metropolitan Regional Vocational High School

J09299.000

Wakefield, MA

A key element in the delivery of this project in the preconstruction and construction phases is the implementation of scheduling procedures. Construction Manager requires the Trade Contractor to comply with procedures as outlined for planning and controlling work on this project.

Pull Planning and Collaboration as a Team

Team members are required to make and keep commitments based on their confidence that prerequisite work, design information, materials, labor, and equipment will be ready so they can start and complete installations to meet Master Schedule milestones. The Trade Contractor's Supervisors and Project Managers are required to participate together with all applicable Trade Contractors in pull plans for each major phase of work on the project in which they will be participating. Each pull plan will work towards creating the detailed expansion of the milestone schedule included in the bid documents. This Milestone schedule is a guide for the intended phasing and flow through the project. Dates, durations, and all sequencing will be created through pull planning sessions throughout the life of the project. No sequencing or handoffs should be assumed prior to any pull planning event, other than those specifically communicated in the bid documents. Final sequencing and hand offs at all pull plan events will be agreed upon by the project team to support the best interest of the project as a whole. The durations and sequencing agreed upon at each pull plan will become contractual obligations. At each pull plan event, Trade Contractor Supervisors structure the flow of work and outline the network of commitments by identifying the hand-offs between Trade Contractors. Each onsite Superintendent or Lead Foreman has the responsibility to plan their activities six weeks ahead in a "Look-ahead Schedule" and to identify crew assignments for the current and next week in a "Weekly Work Plan," and are asked to commit to performing work that they know can be made ready for their crews and to refuse to assign work they are not confident can be started or be completed because it is not ready.

Weekly Work Plans and Constant Communication

A Weekly Work Plan meeting will be held every Thursday, or other agreed day, to review the work commitments completed the prior week, forecast the work for this current week and look ahead to the following week (s). In advance of this meeting, Bid Package specific Weekly Work Plan (WWP) are required to be submitted to the Construction Manager by close of business every Monday for the following week's activities. Submission of the WWP may be managed through an Excel Template or an online cloud software scheduling platform (similar to TouchPlan). The Construction Manager will provide training in entering, managing, maintaining schedule activities with the WWP template or software tool.

The Trade Contractor will be responsible for entering the WWP activities as defined by their associated Bid Package and by each individual activity line item based on the following criteria or as defined by the Construction Manager:

- Trade Contractor
- Tier Sub-Trade Contractor A, B, C, D, etc.
- Type / Category / Function of Work being preformed
- Location of work being performed (overall Grid/Site Reference Plan to be provided by Construction Manager)
- Identification of Submittal status and Material Procurement
- WBS - P6 Activity line item # correlation
- Schedule Start Date, Scheduled Finish Date
- Duration of Work
- Crew Size

- Dependencies: Roadblock identification, Predecessor, Successor activity linking
- Status: Commitment, Backlog, Complete, Incomplete
- Enter 3D Model object/attribute/element/geometry ID # correlation to activity, as applicable
- Constraints

5S Methodology + Safety

5S Methodology is the list which describes how to organize a workspace for efficiency and effectiveness by identifying and storing the items used, maintaining the area and items, and sustaining the new organizational system. Gilbane specifically adds a 6th S for Safety. Each Trade Contractor will be required to follow project 5S standards and participate in the Visual Management of this system.

1. Sort - Provide only the required materials, tools and equipment at the work area(s) and laydown area. Work areas are safe and free from tripping hazards and other risks.
2. Set in Order - Clearly define, with signage and boundary control, laydown and storage areas, walkways, and vehicle paths, and exits. Clearly label and identify equipment and material.
3. Shine – Keep work area clean and neat. Keep tools and equipment in good working order. Keep floors free of materials and debris.
4. Standardize - Formalize standards and processes for work from activities taken place in SORT, SET IN ORDER, and SHINE.
5. Sustain/Self Discipline - The contractor will allocate time to daily and weekly 5S management and shall participate in a weekly 5S walk to review progress and contribute to continuous improvement.
6. Safety

Scheduling Procedures

- Each onsite Supervisor or Superintendent for each Trade Contractor has the latest information about the status of contract issues, submittals and shop drawings, material and equipment deliveries, RFIs and change orders, safety training, labor and construction equipment availability.
- Each Supervisor or Superintendent has the ability to plan work for their respective company and authority to make commitments to the project in order to execute this plan.
- Each Supervisor or Superintendent will participate in the phase planning and scheduling meetings for each phase in which their company is involved. Examples are Demolition & Earthwork, Foundations, Superstructure, Exterior Envelop, Interior Construction, Finishes and Specialties.
- Each Supervisor or Superintendent will come prepared with information to support their Look-ahead Schedule and Weekly Work Plan to the weekly planning meeting and actively participate in coordinating work with other Trade Contractors under the direction of the Project Superintendent.
- Each Supervisor or Superintendent will update tasks electronically and report task completions as they occur to the Project Superintendent as well as the other Supervisors of succeeding Trade Contractors.
- Optional: Each Supervisor or Superintendent will track tasks completed as planned and report the results along with reasons for failures in the weekly planning meeting. The completed items of work are measured a “Percent Plan Complete” (PPC).
- Each Supervisor or Superintendent will participate in a Trade Contractor Coordination meeting to coordinate work for the next day or week with other Trade Contractors.
- Each Supervisor or Superintendent will participate in the creation of the Constraint Log and the ongoing efforts to remove constraints prior to schedule impacts.

- Each coordination meeting can take place either daily or weekly, depending on the complexity and stage of the project.
- Roles and Responsibilities
    - Construction Manager will be responsible to facilitate and administer the scheduling procedures. This will involve providing direction and coordinating Trade Contractor activities, collecting and approving Trade Contractor work plans, facilitating Trade Contractor planning meetings and updating, maintaining, and distributing forms to all parties.
    - Trade Contractors will provide and include in their bid the necessary resources to implement scheduling procedures for the duration of the project, including providing mobile technology to their Foreman or Superintendent for them to make the electronic updates in the field. Provide and maintain this technology throughout the life of the project duration.
    - Trade Contractors must be committed to the process. The Superintendents must make themselves available to plan and direct the weekly work planning meetings.
- Submittals
    - Trade Contractors will be responsible to document the process and provide the following reports to Construction Manager:
        - Weekly copies of the work plans
    - Construction Manager will be responsible to document the process and publish the following reports:
        - Monthly reports on PPC achieved per Trade Contractor and/or by company and for the overall project including Construction Manager's and the Owner's performance.
        - Construction Manager will publish a quarterly variance report. The report will outline why variances are occurring and recommendations to reduce future variances.

Project Schedule

See Gilbane Project Manual, for the project schedule. This schedule represents the general milestones that must be met to achieve the overall project completion dates and provides guidance to the bidders to understand the time constraints under which the work must be performed. The project detailed schedule, in accordance with the terms of the Contract, General Conditions, and Special Conditions will be derived from pull planning scheduling sessions with mandatory attendance by all prime Trade Contractors.

Bidders shall include non-productive Supervisor/Superintendent time to attend scheduling procedures training.

Lean Scheduling

A 5-step Lean collaborative scheduling approach will be utilized on this project. All Trade Contractors shall participate in this process. The 5 steps are:

1. Phase Scheduling – All Trade Contractors shall attend continuous pull planning sessions for a collaborative approach to specify handoffs, project sequence, commitments, coordination, and work flow. These sessions will detail the milestone schedule and be issued as zero-dollar amendments to all Trade Contractors.
2. Look-ahead Planning – 6 Week Lookahead Schedules – At weekly Trade Contractor meetings, Trade Contractors shall identify constraints, confirm procurement, and continuity of commitments.
3. Weekly Work Planning –Trade Contractors shall submit their two week look-ahead schedule in order to coordinate their work plan at the Trade Contractor meeting. At the weekly Trade Contractor meeting, the handoffs and sequence agreed upon at the pull plan sessions will be detailed into daily commitments.

4. Learning – At the weekly Trade Contractor meeting the Planned Percent Complete (PPC) will be measured against the weekly work plan. Reasons for activities taking longer than planned must be given and a planned workaround must be developed to get back on schedule.
5. Daily Planning & Commitment - Daily Huddles are required for all Foremen on the jobsite. These huddles will confirm that the daily tasks were completed (PPC/root cause), and if they were not completed, an alternate plan for the next day will be discussed.

July 2023

Technology Requirements

Northeast Metropolitan Regional Vocational School District

J09299.100

100 Hemlock Road Wakefield, MA 01880 US

Trade Contractors shall be required to use the following programs for each described activity (all are free of charge):

- Procore for Daily Work Logs, Pre-Task Plans, JHA-AHAs, RFIs, Submittals, Observations, Punch List, Specifications, Closeout Documents, and current Contract Documents
- BIM 360 for sharing CAD backgrounds and/or Revit 3D Models.
- SafetyNet for tracking and remediation of safety risk issues

Note: These are the technologies anticipated at this time. Construction Manager reserves the right to implement additional technologies requiring Trade Contractor participation at no additional cost.

Training

The Project Manager and Superintendent are required to complete a Procore Certification training, free of charge, available here: *https://learn.procore.com/series/procore-certification-subcontractor-client/procore-certification-subcontractor.* Or, attend a one (1) hour training provided by the Construction Manager.

The Trade Contractor is responsible to complete the training within two weeks of contract award. The Trade Contractor shall have their project team participate in this training at no additional cost to the Construction Manager or Owner.

Hardware

Computer Requirements

The Trade Contractor shall have access to an internet connected computer to communicate with the Construction Manager and submit documents on Procore. The computer shall have sufficient memory and processing power to access the Procore project and submit required documents in a timely manner.

Tablets/iPads

Each Trade Contractor is responsible to provide one tablet per supervisor. Contract Documents will be available and maintained within Procore, and available via the Procore app on this tablet. All communication and changes to the Contract Documents will be issued via Procore. In addition, Trade Contractors will have the ability to submit and respond to other project tasks, including but not limited to: RFI's, Submittals, Daily Work Log, STA's, Observations, Punch List, etc.

Each Trade Contractor supervisor utilizing the tablet shall have a valid email address and account set up prior to arriving on the job site to receive notifications from the Construction Manager, and other applications that will be used throughout the duration of the project. Additionally, an iTunes, Google Play, or other appropriate account shall be set up in order to download the mobile applications to interact with the Contract Documents.

The tablet provided must meet or exceed the minimum requirements of the latest release version of the Procore application throughout the life of the project, from contract award to final completion. It is the responsibility of the Trade Contractor to keep both the tablet OS and Procore application up to date with the most current version.

Software

Procore

The Construction Manager, along with the Owner and Architect, have elected to utilize Procore. Procore is a cloud-based construction management software used to facilitate communication and collaboration on the project. There are no fees to utilize Procore.

Procore requires a high-speed internet connection and is supported by most standard browsers and recommended for use in Google Chrome, see here https://support.procore.com/faq/which-web-browsers-are-supported-by-procore. Documents uploaded to the site must meet the standards required by the software.

Procore will be used to submit and answer all RFIs generated following contract award, to process electronic review and distribution of submittals, to submit daily report logs, and to submit safety task assignments. Each Trade Contractor will be given a user account for Procore and will be required to submit electronically as per the Procore format, all items as listed above. "Submit electronically" means to fill in the Procore form and upload any corresponding documents. In addition, the Construction Manager may require that changes and requisitions be provided electronically during the project.

Trade Contractors that do not utilize Procore, and instead provide hard copies of required documentation, will be subject to back charge for related document transmission fees, Construction Manager personnel time, and document reproduction fees. Please notify Construction Manager of any issues relating to the use of Procore at time of bid.

Procore generates e-mail notifications to alert participants of actions required. The Trade Contractor shall be responsible for accurate and current e-mail contact information for all project team personnel. The Trade Contractor shall be responsible for timely interaction and response to assigned tasks through Procore. The Construction Manager is not responsible to provide the Trade Contractor duplicate notification via any other system. The Trade Contractor's project team shall have continuous access to a computer, internet and e-mail to facilitate the effective use of these tools.

Contract Documents

Procore will be used as the mechanism for the Construction Manager to electronically provide all project related documents and document updates to Trade Contractors. This specifically includes Contract Documents, Specification, Shop Drawings, Coordination Drawings, Submittals, RFIs, MSDS's, and Meeting Minutes. If a Trade Contractor requires printed copies of documents, all costs for printing and distribution of those documents shall be borne by the Trade Contractor. The Trade Contractor is responsible for staying up to date and referencing the latest Contract Documents via Procore.

BIM 360

Construction Manager has set up a project site on BIM 360 Glue for use by Trade Contractors and the design team to share information and collaborate. There is no cost associated to the Trade contractors for use of this service. It is intended to help the development and coordination of the design implantation and fabrication into the field installation. Construction Manager will work with the selected Trade Contractors to establish the most productive workflow for this project. The Construction Manager will set up a cloud-based Project and invite recipients to join. These documents can be viewed both on a desktop via a free downloadable BIM 360 Glue Viewer or through the Autodesk BIM 360 Glue App available for download from iTunes.

SafetyNet

Trade Contractors shall use SafetyNet to be made aware of safety issues requiring attention and notify the Construction Manager upon remediation of these issues.

Trade Contract Performance Bond

Project Name _____

Project Address _____

Trade Contract Number _____ Trade Contract Date _____

Trade Contract Amount _____

Bond Number _____ Additional Obligee Rider ◯ Yes ◉ No

Bond Date _____ Bond Penal Amount _____

PRINCIPAL (TRADE CONTRACTOR)
Name and Address

_____

SURETY
Name and Address of Surety Company Office

_____

OBLIGEE

Gilbane Contracting Entity _____

Address _____

The Principal and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Obligee for the performance of the Trade Contract, which is incorporated in this bond by reference.

If the Principal performs the Trade Contract, then this bond shall be null and void; otherwise, it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of the Trade Contract, including but not limited to the Trade Contract price and/or time, made by the Obligee. This waiver shall not apply to the time for suit. The penal sum of this bond will adjust with the alterations to the Trade Contract price accordingly.

Whenever the Principal shall be, and is declared by the Obligee to be in default under the Trade Contract, with the Obligee having performed its obligations in the Trade Contract, one of the following shall occur:

1. Surety may promptly remedy the default subject to the provisions of paragraph 3 herein; or

2. Obligee may, after reasonable notice to Surety, or Surety may, upon demand of Obligee, arrange for the performance of Principal's obligation under the Trade Contract subject to the provisions of paragraph 3 herein;

3. The balance of the contract price, as defined below, shall be credited against the reasonable cost of completing performance of the Trade Contract. If completed by the Obligee, and the reasonable cost exceeds the balance of the contract price, the Surety shall pay to the Obligee such excess, but in no event shall the aggregate liability of the Surety exceed the amount of this bond. Obligee's reasonable cost of completing performance of the Trade Contract shall also include all Damages Obligee is entitled to under the terms of the Trade Contract due to Principal's default. If the Surety arranges completion or remedies the default, that portion of the balance of the contract price as may be required to complete the Trade Contract or remedy the default and to reimburse the Surety for its outlays shall be paid to the Surety at the times and in the manner as

said sums would have been payable to Principal had there been no default under the Trade Contract. The term "balance of the contract price," as used in this paragraph, shall mean the total amount payable by Obligee to Principal under the Trade Contract and any amendments thereto, less the amounts heretofore properly paid by Obligee under the Trade Contract.

Any suit under this bond must be instituted before the expiration of (a) two years from the date on which final payment under the contract falls due; or (b) the applicable statute of limitations of the jurisdiction in which the bond is executed, whichever is later.

Surety represents and warrants that it has made an independent investigation of the Principal and has satisfied itself of all issues relative to the issuance of this Bond to Obligee, and further represents and warrants that Surety has not relied upon any information, statement or documentation either from the Obligee or any Additional Obligee or their respective agents or representatives.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Obligees named herein or its heirs, executors, administrators, or successors of the Obligees.

Signed and sealed this _____ day of _____ 20____ in the presence of:

Attach valid Corporate Power of Attorney Form

PRINCIPAL

Company Name _____

Name and Title _____

Signature_____

Seal

SURETY

Company Name _____

Name and Title _____

Signature_____

Seal

Witness _____

Witness _____

Trade Contract Labor and Material Payment Bond

Project Name _____

Project Address _____

Trade Contract Number _____ Trade Contract Date _____

Trade Contract Amount _____

Bond Number _____ Additional Obligee Rider ◯ Yes ◯ No

Bond Date _____ Bond Penal Amount _____

PRINCIPAL (TRADE CONTRACTOR)
Name and Address

_____

SURETY
Name and Address of Surety Company Office

_____

OBLIGEE

Gilbane Contracting Entity _____

Address _____

The Principal and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Obligee to pay for labor, materials and equipment furnished for use in the performance of the Trade Contract, which is incorporated in this bond by reference and pursuant to which this bond is issued.

If the Principal shall promptly make payment directly or indirectly to all Claimants as defined in this bond, for all labor, material and equipment used in the performance of the Trade Contract, then this bond shall be null and void; otherwise, it shall remain in full force and effect, subject, however, to the following conditions:

1. A Claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the contract. Labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service, rental of equipment, payroll taxes, contributions for unemployment insurance, old age pensions and annuities which are measured by wages and/or salaries directly applicable to the Trade Contract. This Bond is intended to provide the most liberal interpretation of Claimant.
2. The above-named Principal and Surety hereby jointly and severally agree with the Obligee that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such Claimant, prosecute the suit to final judgment for such sum or sums as may be justly due Claimant and have execution thereon. The Obligee shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any Claimant,
    a. After the expiration of one (1) year following the date on which Principal ceased work on said contract it being understood, however, that if any limitation embodied in this bond is prohibited by

any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

b. Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project or any part thereof, is situated, and not elsewhere.

4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.

The Surety waives notice of any alteration or extension of the Trade Contract, including but not limited to the Trade Contract price and/or time, made by the Obligee. This waiver does not apply to the time for suit identified above. The penal sum of this bond will adjust with the alterations to the Trade Contract price accordingly.

Surety represents and warrants that it has made an independent investigation of the Principal and has satisfied itself of all issues relative to the issuance of this Bond to Obligee, and further represents and warrants that Surety has not relied upon any information, statement or documentation either from the Obligee or any Additional Obligee or their respective agents or representatives.

Signed and sealed this _____ day of _____ 20____ in the presence of:

Attach valid Corporate Power of Attorney Form

PRINCIPAL

Company Name _____

Name and Title _____

Signature_____

Seal

Witness _____

SURETY

Company Name _____

Name and Title _____

Signature_____

Seal

Witness _____

Additional Obligee Rider (Performance Bond)

Project Name _____

Project Address _____

Trade Contract Number _____ Trade Contract Date _____

Trade Contract Amount _____

Bond Number _____ Additional Obligee Rider ◯ Yes ◯ No

Bond Date _____ Bond Penal Amount _____

PRINCIPAL (TRADE CONTRACTOR)
Name and Address

_____

SURETY
Name and Address of Surety Company Office

_____

OBLIGEE

Gilbane Contracting Entity _____

Address _____

This Additional Obligee Rider is attached to and incorporated into Performance Bond, number _____, dated _____, 20__.

All of the terms, conditions and provisions of the Performance Bond are incorporated herein by reference, and nothing herein shall alter or affect any of the terms, conditions and other provisions of the Performance Bond, including but not limited to, the aggregate liability of Surety as described in the Performance Bond.

All defined terms as set forth in the Performance Bond shall have the same meanings herein.

_____ is hereby added to the Performance Bond as an additional named Obligee.

Signed and sealed this _____ day of _____ 20____ in the presence of:

PRINCIPAL

Company Name _____

Name and Title _____

Signature_____

Seal

SURETY

Company Name _____

Name and Title _____

Signature_____

Seal

Witness _____

Witness _____

Additional Obligee Rider (Payment Bond)

Project Name _____

Project Address _____

Trade Contract Number _____ Trade Contract Date _____

Trade Contract Amount _____

Bond Number _____ Additional Obligee Rider ◯ Yes ◯ No

Bond Date _____ Bond Penal Amount _____

PRINCIPAL (TRADE CONTRACTOR)
Name and Address

_____

SURETY
Name and Address of Surety Company Office

_____

OBLIGEE

Gilbane Contracting Entity _____

Address _____

This Additional Obligee Rider is attached to and incorporated into Payment Bond, number _____, dated _____, 20__.

All of the terms, conditions and provisions of the Payment Bond are incorporated herein by reference, and nothing herein shall alter or affect any of the terms, conditions and other provisions of the Payment Bond, including but not limited to, the aggregate liability of Surety as described in the Payment Bond.

All defined terms as set forth in the Payment Bond shall have the same meanings herein.

_____ is hereby added to the Payment Bond as an additional named Obligee.

Signed and sealed this _____ day of _____ 20____ in the presence of:

PRINCIPAL

Company Name _____

Name and Title _____

Signature_____

Seal

SURETY

Company Name _____

Name and Title _____

Signature_____

Seal

Witness _____

Witness _____

ORDER OF CONDITIONS
DEP File Number 313-0608
CCF Quannapowitt Property Company
200-400 Quannapowitt Parkway
Wakefield, MA 01880

A.8.f: Final Approved Plans and Other Documents

Site Development Plans for 200-400 Quannapowitt Parkway, Wakefield, MA 01880	Allen & Major Associates, Inc.	June 2, 2022
Site Development Plans for 200-400 Quannapowitt Parkway, Wakefield, MA 01880	Copley Wolff Design Group	May 31, 2022
Existing and Proposed Riverfront Exhibits	Allen & Major Associates, Inc.	04/08/2022
Drainage Report	Allen & Major Associates, Inc.	April 8, 2022
Re-naturalization Area Plan	Goddard Consulting LLC	April 11, 2022
Invasive Species Management Plan	Goddard Consulting LLC	April 11, 2022

This Order applies only to the activities as described in the above Referenced Notice of Intent, MA-DEP # 313-0608. All work is to be performed in accordance with the above referenced Notice of Intent MA-DEP # 313-0608 and attachments.

Findings

Project Description: The subject Site is an approximately 23.8-acre parcel, Parcel ID: 01-36-AM1, with an existing multi-story office building and associated parking. The parcel is bordered by Route 95 to the northwest and Lake Quannapowitt to the southeast. A narrow town-owned parcel separates the subject Site from the lake shore and is maintained as lawn with trees and a walking path. A forested swamp comprises the northern end of the Site, and a perennial stream occurs at the property's southern end. Jurisdictional resource areas on the Site include Bordering Vegetated Wetland, Inland Bank, Bordering Land Subject to Flooding (BLSF), 100-foot Buffer Zone to Bordering Vegetated Wetlands (BVW) and Bank, and the 200-foot Riverfront Area (RFA) associated with the perennial stream. The wetland boundaries on the property were based on delineation approved through an Order of Conditions issued by the Wakefield Conservation Commission (WCC) on May 23, 2019 (DEP File #313-578). The project (Project) consists of razing an existing multi-story office building with associated parking areas and constructing three multi-story, mixed-use buildings with parking areas and stormwater management infrastructure. Construction will take place within Buffer

Zone to Bordering Vegetated Wetland (BVW) and Bank, within Bordering Land Subject to Flooding (BLSF), and the 200-foot Riverfront Area (RFA).

Findings under the Massachusetts Wetlands Protection Act

Wetland Values and Areas Subject to Protection. The inland wetland functions protected by the Massachusetts Wetlands Protection Act (the Act, M.G.L. ch 131 §40) are as follows: public or private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, fisheries, and wildlife habitat.

The WCC finds that the Bank, Bordering Vegetated Wetland, Bordering and Isolated Land Subject to Flooding, and Riverfront Area documented on or near the Project site are presumed to contribute to the interests listed above.

The WCC finds that the Order of Conditions issued in 2019 confirming the wetland delineation under DEP #313-578 was still valid at the time the Applicant submitted the subject Notice Of Intent (DEP #313-0608). The Commission finds that portions of the proposed Project will take place within the resource areas and associated Buffer Zones identified under DEP #313-578.The WCC notes that flags labeled A92 – A119 on Sheet C2 of the Plans for this Project were not subject to review under this Notice of Intent and shall not be accepted for any future proposed work without review.

The WCC finds that the Notice of Intent and supporting documents include statements of compliance with the performance standards under the Wetlands Protection Act and the Town of Wakefield Tree Removal Policy.

Special Conditions

Section I. Additional General Conditions

1. This Order shall be made part of all contracts and subcontracts dealing with the work proposed and shall supersede any other conflicting contract requirements. A copy of this Order of Conditions, as well as all approved plans and documents referenced in Section A8, shall be available upon request at the on-site office of the Applicant upon commencement of any site work and shall be made available to any person doing work on the site.
2. The WCC reserves the right to impose reasonable additional conditions on this Project such as additional or modified erosion and sedimentation controls during construction, if it deems that site conditions warrant such measures to mitigate potential impacts.
3. In addition to Form 5 General Condition 16, if the subject parcel is sold or the development rights are transferred to any other person prior to the issuance of a Certificate of Compliance, the Applicant shall be required to submit to the WCC a signed and notarized letter of acknowledgement from the buyer or their assignees stating that they have been provided copies of all permits associated with the proposed Project, including this Order, and that they understand their responsibility associated with the construction of this Project under those permits, including this Order.

4. During construction, the Applicant shall employ an Environmental Monitor to perform weekly inspections of the site work occurring within the jurisdiction of the WCC on the Project site, as well as the functionality and condition of the erosion control measures, until such time as the site is fully stabilized. The Environmental Monitor shall promptly notify the Commission if any discharges to a wetland resource area occur.

    a. Qualifications: The Applicant shall designate an "Environmental Monitor," such as a Registered Professional Engineer, Professional Wetland Scientist or other qualified consultant who has relevant experience in wetland impact assessment and erosion/sedimentation control measures to oversee any emergency placement of controls and regular inspection or replacement of sedimentation control devices.

    b. Authority: The name and phone number of the Environmental Monitor must be provided to the WCC in the event that this person has to be contacted, due to an emergency at the site, during any 24-hour period, including weekends. **This person shall be given the authority to stop construction should there be unlawful entry into the wetland resource areas and/or for erosion control purposes.** The Environmental Monitor will be required to inspect all such devices and oversee cleaning and the proper disposal of waste products. Cleaning shall include removal of any entrapped silt.

    c. Site Inspections: Consistent with USEPA's NPDES Construction General Permit, the Environmental Monitor shall conduct site inspections at least weekly and within 24-hours after rain events of 0.25 inches or more in 24 hours during periods of active site work within WCC jurisdictional areas. Less frequent inspections may be conducted to the extent permitted by the USEPA NPDES Construction General Permit and as the WCC or the WCC's Agent may approve during the course of construction based on consideration of the site conditions, the level of site activity, and other relevant factors. During inspections, the Environmental Monitor must (1) visually inspect all sedimentation/erosion control measures and ensure that they are being properly maintained and functioning as intended, and (2) visually inspect all wetland resource areas near or downgradient from site activities for siltation, turbidity, and/or other water quality impacts.

    d. Reporting: During periods in which site inspections are required, the Environmental Monitor shall submit a written report to the WCC following each inspection (except as the WCC or the WCC's Agent may otherwise approve).

        i. The Environmental Monitor must certify that, to the best of his/her knowledge and belief based on a careful site inspection, all work is being performed in compliance with this Order except any incidents of non-compliance that the Environmental Monitor may identify in the report, for which mitigation and/or corrective actions shall also be identified.

        ii. The reports shall describe what work is anticipated to be complete over the next reporting period (this will update the construction sequence); current conditions of the erosion control; description of any erosion or sedimentation repair and/or replacement; and any erosion problems and mitigation measures implemented.

iii. Such reports shall continue until the applicant has requested and the WCC or the WCC's Agent has approved in writing either a less frequent reporting schedule or an end of the reporting.

5. At the Applicant's expense, the WCC may designate its own Environmental Monitor meeting the qualifications specified in Special Condition (SC) 4a and tasked to perform oversight and reporting to the WCC per SC 4. The WCC shall have sole authority to determine the scope of oversight and reporting under this condition.

6. Prior to backfilling, the Applicant shall provide the WCC an inspection report by the Project Engineer verifying the installation of the infiltration unit(s) in a manner consistent with the approved Plans. Photographs of the infiltration unit(s) shall be included with the inspection report.

7. In addition to Form 5 General Condition 14, any errors, and/or proposed or executed change in the plans approved under this Order, shall require the Applicant to inquire of the WCC in writing whether the change is substantial enough to require a new or amended filing. Prior to consideration of any such request, the WCC may require the Applicant to have the originally approved flagging reestablished. The Applicant shall be required to submit the modification request in writing along with all the necessary forms and supporting documents in a timely manner for the WCC's consideration.

    a. The WCC may require any significant plan modification request to be peer reviewed, in which case the applicant shall submit the necessary funds to the WCC for such consultant services.

    b. The WCC shall also review the request and decide if an Amended Order of Conditions is required pursuant to the Massachusetts Wetlands Protection Act. As stated, any change that requires modification of approved plans within the jurisdictional areas or changes to the erosion control plan or to the stormwater management system may require an Amended Order of Conditions unless the WCC decides otherwise at its regularly posted public meeting. If the WCC decides that a change is of significant magnitude to warrant imposition of additional conditions to ensure adequate protection of the resource area and/or interests of the Wetlands Protection Act, a public hearing shall be required.

    c. Any requests for modification or amendment of the Order shall not be considered or reviewed if the Order has expired or there is an outstanding Enforcement Order on the subject parcel, except as the WCC may otherwise explicitly allow.

    d. Any changes proposed to the plants to be installed in Buffer Zone shall be native to the New England region and not listed on the Massachusetts Prohibited Plant List or the USDA Invasive Plants Database at the time of planting. At least one week prior to the pre-construction meeting, a final list of all plant species shall be submitted to the WCC for its review.

8. Issuance of these conditions does not in any way imply or certify that the site or downstream areas will not be subject to flooding, storm damage, or any other form of water damage.

9. No clearing of vegetation, including trees, or disturbance of soil on any areas within 100 feet of any wetland resource area shall occur prior to the Preconstruction Meeting, except

such minimal disturbance required in order to stake the required limit of work and/or erosion control barrier.

10. The Applicant agrees with the Commission's position that the Order of Conditions as written, individually or as a group, protects the Interests of the Act. In the event that an Enforcement Order is issued to the Applicant and/or the property owner and the Applicant and/or the property owner fails to act after five days from the receipt of said Enforcement Order, the Commission may satisfy the requirements of the Enforcement Order and the Applicant agrees to reimburse the Commission for all administrative costs and other expenses required to satisfy the Enforcement Order including but not limited to all costs incurred by the Town due to the use of its own resources or the use of outside resources including the employment of experts, specialized contractors or any other individual or organization it deems necessary to satisfy the requirements of the Enforcement Order.

Section II Pre-construction Conditions

11. The contractor shall provide a construction sequence plan for installation of the stormwater management facilities, erosion and sediment control barriers, and other work within WCC jurisdictional areas within twenty-one (21) days prior to the pre-construction meeting for review and reasonable approval by the WCC and/or the WCC's Agent. The construction sequence plan shall include a plan showing the location of any soil, material stockpile areas, and any temporary, construction period stormwater BMPs. Work within areas under WCC jurisdiction may not begin prior to approval by WCC or WCC's Agent of the construction sequence plan.

12. In addition to provisions of Form 5 General Condition 17, wetland flags shall be checked and replaced as necessary and maintained in good condition, with readable labelling until a Certificate of Compliance is issued for the Project or any earlier period as the WCC or the WCC's Agent may authorize. If flags are missing, they shall be replaced by accurate survey methods.

13. Prior to the pre-construction meeting and commencement of any activity on the site, all erosion control devices approved under this Order shall be properly installed as shown on the approved plan and as specified in the Construction Sequence Plan (see SC 11). The WCC and/or its Agent shall inspect and approve installed erosion control devices in writing. Said barrier may consist of a row of double-staked hay bales back by a filter fabric fence, installed in accordance with the Erosion and Sedimentation Control Guidelines for Urban and Suburban Areas (DEP & NRCS, 1997), or of another perimeter control BMP if previously approved in writing. The erosion control devices must remain in place and functioning until the WCC or its Agent has authorized their removal. All workers must be instructed not to work beyond this limit.

14. Placement of erosion controls shall be directed at the site by the Project engineer/compliance or erosion control monitor in order to ensure that the erosion and sedimentation controls perform as specified as part of the Notice of Intent and this Order. Note: Specific installation conditions for this condition could include the following, but should be specific to the Project:

    a. A row of filter fabric fencing, backed by one row of staked erosion/sedimentation bales placed end to end, shall be placed up-gradient of all resource areas along the limit of work between all disturbed areas and the wetland.

b. Filter fabric fencing shall be set and staked every 18-36 inches at the upland side of the excavated compensation area. Filter fabric shall be no less than 15 inches high.

15. The WCC reserves the right to reasonably determine the adequacy of the erosion, sedimentation and pollution control measures during construction. All inadequate devices and measures, as determined by the WCC and/or its agent(s), shall be replaced with devices and measures deemed adequate by the WCC and/or its agent(s).

16. Once all pre-construction requirements are complete, the Applicant shall contact the WCC prior to commencement of site preparation or construction and shall arrange a pre-construction meeting between the Project supervisor, the contractor responsible for the work, the Applicant's Environmental Monitor, and representative(s) of the WCC to ensure that the requirements of the Order are understood. The Applicant shall contact the WCC to arrange the pre-construction meeting two (2) weeks prior to any earth disturbing activity within the Buffer Zone other than installation of the erosion controls. Any person performing work on the activity that is the subject of this Order of Conditions is individually responsible for understanding and complying with the requirements of this Order of Conditions.

17. This Order shall be included in all construction contracts and subcontracts dealing with the work and shall supersede other contract requirements. Failure to have this Order present during a site visit shall constitute a violation of the Wetlands Protection Act and shall be subject to enforcement action by the WCC in a public hearing. The Applicant shall assume all responsibility for the proper conduct of all activities permitted including, but not limited to, proper monitoring of any contractor compliance with the conditions of this Order. The Applicant is hereby instructed to review such conditions with all contractors and workers involved on operations prior to any work on the Project. Any contractors and workers arriving after work on the Project commences shall likewise be apprised of these conditions.

18. Prior to any work being done at the Project site, the Applicant shall inform the WCC in writing of the names, addresses, business, mobile, and home telephone numbers of both the Project supervisor who will be responsible for ensuring on-site compliance with this Order and his/her alternate. The notification shall occur at least seventy-two (72) hours prior to commencement of work on the site. The 72 hours shall not be over weekends or holidays. The applicant shall also notify the WCC in writing of any changes to the Project Supervisor.

19. The Stormwater Operation and Maintenance Plan & Long-Term Pollution Prevention Plan (Plan) contained within the Drainage Report by Allen & Major Associates, Inc. as revised April 8, 2022, shall be revised to include the contact name and phone number for the Landowner & Stormwater Management System Owner. This revised Plan shall be recorded by the Applicant at the Registry of Deeds. A copy of the recorded Plan shall be presented to the Agent no later than the time of the Pre-construction Meeting.

20. The Project is subject to the National Pollutant Discharge Elimination System (NPDES) program of the United States Environmental Protection Agency (EPA). At least 14-days prior to the start of any land disturbing activities, a copy of the Project's Stormwater Pollution Prevention Plan (SWPPP) and documentation that a Notice of Intent (NOI) has been submitted to EPA under the NPDES program shall be provided to the Agent.

21. Prior to the commencement of activities on the Project site, the Applicant shall submit photographs depicting the project site along the wetland boundary and between the wetland and limit of work line. These shall be updated regularly on a schedule approved by the WCC until construction on the Project is complete.

22. Prior to the commencement of activities on the project site, all trees greater than six (6) inches in diameter that are to be saved shall be protected from inadvertent damage by methods approved by the WCC. The WCC shall approve completion of this protective measure in writing. Such measures shall be maintained until all earthwork and grading is complete. Trees that are not to be saved shall be cut and the stumps removed.

Section III Construction Conditions

23. A copy of the recorded Order shall be provided to the Building Inspector at the time of making application for Building Permit along with a set of approved plans.

24. Accepted engineering and Best Management Practices for construction standards shall be followed in the conduct of all work. All site improvements shall be installed as per approved plans and engineering details shown on them. Per SC 7, any modifications or deviations from approved plans shall only be made upon approval from the WCC (or, with respect to minor deviations, by the WCC's Agent)

25. All waste generated by, or associated with, the construction activity shall be contained within the construction area, and away from resource areas. There shall be no stump dumps, burying of stumps or other material on site. The applicant shall maintain a dumpster (or other suitable means) at the site for storage and removal of such construction material. However, no trash dumpsters will be allowed within 100-feet of the Bordering Vegetated Wetland (BVW) or within Riverfront Area unless otherwise approved by the WCC.

26. During construction, portable restrooms shall be located outside of jurisdictional resource areas and Buffer Zones unless otherwise approved by the WCC.

27. Erosion control devices shall be inspected regularly by the applicant and within 24 hours of a rainfall event of 0.25 inches or more in 24 hours (see SC 4c). Any entrapped silt exceeding the capacity of the erosion controls shall be removed to an area outside of the Buffer Zone and wetland resource areas. Silt fence and haybales shall be replaced as necessary.

28. If required, dewatering activities shall be monitored daily to ensure that sediment-laden water is appropriately settled prior to discharge toward wetland resource areas. No discharge of water is allowed directly into an area subject to jurisdiction of the Wetlands Protection Act . If emergency dewatering requirements arise, the applicant shall submit a contingency plan to the WCC for approval, which provides for the pumped water to be contained in a settling basin to reduce turbidity prior to discharge into a resource area. Such plan shall show the location of a sedimentation basin(s) to entrap any soils that may be eroded during construction.

29. Stockpiles shall be maintained according to the following:

    a. There shall be no stockpiling outside the approved limit of work, and staging, storage, and stockpiling areas shall be located further than 50 feet from WCC jurisdictional areas to the maximum extent practicable. All stockpiles within the WCC jurisdictional

areas including Buffer Zones to resource areas shall be enclosed by erosion control consisting of hay bales and entrenched silt fence or other barriers as the WCC or the WCC's Agent may approve. For stockpiles located outside of WCC jurisdictional areas, a sediment barrier shall be installed along all downgradient perimeter areas. Prior to storms predicted to produce 1-inch or more within a 24-hour period, stockpiles must be moved at least 50 feet away from wetland resource area boundaries or have the side of the stockpile facing the wetland resource area(s) stabilized.

b. Stockpiles shall not drain toward wetland resource areas or drainage conveyances or catch basin inlets unless adequate erosion controls are in place.

c. Stockpiles not in active use must be stabilized as soon as practicable, but not more than 14 days after use of the stockpile ceases temporarily or permanently, unless:

    i. Stabilization by the 14th day is precluded by snow cover or frozen ground, in which case stabilization measures must be initiated as soon as practicable; or

    ii. Use of the stockpile will resume by the 14th day after activities ceased.

30. At no time during or after construction shall fill or other materials be placed, or intentionally allowed to slump into or fall beyond the limit of work as shown on the plan. The Environmental Monitor shall include inspection of slopes in weekly inspection and shall notify the Commission if slumping, erosion, or encroachment occurs.

31. To the extent practicable, site grading and construction in the Buffer Zone shall be performed uninterrupted to completion to avoid erosion and sedimentation to the wetlands.

32. Bare ground in the Buffer Zone that is not being actively worked and cannot be permanently stabilized within thirty (30) days shall be stabilized by a temporary cover of rye or other grass following U.S. Natural Resource Conservation Service (NRCS) procedures to prevent erosion and sediment transport. If the season is not appropriate for plant growth, exposed surfaces shall be stabilized by straw, jute netting, or other NRCS approved Best Management Practices. Any stabilization materials such as jute netting shall be firmly anchored to prevent them from being washed from slopes by rain, snow melt, or flooding.

33. After a particular area has been brought to finished grade, that area shall be stabilized permanently against erosion. Achievement of stabilization is considered to be when the surface shows complete vegetation cover as prescribed in the approve Landscape Plan. This shall be measured by at least 70% coverage by established vegetation.

34. Subsequent to seeding, disturbed areas will be covered with salt hay mulch, erosion control blanket or netting, or other suitable material in order to provide adequate surface protection until seed germination. Preference should be given to erosion control netting with biodegradable stitching. Netting shall be required on all slopes steeper than 3:1 unless the slope is designated on the approve plans to be covered by other material.

35. All contractors and subcontractors shall be informed that equipment, machinery, and vehicle storage, washing, and refueling operations shall be situated in upland areas at a distance greater than 100-feet from wetland resources unless otherwise approved by the WCC. All machinery shall be checked daily for leaking fluids.

36. During work on this Project, there shall be no discharge or spillage of fuel, oil, or other pollutants, including sediments, into any part of the site. The applicant shall take all

reasonable precautions to prevent the release of pollutants by ignorance, accident, or vandalism.

37. All contractors shall be informed that cleaning of equipment, including concrete mixing equipment and/or machinery shall be restricted to upland areas at a distance greater than 100 feet from wetland resources, and appropriate discharge control measures shall be implemented, including monitoring of pH of discharge waters to ensure that appropriate Massachusetts Surface Water Quality Discharge Standards are met.

38. Vehicles exiting the construction Site shall not be allowed to track-out sediment, mud, or other materials onto public or private roads. Where track-out of such materials has occurred onto a roadway, it shall be swept off the road by the end of the same work day.

39. A copy of the SWPPP and SWPPP inspection reports shall be kept on-site at all times during construction and shall be available for review by the Agent and/or representative(s) of the WCC upon request.

40. Any permanent infiltration stormwater best management practices (BMP's) used as temporary sedimentation basins during construction shall have all construction period sediments removed and legally disposed of prior to completion and use as a permanent infiltration BMP. A Professional Engineer registered in the Commonwealth of Massachusetts shall provide written confirmation that temporary sedimentation basins have been adequately restored for use as permanent stormwater infiltration BMP's.

Section IV Post Construction Conditions

41. Erosion control devices shall remain in place and functioning properly until all exposed soils have been stabilized with final vegetative cover and the WCC and/or the WCC's Agent has authorized their removal. Removal of erosion control devices shall be done within fourteen (14) days of such authorization.

42. Upon completion of construction, all exposed soils shall be seeded with appropriate vegetation or otherwise stabilized.

43. Upon completion of the Project, the Applicant shall request a Certificate of Compliance from the WCC using WPA Form 8A – Request for a Certificate of Compliance, and shall submit the following information with the request:

    a. A written statement by a professional engineer or land surveyor registered in the Commonwealth of Massachusetts certifying substantial compliance with the approved plans referenced above and this Order of Conditions and setting forth deviations, if any exist;

    b. A written statement by a professional engineer or land surveyor registered in the Commonwealth of Massachusetts certifying that stormwater BMPs have been installed as designed and any temporary sedimentation basins converted to permanent stormwater infiltration BMP's have been adequately restored to function as designed;

    c. An as-built site plan prepared by a registered land surveyor or registered professional engineer showing location and grades of the Project, including but not limited to;

structures, driveways, major landscaping features, infiltration systems (surface and subsurface), site grading, and sidewalks within the 100-foot Buffer Zone; and

d. A final monitoring report shall be submitted regarding the health of the landscape plantings within the Buffer Zone and include any recommendations for replacement of plants if needed.

44. The Applicant's Environmental Monitor shall provide a full review of the as-built plans and provide comments and recommendations in support of a Request for Certificate of Compliance and the subsequent issuance of a Certificate of Compliance by the WCC. Deviations, both authorized and unauthorized, shall be fully documented. Unauthorized deviations from the approved plan may result in additional mitigation measures and/or enforcement actions.

45. Prior to the issuance of a Certificate of Compliance, the Applicant shall be required to pay in full any outstanding invoices from the Commission's peer review consultant and/or Commission's Environmental Monitor, as may be employed for this Project (a) using the authority and conditions specified under MGL Ch. 44 §53G (and that the applicant has not appealed); or (b) or, when not engaged under MGL Ch. 44 §53G, that are within contracted amounts agreed to by the applicant.

46. Prior to issuance of a Certificate of Compliance, the Applicant shall provide the name, contact information, and qualifications of the entity that will perform inspections and maintenance of the stormwater management BMP's in accordance with the Stormwater Operations and Maintenance Plan & Long-Term Pollution Prevention Plan contained within the Drainage Report by Allen & Major Associates, Inc. as revised April 8, 2022.

47. Invasive Species Management

a) Invasive species management shall be conducted according to the approved Invasive Species Management Plan (ISMP) dated April 11, 2022, by Goddard Consulting LLC.
b) Twice a year, for three years, the ISMP area will be inspected for invasive species. Monitoring reports shall be prepared for the ISMP by a qualified wetland scientist once a year, for three years after implementation. This monitoring program will consist of spring and fall inspections and will include photographs and details about the vitality of ISMP Zones. Monitoring reports shall be submitted to the issuing authority by December of each monitoring year. Monitoring reports shall describe, using narratives, plans, and color photographs, the physical characteristics of the ISMP Zones. Invasive species, if present, will be noted, flagged, and removed/treated.
c) At least 75% of the plant species within the ISMP Zone shall be re-established with indigenous plant species within three years of the ISMP implementation. If the ISMP Zone does not meet the 75% indigenous re-vegetation requirement by the end of the third growing season after implementation, the Applicant shall submit a remediation plan to the issuing authority for approval that will achieve, under the supervision of a wetland specialist, restoration goals. This plan must include an analysis of why the areas have not successfully re-vegetated with native species and how the Applicant intends to resolve the problem.
d) The extent of invasive species management shall be at least within the area of the ISMP Zone shown on the map titled, *Invasive Species Management Plan (ISMP) Zone,* dated 4/4/2022, by Goddard Consulting LLC, which is contained within the approved ISMP document.

48. Re-Naturalization Area

a) Construction of the Re-Naturalization Areas shall be conducted according to the approved Re-Naturalization Area Plan dated April 11, 2022, by Goddard Consulting LLC. Refer to Section A. 8: Final Approved Plans and Other Documents.
b) Seasonal monitoring reports shall be prepared for the Re-Naturalization Areas by a qualified wetland scientist for a period of 3 additional years after installation or every year until a COC is issued by the Conservation Commission. This monitoring program will consist of early summer and early fall inspections and will include photographs and details about the vitality of the Re-Naturalization Area. Monitoring reports shall be submitted to the Commission by December of each year. Monitoring reports shall describe, using narratives, plans, and color photographs, the physical characteristics of the Re-Naturalization Area with respect to stability, soil characteristics (i.e. horizons, depths, texture, percent gravel and rock, organic matter, Munsell hue, value and chroma, consistence and evidence of hydrologic influence), survival of vegetation and plant mortality, aerial extent and distribution, species diversity and vertical stratification (i.e. herb, shrub and tree layers). Invasive species will be documented if present, monitored and removed.
c) At least 75% of the surface area of the Re-Naturalization Areas shall be re-established with indigenous plant species within two growing seasons. If the Re-Naturalization Areas do not meet the 75% re-vegetation requirement by the end of the third growing season after installation, the Applicant shall submit a remediation plan to the Commission for approval that will achieve re- naturalization goals, under the supervision of a wetland specialist. This plan must include an analysis of why the areas have not successfully re-vegetated and how the Applicant intends to resolve the problem.
d) Permanent markers shall be installed to demarcate the Re-Naturalization Areas to prevent future encroachment.

49. Subject to and only upon the allowance, acceptance and/or approval of all necessary Town and State officials, including, but not limited to, all applicable councils, boards, commissions, town meetings, and authorities, the Applicant shall prior to the issuance of the final Certificate of Occupancy for the Project provide the Town a mutually agreeable instrument, to the reasonable satisfaction of Town Counsel, restricting the area highlighted and shown on the plan entitled “200 Quannapowitt Land Preservation Plan”, dated April 22, 2022 prepared by Allen & Major Associates, Inc. as the “Woodlands Area” totaling approximately 9.33 acres for conservation or open space purposes in perpetuity. Such instrument, which could include a Conservation Restriction under MGL c.184 s.31, shall be recorded in the Middlesex South Registry of Deeds as appropriate, and all mortgages shall be subordinate to such instrument. A copy of said plan is attached to this Order.

Section V Perpetual Conditions

50. Prohibition on dumping: There shall be no burning or dumping of leaves, grass clippings, brush or other debris into wetland, Buffer Zone, or any portion of the stormwater management system.

51. It is the responsibility of the property owner to maintain the stormwater management systems as specified in the Operation and Maintenance Plan to ensure that they function properly. This condition shall exist in perpetuity and shall be recorded as such in the Certificate of Compliance. On the sale or change of hands of the property, the applicant shall provide the new owner with a copy of the Operation and Maintenance Plan. At each

subsequent sale of the property, the then current owner shall provide a copy of the Operation and Maintenance Plan to the new owner. A copy of the new owner's acknowledgement of receipt of the Operation and Maintenance Plan shall be sent to the WCC. This condition shall exist in perpetuity and shall be recorded as such in the Certificate of Compliance.

52. Applicant shall have the Long-Term Pollution Prevention, Operations and Maintenance Plan, and the Certificate of Compliance made part of the management contract for the facility.

53. Applicant shall be responsible for the sweeping, removal of snow, and sanding of the internal roadways and driveways providing access to the Site and for emergency vehicles as consistent with the Stormwater Operation and Maintenance Plan. Applicant shall comply with MassDEP snow disposal guidance, as may be revised from time to time.

54. All de-icing chemicals shall be stored in a covered location, outside of the 100-foot Buffer Zone, the adjacent wetland resource areas, and all areas where stormwater BMPs are located. No sodium chloride shall be used for de-icing on the site.

55. Prior to requesting a final Certificate of Compliance, Applicant shall submit to the WCC proof that the required 3-years of monitoring and reporting for invasive species management and re-Naturalization areas were conducted according to the approved plans and requirements specified in SC 47 and SC 48.

56. The Applicant and all future owners of the property shall submit to the WCC an annual report documenting all required stormwater inspections and maintenance as detailed in the Stormwater Operation and Maintenance Plan & Long-Term Pollution Prevention Plan. The report shall be in a format acceptable to the WCC, shall be submitted on or around the first WCC meeting of each year, and shall, at a minimum, include the following information:

    a. Dates of street sweeping and name of company that performed street sweeping.

    b. Dates of and name of person performing inspections of all stormwater BMP's detailed in the Stormwater Operation and Maintenance Plan & Long-Term Pollution Prevention Plan.

    c. Condition of each BMP inspected.

    d. Details of any maintenance (sediment removal, cleaning, repairs, etc.) performed on each BMP including dates of and company(ies) performing the maintenance.

57. Stormwater management systems on the Project Site are not subject to the provision of 310 CMR 10.02(2)(b)3.c., and any modifications to systems installed subject to this Order shall be subject to the filing of a Request for Determination of Applicability, Notice of Intent or Amended Notice of Intent.

58. The following information shall be submitted with the Request for Certificate of Compliance:

    a. A certification from a Massachusetts Registered Professional (Civil) Engineer stating that construction complies in all respects with this Order of Conditions and setting forth deviations, if any exist.

    b. Two sets of field surveyed as-built site plans prepared, signed and stamped by a Massachusetts Registered Professional Land Surveyor or a Massachusetts Registered Professional (Civil) Engineer. The as-built plan shall include, at a

minimum, and as applicable to the project, elevations of all pipe inverts and outlets, pipe sizes, other drainage structures, and materials; all other drainage structures, limits of clearing; all structures, pavement and 2 foot contour elevations within 100 feet of wetlands boundaries; locations of wetlands boundaries; all wetland replication areas.

c. Post-construction photographs of stormwater structure construction/installation, landscaping, buffer area within first 25 feet of wetland, and/or wetland boundary.

GILBANE BUILDING COMPANY

LABOR RATE DEVELOPMENT SHEET*

PROJECT NAME:

TRADE NAME:

Effective: X/X/XX - X/X/XX

	Cells available for input
	Calculation cells
	Annual Statutory Limits (to review)
	No entry required

Description	Rates	Limits	** Gen. Foreman	Foreman	Journeyman	Premium Portion Time & One Half: Rates	Limits	Gen. Foreman	Foreman	Journeyman	Premium Portion Double Time: Rates	Limits	Gen. Foreman	Foreman	Journeyman
Wages			14.42	48.03	40.00			7.21	24.02	20.00			14.42	48.03	40.00
Payroll Taxes:															
Social Security	6.20%	160,200	0.89	2.98	2.48	6.20%	160,200	0.45	1.49	1.24	6.20%	160,200	0.89	2.98	2.48
Medicare	1.45%	No Limit	0.21	0.70	0.58	1.45%	No Limit	0.10	0.35	0.29	1.45%	No Limit	0.21	0.70	0.58
Family and Medical Leave	0.372%	160,200	0.05	0.18	0.15	0.37%	160,200	0.03	0.09	0.07	0.37%	160,200	0.05	0.18	0.15
FUTA	0.60%	7,000	0.04	0.04	0.04	0.60%	7,000	-	-	-	0.60%	7,000	-	-	-
UI (0.56%-8.62%)	8.62%	15,000	1.24	1.24	1.24	8.62%	15,000	0.00	-	-	8.62%	15,000	0.00	-	-
Covid Recovery (0.708%-10.896%)	10.896%	15,000	1.57	1.57	1.57	10.90%	15,000	0.00	-	-	10.90%	15,000	0.00	-	-
Employer Medical Assistance (0.12% - 0.34%)	0.34%	15,000	0.05	0.05	0.05	0.34%	15,000	0.00	-	-	0.34%	15,000	0.00	-	-
Worker Training Fund	0.056%	15,000	0.01	0.01	0.01	0.06%	15,000	0.00	-	-	0.06%	15,000	0.00	-	-
Subtotal			4.07	6.77	6.12			0.58	1.93	1.60			1.16	3.85	3.21
Union Benefits:															
Benefits			-	-	-			-	-	-			-	-	-
-			-	-	-			-	-	-			-	-	-
-			-	-	-			-	-	-			-	-	-
-			-	-	-			-	-	-			-	-	-
-			-	-	-			-	-	-			-	-	-
-			-	-	-			-	-	-			-	-	-
-			-	-	-			-	-	-			-	-	-
-			-	-	-			-	-	-			-	-	-
-			-	-	-										
MA: Earn Sick Time			-	-	-										
Paid Holidays & Vacation****			-	-	-			-	-	-			-	-	-
Subtotal			-	-	-			-	-	-			-	-	-
Insurance:															
Workers Comp	0.00%		-	-	-	0.00%		-	-	-	0.00%		-	-	-
General Liability	8.65%		1.25	4.15	3.46	0.00%		-	-	-	0.00%		-	-	-
Subtotal			1.25	4.15	3.46			-	-	-			-	-	-
Other * **															
			-	-	-										
Total Labor Rate			19.74	58.95	49.58			7.79	25.94	21.60			15.58	51.88	43.21
			Plus Contract Approved Markups for Overhead and Profit					**Plus Contract Approved Markups for Overhead and Profit**					**Plus Contract Approved Markups for Overhead and Profit**		

NOTES:

*The wage rates established by this worksheet will be used for Lump-Sum and T&M change order pricing. This sheet must be completed and approved by Gilbane for ALL Trade Contractors and their sub-contractors.

**If workers are paid above the union minimum, the wage must be supported by Certified Payroll backup.

***Refer to Article 1.13 of the Trade Contract Conditions (included in the Project Manual) for a listing of Overhead items to covered by the contract-approved Overhead mark-up and NOT part of the wage rate.

****If workers are paid for Holidays and/or Vacation time, this must be supported by Union CBA or Certified Payroll backup

DISCLAIMER: In the event that a future audit determines that the trade contractor has been over-paid as a result of the above labor rates, the trade contractor shall reimburse Gilbane accordingly.

Northeast Metrotech Vocational School Project

Carbon Purchase Tracking Sheet

All trade contractors are required to report the quantity of fuels purchased and utilized on-site.

Summary of Fossil Fuel Usage

Source	Total Usage	Units
Diesel	0	Gallons
Propane	0	Gallons
Natural Gas	0	Cubic Feet
Gasoline	0	Gallons
Refrigerant	0	Gallons

DIESEL

Month	Gallons purchased
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
TOTAL	0

NATURAL GAS

Month	Cubic Feet purchased
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
TOTAL	0

PROPANE

Month	Gallons purchased
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
TOTAL	0

GASOLINE

Month	Gallons purchased
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
TOTAL	0

REFRIGERANT

Month	Gallons purchased
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
TOTAL	0

Gilbane Building Company

Printed on Thu Aug 24, 2023 at 01:35 pm EDT

Job #: J09299.000 Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

RFI LOG

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
Pre-72	Fire Rating Requirements at Precast Plank Mezzanine Floors	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	07/06/2023	Donald Venerus	07/13/2023	07/18/23					
Pre-71	Door A207 Curtainwall Type and Bracing	Closed	Gilbane Building ...	Venerus, Donald (Gilbane Building Company)	Lyubetsky, Vladim... Khazadian, Angel ...	06/29/2023	Donald Venerus	07/06/2023	07/07/23					
Pre-70	Plastic Laminate - Manufactured Casework	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim...	06/20/2023	Donald Venerus	06/27/2023	07/05/23					
Pre-69	Plumbing Clarification - TW and TWR references	Closed		None	CA Email, Bala Bo... Sullivan, Sean (B... Khazadian, Angel ... Lyubetsky, Vladim...	06/20/2023	Donald Venerus	06/27/2023	06/29/23					
Pre-68	Dust Collection/Fire Protection Scope	Closed		None	CA Email, Bala Bo... Lyubetsky, Vladim... Khazadian, Angel ... Sullivan, Sean (B...	06/19/2023	Donald Venerus	06/26/2023	07/05/23					
Pre-67	Utility Make-Safe at Existing Building	Closed		None	Sullivan, Sean (B... CA Email, Bala Bo... Lyubetsky, Vladim... Khazadian, Angel ...	06/19/2023	Donald Venerus	06/26/2023	07/05/23					
Pre-66	Fire Protection, Site Utilities Division of Work	Closed		None	Conway, David (Ni... CA Email, Bala Bo... Sullivan, Sean (B... Blanchard, Paige ... Khazadian,	06/19/2023	Donald Venerus	06/26/2023	07/05/23					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
					Angel ... Lyubetsky, Vladim...									
Pre-65	Surcharge/Earth Loading on Retaining Wall	Closed		None	Auditore, Alex (E... Lyubetsky, Vladim... Khazadian, Angel ...	06/13/2023	Donald Venerus	06/20/2023	06/27/23					
~~Pre-64~~	~~Terrazzo Flooring~~ **RFI N/A**	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim...	06/08/2023	Lauren Muldoon	06/15/2023	06/12/23					
Pre-63	Stainless Steel Hollow Metal Doors and Frame Locations	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	06/07/2023	Donald Venerus	06/14/2023	06/09/23					
Pre-62	Wall Cladding Support System Clarification	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	06/07/2023	Donald Venerus	06/14/2023	06/14/23					
Pre-61	Slab on Grade Fiber Reinforcing Requirements	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim...	05/23/2023	Donald Venerus	05/30/2023	06/02/23					
Pre-60	Mezzanine Level AHU Housekeeping Pads	Closed		None	Khazadian, Angel ... Sullivan, Sean (B... Lyubetsky, Vladim...	05/23/2023	Donald Venerus	05/30/2023	05/25/23					
Pre-59	Spray Fireproofing at Locker Building	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim...	05/22/2023	Donald Venerus	05/29/2023	05/24/23		Locker Building			
Pre-58	Beam Clarification - Area D Mezzanine	Closed		None	Lyubetsky, Vladim... Auditore, Alex (E... Khazadian, Angel ...	05/18/2023	Donald Venerus	05/25/2023	06/02/23					
Pre-57	Architectural Concrete Location Clarification	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	05/18/2023	Donald Venerus	05/25/2023	05/25/23					

Gilbane Building Company

Printed on Thu Aug 24, 2023 at 01:35 pm EDT

Job #: J09299.000 Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
Pre-56	Locker Base Detail Clarification	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	05/17/2023	Donald Venerus	05/24/2023	05/25/23					
Pre-55	Concrete - Waterstop Material	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	05/17/2023	Donald Venerus	05/24/2023	05/25/23					
Pre-54	Loading Capacity for Lifts	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ... Auditore, Alex (E...	05/09/2023	Donald Venerus	05/16/2023	05/17/23					
Pre-53	Precast Plank Clarification - 8" Plank Spans	Closed		None	Lyubetsky, Vladim... Auditore, Alex (E... Khazadian, Angel ...	05/09/2023	Donald Venerus	05/16/2023	05/17/23					
Pre-52	HSS Elevation Question S1-1-2A	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	04/26/2023	Donald Venerus	05/03/2023	04/27/23					
Pre-51	Purlins for Stage Lighting Battens	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	04/25/2023	Donald Venerus	05/02/2023	04/27/23					
Pre-50	Joist Connection Detail Clarification	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	04/20/2023	Donald Venerus	04/27/2023	04/21/23					
Pre-49	Metal Deck Clarifications	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	04/18/2023	Donald Venerus	04/25/2023	04/21/23					
Pre-48	Structural Detail for Mechanical Units	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	04/17/2023	Donald Venerus	04/24/2023	04/21/23					
Pre-47	Alternate Plank Details	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim...	04/14/2023	Donald Venerus	04/21/2023	04/17/23					
Pre-46	Steel Bid Detail Questions	Closed		None	Khazadian,	04/13/2023	Donald	04/20/2023	04/17/23					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
					Angel ... Lyubetsky, Vladim... Auditore, Alex (E...		Venerus							
Pre-45	Precast Joint Clarifications	Closed		None	Lyubetsky, Vladim... Auditore, Alex (E... Khazadian, Angel ...	04/13/2023	Donald Venerus	04/20/2023	04/17/23					
Pre-44	Precast Plank Bid Questions	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim... Auditore, Alex (E...	04/12/2023	Donald Venerus	04/19/2023	04/17/23					
Pre-43	Gymnasium Roof Framing/Deck Finish Questions	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim...	04/11/2023	Donald Venerus	04/18/2023	04/13/23					
Pre-42	HVAC Technology Walk-In Freezer	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim...	04/10/2023	Donald Venerus	04/17/2023	04/13/23					
Pre-41	Auto Technology - Alignment Rack and Spill Containment Details	Closed		None	Lyubetsky, Vladim... Auditore, Alex (E... Khazadian, Angel ...	04/10/2023	Donald Venerus	04/17/2023	04/17/23					
Pre-40	Grease Trap Pit and Spill Containment Details	Closed		None	Khazadian, Angel ... CA Email, Bala Bo... Auditore, Alex (E... Sullivan, Sean (B... DONT USE, Paige B... Lyubetsky, Vladim...	04/10/2023	Donald Venerus	04/17/2023	04/21/23					
Pre-39	Building Corner Locations	Closed		None	Lyubetsky, Vladim... Warner, David (Wa...	04/10/2023	Donald Venerus	04/17/2023	04/12/23					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
					Allen, Amy (Warne... Khazadian, Angel ...									
Pre-38	Volleyball Sleeve Detail	Closed		None	Khazadian, Angel ... Auditore, Alex (E... Lyubetsky, Vladim...	04/07/2023	Donald Venerus	04/14/2023	04/17/23					
Pre-37	Floor Depressions for Arch Grilles	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	04/06/2023	Donald Venerus	04/13/2023	04/07/23					
Pre-36	Housekeeping Pad Detail on Precast Plank	Closed		None	Auditore, Alex (E... Lyubetsky, Vladim... Khazadian, Angel ...	04/05/2023	Donald Venerus	04/12/2023	04/12/23					
Pre-35	Drainage Tee Size	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim... DONT USE, Paige B...	04/05/2023	Donald Venerus	04/12/2023	04/06/23					
Pre-34	Precast Plank Detail Clarification	Closed		None	Auditore, Alex (E... Lyubetsky, Vladim... Khazadian, Angel ...	03/30/2023	Donald Venerus	04/06/2023	04/06/23					
Pre-33	Floor Hardener Clarification	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	03/28/2023	Donald Venerus	04/04/2023	04/07/23					
Pre-32	Structural Detail Clarifications	Closed		None	Khazadian, Angel ... Auditore, Alex (E... Lyubetsky, Vladim...	03/28/2023	Donald Venerus	04/04/2023	04/05/23					
Pre-31	Bent Plate Size Clarification	Closed		None	Auditore, Alex (E... Khazadian, Angel ... Lyubetsky,	03/28/2023	Donald Venerus	04/04/2023	04/05/23					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
					Vladim...									
Pre-30	Site Electrical Specifications	Closed		None	Khazadian, Angel ... Sullivan, Sean (B... Lyubetsky, Vladim...	03/24/2023	Donald Venerus	03/31/2023	03/31/23					
Pre-29	Earth Retention at Culverts	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ... DONT USE, Paige B... Warner, David (Wa... Allen, Amy (Warne... Conway, David (Ni...	03/23/2023	Donald Venerus	03/30/2023	03/27/23					
Pre-28	Segmented Retaining Wall Manufacturer and Size	Closed		None	Allen, Amy (Warne... Lyubetsky, Vladim... Khazadian, Angel ...	03/22/2023	Donald Venerus	03/29/2023	03/28/23					
Pre-27	Addendum 1 Grading Clarification	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ... Allen, Amy (Warne...	03/22/2023	Donald Venerus	03/29/2023	04/05/23					
Pre-26	Facility Fall Protection	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	03/21/2023	Donald Venerus	03/28/2023	03/27/23					
Pre-25	Curb Detail Clarification	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim... DONT USE, Paige B...	03/21/2023	Donald Venerus	03/28/2023	03/23/23					
Pre-24	Steel Clarifications - Coatings, Details	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	03/16/2023	Donald Venerus	03/23/2023	03/27/23					
Pre-23	Foundation Waterproofing Clarifications	Closed		None	Lyubetsky, Vladim...	03/15/2023	Donald Venerus	03/22/2023	03/23/23					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
					Khazadian, Angel ...									
Pre-21	Revised Site Electrical Drawings	Closed		None	Khazadian, Angel ... Sullivan, Sean (B... Lyubetsky, Vladim...	03/15/2023	Donald Venerus	03/22/2023	03/27/23					
Pre-20	Parameters for Blasting	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim...	03/14/2023	Lauren Muldoon	03/21/2023	04/18/23					
Pre-19	Sitework Addendum 1 Clarifications	Closed		None	DONT USE, Paige B... Khazadian, Angel ... Lyubetsky, Vladim...	03/13/2023	Donald Venerus	03/20/2023	03/20/23					
Pre-18	Temporary Drainage Connection Details	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim... DONT USE, Paige B...	03/09/2023	Donald Venerus	03/16/2023	04/06/23					
Pre-17	Erosion Control Barrier - Super Silt Fence	Closed		None	DONT USE, Paige B... Khazadian, Angel ... Lyubetsky, Vladim...	03/03/2023	Donald Venerus	03/10/2023	03/09/23					
Pre-16	Ductbank Rebar	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ... Sullivan, Sean (B...	03/03/2023	Donald Venerus	03/10/2023	03/23/23					
Pre-15	Underslab Drainage	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	03/02/2023	Lauren Muldoon	03/09/2023	04/18/23					
Pre-14	Concrete Bench Shelf	Closed		None	Millonig, Josh (W... Lyubetsky, Vladim... Khazadian, Angel ...	03/02/2023	Lauren Muldoon	03/09/2023	03/23/23					

Gilbane Building Company

Printed on Thu Aug 24, 2023 at 01:35 pm EDT

Job #: J09299.000 Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
Pre-13	Utility Crossing at Culverts	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim... DONT USE, Paige B...	03/02/2023	Donald Venerus	03/09/2023	03/23/23					
Pre-12	Fuel and Gas Tanks	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	02/22/2023	Lauren Muldoon	03/01/2023	03/09/23					
Pre-11	Sewer Pump Station	Closed		None	Lyubetsky, Vladim... DONT USE, Paige B... Conway, David (Ni... Khazadian, Angel ...	02/22/2023	Lauren Muldoon	03/01/2023	03/02/23					
Pre-10R1	Electric Junction Boxes	Closed		None	Khazadian, Angel ... CA Email, Bala Bo... Sullivan, Sean (B... Lyubetsky, Vladim...	02/17/2023	Donald Venerus	03/27/2023	03/27/23					
Pre-9	Straw Wattles	Closed		None	DONT USE, Paige B... Khazadian, Angel ... Lyubetsky, Vladim... Conway, David (Ni...	02/17/2023	Lauren Muldoon	02/24/2023	04/20/23					
Pre-8	Wetland Scientist	Closed		None	DONT USE, Paige B... Khazadian, Angel ... Lyubetsky, Vladim...	02/16/2023	Lauren Muldoon	02/23/2023	03/30/23					
Pre-7	Utility Profiles and Cross Sections	Closed		None	Khazadian, Angel ... DONT USE, Paige B... Lyubetsky, Vladim...	01/31/2023	Lauren Muldoon	02/07/2023	04/19/23					
Pre-6	Connection to Existing Water Line on Old Nahant	Closed		None	Khazadian,	01/23/2023	Lauren	01/30/2023	03/02/23					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	Rd				Angel ... Lyubetsky, Vladim... DONT USE, Paige B...		Muldoon							
Pre-5	Permanent Site Drainage Connections	Closed		None	Khazadian, Angel ... Lyubetsky, Vladim... DONT USE, Paige B...	01/19/2023	Lauren Muldoon	01/26/2023	04/21/23					
Pre-4	Elevation and Grade Consistency	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	01/05/2023	Donald Venerus	01/12/2023	03/02/23					
Pre-3	Permanent Site Drainage Connections	Closed		None	Lyubetsky, Vladim... DONT USE, Paige B... Khazadian, Angel ...	01/05/2023	Donald Venerus	01/12/2023	04/06/23					
Pre-2	Steel Guardrail Support Detail at Segmented Retaining Wall and Precast Culvert	Closed		None	Millonig, Josh (W... Khazadian, Angel ... Lyubetsky, Vladim...	12/19/2022	Donald Venerus	12/26/2022	03/02/23					
Pre-1	Radon Mitigation System Clarification	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ...	12/19/2022	Donald Venerus	12/26/2022	01/06/23		00 - Underground			
Bid-43	Structural Steel Post Bid Questions	Closed		None	Venerus, Donald (...	04/25/2023	Donald Venerus	05/02/2023	04/25/23					
Bid-42	Steel Bid Questions #2	Closed		None	Venerus, Donald (...	03/29/2023	Donald Venerus	04/05/2023	03/29/23					
Bid-41	Steel Bid Questions #1	Closed		None	Venerus, Donald (...	03/29/2023	Donald Venerus	04/05/2023	03/29/23					
Bid-40	Sewer Pump Station	Closed		None	Muldoon, Lauren (...	02/22/2023	Lauren Muldoon	03/01/2023	04/04/23					
Bid-39	Alt. #12 - Sound Berm	Closed		None	Muldoon, Lauren (...	02/22/2023	Lauren Muldoon	03/01/2023	02/22/23					
Bid-38	Supplement 3 Milestone Schedule	Closed		None	Muldoon, Lauren (...	02/22/2023	Lauren Muldoon	03/01/2023	02/22/23					
Bid-37	Transite Pipe	Closed		None	Muldoon,	02/21/2023	Lauren	02/28/2023	04/04/23					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
					Lauren (...		Muldoon							
Bid-36	Vibration Monitoring	Closed		None	Muldoon, Lauren (...	02/21/2023	Lauren Muldoon	02/28/2023	04/04/23					
Bid-35	Traffic Signage	Closed		None	Muldoon, Lauren (...	02/21/2023	Lauren Muldoon	02/28/2023	04/04/23					
Bid-34	Concrete Bollards	Closed		None	Muldoon, Lauren (... Venerus, Donald (...	02/21/2023	Lauren Muldoon	02/28/2023	03/07/23					
Bid-33	Maintenance Building	Closed		None	Muldoon, Lauren (...	02/21/2023	Lauren Muldoon	02/28/2023	04/04/23					
Bid-32	Erosion Control	Closed		None	Muldoon, Lauren (...	02/17/2023	Lauren Muldoon	02/24/2023	04/04/23					
Bid-31	Existing School Elevation	Closed		None	Muldoon, Lauren (...	02/16/2023	Lauren Muldoon	02/23/2023	04/04/23					
Bid-30	Tank Removal	Closed		None	Muldoon, Lauren (...	02/16/2023	Lauren Muldoon	02/23/2023	04/04/23					
Bid-29	USA-made Castings	Closed		None	Muldoon, Lauren (...	02/16/2023	Lauren Muldoon	02/23/2023	02/16/23					
Bid-28	Retaining Wall	Closed		None	Lyubetsky, Vladim... Khazadian, Angel ... Millonig, Josh (W...	02/16/2023	Donald Venerus	02/23/2023	03/23/23					
Bid-27	Athletic Fields	Closed		None	Muldoon, Lauren (...	02/15/2023	Lauren Muldoon	02/22/2023	04/13/23					
Bid-26	#58 Scope of Work	Closed		None	Muldoon, Lauren (... Venerus, Donald (...	02/15/2023	Lauren Muldoon	02/22/2023	03/07/23					
Bid-25	Fencing	Closed		None	Muldoon, Lauren (...	02/15/2023	Lauren Muldoon	02/22/2023	02/15/23					
Bid-24	Elks Parking Lot	Closed		None	Muldoon, Lauren (...	02/15/2023	Lauren Muldoon	02/22/2023	02/15/23					
Bid-23	Job Schedule	Closed		None	Muldoon, Lauren (...	02/15/2023	Lauren Muldoon	02/22/2023	02/15/23					
Bid-22	Teachers Parking Area	Closed		None	Muldoon, Lauren (...	02/15/2023	Lauren Muldoon	02/22/2023	02/15/23					
Bid-21	Missing Details	Closed		None	Muldoon, Lauren (...	02/15/2023	Lauren Muldoon	02/22/2023	02/15/23					

Gilbane Building Company

Printed on Thu Aug 24, 2023 at 01:35 pm EDT

Job #: J09299.000 Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
Bid-20	Base Bid	Closed		None	Muldoon, Lauren (... Venerus, Donald (...	02/15/2023	Donald Venerus	02/22/2023	03/07/23					
Bid-19	Order of Conditions	Closed		None	Muldoon, Lauren (...	02/15/2023	Lauren Muldoon	02/22/2023	02/15/23					
Bid-18	Excess Material	Closed		None	Muldoon, Lauren (...	02/15/2023	Lauren Muldoon	02/22/2023	02/15/23					
Bid-17	Gravel/Grading	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-16	Rock Scaling allowance	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-15	Allowance #14	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-14	Allowance #9	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-13	SOE	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-12	Sewer Cast In Place Pipe	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-11	Temporary Paving	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-10	Phase 3	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-9	Existing Building Elevations	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/15/23					
Bid-8	Wetland Scientist	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/15/23					
Bid-7	Winter Conditions	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-6	Site Logistics	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	04/04/23					
Bid-5	Milestone Schedule	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-4	Site Fencing	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-3	Temporary Roof Drain Tie-ins	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/08/23					
Bid-2	Topsoil	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	03/30/23					

Gilbane Building Company

Printed on Thu Aug 24, 2023 at 01:35 pm EDT

Job #: J09299.000 Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
Bid-1	Site Lighting	Closed		None	Muldoon, Lauren (...	02/06/2023	Lauren Muldoon	02/13/2023	02/06/23					

RFI #Bid-1

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Site Lighting

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/06/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:19 PM on 02/03/2023

1. Scope Item #16 - Temporary Lighting throughout the site and at temporary access points? What is anticipated by Gilbane?
2. Scope Item # 26 – Site Lighting, excavation and backfill will be provided by others? Please confirm.
3. Scope Item #53 - Provide detail of temporary utility poles for site cameras/temporary lighting.

Awaiting an Official Response

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 08:16 AM on 02/06/2023

1. Please reference updated site security plan dated 2/6/23.
2. This bidder is to include all site lighting, excavation and backfill. Please see supplement #1 for update.
3. Please reference updated site security plan dated 2/6/23.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-2

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Topsoil

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 03/30/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:32 PM on 02/03/2023

1. Scope Item # 10 – Strip and Stockpile all topsoil onsite. Please confirm this is true and the location of anticipated stockpile?
2. Confirm topsoil respread is by others. Confirm wetland restoration work is by others.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 8:38AM EST*

1. There is availability for stock piling as shown on Access to Rear Fields Plan dated 2/6/23. Issued and posted in supplement #1. Reference alternate #9 in bid supplement.
2. Confirmed topsoil re-spread by others. Wetland restoration work to be by others. Any wetland damage caused by site contractor will be the responsibility of the sitework contractor.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-3

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Temporary Roof Drain Tie-ins

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:34 PM on 02/03/2023

1. Scope Item # 60 – How many temporary roof drain tie ins are required for this project? Please confirm.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 8:39AM EST*

1. Temporary roof drains will be at each permanent tie in location.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 08:39 AM on 02/06/2023

1. Temporary roof drains will be at each permanent tie in location.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-4

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Site Fencing

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:38 PM on 02/03/2023

1. Scope Item #6 - Please clarify extents of temporary fencing, two plans provided (Phase 1&2 Temporary Fence Plan and Phase 3 Temporary Fence Plan) but only one is referenced in Scope of Work. Confirm we supposed to put in temporary fence for Phase 3 too?
2. Confirm site fencing (besides temporary fencing) is by others.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 8:43AM EST*

1. All phases shall be included in bid. Sitework contractor to own temporary fencing throughout the job.
2. Permanent site fencing by others.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 08:43 AM on 02/06/2023

1. All phases shall be included in bid. Sitework contractor to own temporary fencing throughout the job.
2. Permanent site fencing by others.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-5

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Milestone Schedule

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:41 PM on 02/03/2023

1. "Construct access road to rear stockpile area – See "Back Field Access Drawing." Start: 6/26/23" – does this include the proposed temporary work shown around the existing school? Does this need to be done before school starts in September 2023? Or does this get completed before school starts in September 2024 – see " Phase 3 Sitework & Blasting Lower Lot- Enabling Phase 2 Occupancy. Start: 6/24/24 with Completion: 8/30/24"
2. Milestone schedule does not look like it is possible (shows start date of 2/1/23) – is this going to be updated or pushed back by a month or equivalent.
3. Can you provide the milestone schedule (start and finish) for Phase 1 / Phase 2 / Phase 3?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 8:54AM EST*

See supplement #1 and revised site logistics drawings for revised milestone dates.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 08:54 AM on 02/06/2023

See supplement #1 and revised site logistics drawings for revised milestone dates.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-6

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Site Logistics

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 04/04/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:45 PM on 02/03/2023

1. "Site Logistics Plan – Field Office Area and Back Field Access Page 2" - Provide proposed restriping plan in existing parking lots around the school. "Area to be re-striped. See Contract Documents."
2. Confirm only asphalt to be included is on the Gilbane "Temporary Road Plan" and "Site Logistics Plan – Field Office Area and Back Field Access" Pages 1+ 2 (shown in light blue) (Item 57) and temporary bituminous walkways at each building entrance (Item 74).
3. Scope Item #38 - Provide details of temporary traffic control devices at Farm Street entrance.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, April 4th, 2023 at 12:49PM EDT*

1. Striping plan provided in supplement #1.
2. Confirmed.
3. No details provided – to be performed on an as needed basis by the early site contractor.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-7

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Winter Conditions

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:55 PM on 02/03/2023

1. Scope Item # 37 – Is the intention that the site contractor owns 12 snow events <4” per season? Please confirm. Also confirm if you want this handled by an allowance.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 9:13AM EST*

1. Confirmed 12 snow events <4" each per season. This shall be lump sum.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 09:13 AM on 02/06/2023

1. Confirmed 12 snow events <4" each per season. This shall be lump sum.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-8

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Wetland Scientist

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:58 PM on 02/03/2023

1. Scope Item # 59 - Wetland Scientist – Who is paying for the wetland scientist services? Ils the landscape contractor doing all plantings in this area?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 8:24AM EST*

The wetland scientist should be excluded from this bid package but you will take direction from this person as required. Yes, Site Improvements bid package will include wetlands restoration.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 08:24 AM on 02/15/2023

The wetland scientist should be excluded from this bid package but you will take direction from this person as required. Yes, Site Improvements bid package will include wetlands restoration.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-9

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Existing Building Elevations

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:01 PM on 02/03/2023

Do you have any existing drawings to show the elevations for the existing building? Are there any basements?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 9:18AM EST*

See bid supplement #1. These drawings are for reference only.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 09:18 AM on 02/06/2023

See bid supplement #1. These drawings are for reference only.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-10

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Phase 3

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:49 PM on 02/03/2023

1. Site and utilities demo within 10 feet of school.
2. Confirm extents of blasting or subgrade prep – This cant be done until school is not occupied / demo-ed
3. Landscape drawings show a lot of base bid / add alt items in the vicinity of the existing school and athletic fields – clarify extent of base bid in the area of existing school and athletic fields
4. Site prep of teacher parking, etc. shown on Site Logistics Plan – Field Office Area and Back Field Access Page 2.?? See question above about timing.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 9:27AM EST*

1. Please see Gilbane Scope of Work #8.
2. Refer to project documents for extent of blasting and subgrade prep. Blasting in and around the existing school to be done during time when school is not occupied.
3. Unless otherwise noted, work to be performed by site improvement contractor.
4. Refer to revised drawings as part of addendum #1. All work on these drawings to be performed during spring of 2023.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 09:27 AM on 02/06/2023

1. Please see Gilbane Scope of Work #8.
2. Refer to project documents for extent of blasting and subgrade prep. Blasting in and around the existing school to be done during time when school is not occupied.
3. Unless otherwise noted, work to be performed by site improvement contractor.
4. Refer to revised drawings as part of addendum #1. All work on these drawings to be performed during spring of 2023.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Bid-11

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Temporary Paving

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:09 PM on 02/03/2023

Is all temporary paving 2.5” binder with 12” gravel? Please confirm.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 9:29AM EST*

Confirmed.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 09:29 AM on 02/06/2023

Confirmed.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-12

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Sewer Cast In Place Pipe

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:14 PM on 02/03/2023

Is the sewer cast in place pipe (CIPP) lining supposed to be included in this scope?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 9:30AM EST*

No it is not included.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 09:30 AM on 02/06/2023

No it is not included.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-13

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

SOE

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:16 PM on 02/03/2023

Where is it assumed that SOE will be required so we can get subcontractors on board?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 9:33AM EST*

This is means and methods. To be determined by contractor.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 09:33 AM on 02/06/2023

This is means and methods. To be determined by contractor.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-14

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Allowance #9

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:55 PM on 02/06/2023

Allowance #9 – Restriping Existing Lot – Please confirm this will be the actual subcontractor cost with a markup.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 12:56PM EST*

Refer to section #10 of iBidPro proposal form for description on what should be included in allowances.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 12:56 PM on 02/06/2023

Refer to section #10 of iBidPro proposal form for description on what should be included in allowances.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-15

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Allowance #14

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:16 PM on 02/06/2023

Allowance # 14 – Is this all we carry for excavation and backfill for underground electric?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 2:17PM EST*

This is for under slab electrical located in the building. All other excavation and backfill should be lump sum.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 02:17 PM on 02/06/2023

This is for under slab electrical located in the building. All other excavation and backfill should be lump sum.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-16

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Rock Scaling allowance

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:19 PM on 02/06/2023

Rock Scaling allowance $150,000 – Please confirm this item will be paid by the Unit Price for the crew day.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 2:19PM EST*
Confirmed.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 02:19 PM on 02/06/2023

Confirmed.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-17

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Gravel/Grading

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/08/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:23 PM on 02/06/2023

Please confirm there will not be any gravel and grading associated with this project?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Monday, February 6th, 2023 at 2:24PM EST*

No, this is required in the base scope.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 02:24 PM on 02/06/2023

No, this is required in the base scope.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-18

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Excess Material

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 09:33 AM on 02/08/2023

If excess material is left over after we perform the site cuts and fills to subgrade, where is the planned stockpile area?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 8:01AM EST*

We have a stockpile location at the sound berm and the back field.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 08:01 AM on 02/15/2023

We have a stockpile location at the sound berm and the back field.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-19

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Order of Conditions

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 09:35 AM on 02/08/2023

We have downloaded the Wakefield Order of Conditions: DEP file # 313-0608. Is there a site specific Order of Conditions for this project?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 7:58AM EST*

The site specific Order of Conditions is forthcoming.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 07:58 AM on 02/15/2023

The site specific Order of Conditions is forthcoming.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-20

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Base Bid

TO:	Lauren Muldoon **(Gilbane Building Company)** Donald Venerus **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 03/07/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 10:24 AM on 02/08/2023

Can you confirm base bid is:

Cuts and fills, rock blasting to subgrade.
All utilities – Drain, Sewer, Water Electrical Duct Banks, Gas Exclude Site Lighting
Building Crush Stone w/filter Fabric and under slab drain Excavation and backfill for interior utilities

Exclusions:

All gravel and grading
Asphalt paving
All curbing
All Finish Work

Official Response: **Donald Venerus (Gilbane Building Company)** *responded on Tuesday, March 7th, 2023 at 2:06PM EST*

Note that the asphalt and curbing was added to the base scope via Supplement 3.

Attachments:

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 7:54AM EST*

All gravel and grading is included. Asphalt paving and curbing is an add alternate. Finish work is excluded.

Attachments:

All Replies:

Response from Donald Venerus (Gilbane Building Company) at 02:06 PM on 03/07/2023

Note that the asphalt and curbing was added to the base scope via Supplement 3.

Attachments:

RFI #Bid-20

Response from Lauren Muldoon (Gilbane Building Company) at 07:54 AM on 02/15/2023
All gravel and grading is included. Asphalt paving and curbing is an add alternate. Finish work is excluded.
Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY | **DATE** | **COPIES TO**

RFI #Bid-21

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Missing Details

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 10:37 AM on 02/08/2023

1. Are there any details for the collection pond?
2. Is there a detail for noise berm?
3. Is there a design for sediment basins?
4. Is there a detail for temp infiltration basin (off farm rd)

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 7:52AM EST*

This is means and methods for #1-4. Please develop these details as part of your overall site dewatering plan. Some details were provided in SWPPP that was just provided in Supplement #2.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 07:52 AM on 02/15/2023

This is means and methods for #1-4. Please develop these details as part of your overall site dewatering plan. Some details were provided in SWPPP that was just provided in Supplement #2.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-22

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Teachers Parking Area

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 10:42 AM on 02/08/2023

At added teachers parking area (b-ball court), are we to remove existing bit and place stone or new paving?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 7:50AM EST*
Refer to latest site utilization plan. This site is no longer being used as teacher parking.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 07:50 AM on 02/15/2023

Refer to latest site utilization plan. This site is no longer being used as teacher parking.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-23

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Job Schedule

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 10:43 AM on 02/08/2023

Is there a schedule for this job?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 7:48AM EST*

1. Schedule is forthcoming. Refer to milestone dates for work of this bid package.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 07:48 AM on 02/15/2023

1. Schedule is forthcoming. Refer to milestone dates for work of this bid package.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-24

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Elks Parking Lot

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 09:07 AM on 02/09/2023

Can you let us know if that the Elks parking lot work referenced in Alternate 9 is off-site improvements? Could you provide a site plan or at least an address?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 7:43AM EST*

The address is 401 Main St Saugus, MA 01906. Refer to Supplement #2.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 07:43 AM on 02/15/2023

The address is 401 Main St Saugus, MA 01906. Refer to Supplement #2.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-25

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Fencing

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:38 PM on 02/09/2023

1. Regarding the temporary fence, will a top rail be required?
2. Can you confirm that we are using 6' fence as stated in the iBidPro proposal form in lieu of the 8' fence indicated in the spec and detail on C-700?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 7:40AM EST*

1. Where posts are driven, no top rail is required except where fence panel will be required for access to wetlands.
2. Confirmed.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 07:40 AM on 02/15/2023

1. Where posts are driven, no top rail is required except where fence panel will be required for access to wetlands.
2. Confirmed.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-26

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

#58 Scope of Work

TO:	Lauren Muldoon **(Gilbane Building Company)** Donald Venerus **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 03/07/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 11:18 AM on 02/15/2023

#58 Scope of Work says install water line of Farm & Old Nahant Road. Can you please provide the water connection point on Old Nahant Road?
Also what is the extent of the coldplane & overlay? (Full width of road?) (Depth?)

Official Response: **Donald Venerus (Gilbane Building Company)** *responded on Tuesday, March 7th, 2023 at 2:51PM EST*

- Reference RFI Pre-6 for more information on water line connection.
- Reference drawing TR-001 (Post-Bid Supplement 1)

Attachments:

All Replies:

Response from Donald Venerus (Gilbane Building Company) at 02:51 PM on 03/07/2023

- Reference RFI Pre-6 for more information on water line connection.
- Reference drawing TR-001 (Post-Bid Supplement 1)

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-27

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Athletic Fields

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/15/2023	**STATUS:**	Closed on 04/13/23
LOCATION:		**DUE DATE:**	02/22/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 11:19 AM on 02/15/2023

1. #47 Scope of Work asks for underdrain below slab & athletic field. Can you please supply location under bldg. slab and supply the drawings for the Athletic Field underdrain system
2. Detail L603/18 – Synthetic Turf Athletic Field – Shows a panel drainage system. Is this required? If so, please provide a location of the panel drains so we can quantify.
3. Detail L603/18 – Synthetic Turf Athletic Field – Profile shows a bottom subbase layer of “Crushed Stone, graded to establish properly sloped surface to place panel drains…” (not shown on the plan; see above). Is there a minimum thickness of crushed stone required? This thickness is not provided on the Civil Plans as stated in the detail.
4. Detail L603/17 – Natural Grass Athletic Field – The drainage shown in this detail does not correspond with anything shown on the Drainage Plans. Are the vertical panel drains and flat panel drains required? If so, how many? What are the length?
5. Detail L603/17 – Natural Grass Athletic Field – Is this the profile for the Football Field (Base Bid) and the Softball & Baseball fields (Alternates)? Is the drainage show in the detail required for all fields (See Above)?
6. Alternate 5 – Sitework Provisions for the Softball Field – Does this alternate include both softball fields shown on C304?
7. Alternate 7 – Tennis Courts – Where are the tennis courts shown on Sheet L304? Does this consist of the proposed gravel lot in the footprint of the Former Tennis Courts? If not, where does the alternate fit in?
8.
   - Please clarify Add Alt #6. Is this supposed to be for the synthetic turf football field or the soccer field?

Awaiting an Official Response

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-28

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Retaining Wall

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Josh Millonig **(Warner Larson Landscape Architects)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
		STATUS:	Closed on 03/23/23
		DUE DATE:	02/23/2023
DATE INITIATED:	02/16/2023	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Bidding	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:			
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Lauren Muldoon (Gilbane Building Company) at 07:31 AM on 02/16/2023

Plan L300-L305 shows retaining walls. Please provide top & bottom of wall elevations.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, March 17th, 2023 at 12:31PM EDT*

Refer to the attached RFI response.

Attachments:
RFI BID-28R1_Land-Retaining Wall-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Bid-28R1

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Retaining Wall Additional Comments

TO:	Josh Millonig **(Warner Larson Landscape Architects)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
		STATUS:	Open
		DUE DATE:	02/23/2023
DATE INITIATED:	02/16/2023	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Bidding	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:			
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 07:31 AM on 02/16/2023

Plan L300-L305 shows retaining walls. Please provide top & bottom of wall elevations.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to WLA response below.

ANGEL KHAZADIAN
03/16/2023

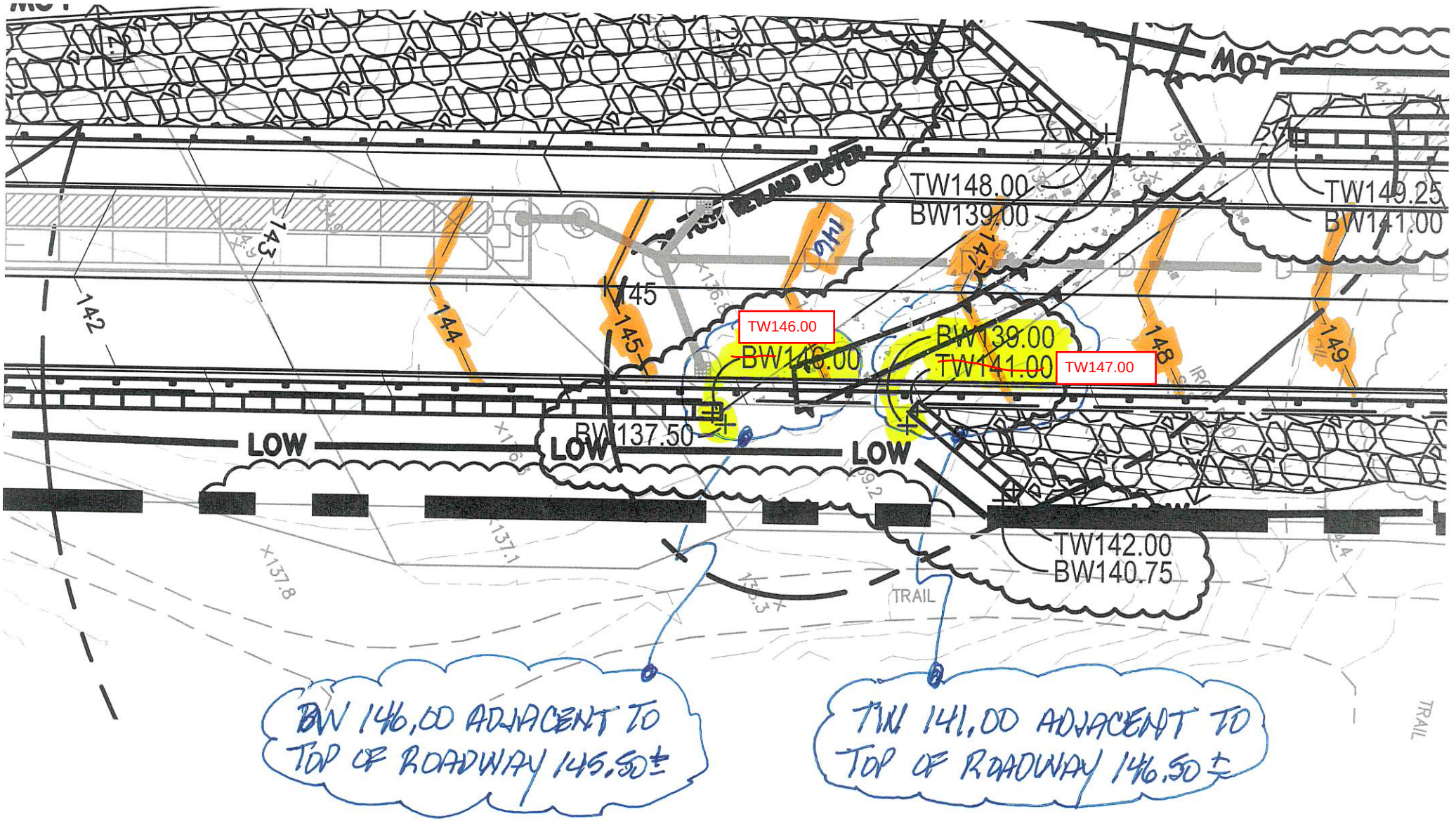
WLA RESPONSE:

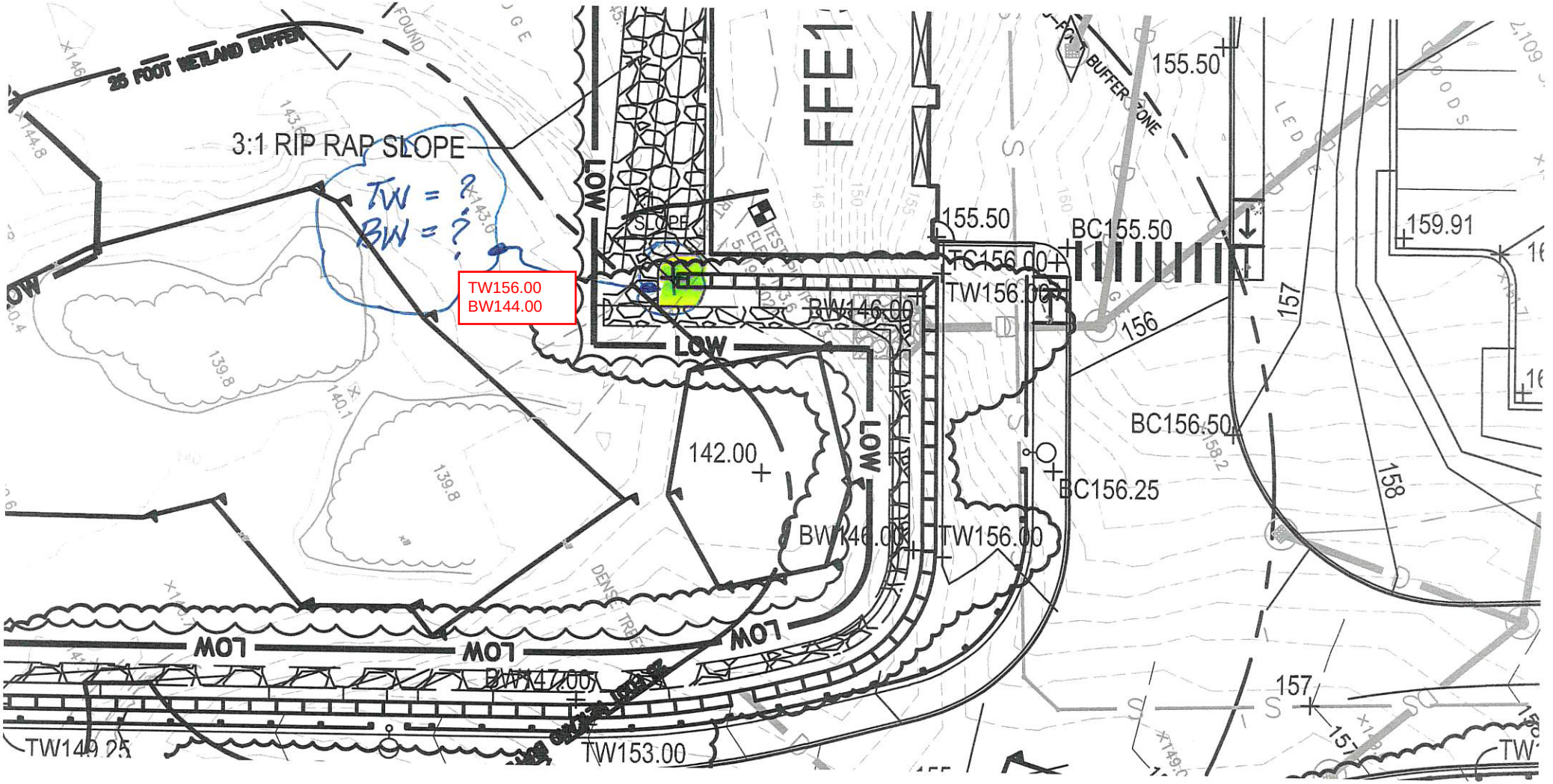
Refer to comments on the attached sketches, as well as, updated grading plan.

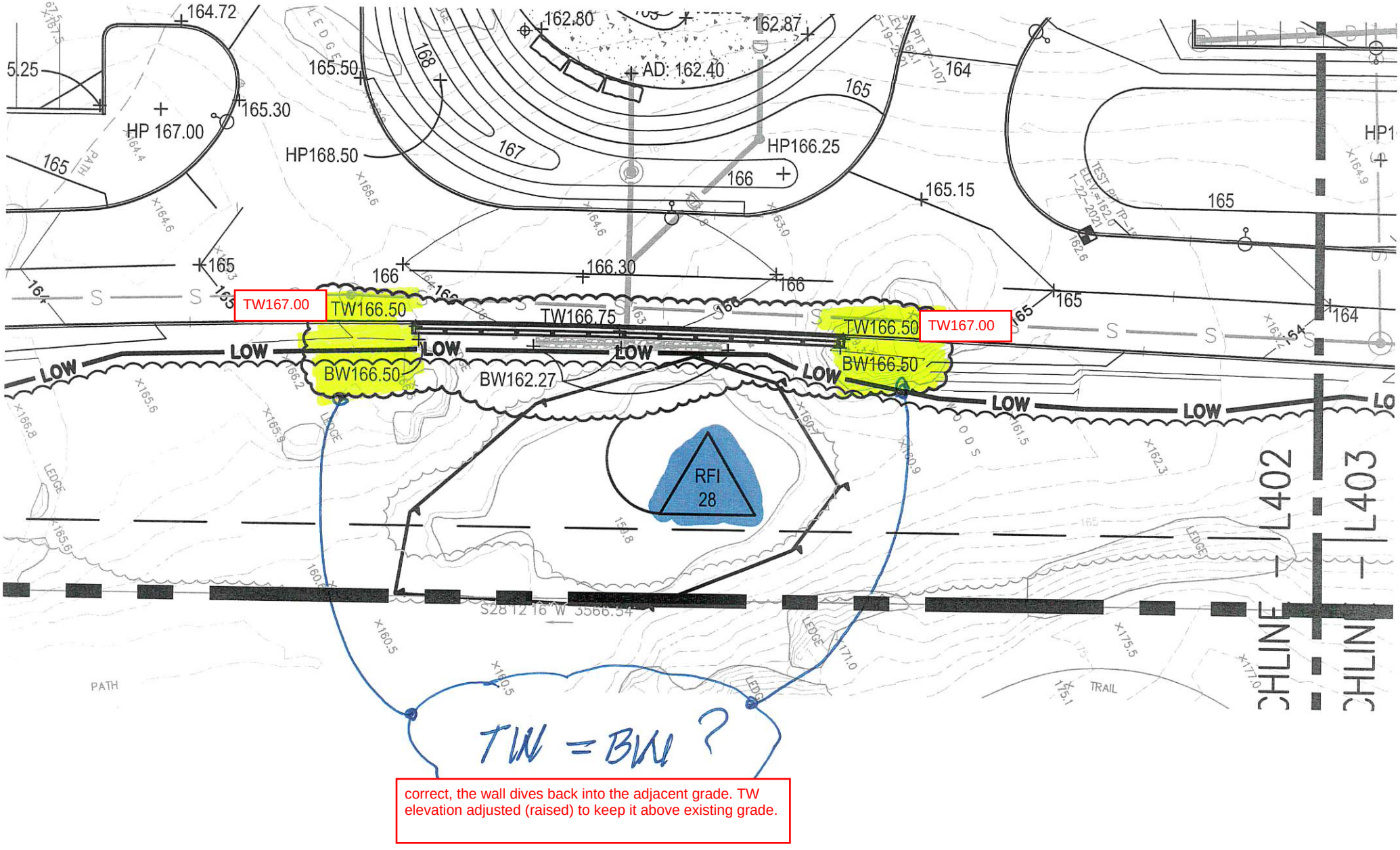
JOSH MILLONIG
03/16/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

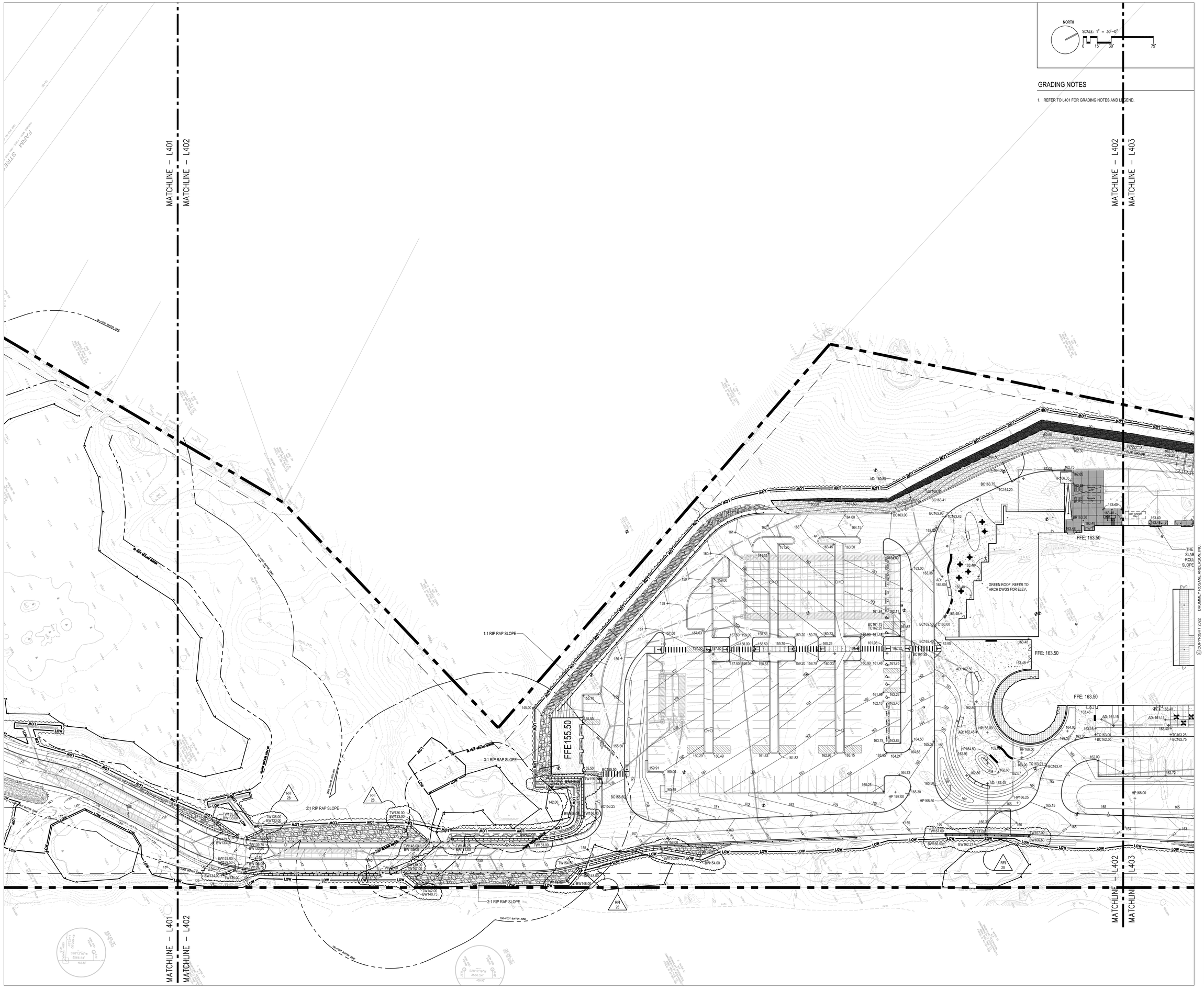
BY **DATE** **COPIES TO**


MOT
TW148.00
BW139.00
TW149.25
BW141.00
TW146.00
BW146.00
BW139.00
TW141.00
TW147.00
BW137.50
LOW
LOW
LOW
TW142.00
BW140.75
TRAIL
TRAIL
142
143
144
145
145
147
148
149
BW 146.00 ADJACENT TO TOP OF ROADWAY 145.50±
TW 141.00 ADJACENT TO TOP OF ROADWAY 146.50±


25 FOOT WETLAND BUFFER
3:1 RIP RAP SLOPE
TW = ?
BW = ?
TW156.00
BW144.00
FFE1
155.50
BC155.50
TC156.00
TW156.00
BW146.00
LOW
156
157
159.91
BC156.50
142.00
BC156.25
BW146.00
TW156.00
LOW
LOW
LOW
BW147.00
TW149.25
TW153.00
157
158
BUFFER ZONE



correct, the wall dives back into the adjacent grade. TW elevation adjusted (raised) to keep it above existing grade.



GRADING NOTES

1. REFER TO L401 FOR GRADING NOTES AND LEGEND.

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

© COPYRIGHT 2022 DRUMMEY ROSANE ANDERSON, INC.

NOI Submission

February 15, 2023

A B C D

KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

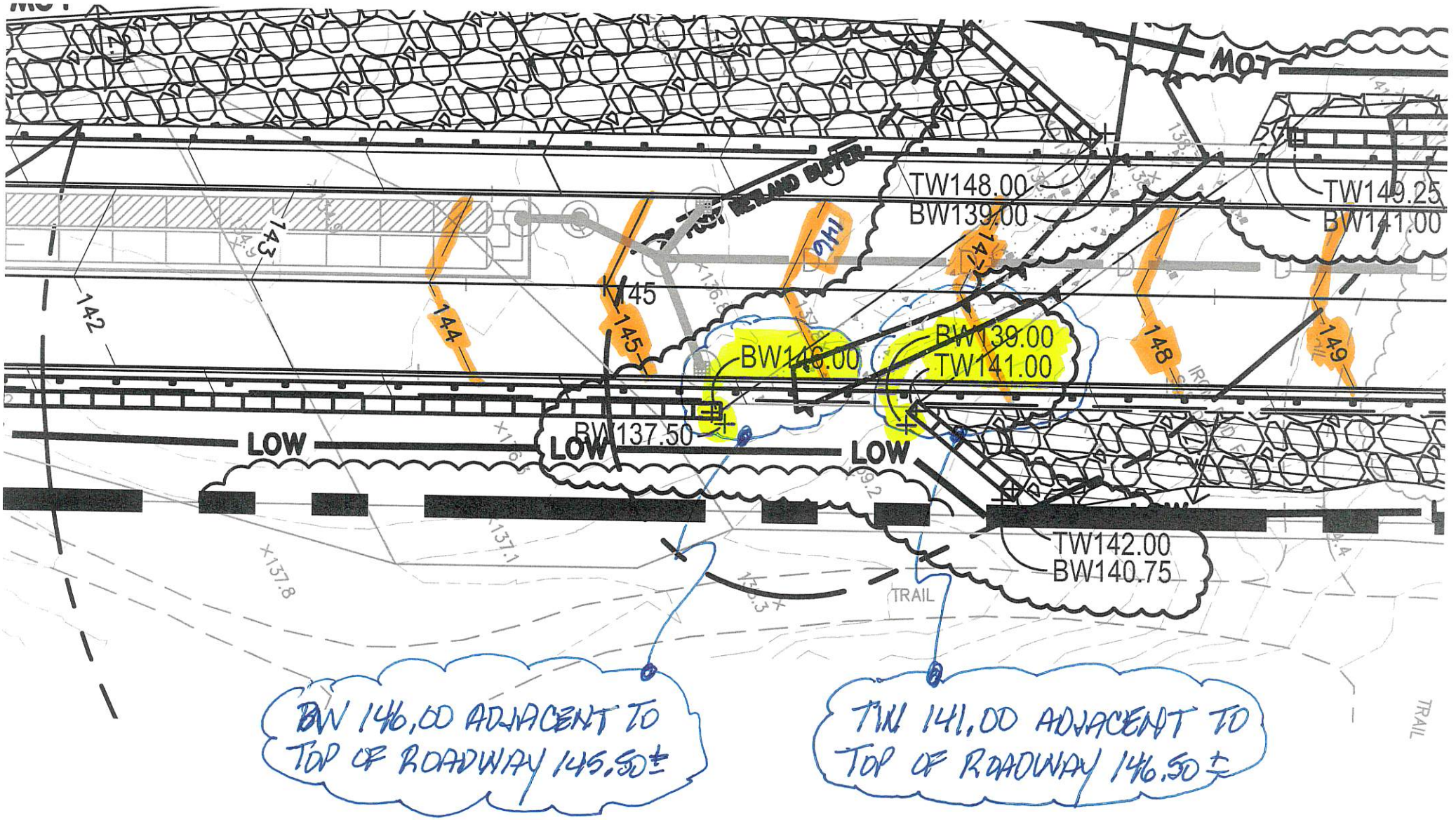
GRADING PLAN - 2

RFI #BID-28
Rev.1

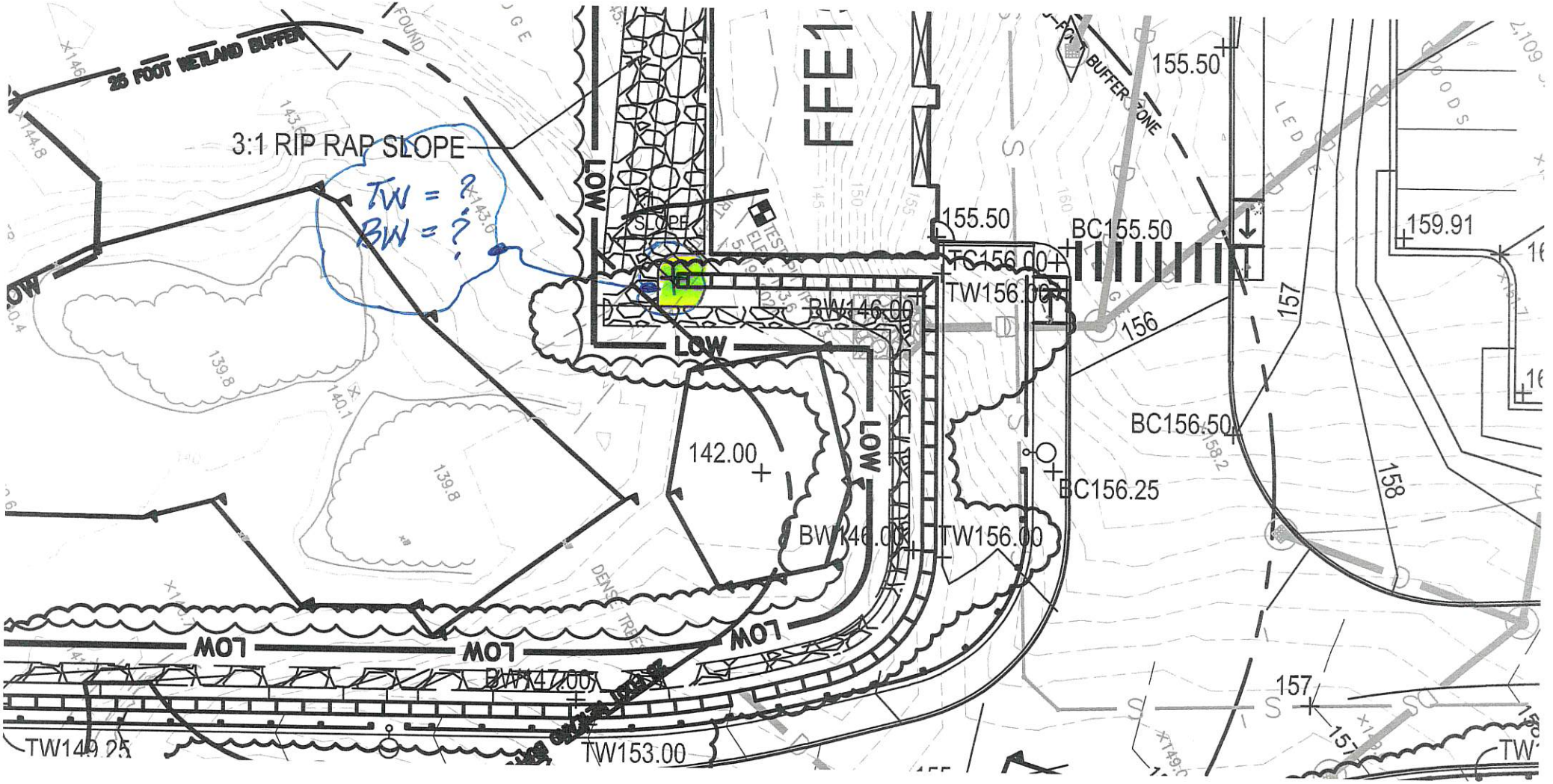
Scale: 1" = 30'-0"
Job No.: 20202.00
Drawn By: JM/AA
Date: February 15, 2023

L402

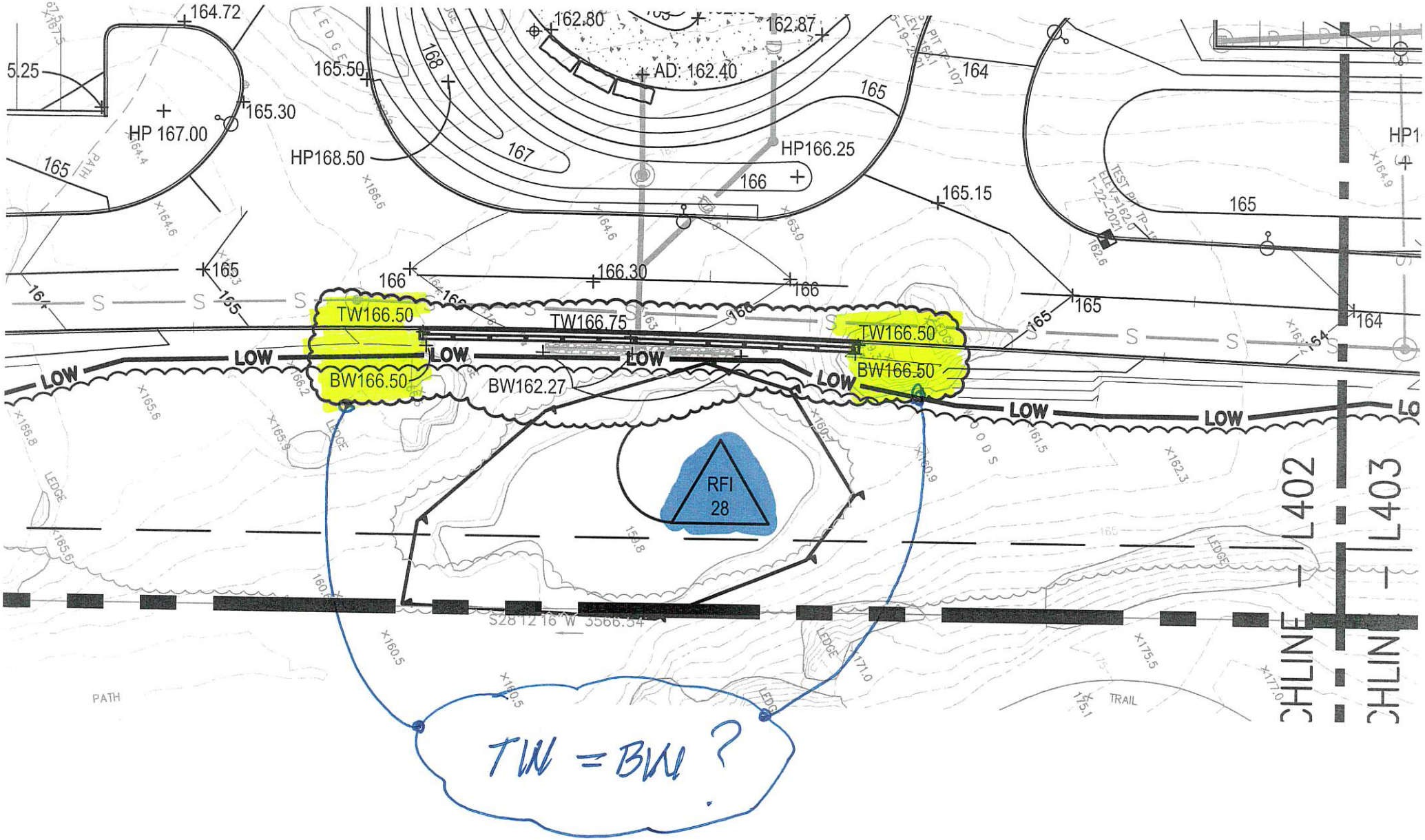
2



MOT
TW148.00
BW139.00
TW149.25
BW141.00
142
143
144
145
146
147
148
149
BW146.00
BW139.00
TW141.00
BW137.50
LOW
LOW
LOW
TW142.00
BW140.75
TRAIL
TRAIL
BW 146.00 ADJACENT TO TOP OF ROADWAY 145.50±
TW 141.00 ADJACENT TO TOP OF ROADWAY 146.50±



25 FOOT WETLAND BUFFER
3:1 RIP RAP SLOPE
TW = ?
BW = ?
LOW
FFE1
SLOPE
155.50
BC155.50
TC156.00
TW156.00
BW146.00
156
157
158
159.91
BC156.50
BC156.25
142.00
BW146.00
TW156.00
BW147.00
TW149.25
TW153.00
DENSE TREES


164.72
5.25
HP 167.00
165.30
165
165.50
168
167
162.80
162.87
AD: 162.40
165
164
HP168.50
HP166.25
166
165.15
165
166
166.30
166
165
165
164
TW166.50
TW166.75
TW166.50
LOW
LOW
LOW
LOW
LOW
LOW
BW166.50
BW162.27
BW166.50
RFI
28
S28°12'16"W 3566.34
PATH
TRAIL
L402
L403
TW = BW ?

RFI #Bid-28

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Retaining Wall

TO:	Josh Millonig **(Warner Larson Landscape Architects)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
		STATUS:	Open
		DUE DATE:	02/23/2023
DATE INITIATED:	02/16/2023	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Bidding	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:			
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 07:31 AM on 02/16/2023

Plan L300-L305 shows retaining walls. Please provide top & bottom of wall elevations.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to NEI response below.

ANGEL KHAZADIAN
03/13/2023

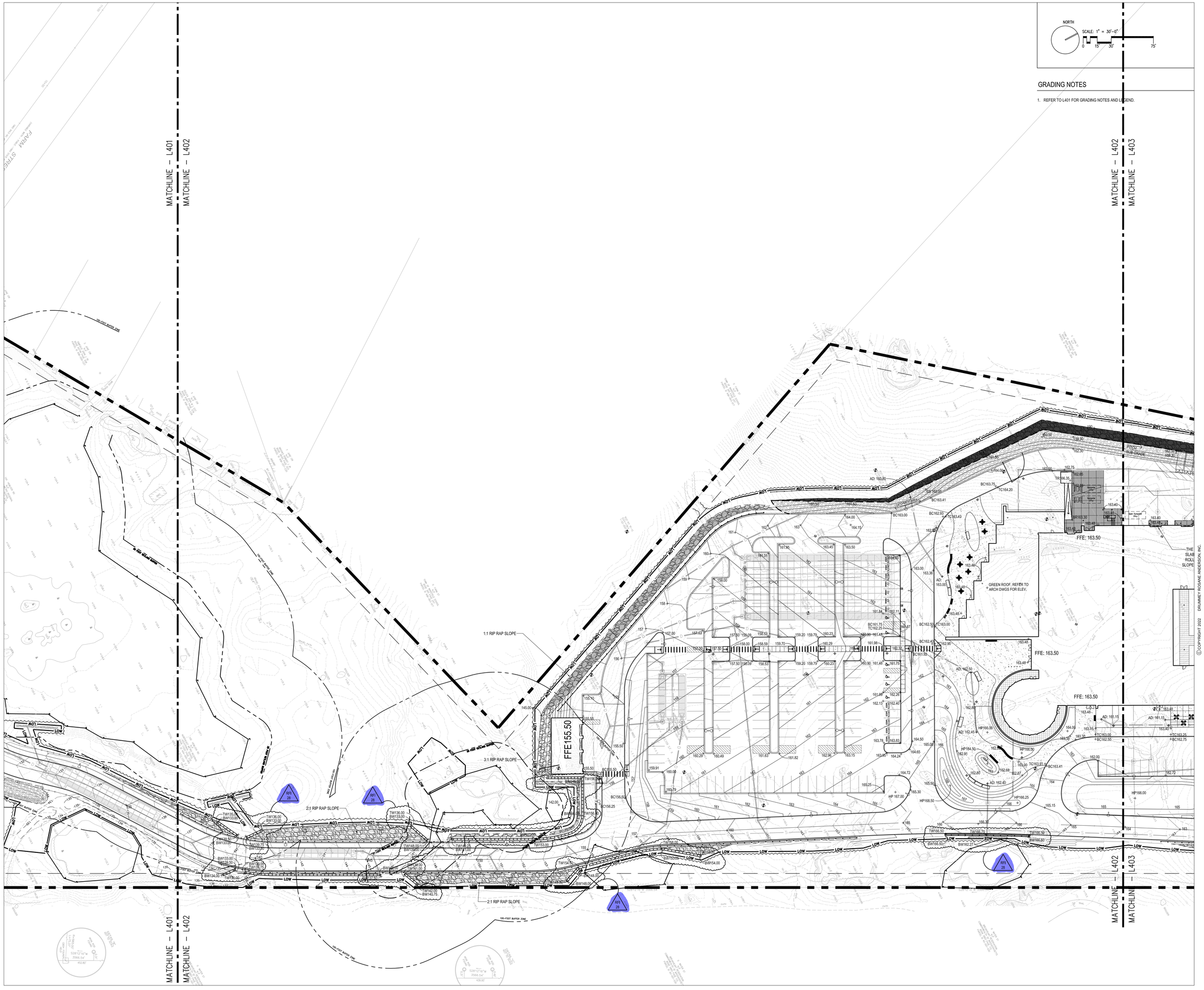
WLA RESPONSE:

See wall elevations added to the attached L402-Grading plan.

JOSH MILLONIG
03/10/2020

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO
	03/08/2023	



DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

NOI Submission

February 15, 2023

A B C D

KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

GRADING PLAN - 2

RFI #BID-28

Scale: 1" = 30'-0"
Job No.: 20202.00
Drawn By: JM
Date: February 15, 2023

L402

RFI #Bid-29

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

USA-made Castings

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/16/2023	**STATUS:**	Closed on 02/16/23
LOCATION:		**DUE DATE:**	02/23/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 08:47 AM on 02/14/2023

Does the project require USA-made castings?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Thursday, February 16th, 2023 at 9:35AM EST*

No, this is not a requirement.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 09:35 AM on 02/16/2023

No, this is not a requirement.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-30

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Tank Removal

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/16/2023	**STATUS:**	Closed on 04/04/23
LOCATION:		**DUE DATE:**	02/23/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:28 PM on 02/16/2023

1. Do we know the sizes of the underground storage tanks that need removal? 2ea
2. Are we responsible for the removal of the above ground propane tanks? 4ea

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, April 4th, 2023 at 12:51PM EDT*

1. There is one 20,000 gallon underground tank.
2. Yes, there are 5 above propane tanks.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY | **DATE** | **COPIES TO**

RFI #Bid-31

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Existing School Elevation

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/16/2023	**STATUS:**	Closed on 04/04/23
LOCATION:		**DUE DATE:**	02/23/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:57 PM on 02/16/2023

After existing school building demo, what elevation will the area be left at?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, April 4th, 2023 at 12:52PM EDT*

The area where the existing building was demolished should be brought up to the proposed subgrade for the final use of the area.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-32

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Erosion Control

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/17/2023	**STATUS:**	Closed on 04/04/23
LOCATION:		**DUE DATE:**	02/24/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:44 PM on 02/17/2023

Erosion control Spec calls for 9” wattles (attached)/ details call for 18” wattles? Our supplier only carries up to 12” wattles Please clarify.

Attachments:
wattle detail.png Wakefield MA Spec.pdf

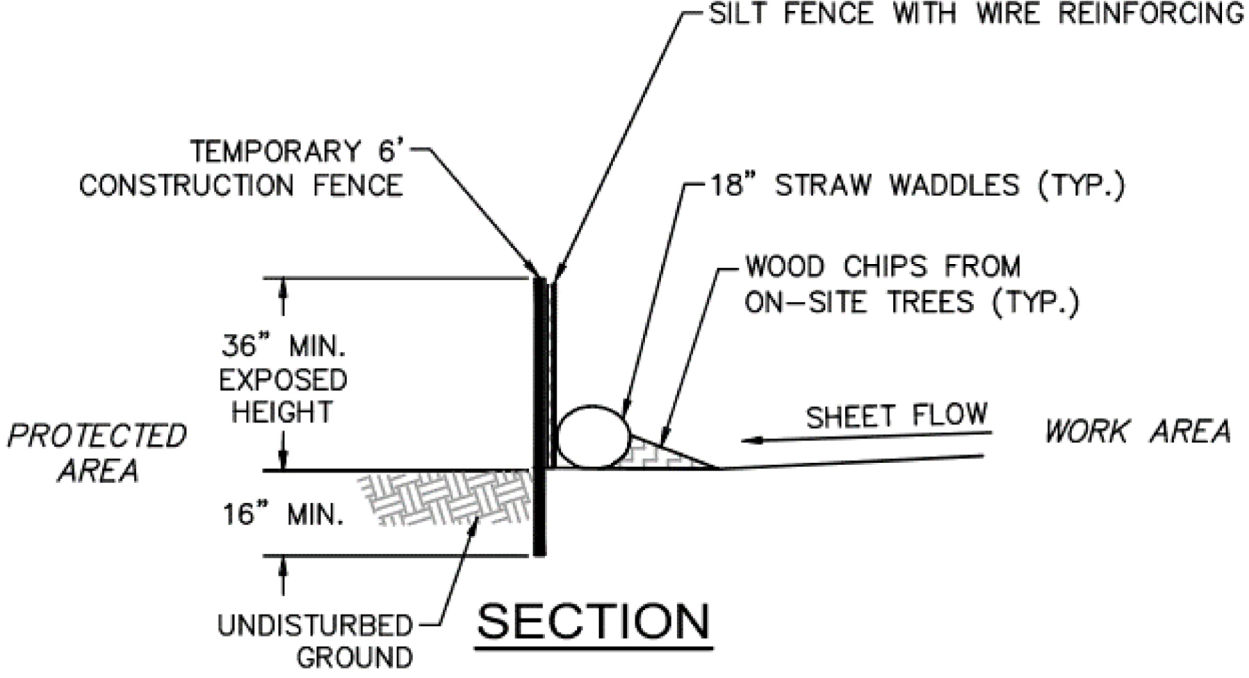
Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, April 4th, 2023 at 12:04PM EDT*

Provide 12" biodegradable wattles.

Attachments:

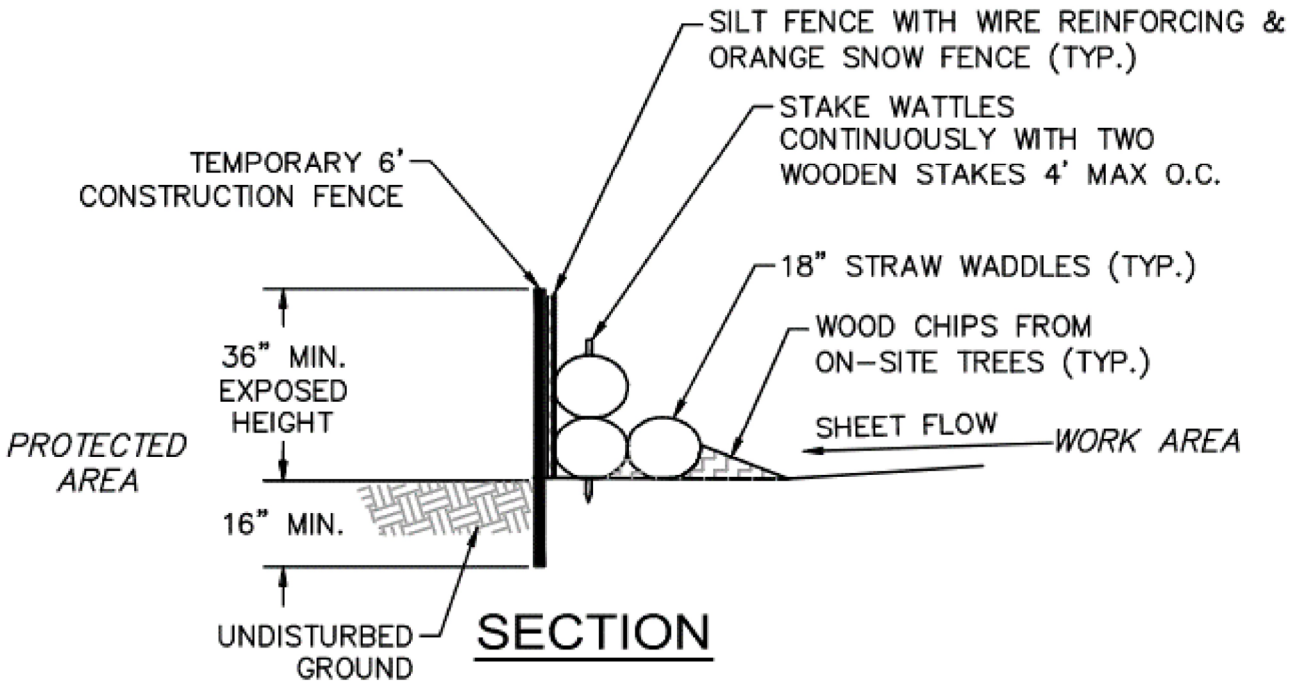
If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**



STANDARD PERIMETER PROTECTION BARRIER
SILT FENCE DETAIL WITH WATTLES

NOT TO SCALE



SENSITIVE AREA PERIMETER
PROTECTION BARRIER
SILT FENCE DETAIL WITH WATTLES

NOT TO SCALE

1. Straw wattles shall consist of weed free rice straw inside biodegradable netting. Straw wattles shall measure at least nine (9) inches in diameter.
2. Stakes for wattles shall be one of the following materials. Lengths shall be approximately two feet (2').
   a. Wood stakes of sound hardwood, one inch by one inch (1" x 1") in size.
   b. Steel reinforcing bars of at least No. 4 size.

D. Siltation Fence

1. Fabricated or prefabricated unit consisting of the following filter fabric properties:

a.	Grab Tensile Strength (lbs)	124	ASTM D4632
b.	Elongation at Failure (%)	15	ASTM D4632
c.	Mullen Burst Strength (PSI)	280-300	ASTM D3786
d.	Puncture Strength (lbs)	60-65	ASTM D4833
e.	Water Flow Rate (gal/min/sf)	8-10	ASTM D4491
f.	Apparent Opening Size (Sieve)	30	ASTM D4751
g.	Ultraviolet Radiation Stability (%)	70-80	ASTM D4355

2. Use only commercially available fabric that is certified in writing by the manufacturer for the purpose intended.
3. Acceptable fabric materials include "Mirafi Envirofence" by Mirafi Construction Products, "Style 2130" by Amoco Fabrics Co., and "IVI 3617C Silt Fence" by Indian Valley Industries, Inc., or approved equal by the Engineer.
4. Silt fence posts: Posts may be wood or metal. Wood post shall be a minimum 1¼ inch by 1¼ inch by 5 feet long hardwood stakes commonly used to support siltation fabric. Metal posts shall be a minimum of 1 inch wide and 5 feet long. Posts shall be spaced at a maximum distance of 8 feet on center.
5. Provide suitable heavy nylon cord for securing abutting silt fence posts.

E. Fencing: Steel posts shall be standard 6-foot long metal stamped drive stakes commonly used to support snow fences. Fencing shall be new four-foot height wood lath snow fencing. Provide suitable steel staples or heavy nylon cord for securing filter cloth to support system.

F. Crushed Stone: Crushed Stone: Crushed stone shall consist of durable crushed rock or durable crushed gravel stone, free from ice and snow, sand, clay, loam, or other deleterious or organic material. The crushed stone shall be uniformly blended and shall conform to the following requirements.

Percent Passing by Weight		
Sieve Size	**1 1/2-inch Stone**	**3/4-inch Stone**
2-inch	100	---
1 1/2-inch	95-100	---
1 1/4-inch	---	---
1-inch	35-70	100
3/4-inch	0-25	90-100
1/2-inch	---	10-50
3/8-inch	---	0-20

RFI #Bid-33

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Maintenance Building

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/21/2023	**STATUS:**	Closed on 04/04/23
LOCATION:		**DUE DATE:**	02/28/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 11:23 AM on 02/21/2023

Drawing SM-1-1 – Is this the maintenance building shown just south of the new school location? If so, the top of slab elevation is shown to be 992 appears to be inaccurate. Please provide the proper elevation.
Is there a structural drawing provided for the Maintenance Building shown on L304 just west of the North end zone of the football field?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, April 4th, 2023 at 12:45PM EDT*

The maintenance building was deleted from this project.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-34

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Concrete Bollards

TO:	Lauren Muldoon **(Gilbane Building Company)** Donald Venerus **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/21/2023	**STATUS:**	Closed on 03/07/23
LOCATION:		**DUE DATE:**	02/28/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 11:37 AM on 02/21/2023

Are the new concrete bollards to be furnished and/or installed under this scope?

Official Response: **Donald Venerus (Gilbane Building Company)** *responded on Tuesday, March 7th, 2023 at 3:03PM EST*

No - these are included in the Misc Metals bid package.

Attachments:

All Replies:

Response from Donald Venerus (Gilbane Building Company) at 03:03 PM on 03/07/2023

No - these are included in the Misc Metals bid package.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-35

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Traffic Signage

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/21/2023	**STATUS:**	Closed on 04/04/23
LOCATION:		**DUE DATE:**	02/28/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:17 PM on 02/21/2023

Is traffic signage to be furnished and installed under this scope?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, April 4th, 2023 at 12:55PM EDT*

The permanent traffic signage has not yet been designed. No traffic signage referenced above to be carried by the bidder. There is an Owner Allowance for Temporary Traffic Control Measures at Farm Street.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-36

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Vibration Monitoring

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/21/2023	**STATUS:**	Closed on 04/04/23
LOCATION:		**DUE DATE:**	02/28/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:21 PM on 02/21/2023

Line 61 of Scope Sheet – What is the duration required for vibration monitoring beyond the pre & post blast surveys? There are no nearby structures to the work.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, April 4th, 2023 at 11:50AM EDT*

Provide seismograph and vibration monitoring system as indicated in the Geotechnical Report and within Specification 312000 (Earth Moving) Section 1.2.B.21 throughout duration of the earthwork operations.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-37

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Transite Pipe

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/21/2023	**STATUS:**	Closed on 04/04/23
LOCATION:		**DUE DATE:**	02/28/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:18 PM on 02/21/2023

Line 66 of Scope Sheet – What is the quantity of transite pipe? Plans indicate sewer pipe to be demolished is RCP.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, April 4th, 2023 at 12:22PM EDT*

Assume all sewer demo to be transite pipe.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-38

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Supplement 3 Milestone Schedule

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/22/2023	**STATUS:**	Closed on 02/22/23
LOCATION:		**DUE DATE:**	03/01/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 10:28 AM on 02/22/2023

Supplement 3 – Confirm Milestone Schedule (complete by 4/21/23)

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 22nd, 2023 at 10:29AM EST*
Confirmed.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 10:29 AM on 02/22/2023

Confirmed.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-39

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Alt. #12 - Sound Berm

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/22/2023	**STATUS:**	Closed on 02/22/23
LOCATION:		**DUE DATE:**	03/01/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 10:36 AM on 02/22/2023

What is Alt 12 – Sound Berm? Nothing shown on that Site Logistics Drawing.

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 22nd, 2023 at 10:37AM EST*
The Site Logistics Plan shows the berm located along the interface between the wetland area and Area 1.

Attachments:

All Replies:

Response from Lauren Muldoon (Gilbane Building Company) at 10:37 AM on 02/22/2023

The Site Logistics Plan shows the berm located along the interface between the wetland area and Area 1.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-40

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Sewer Pump Station

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/22/2023	**STATUS:**	Closed on 04/04/23
LOCATION:		**DUE DATE:**	03/01/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 11:31 AM on 02/22/2023

Site drawings show Sewer pump station & valve chamber but detail sheet only shows an E-ONE sewer system that is not H-20 loading. I am assuming we will own the Detail Sewer system and we will install in the loam area then force main will start from the location of the unit?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, April 4th, 2023 at 12:42PM EDT*

The pump station and forced main were deleted from the project. Refer to Addendum #1.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-41

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Steel Bid Questions #1

TO:	Donald Venerus **(Gilbane Building Company)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/29/2023	**STATUS:**	Closed on 03/29/23
LOCATION:		**DUE DATE:**	04/05/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:10 PM on 03/29/2023

Structural Steel Bid Questions (#1):
1. Could you please provide anchor bolts diameter at maintenance building (2/SM-1-1)? Response: Assume 1” for bid purposes. Engineered Steel Building Contractor will confirm size during submittal process.
2. On detail 4/A3-2-11 there is an over-head door (grid NN between 6.9 and 4) but nothing shown on – S – dwgs. Please advise. Response: Embedded jamb angle at overhead doors is by Misc Metals – see 5/A6-2-3.
Overhead Door framing detail (HSS jamb and head frame) is by Misc Metals also – see 8/S0-0-5.
3. Confirm Steel angle at CMU wall (11/S3-0-7) is furnished and installed by others. Response: Both angles in details are provided by Misc Metals.
4. Embedded plate at top CMU wall (9/S2-0-3) is furnished and installed by others. Response: The angle at the top of the CMU wall for curtainwall support is provided by Misc Metals. The angle embedded in the concrete foundation wall for deck installation is furnished by Structural Steel for installation by others.
5. Volleyball net post (3/S0-0-3) is furnished and installed by others? Response: Correct
6. Metal grating with attachment (4/S0-0-3) (7/S2-0-1) is furnished and installed by others? Response: Correct
7. Masonry Anchorage (7/S0-0-5) is furnished and installed by others? Response: Correct
8. Steel plate with weldable coupler at masonry shear wall (6/S0-0-5) (8/S3-0-6) is furnished and installed by others? Response: Correct
9. Railing with channel or HSS stringer (5/S0-0-7) is furnished and installed by others? Response: Correct
10. Embedded galvanized angle with headed stud at over-head door (7/S2-0-1) is furnished and installed by others? Response: Correct
11. Steel angle with Hilti HY-200 at CMU wall (9, 9A/S2-0-1) (9/S2-0-3) is furnished and installed by others? Response: Correct
12. Steel fence post (12/S2-0-3) (9/S3-0-3) (8/S3-0-4) is furnished and installed by others? Response: Steel fence post is by others. HSS “base” post w/ base plate and cap plate is by this bid package.
13. Embedded angle with headed studs at stair stringer (1/S2-0-4) is furnished and installed by others? Response: Correct
14. Embedded MC Channel with headed studs (8/S2-0-4) is furnished and installed by others? Response: Correct?
15. Embedded angle with headed studs (9A/S2-0-4) is furnished and installed by others? Response: Correct?
16. Guardrail (1, 5/S3-0-6) (4,6/S3-0-8) is furnished and installed by others? Response: Guardrail is by others

Awaiting an Official Response

All Replies:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-42

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Steel Bid Questions #2

TO:	Donald Venerus **(Gilbane Building Company)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/29/2023	**STATUS:**	Closed on 03/29/23
LOCATION:		**DUE DATE:**	04/05/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:34 PM on 03/29/2023

Steel Bid Questions #2:
1. We are going to exclude loose steel lintel as per schedule on drawing S0-0-4/detail 7. We assume that miscellaneous metal will provide them. Please confirm. *Response: Correct*
2. We are going to exclude CMU clip shown on drawing S0-0-5 details 4,7. We assume that miscellaneous metal will provide them. Please confirm. *Response: Correct*
3. We are going to exclude all steel shown on drawing S2-0-1 details 3,7 We assume that miscellaneous metal will provide them. Please confirm. *Response: Detail 3 is by Structural Steel including embed angle. Reference scope item 50. Detail 7 (embed items in SOG) items are by others.*
4. We are going to exclude all steel on details 1,2/S2-0-2 and similar. We assume that miscellaneous metal will provide them. Please confirm. *Response: Embedded items will be provided by others, but will be installed by Structural Steel (as part of precast plank installation)*
5. We are going to exclude embedded angle on details 1/S2-0-4 and similar. We assume that miscellaneous metal will provide them. Please confirm. Response: *Correct. 1/S2-0-4 is by others.*
6. We are going to exclude all steel shown on drawing S2-0-4 details 9,9A We assume that miscellaneous metal will provide them. Please confirm. *Response: Correct*
7. Who supplies & installs the angle shown on drawing S2-0-1 detail 9 ? *Response: Post installed angle in CMU for curtainwall support is by Misc Metals*
8. Who supplies & installs the angle shown on drawing S2-0-2 detail 5 and similar? *Response: Angle to support precast plank is furnished by others and installed by Structural Steel for precast plank installation.*
9. Who supplies & installs the angle shown on drawing S2-0-2 detail 9 ? *Response: Embed angle at edge of slab is by Misc Metals*
10. Who supplies & installs the angle shown on drawing S2-0-3 detail 9 ? *Response: Embed angle in foundation wall for deck support is by Structural Steel. Post installed anchor in CMU for curtainwall support is by Misc Metals*
11. Who supplies & installs the angle shown on drawing S2-0-3 detail 9 ? *Response: Embed angle in foundation wall for deck support is by Structural Steel. Post installed anchor in CMU for curtainwall support is by Misc Metals*
12. Who supplies & installs the angle shown on drawing S2-0-5 details 1,2 ? *Response: Angles and plates in these two details to support precast plank is furnished by others. Detail 2: Post-installed anchor indicated is installed by Structural Steel for precast plank installation. Detail 1: the embedded plate is furnished by precast supplier and installed by Concrete contractors. Installation of angle and field welding to embedded plates is by Structural Steel.*
13. Who supplies & installs the plate shown on drawing S2-0-3 detail 7 ? *Response: Bearing plates for planks are provided by others and installed by Structural Steel during precast plank installation.*
14. Who supplies and installs the precast planks? *Response: Precast planks are furnished by others and installed by Structural Steel.*
15. If us, please provide a quantity & weight. *Response: Square footage of precast concrete plank is per contract drawings. Number of pieces can be inferred from the contract drawings for bidding, but the final number of planks is developed by precast plank installer during shop drawings. Plank thickness is indicated on plans (8" or 10"). For refence only, Oldcastle Precast lists their 8" plank self weight as 60psf and 10" plank self weight as 71psf, but this could vary based on manufacturer selected.*

Awaiting an Official Response

All Replies:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Bid-43

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Structural Steel Post Bid Questions

TO:	Donald Venerus **(Gilbane Building Company)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/25/2023	**STATUS:**	Closed on 04/25/23
LOCATION:		**DUE DATE:**	05/02/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:15 AM on 04/25/2023

1) Due to lack of information duct passage shown on plans S5-0-1 thru S5-0-3 are not considered. Could you please provide?
2) In supplement #1, Bid #42 RFI 4; det 1/S21-0-2. We have to install embedded plate supplied by other on the precast plank. There is other items shown on this detail in pink shaded that we will exclude. Please confirm
3) The MC will be installed later, so as the grout will be already in place, this detail does not seams to work as it shown with embed studs welded to MC. Could you please clarify?
4) Also coordination, layout, etc… will be done by the Misc Metal Fabricator. Please confirm.
5) On detail 5/S2-0-2, please confirm that embeded plates will be provided and installed by other :

Attachments:
RFI Steel Post Bid Questions.pdf

Official Response: **Donald Venerus (Gilbane Building Company)** *responded on Tuesday, April 25th, 2023 at 10:49AM EDT*

1) See attached overlays of the Mechanical and Structural plans for the Multipurpose Room and Gymnasium. We added clouds where the trusses need to be coordinated with ductwork. The duct sizes at these coordination points were highlighted.
2) The MC18 channel and headed studs are furnished and installed by Misc Metals. The continuous 1/4" x 5" plate between CMU walls needs to be installed prior to setting of planks - this plate is furnished by precast fabricator and installed by Structural Steel as part of precast installation.
3) We plan to have the MC channel installed prior to grouting.
4) Correct
5) The embedded plate will be cast into the precast plank, so it will be provided and installed by others. The support angle will be furnished by others, but installed/welded by Structural Steel.

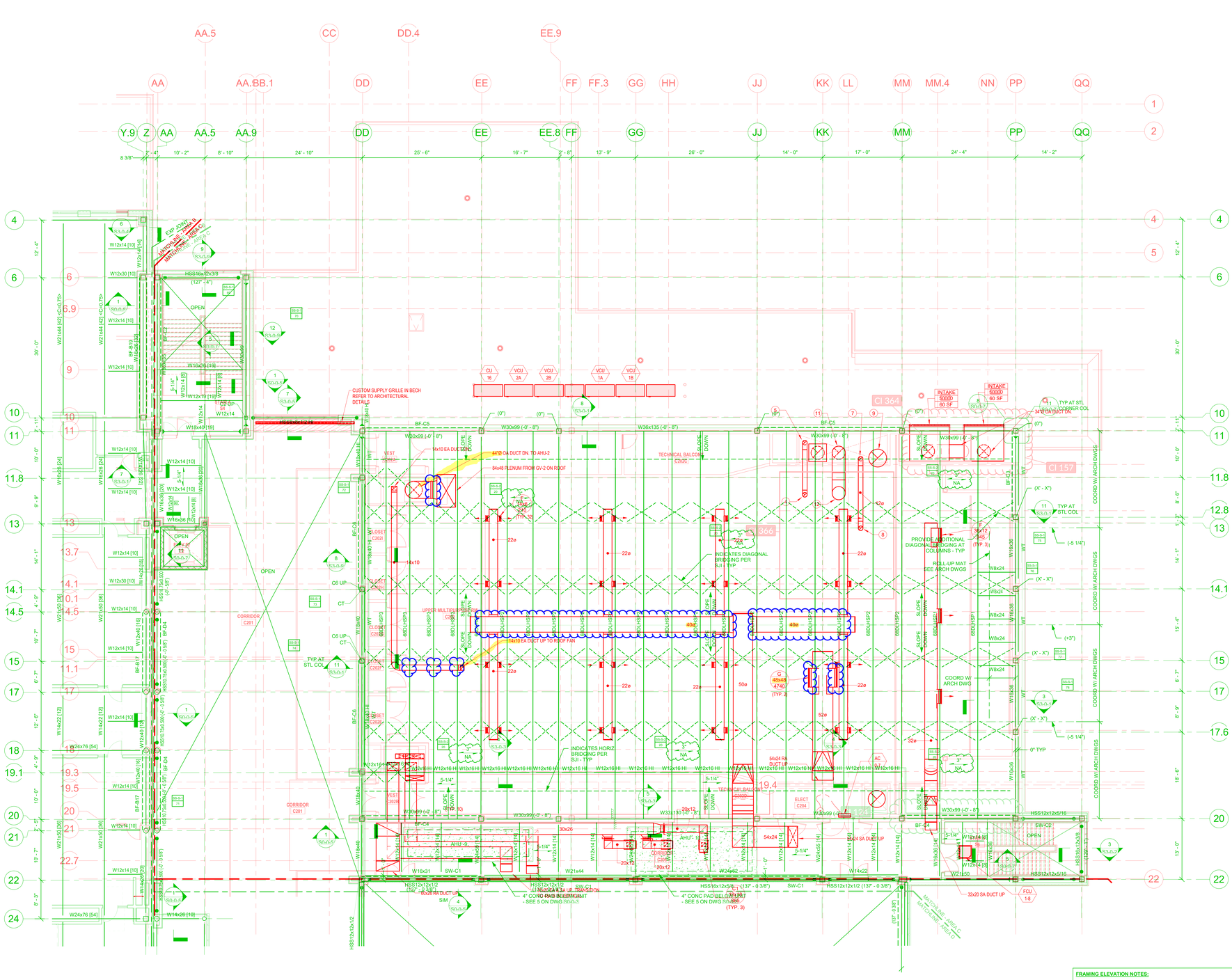
Attachments:
NEMT Multipurpose Overlay HVAC vs Structural.pdf,NEMT Gym Overlay HVAC vs Structural.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

HVAC DRAWING NOTES

1. 48"Ø DIAMETER EA DUCT DOWN.
2. 72x72 EA DUCT UP TO ROOF VENT.
3. 34"Ø DIAMETER EA DUCT UP TO FAN ON ROOF AND DOWN.
4. 12"Ø DIAMETER EA DUCT UP TO FAN ON ROOF.
5. 12"Ø DIAMETER EA DUCT DN.
6. NOT USED.
7. 10"Ø DIAMETER EA DUCT DOWN.
8. 10"Ø DIAMETER EA DUCT UP TO FAN ON ROOF.
9. 46"Ø DIAMETER EA DUCT UP TO FAN ON ROOF AND DN.
10. NOT USED.
11. 34"Ø DIAMETER EA DUCT DOWN.
12. 34"Ø DIAMETER EA DUCT UP TO FAN ON ROOF.


AA.5
CC
DD.4
EE.9
AA
AA.BB.1
DD
EE
FF
FF.3
GG
HH
JJ
KK
LL
MM
MM.4
NN
PP
QQ
Y.9
Z
AA
AA.5
AA.9
DD
EE
EE.8
FF
GG
JJ
KK
MM
PP
QQ
CUSTOM SUPPLY GRILLE IN BECH REFER TO ARCHITECTURAL DETAILS
14x10 EA DUCT DNG
44"Ø OA DUCT DN. TO AHU-2
84x48 PLENUM FROM GV-2 ON ROOF
INDICATES DIAGONAL BRIDGING PER SJI - TYP
INDICATES HORIZ BRIDGING PER SJI - TYP
PROVIDE ADDITIONAL DIAGONAL BRACING AT COLUMNS - TYP
ROLL-UP MAT SEE ARCH DWGS
COORD W/ ARCH DWG
TYP AT STL COL
TYP AT STL CORNER COL
34"Ø OA DUCT DN.
INTAKE 50000 60 SF
CI 364
CI 157
CI 366
CI 121
CORRIDOR C201
OPEN
CLOSET C202
CLOSET C203
CLOSET C204
ELECT C204
AHU- 10
AHU- 9
FCU 1-6
4" CONC PAD BELOW UNIT - SEE S ON DWG S0-0.5
HSS12x12x1/2 (137" - 0 3/8")
HSS16x12x5/8 (137" - 0 3/8")
HSS12x12x1/2 (137" - 0 3/8")
HSS12x12x5/16
HSS16x12x3/8
HSS16x4x1/4
W12x14 [10]
W16x26 [19]
W16x31
W21x44
W21x22
W14x22
W21x50
W24x76 [54]
W14x26 [10]
W16x36 [24]
W16x40 [19]
W16x45 [24]
W16x50 [36]
W16x67 [36]
W18x40 [19]
W21x44 [42]<D+0.75>
W21x50 [36]
W21x55 [36]
W12x19 [10]
W12x30 [10]
W14x22 [112]
W14x40 [16]
W14x48 [16]
W14x61 [16]
W14x68 [24]
W14x82 [24]
W14x90 [28]
W14x109 [28]
W14x132 [28]
W14x145 [28]
W14x159 [28]
W14x176 [28]
W14x193 [28]
W14x211 [28]
W14x233 [28]
W14x257 [28]
W14x283 [28]
W14x311 [28]
W14x342 [28]
W14x370 [28]
W14x398 [28]
W14x426 [28]
W14x455 [28]
W14x500 [28]
W14x550 [28]
W14x605 [28]
W14x665 [28]
W14x730 [28]
W14x808 [28]
W14x873 [28]
W14x932 [28]
W14x1000 [28]
W14x1082 [28]
W14x1176 [28]
W14x1269 [28]
W14x1370 [28]
W14x1455 [28]
W14x1561 [28]
W14x1665 [28]
W14x1757 [28]
W14x1851 [28]
W14x1963 [28]
W14x2053 [28]
W14x2158 [28]
W14x2257 [28]
W14x2342 [28]
W14x2445 [28]
W14x2539 [28]
W14x2623 [28]
W14x2730 [28]
W14x2809 [28]
W14x2887 [28]
W14x2966 [28]
W14x3061 [28]
W14x3150 [28]
W14x3233 [28]
W14x3311 [28]
W14x3398 [28]
W14x3482 [28]
W14x3568 [28]
W14x3665 [28]
W14x3756 [28]
W14x3849 [28]
W14x3932 [28]
W14x4016 [28]
W14x4109 [28]
W14x4211 [28]
W14x4297 [28]
W14x4398 [28]
W14x4493 [28]
W14x4584 [28]
W14x4680 [28]
W14x4783 [28]
W14x4873 [28]
W14x4961 [28]
W14x5053 [28]
W14x5159 [28]
W14x5257 [28]
W14x5342 [28]
W14x5445 [28]
W14x5539 [28]
W14x5623 [28]
W14x5730 [28]
W14x5809 [28]
W14x5887 [28]
W14x5966 [28]
W14x6061 [28]
W14x6150 [28]
W14x6233 [28]
W14x6311 [28]
W14x6398 [28]
W14x6482 [28]
W14x6568 [28]
W14x6665 [28]
W14x6756 [28]
W14x6849 [28]
W14x6932 [28]
W14x7016 [28]
W14x7109 [28]
W14x7211 [28]
W14x7297 [28]
W14x7398 [28]
W14x7493 [28]
W14x7584 [28]
W14x7680 [28]
W14x7783 [28]
W14x7873 [28]
W14x7961 [28]
W14x8053 [28]
W14x8159 [28]
W14x8257 [28]
W14x8342 [28]
W14x8445 [28]
W14x8539 [28]
W14x8623 [28]
W14x8730 [28]
W14x8809 [28]
W14x8887 [28]
W14x8966 [28]
W14x9061 [28]
W14x9150 [28]
W14x9233 [28]
W14x9311 [28]
W14x9398 [28]
W14x9482 [28]
W14x9568 [28]
W14x9665 [28]
W14x9756 [28]
W14x9849 [28]
W14x9932 [28]
W14x10016 [28]
W14x10109 [28]
W14x10211 [28]
W14x10297 [28]
W14x10398 [28]
W14x10493 [28]
W14x10584 [28]
W14x10680 [28]
W14x10783 [28]
W14x10873 [28]
W14x10961 [28]
W14x11053 [28]
W14x11159 [28]
W14x11257 [28]
W14x11342 [28]
W14x11445 [28]
W14x11539 [28]
W14x11623 [28]
W14x11730 [28]
W14x11809 [28]
W14x11887 [28]
W14x11966 [28]
W14x12061 [28]
W14x12150 [28]
W14x12233 [28]
W14x12311 [28]
W14x12398 [28]
W14x12482 [28]
W14x12568 [28]
W14x12665 [28]
W14x12756 [28]
W14x12849 [28]
W14x12932 [28]
W14x13016 [28]
W14x13109 [28]
W14x13211 [28]
W14x13297 [28]
W14x13398 [28]
W14x13493 [28]
W14x13584 [28]
W14x13680 [28]
W14x13783 [28]
W14x13873 [28]
W14x13961 [28]
W14x14053 [28]
W14x14159 [28]
W14x14257 [28]
W14x14342 [28]
W14x14445 [28]
W14x14539 [28]
W14x14623 [28]
W14x14730 [28]
W14x14809 [28]
W14x14887 [28]
W14x14966 [28]
W14x15061 [28]
W14x15150 [28]
W14x15233 [28]
W14x15311 [28]
W14x15398 [28]
W14x15482 [28]
W14x15568 [28]
W14x15665 [28]
W14x15756 [28]
W14x15849 [28]
W14x15932 [28]
W14x16016 [28]
W14x16109 [28]
W14x16211 [28]
W14x16297 [28]
W14x16398 [28]
W14x16493 [28]
W14x16584 [28]
W14x16680 [28]
W14x16783 [28]
W14x16873 [28]
W14x16961 [28]
W14x17053 [28]
W14x17159 [28]
W14x17257 [28]
W14x17342 [28]
W14x17445 [28]
W14x17539 [28]
W14x17623 [28]
W14x17730 [28]
W14x17809 [28]
W14x17887 [28]
W14x17966 [28]
W14x18061 [28]
W14x18150 [28]
W14x18233 [28]
W14x18311 [28]
W14x18398 [28]
W14x18482 [28]
W14x18568 [28]
W14x18665 [28]
W14x18756 [28]
W14x18849 [28]
W14x18932 [28]
W14x19016 [28]
W14x19109 [28]
W14x19211 [28]
W14x19297 [28]
W14x19398 [28]
W14x19493 [28]
W14x19584 [28]
W14x19680 [28]
W14x19783 [28]
W14x19873 [28]
W14x19961 [28]
W14x20053 [28]
W14x20159 [28]
W14x20257 [28]
W14x20342 [28]
W14x20445 [28]
W14x20539 [28]
W14x20623 [28]
W14x20730 [28]
W14x20809 [28]
W14x20887 [28]
W14x20966 [28]
W14x21061 [28]
W14x21150 [28]
W14x21233 [28]
W14x21311 [28]
W14x21398 [28]
W14x21482 [28]
W14x21568 [28]
W14x21665 [28]
W14x21756 [28]
W14x21849 [28]
W14x21932 [28]
W14x22016 [28]
W14x22109 [28]
W14x22211 [28]
W14x22297 [28]
W14x22398 [28]
W14x22493 [28]
W14x22584 [28]
W14x22680 [28]
W14x22783 [28]
W14x22873 [28]
W14x22961 [28]
W14x23053 [28]
W14x23159 [28]
W14x23257 [28]
W14x23342 [28]
W14x23445 [28]
W14x23539 [28]
W14x23623 [28]
W14x23730 [28]
W14x23809 [28]
W14x23887 [28]
W14x23966 [28]
W14x24061 [28]
W14x24150 [28]
W14x24233 [28]
W14x24311 [28]
W14x24398 [28]
W14x24482 [28]
W14x24568 [28]
W14x24665 [28]
W14x24756 [28]
W14x24849 [28]
W14x24932 [28]
W14x25016 [28]
W14x25109 [28]
W14x25211 [28]
W14x25297 [28]
W14x25398 [28]
W14x25493 [28]
W14x25584 [28]
W14x25680 [28]
W14x25783 [28]
W14x25873 [28]
W14x25961 [28]
W14x26053 [28]
W14x26159 [28]
W14x26257 [28]
W14x26342 [28]
W14x26445 [28]
W14x26539 [28]
W14x26623 [28]
W14x26730 [28]
W14x26809 [28]
W14x26887 [28]
W14x26966 [28]
W14x27061 [28]
W14x27150 [28]
W14x27233 [28]
W14x27311 [28]
W14x27398 [28]
W14x27482 [28]
W14x27568 [28]
W14x27665 [28]
W14x27756 [28]
W14x27849 [28]
W14x27932 [28]
W14x28016 [28]
W14x28109 [28]
W14x28211 [28]
W14x28297 [28]
W14x28398 [28]
W14x28493 [28]
W14x28584 [28]
W14x28680 [28]
W14x28783 [28]
W14x28873 [28]
W14x28961 [28]
W14x29053 [28]
W14x29159 [28]
W14x29257 [28]
W14x29342 [28]
W14x29445 [28]
W14x29539 [28]
W14x29623 [28]
W14x29730 [28]
W14x29809 [28]
W14x29887 [28]
W14x29966 [28]
W14x30061 [28]
W14x30150 [28]
W14x30233 [28]
W14x30311 [28]
W14x30398 [28]
W14x30482 [28]
W14x30568 [28]
W14x30665 [28]
W14x30756 [28]
W14x30849 [28]
W14x30932 [28]
W14x31016 [28]
W14x31109 [28]
W14x31211 [28]
W14x31297 [28]
W14x31398 [28]
W14x31493 [28]
W14x31584 [28]
W14x31680 [28]
W14x31783 [28]
W14x31873 [28]
W14x31961 [28]
W14x32053 [28]
W14x32159 [28]
W14x32257 [28]
W14x32342 [28]
W14x32445 [28]
W14x32539 [28]
W14x32623 [28]
W14x32730 [28]
W14x32809 [28]
W14x32887 [28]
W14x32966 [28]
W14x33061 [28]
W14x33150 [28]
W14x33233 [28]
W14x33311 [28]
W14x33398 [28]
W14x33482 [28]
W14x33568 [28]
W14x33665 [28]
W14x33756 [28]
W14x33849 [28]
W14x33932 [28]
W14x34016 [28]
W14x34109 [28]
W14x34211 [28]
W14x34297 [28]
W14x34398 [28]
W14x34493 [28]
W14x34584 [28]
W14x34680 [28]
W14x34783 [28]
W14x34873 [28]
W14x34961 [28]
W14x35053 [28]
W14x35159 [28]
W14x35257 [28]
W14x35342 [28]
W14x35445 [28]
W14x35539 [28]
W14x35623 [28]
W14x35730 [28]
W14x35809 [28]
W14x35887 [28]
W14x35966 [28]
W14x36061 [28]
W14x36150 [28]
W14x36233 [28]
W14x36311 [28]
W14x36398 [28]
W14x36482 [28]
W14x36568 [28]
W14x36665 [28]
W14x36756 [28]
W14x36849 [28]
W14x36932 [28]
W14x37016 [28]
W14x37109 [28]
W14x37211 [28]
W14x37297 [28]
W14x37398 [28]
W14x37493 [28]
W14x37584 [28]
W14x37680 [28]
W14x37783 [28]
W14x37873 [28]
W14x37961 [28]
W14x38053 [28]
W14x38159 [28]
W14x38257 [28]
W14x38342 [28]
W14x38445 [28]
W14x38539 [28]
W14x38623 [28]
W14x38730 [28]
W14x38809 [28]
W14x38887 [28]
W14x38966 [28]
W14x39061 [28]
W14x39150 [28]
W14x39233 [28]
W14x39311 [28]
W14x39398 [28]
W14x39482 [28]
W14x39568 [28]
W14x39665 [28]
W14x39756 [28]
W14x39849 [28]
W14x39932 [28]
W14x40016 [28]
W14x40109 [28]
W14x40211 [28]
W14x40297 [28]
W14x40398 [28]
W14x40493 [28]
W14x40584 [28]
W14x40680 [28]
W14x40783 [28]
W14x40873 [28]
W14x40961 [28]
W14x41053 [28]
W14x41159 [28]
W14x41257 [28]
W14x41342 [28]
W14x41445 [28]
W14x41539 [28]
W14x41623 [28]
W14x41730 [28]
W14x41809 [28]
W14x41887 [28]
W14x41966 [28]
W14x42061 [28]
W14x42150 [28]
W14x42233 [28]
W14x42311 [28]
W14x42398 [28]
W14x42482 [28]
W14x42568 [28]
W14x42665 [28]
W14x42756 [28]
W14x42849 [28]
W14x42932 [28]
W14x43016 [28]
W14x43109 [28]
W14x43211 [28]
W14x43297 [28]
W14x43398 [28]
W14x43493 [28]
W14x43584 [28]
W14x43680 [28]
W14x43783 [28]
W14x43873 [28]
W14x43961 [28]
W14x44053 [28]
W14x44159 [28]
W14x44257 [28]
W14x44342 [28]
W14x44445 [28]
W14x44539 [28]
W14x44623 [28]
W14x44730 [28]
W14x44809 [28]
W14x44887 [28]
W14x44966 [28]
W14x45061 [28]
W14x45150 [28]
W14x45233 [28]
W14x45311 [28]
W14x45398 [28]
W14x45482 [28]
W14x45568 [28]
W14x45665 [28]
W14x45756 [28]
W14x45849 [28]
W14x45932 [28]
W14x46016 [28]
W14x46109 [28]
W14x46211 [28]
W14x46297 [28]
W14x46398 [28]
W14x46493 [28]
W14x46584 [28]
W14x46680 [28]
W14x46783 [28]
W14x46873 [28]
W14x46961 [28]
W14x47053 [28]
W14x47159 [28]
W14x47257 [28]
W14x47342 [28]
W14x47445 [28]
W14x47539 [28]
W14x47623 [28]
W14x47730 [28]
W14x47809 [28]
W14x47887 [28]
W14x47966 [28]
W14x48061 [28]
W14x48150 [28]
W14x48233 [28]
W14x48311 [28]
W14x48398 [28]
W14x48482 [28]
W14x48568 [28]
W14x48665 [28]
W14x48756 [28]
W14x48849 [28]
W14x48932 [28]
W14x49016 [28]
W14x49109 [28]
W14x49211 [28]
W14x49297 [28]
W14x49398 [28]
W14x49493 [28]
W14x49584 [28]
W14x49680 [28]
W14x49783 [28]
W14x49873 [28]
W14x49961 [28]
W14x50053 [28]
W14x50159 [28]
W14x50257 [28]
W14x50342 [28]
W14x50445 [28]
W14x50539 [28]
W14x50623 [28]
W14x50730 [28]
W14x50809 [28]
W14x50887 [28]
W14x50966 [28]
W14x51061 [28]
W14x51150 [28]
W14x51233 [28]
W14x51311 [28]
W14x51398 [28]
W14x51482 [28]
W14x51568 [28]
W14x51665 [28]
W14x51756 [28]
W14x51849 [28]
W14x51932 [28]
W14x52016 [28]
W14x52109 [28]
W14x52211 [28]
W14x52297 [28]
W14x52398 [28]
W14x52493 [28]
W14x52584 [28]
W14x52680 [28]
W14x52783 [28]
W14x52873 [28]
W14x52961 [28]
W14x53053 [28]
W14x53159 [28]
W14x53257 [28]
W14x53342 [28]
W14x53445 [28]
W14x53539 [28]
W14x53623 [28]
W14x53730 [28]
W14x53809 [28]
W14x53887 [28]
W14x53966 [28]
W14x54061 [28]
W14x54150 [28]
W14x54233 [28]
W14x54311 [28]
W14x54398 [28]
W14x54482 [28]
W14x54568 [28]
W14x54665 [28]
W14x54756 [28]
W14x54849 [28]
W14x54932 [28]
W14x55016 [28]
W14x55109 [28]
W14x55211 [28]
W14x55297 [28]
W14x55398 [28]
W14x55493 [28]
W14x55584 [28]
W14x55680 [28]
W14x55783 [28]
W14x55873 [28]
W14x55961 [28]
W14x56053 [28]
W14x56159 [28]
W14x56257 [28]
W14x56342 [28]
W14x56445 [28]
W14x56539 [28]
W14x56623 [28]
W14x56730 [28]
W14x56809 [28]
W14x56887 [28]
W14x56966 [28]
W14x57061 [28]
W14x57150 [28]
W14x57233 [28]
W14x57311 [28]
W14x57398 [28]
W14x57482 [28]
W14x57568 [28]
W14x57665 [28]
W14x57756 [28]
W14x57849 [28]
W14x57932 [28]
W14x58016 [28]
W14x58109 [28]
W14x58211 [28]
W14x58297 [28]
W14x58398 [28]
W14x58493 [28]
W14x58584 [28]
W14x58680 [28]
W14x58783 [28]
W14x58873 [28]
W14x58961 [28]
W14x59053 [28]
W14x59159 [28]
W14x59257 [28]
W14x59342 [28]
W14x59445 [28]
W14x59539 [28]
W14x59623 [28]
W14x59730 [28]
W14x59809 [28]
W14x59887 [28]
W14x59966 [28]
W14x60061 [28]
W14x60150 [28]
W14x60233 [28]
W14x60311 [28]
W14x60398 [28]
W14x60482 [28]
W14x60568 [28]
W14x60665 [28]
W14x60756 [28]
W14x60849 [28]
W14x60932 [28]
W14x61016 [28]
W14x61109 [28]
W14x61211 [28]
W14x61297 [28]
W14x61398 [28]
W14x61493 [28]
W14x61584 [28]
W14x61680 [28]
W14x61783 [28]
W14x61873 [28]
W14x61961 [28]
W14x62053 [28]
W14x62159 [28]
W14x62257 [28]
W14x62342 [28]
W14x62445 [28]
W14x62539 [28]
W14x62623 [28]
W14x62730 [28]
W14x62809 [28]
W14x62887 [28]
W14x62966 [28]
W14x63061 [28]
W14x63150 [28]
W14x63233 [28]
W14x63311 [28]
W14x63398 [28]
W14x63482 [28]
W14x63568 [28]
W14x63665 [28]
W14x63756 [28]
W14x63849 [28]
W14x63932 [28]
W14x64016 [28]
W14x64109 [28]
W14x64211 [28]
W14x64297 [28]
W14x64398 [28]
W14x64493 [28]
W14x64584 [28]
W14x64680 [28]
W14x64783 [28]
W14x64873 [28]
W14x64961 [28]
W14x65053 [28]
W14x65159 [28]
W14x65257 [28]
W14x65342 [28]
W14x65445 [28]
W14x65539 [28]
W14x65623 [28]
W14x65730 [28]
W14x65809 [28]
W14x65887 [28]
W14x65966 [28]
W14x66061 [28]
W14x66150 [28]
W14x66233 [28]
W14x66311 [28]
W14x66398 [28]
W14x66482 [28]
W14x66568 [28]
W14x66665 [28]
W14x66756 [28]
W14x66849 [28]
W14x66932 [28]
W14x67016 [28]
W14x67109 [28]
W14x67211 [28]
W14x67297 [28]
W14x67398 [28]
W14x67493 [28]
W14x67584 [28]
W14x67680 [28]
W14x67783 [28]
W14x67873 [28]
W14x67961 [28]
W14x68053 [28]
W14x68159 [28]
W14x68257 [28]
W14x68342 [28]
W14x68445 [28]
W14x68539 [28]
W14x68623 [28]
W14x68730 [28]
W14x68809 [28]
W14x68887 [28]
W14x68966 [28]
W14x69061 [28]
W14x69150 [28]
W14x69233 [28]
W14x69311 [28]
W14x69398 [28]
W14x69482 [28]
W14x69568 [28]
W14x69665 [28]
W14x69756 [28]
W14x69849 [28]
W14x69932 [28]
W14x70016 [28]
W14x70109 [28]
W14x70211 [28]
W14x70297 [28]
W14x70398 [28]
W14x70493 [28]
W14x70584 [28]
W14x70680 [28]
W14x70783 [28]
W14x70873 [28]
W14x70961 [28]
W14x71053 [28]
W14x71159 [28]
W14x71257 [28]
W14x71342 [28]
W14x71445 [28]
W14x71539 [28]
W14x71623 [28]
W14x71730 [28]
W14x71809 [28]
W14x71887 [28]
W14x71966 [28]
W14x72061 [28]
W14x72150 [28]
W14x72233 [28]
W14x72311 [28]
W14x72398 [28]
W14x72482 [28]
W14x72568 [28]
W14x72665 [28]
W14x72756 [28]
W14x72849 [28]
W14x72932 [28]
W14x73016 [28]
W14x73109 [28]
W14x73211 [28]
W14x73297 [28]
W14x73398 [28]
W14x73493 [28]
W14x73584 [28]
W14x73680 [28]
W14x73783 [28]
W14x73873 [28]
W14x73961 [28]
W14x74053 [28]
W14x74159 [28]
W14x74257 [28]
W14x74342 [28]
W14x74445 [28]
W14x74539 [28]
W14x74623 [28]
W14x74730 [28]
W14x74809 [28]
W14x74887 [28]
W14x74966 [28]
W14x75061 [28]
W14x75150 [28]
W14x75233 [28]
W14x75311 [28]
W14x75398 [28]
W14x75482 [28]
W14x75568 [28]
W14x75665 [28]
W14x75756 [28]
W14x75849 [28]
W14x75932 [28]
W14x76016 [28]
W14x76109 [28]
W14x76211 [28]
W14x76297 [28]
W14x76398 [28]
W14x76493 [28]
W14x76584 [28]
W14x76680 [28]
W14x76783 [28]
W14x76873 [28]
W14x76961 [28]
W14x77053 [28]
W14x77159 [28]
W14x77257 [28]
W14x77342 [28]
W14x77445 [28]
W14x77539 [28]
W14x77623 [28]
W14x77730 [28]
W14x77809 [28]
W14x77887 [28]
W14x77966 [28]
W14x78061 [28]
W14x78150 [28]
W14x78233 [28]
W14x78311 [28]
W14x78398 [28]
W14x78482 [28]
W14x78568 [28]
W14x78665 [28]
W14x78756 [28]
W14x78849 [28]
W14x78932 [28]
W14x79016 [28]
W14x79109 [28]
W14x79211 [28]
W14x79297 [28]
W14x79398 [28]
W14x79493 [28]
W14x79584 [28]
W14x79680 [28]
W14x79783 [28]
W14x79873 [28]
W14x79961 [28]
W14x80053 [28]
W14x80159 [28]
W14x80257 [28]
W14x80342 [28]
W14x80445 [28]
W14x80539 [28]
W14x80623 [28]
W14x80730 [28]
W14x80809 [28]
W14x80887 [28]
W14x80966 [28]
W14x81061 [28]
W14x81150 [28]
W14x81233 [28]
W14x81311 [28]
W14x81398 [28]
W14x81482 [28]
W14x81568 [28]
W14x81665 [28]
W14x81756 [28]
W14x81849 [28]
W14x81932 [28]
W14x82016 [28]
W14x82109 [28]
W14x82211 [28]
W14x82297 [28]
W14x82398 [28]
W14x82493 [28]
W14x82584 [28]
W14x82680 [28]
W14x82783 [28]
W14x82873 [28]
W14x82961 [28]
W14x83053 [28]
W14x83159 [28]
W14x83257 [28]
W14x83342 [28]
W14x83445 [28]
W14x83539 [28]
W14x83623 [28]
W14x83730 [28]
W14x83809 [28]
W14x83887 [28]
W14x83966 [28]
W14x84061 [28]
W14x84150 [28]
W14x84233 [28]
W14x84311 [28]
W14x84398 [28]
W14x84482 [28]
W14x84568 [28]
W14x84665 [28]
W14x84756 [28]
W14x84849 [28]
W14x84932 [28]
W14x85016 [28]
W14x85109 [28]
W14x85211 [28]
W14x85297 [28]
W14x85398 [28]
W14x85493 [28]
W14x85584 [28]
W14x85680 [28]
W14x85783 [28]
W14x85873 [28]
W14x85961 [28]
W14x86053 [28]
W14x86159 [28]
W14x86257 [28]
W14x86342 [28]
W14x86445 [28]
W14x86539 [28]
W14x86623 [28]
W14x86730 [28]
W14x86809 [28]
W14x86887 [28]
W14x86966 [28]
W14x87061 [28]
W14x87150 [28]
W14x87233 [28]
W14x87311 [28]
W14x87398 [28]
W14x87482 [28]
W14x87568 [28]
W14x87665 [28]
W14x87756 [28]
W14x87849 [28]
W14x87932 [28]
W14x88016 [28]
W14x88109 [28]
W14x88211 [28]
W14x88297 [28]
W14x88398 [28]
W14x88493 [28]
W14x88584 [28]
W14x88680 [28]
W14x88783 [28]
W14x88873 [28]
W14x88961 [28]
W14x89053 [28]
W14x89159 [28]
W14x89257 [28]
W14x89342 [28]
W14x89445 [28]
W14x89539 [28]
W14x89623 [28]
W14x89730 [28]
W14x89809 [28]
W14x89887 [28]
W14x89966 [28]
W14x90061 [28]
W14x90150 [28]
W14x90233 [28]
W14x90311 [28]
W14x90398 [28]
W14x90482 [28]
W14x90568 [28]
W14x90665 [28]
W14x90756 [28]
W14x90849 [28]
W14x90932 [28]
W14x91016 [28]
W14x91109 [28]
W14x91211 [28]
W14x91297 [28]
W14x91398 [28]
W14x91493 [28]
W14x91584 [28]
W14x91680 [28]
W14x91783 [28]
W14x91873 [28]
W14x91961 [28]
W14x92053 [28]
W14x92159 [28]
W14x92257 [28]
W14x92342 [28]
W14x92445 [28]
W14x92539 [28]
W14x92623 [28]
W14x92730 [28]
W14x92809 [28]
W14x92887 [28]
W14x92966 [28]
W14x93061 [28]
W14x93150 [28]
W14x93233 [28]
W14x93311 [28]
W14x93398 [28]
W14x93482 [28]
W14x93568 [28]
W14x93665 [28]
W14x93756 [28]
W14x93849 [28]
W14x93932 [28]
W14x94016 [28]
W14x94109 [28]
W14x94211 [28]
W14x94297 [28]
W14x94398 [28]
W14x94493 [28]
W14x94584 [28]
W14x94680 [28]
W14x94783 [28]
W14x94873 [28]
W14x94961 [28]
W14x95053 [28]
W14x95159 [28]
W14x95257 [28]
W14x95342 [28]
W14x95445 [28]
W14x95539 [28]
W14x95623 [28]
W14x95730 [28]
W14x95809 [28]
W14x95887 [28]
W14x95966 [28]
W14x96061 [28]
W14x96150 [28]
W14x96233 [28]
W14x96311 [28]
W14x96398 [28]
W14x96482 [28]
W14x96568 [28]
W14x96665 [28]
W14x96756 [28]
W14x96849 [28]
W14x96932 [28]
W14x97016 [28]
W14x97109 [28]
W14x97211 [28]
W14x97297 [28]
W14x97398 [28]
W14x97493 [28]
W14x97584 [28]
W14x97680 [28]
W14x97783 [28]
W14x97873 [28]
W14x97961 [28]
W14x98053 [28]
W14x98159 [28]
W14x98257 [28]
W14x98342 [28]
W14x98445 [28]
W14x98539 [28]
W14x98623 [28]
W14x98730 [28]
W14x98809 [28]
W14x98887 [28]
W14x98966 [28]
W14x99061 [28]
W14x99150 [28]
W14x99233 [28]
W14x99311 [28]
W14x99398 [28]
W14x99482 [28]
W14x99568 [28]
W14x99665 [28]
W14x99756 [28]
W14x99849 [28]
W14x99932 [28]
W14x100016 [28]
W14x100109 [28]
W14x100211 [28]
W14x100297 [28]
W14x100398 [28]
W14x100493 [28]
W14x100584 [28]
W14x100680 [28]
W14x100783 [28]
W14x100873 [28]
W14x100961 [28]
W14x101053 [28]
W14x101159 [28]
W14x101257 [28]
W14x101342 [28]
W14x101445 [28]
W14x101539 [28]
W14x101623 [28]
W14x101730 [28]
W14x101809 [28]
W14x101887 [28]
W14x101966 [28]
W14x102061 [28]
W14x102150 [28]
W14x102233 [28]
W14x102311 [28]
W14x102398 [28]
W14x102482 [28]
W14x102568 [28]
W14x102665 [28]
W14x102756 [28]
W14x102849 [28]
W14x102932 [28]
W14x103016 [28]
W14x103109 [28]
W14x103211 [28]
W14x103297 [28]
W14x103398 [28]
W14x103493 [28]
W14x103584 [28]
W14x103680 [28]
W14x103783 [28]
W14x103873 [28]
W14x103961 [28]
W14x104053 [28]
W14x104159 [28]
W14x104257 [28]
W14x104342 [28]
W14x104445 [28]
W14x104539 [28]
W14x104623 [28]
W14x104730 [28]
W14x104809 [28]
W14x104887 [28]
W14x104966 [28]
W14x105061 [28]
W14x105150 [28]
W14x105233 [28]
W14x105311 [28]
W14x105398 [28]
W14x105482 [28]
W14x105568 [28]
W14x105665 [28]
W14x105756 [28]
W14x105849 [28]
W14x105932 [28]
W14x106016 [28]
W14x106109 [28]
W14x106211 [28]
W14x106297 [28]
W14x106398 [28]
W14x106493 [28]
W14x106584 [28]
W14x106680 [28]
W14x106783 [28]
W14x106873 [28]
W14x106961 [28]
W14x107053 [28]
W14x107159 [28]
W14x107257 [28]
W14x107342 [28]
W14x107445 [28]
W14x107539 [28]
W14x107623 [28]
W14x107730 [28]
W14x107809 [28]
W14x107887 [28]
W14x107966 [28]
W14x108061 [28]
W14x108150 [28]
W14x108233 [28]
W14x108311 [28]
W14x108398 [28]
W14x108482 [28]
W14x108568 [28]
W14x108665 [28]
W14x108756 [28]
W14x108849 [28]
W14x108932 [28]
W14x109016 [28]
W14x109109 [28]
W14x109211 [28]
W14x109297 [28]
W14x109398 [28]
W14x109493 [28]
W14x109584 [28]
W14x109680 [28]
W14x109783 [28]
W14x109873 [28]
W14x109961 [28]
W14x110053 [28]
W14x110159 [28]
W14x110257 [28]
W14x110342 [28]
W14x110445 [28]
W14x110539 [28]
W14x110623 [28]
W14x110730 [28]
W14x110809 [28]
W14x110887 [28]
W14x110966 [28]
W14x111061 [28]
W14x111150 [28]
W14x111233 [28]
W14x111311 [28]
W14x111398 [28]
W14x111482 [28]
W14x111568 [28]
W14x111665 [28]
W14x111756 [28]
W14x111849 [28]
W14x111932 [28]
W14x112016 [28]
W14x112109 [28]
W14x112211 [28]
W14x112297 [28]
W14x112398 [28]
W14x112493 [28]
W14x112584 [28]
W14x112680 [28]
W14x112783 [28]
W14x112873 [28]
W14x112961 [28]
W14x113053 [28]
W14x113159 [28]
W14x113257 [28]
W14x113342 [28]
W14x113445 [28]
W14x113539 [28]
W14x113623 [28]
W14x113730 [28]
W14x113809 [28]
W14x113887 [28]
W14x113966 [28]
W14x114061 [28]
W14x114150 [28]
W14x114233 [28]
W14x114311 [28]
W14x114398 [28]
W14x114482 [28]
W14x114568 [28]
W14x114665 [28]
W14x114756 [28]
W14x114849 [28]
W14x114932 [28]
W14x115016 [28]
W14x115109 [28]
W14x115211 [28]
W14x115297 [28]
W14x115398 [28]
W14x115493 [28]
W14x115584 [28]
W14x115680 [28]
W14x115783 [28]
W14x115873 [28]
W14x115961 [28]
W14x116053 [28]
W14x116159 [28]
W14x116257 [28]
W14x116342 [28]
W14x116445 [28]
W14x116539 [28]
W14x116623 [28]
W14x116730 [28]
W14x116809 [28]
W14x116887 [28]
W14x116966 [28]
W14x117061 [28]
W14x117150 [28]
W14x117233 [28]
W14x117311 [28]
W14x117398 [28]
W14x117482 [28]
W14x117568 [28]
W14x117665 [28]
W14x117756 [28]
W14x117849 [28]
W14x117932 [28]
W14x118016 [28]
W14x118109 [28]
W14x118211 [28]
W14x118297 [28]
W14x118398 [28]
W14x118493 [28]
W14x118584 [28]
W14x118680 [28]
W14x118783 [28]
W14x118873 [28]
W14x118961 [28]
W14x119053 [28]
W14x119159 [28]
W14x119257 [28]
W14x119342 [28]
W14x119445 [28]
W14x119539 [28]
W14x119623 [28]
W14x119730 [28]
W14x119809 [28]
W14x119887 [28]
W14x119966 [28]
W14x120061 [28]
W14x120150 [28]
W14x120233 [28]
W14x120311 [28]
W14x120398 [28]
W14x120482 [28]
W14x120568 [28]
W14x120665 [28]
W14x120756 [28]
W14x120849 [28]
W14x120932 [28]
W14x121016 [28]
W14x121109 [28]
W14x121211 [28]
W14x121297 [28]
W14x121398 [28]
W14x121493 [28]
W14x121584 [28]
W14x121680 [28]
W14x121783 [28]
W14x121873 [28]
W14x121961 [28]
W14x122053 [28]
W14x122159 [28]
W14x122257 [28]
W14x122342 [28]
W14x122445 [28]
W14x122539 [28]
W14x122623 [28]
W14x122730 [28]
W14x122809 [28]
W14x122887 [28]
W14x122966 [28]
W14x123061 [28]
W14x123150 [28]
W14x123233 [28]
W14x123311 [28]
W14x123398 [28]
W14x123482 [28]
W14x123568 [28]
W14x123665 [28]
W14x123756 [28]
W14x123849 [28]
W14x123932 [28]
W14x124016 [28]
W14x124109 [28]
W14x124211 [28]
W14x124297 [28]
W14x124398 [28]
W14x124493 [28]
W14x124584 [28]
W14x124680 [28]
W14x124783 [28]
W14x124873 [28]
W14x124961 [28]
W14x125053 [28]
W14x125159 [28]
W14x125257 [28]
W14x125342 [28]
W14x125445 [28]
W14x125539 [28]
W14x125623 [28]
W14x125730 [28]
W14x125809 [28]
W14x125887 [28]
W14x125966 [28]
W14x126061 [28]
W14x126150 [28]
W14x126233 [28]
W14x126311 [28]
W14x126398 [28]
W14x126482 [28]
W14x126568 [28]
W14x126665 [28]
W14x126756 [28]
W14x126849 [28]
W14x126932 [28]
W14x127016 [28]
W14x127109 [28]
W14x127211 [28]
W14x127297 [28]
W14x127398 [28]
W14x127493 [28]
W14x127584 [28]
W14x127680 [28]
W14x127783 [28]
W14x127873 [28]
W14x127961 [28]
W14x128053 [28]
W14x128159 [28]
W14x128257 [28]
W14x128342 [28]
W14x128445 [28]
W14x128539 [28]
W14x128623 [28]
W14x128730 [28]
W14x128809 [28]
W14x128887 [28]
W14x128966 [28]
W14x129061 [28]
W14x129150 [28]
W14x129233 [28]
W14x129311 [28]
W14x129398 [28]
W14x129482 [28]
W14x129568 [28]
W14x129665 [28]
W14x129756 [28]
W14x129849 [28]
W14x129932 [28]
W14x130016 [28]
W14x130109 [28]
W14x130211 [28]
W14x130297 [28]
W14x130398 [28]
W14x130493 [28]
W14x130584 [28]
W14x130680 [28]
W14x130783 [28]
W14x130873 [28]
W14x130961 [28]
W14x131053 [28]
W14x131159 [28]
W14x131257 [28]
W14x131342 [28]
W14x131445 [28]
W14x131539 [28]
W14x131623 [28]
W14x131730 [28]
W14x131809 [28]
W14x131887 [28]
W14x131966 [28]
W14x132061 [28]
W14x132150 [28]
W14x132233 [28]
W14x132311 [28]
W14x132398 [28]
W14x132482 [28]
W14x132568 [28]
W14x132665 [28]
W14x132756 [28]
W14x132849

HVAC DRAWING NOTES

1.

RFI Pre-24

RFI Pre-43 The joists have shifted. Intumescent paint is only required at the joists along GG & KK. The remaining joist will remain exposed to view.

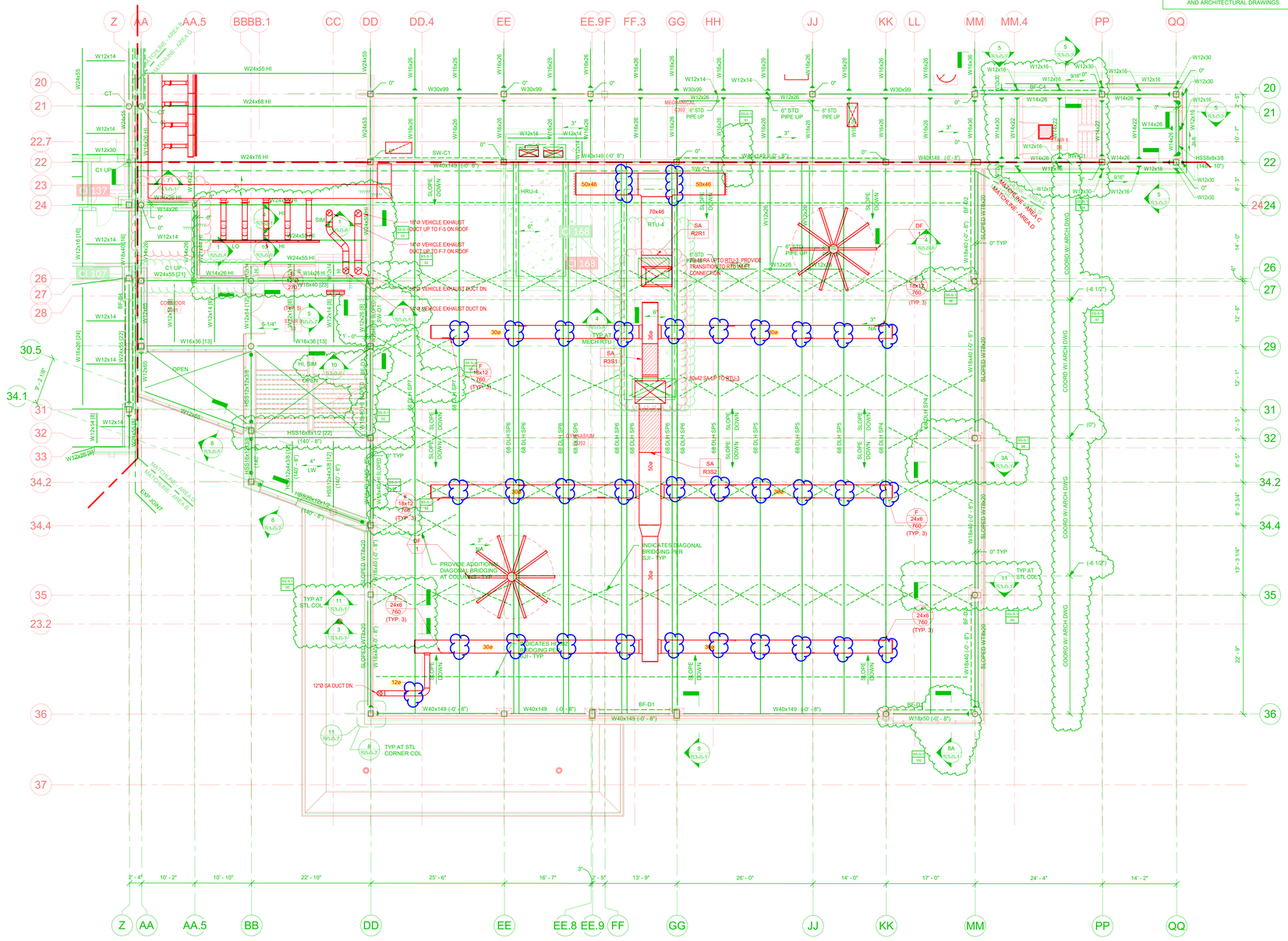
RFI Pre-43

RFI Pre-43 The gymnasium roof deck does not receive cementitious fireproofing. The roof deck will remain exposed to view and painted.

RFI Pre-43

FIREPROOFING NOTES:

1. STEEL COLUMNS SHOWN ON THIS DRAWING SHALL RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS SHALL RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN SHALL RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
2. IN GYMNASIUM, JOISTS ALONG GRIDLINE GG, AND KK SHALL RECEIVE 1-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.
3. STEEL BEAMS AND KICKERS SHOWN ON THIS DRAWING, SUPPORTING UPPER LEVEL FLOORS SHALL RECEIVE 2-HOUR RATING BY CEMENTITIOUS FIREPROOFING.
4. STEEL BEAMS AND KICKERS SHOWN ON THIS DRAWING, SUPPORTING ROOF SHALL RECEIVE 1-HOUR RATING BY CEMENTITIOUS FIREPROOFING. METAL ROOF DECK TO RECEIVE 1-HOUR CREDIT USING ACCEPTABLE UNDERSIDE OF DECK FINISH.
5. CONCEALED FROM VIEW BRACED FRAMES AND HORIZONTAL HSS GIRTS SHALL RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING .
6. EXPOSED TO VIEW BRACED FRAMES AND HORIZONTAL HSS GIRTS SHALL RECEIVE 2-HOUR FIRE RATING BY INTUMENCENT MASTIC FIREPROOFING.
7. AT STAIRS 3 AND 6, ALL EXPOSED TO VIEW STRUCTURE SHALL RECEIVE 2-HOUR RATING BY INTUMESCENT MASTIC FIREPROOFING
8. EXPOSED TO VIEW HORIZONTAL HSS TUBES IN GYMNASIUM AND SUPPORTING CURTAINWALL CW2 SHALL RECEIVE 2-HOUR RATING BY INTUMESCENT MASTIC FIREPROOFING.
9. COORDINATE FIREPROOFING REQUIREMENTS WITH THE SPECIFICATIONS AND ARCHITECTURAL DRAWINGS.



FRAMING ELEVATION NOTES:

1.) TYPICAL UNDERSIDE-OF-DECK ELEVATION = (147' - 6 3/4") AT THE FOURTH FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (AA) - (DD) AND (24) - (34.4). UNLESS NOTED OTHERWISE AS (X' - X"), (+/-X' - X"), OR HI/LO.

2.) TYPICAL UNDERSIDE-OF-DECK ELEVATION = (152' - 4") ALONG THE PERIMETER OF THE GYM ROOF LEVEL, IN THE AREA BOUNDED BY GRIDS (DD) - (MM) AND (22) - (36). UNLESS NOTED OTHERWISE AS (X' - X"), (+/-X' - X"), OR HI/LO.

3.) FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION = (148' - 0"), SHOWN ON THE ARCHITECTURAL DRAWINGS.

4.) COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

5.) SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

BRACE FRAME KEY

0" TYP — WF / BF-X — INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL

0" TYP — BF-X / WF — INDICATES A BRACE FRAME ABOVE LEVEL

0" TYP — WF / BF-X — INDICATES A BRACE FRAME BELOW LEVEL

Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METRO TECH

100 Hemlock Rd,
Wakefield, MA 01880

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

REVISION LIST

SS-S-1	4/14/2023	STRUCTURAL STEEL ADDENDUM 1

EARLY STRUCTURAL BID PACKAGE

MARCH 31, 2023

KEY PLAN

A B C D

PROJECT NORTH | MAGNETIC NORTH

FOURTH FLOOR FRAMING PLAN - AREA D

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: DRA
Date: March 31st, 2023

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA CONSULTING ENGINEERS, INC.
21 CHESTNUT PLACE
BOSTON, MA 02114-1109
TEL: 617.367.6666 FAX: 617.367.0166
WWW.BALA.COM
BALA ENGINEERS
STRUCTURAL · MECHANICAL · ELECTRICAL · PLUMBING · FIRE PROTECTION · SPECIAL SYSTEMS · TECHNOLOGY · COMMISSIONING

90% CD COST ESTIMATE

March 31st, 2023

KEY PLAN

A B C D

PROJECT NORTH | MAGNETIC NORTH

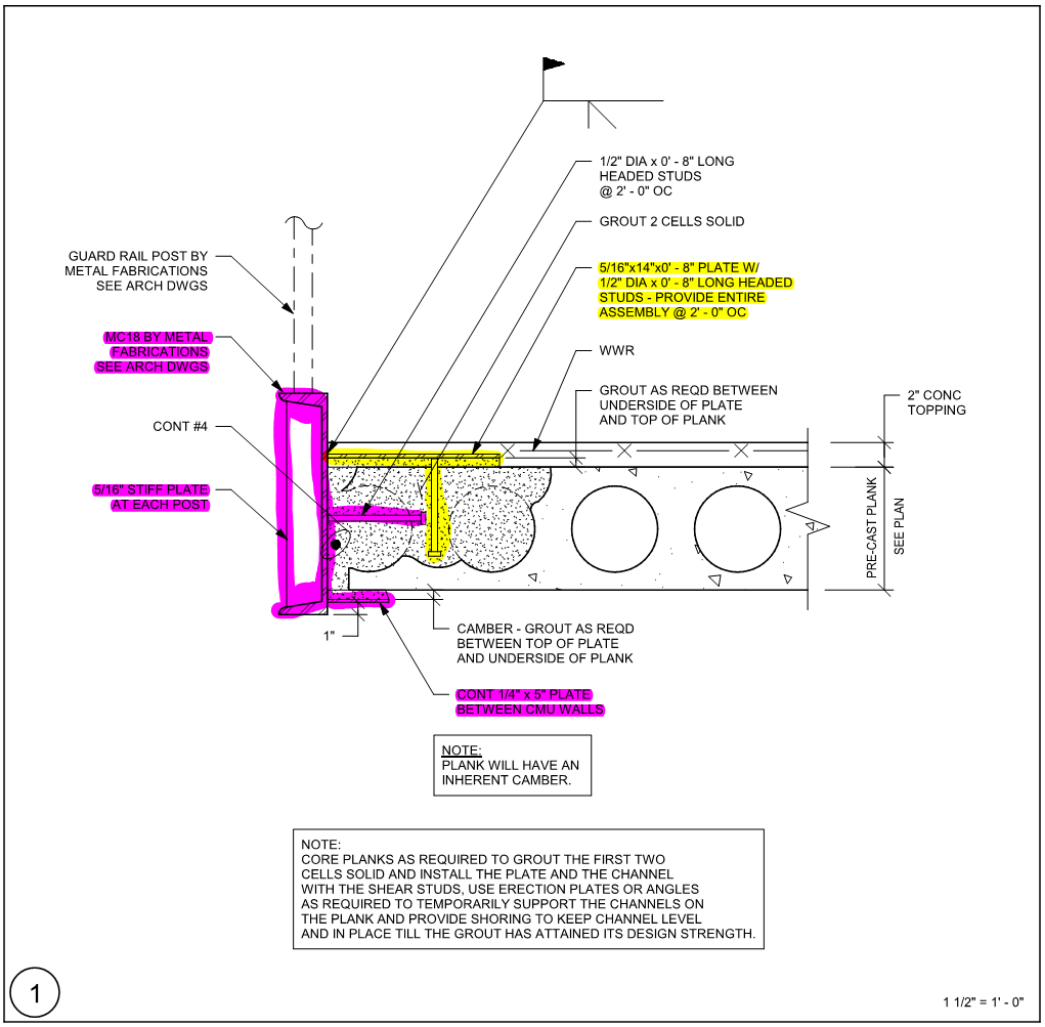
MECHANICAL DUCTWORK THIRD FLOOR PLAN - AREA D

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: DRA
Date: March 31st, 2023

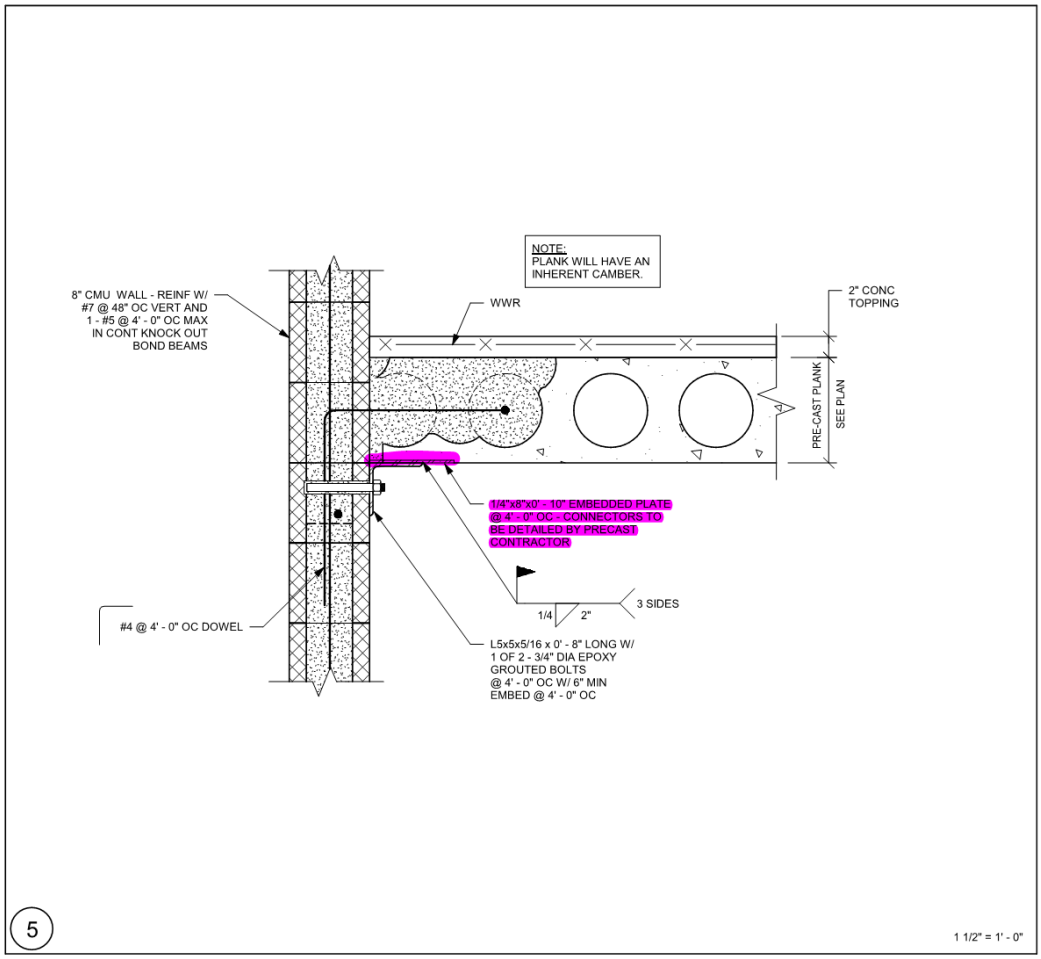
M1-1-3D

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

1/S2-0-2


1/2" DIA x 0' - 8" LONG
HEADED STUDS
@ 2' - 0" OC
GROUT 2 CELLS SOLID
GUARD RAIL POST BY
METAL FABRICATIONS
SEE ARCH DWGS
5/16"x14"x0' - 8" PLATE W/
1/2" DIA x 0' - 8" LONG HEADED
STUDS - PROVIDE ENTIRE
ASSEMBLY @ 2' - 0" OC
WWR
MC18 BY METAL
FABRICATIONS
SEE ARCH DWGS
GROUT AS REQD BETWEEN
UNDERSIDE OF PLATE
AND TOP OF PLANK
2" CONC
TOPPING
CONT #4
5/16" STIFF PLATE
AT EACH POST
PRE-CAST PLANK
SEE PLAN
1"
CAMBER - GROUT AS REQD
BETWEEN TOP OF PLATE
AND UNDERSIDE OF PLANK
CONT 1/4" x 5" PLATE
BETWEEN CMU WALLS
NOTE:
PLANK WILL HAVE AN
INHERENT CAMBER.
NOTE:
CORE PLANKS AS REQUIRED TO GROUT THE FIRST TWO
CELLS SOLID AND INSTALL THE PLATE AND THE CHANNEL
WITH THE SHEAR STUDS, USE ERECTION PLATES OR ANGLES
AS REQUIRED TO TEMPORARILY SUPPORT THE CHANNELS ON
THE PLANK AND PROVIDE SHORING TO KEEP CHANNEL LEVEL
AND IN PLACE TILL THE GROUT HAS ATTAINED ITS DESIGN STRENGTH.
1
1 1/2" = 1' - 0"

5/S2-0-2


NOTE:
PLANK WILL HAVE AN
INHERENT CAMBER.
8" CMU WALL - REINF W/
#7 @ 48" OC VERT AND
1 - #5 @ 4' - 0" OC MAX
IN CONT KNOCK OUT
BOND BEAMS
WWR
2" CONC
TOPPING
PRE-CAST PLANK
SEE PLAN
1/4"x8"x0' - 10" EMBEDDED PLATE
@ 4' - 0" OC - CONNECTORS TO
BE DETAILED BY PRECAST
CONTRACTOR
3 SIDES
1/4
2"
#4 @ 4' - 0" OC DOWEL
L5x5x5/16 x 0' - 8" LONG W/
1 OF 2 - 3/4" DIA EPOXY
GROUTED BOLTS
@ 4' - 0" OC W/ 6" MIN
EMBED @ 4' - 0" OC
5
1 1/2" = 1' - 0"

RFI #Pre-1

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Radon Mitigation System Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** *(Response Required)*	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	12/19/2022	**STATUS:**	Closed on 01/06/23
LOCATION:	Main Building>00 - Underground	**DUE DATE:**	12/26/2022
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	312000 - Earth Moving
DRAWING NUMBER:	P1-0-0A; GT--0-1; GT-0-2	**REFERENCE:**	
LINKED DRAWINGS:	P1-0-0A, P1-0-0B, P1-0-0C, P1-0-0D		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Anthony Lopresti **(PMA Consultants LLC)**, Kevin Nigro **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:29 PM on 12/19/2022

Reference underground plumbing drawings (P1-0-0A for example), specifically the Scope Notes. Scope Note 1 references plumbing scope required for radon mitigation system through the building (from lower level thru roof). Scope Note 2 indicates "Provide dedicated venting from underslab drainage system thru roof." Please clarify the following:
1. The underslab drainage system referenced is the piping shown on the Geotechnical Drawings (GT-0-1 and GT-0-2), correct?
2. Clarification - it appears that the underground components for the radon mitigation system will be comprised of the underslab drainage piping only (with no separate dedicated piping for the mitigation system). Is that correct?
3. Will the underslab drainage piping system indicated on the Geotechnical Plans (GT-0-1 and GT-0-2) be assigned to the Plumbing Filed Sub Bid specifications and drawing lists?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, January 5th, 2023 at 2:10PM EST*
Underslab drainage shown on the GeoTechnical Plans will be assigned to the Plumbing Filed Sub Bid

Attachments:

Official Response: **Donald Venerus (Gilbane Building Company)** *responded on Thursday, January 5th, 2023 at 10:41AM EST*
Reference question 3: will underslab drainage be assigned to the Plumbing Filed Sub Bid?

Attachments:

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, December 22nd, 2022 at 4:40PM EST*
Refer to the attached RFI response

Attachments:
RFI PRE-1_Geo-Radon Mitigation Clarification-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-1

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Radon Mitigation System Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** *(Response Required)*	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	12/19/2022	**STATUS:**	Open
LOCATION:	Main Building>00 - Underground	**DUE DATE:**	12/26/2022
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	312000 - Earth Moving
DRAWING NUMBER:	P1-0-0A; GT--0-1; GT-0-2	**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Anthony Lopresti **(PMA Consultants LLC)**, Kevin Nigro **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:29 PM on 12/19/2022

Reference underground plumbing drawings (P1-0-0A for example), specifically the Scope Notes. Scope Note 1 references plumbing scope required for radon mitigation system through the building (from lower level thru roof). Scope Note 2 indicates "Provide dedicated venting from underslab drainage system thru roof." Please clarify the following:
1. The underslab drainage system referenced is the piping shown on the Geotechnical Drawings (GT-0-1 and GT-0-2), correct?
2. Clarification - it appears that the underground components for the radon mitigation system will be comprised of the underslab drainage piping only (with no separate dedicated piping for the mitigation system). Is that correct?
3. Will the underslab drainage piping system indicated on the Geotechnical Plans (GT-0-1 and GT-0-2) be assigned to the Plumbing Filed Sub Bid specifications and drawing lists?

Awaiting an Official Response

DRA RESPONSE:
Refer to LGCI response below.

ANGEL KHAZADIAN
12/22/2022

LGCI RESPONSE:

The pipe stacks for the radon system are NOT connected to the under-slab drainage pipes shown on the Geotechnical drawings. The bottom of the vertical radon pipes are connected to the crushed stone that is part of the under-slab drainage system, and the pipes daylight at the roof of the building. The piping is shown on the plumbing drawings.

MJ
12/20/2020

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-2

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Steel Guardrail Support Detail at Segmented Retaining Wall and Precast Culvert

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Josh Millonig **(Warner Larson Landscape Architects)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** *(Response Required)*	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
		STATUS:	Closed on 03/02/23
		DUE DATE:	12/26/2022
DATE INITIATED:	12/19/2022	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Pre-Construction	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:	L-302; L-601, C-602		
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Anthony Lopresti **(PMA Consultants LLC)**, Kevin Nigro **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 03:38 PM on 12/19/2022

Reference attached excerpt from L-302 (Materials Plan). There are several locations where anticipated guardrail support needs coordination with other details.
1. At locations where the guardrail is located close to the segmented retaining wall, please provide detail for this condition.
2. The guardrail also shows support posts over the precast drainage culverts, but it does not appear there is enough depth for the typical below grade dimension required. Please review and provide detail for this condition (or anticipated installation requirement).

Attachments:
RFI guardrail.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, January 18th, 2023 at 5:26PM EST*

Refer to attached RFI response.

Attachments:
RFI PRE-2_Land-Steel Guardrail Support at Segmented Wall-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-2

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Steel Guardrail Support Detail at Segmented Retaining Wall and Precast Culvert

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	12/19/2022		
LOCATION:		**STATUS:**	Open
PROJECT STAGE:	Pre-Construction	**DUE DATE:**	12/26/2022
SUB JOB:		**COST CODE:**	
COST IMPACT:		**SCHEDULE IMPACT:**	
DRAWING NUMBER:	L-302; L-601, C-602	**SPEC SECTION:**	
LINKED DRAWINGS:		**REFERENCE:**	

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Anthony Lopresti **(PMA Consultants LLC)**, Kevin Nigro **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 03:38 PM on 12/19/2022

Reference attached excerpt from L-302 (Materials Plan). There are several locations where anticipated guardrail support needs coordination with other details.
1. At locations where the guardrail is located close to the segmented retaining wall, please provide detail for this condition.
2. The guardrail also shows support posts over the precast drainage culverts, but it does not appear there is enough depth for the typical below grade dimension required. Please review and provide detail for this condition (or anticipated installation requirement).

Attachments:
RFI guardrail.pdf

Awaiting an Official Response

DRA RESPONSE:

Refer to WLI response below. Note that the details attached will be included in the furture bid documents and are NOT part of the Early Site Preparation scope of work

ANGEL KHAZADIAN
01/18/2023

WLI RESPONSE:

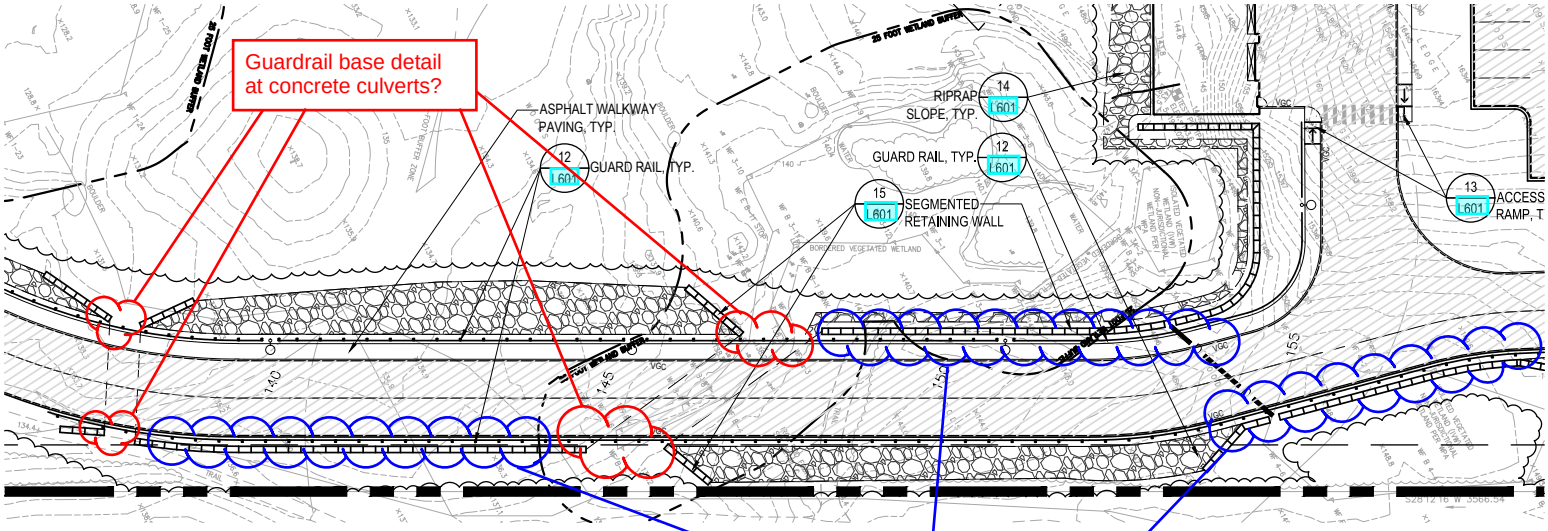
See attached SKL-001 to SKL-005 for details on guardrails.

JOSH MILLONIG
01/18/2023

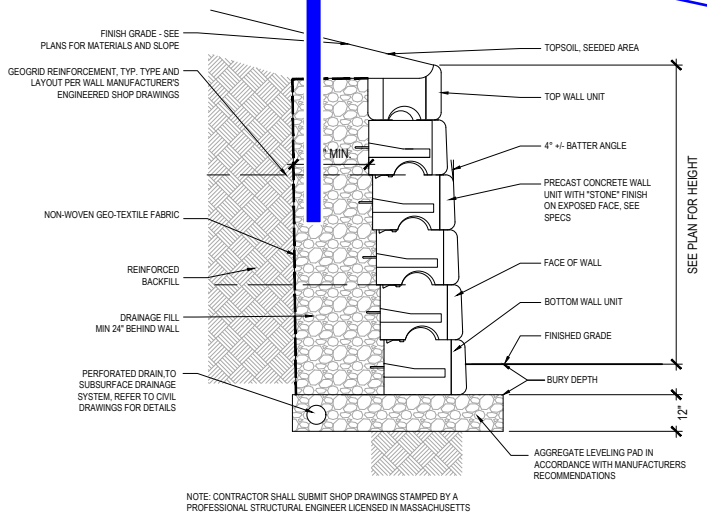
If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

L-302



L-601

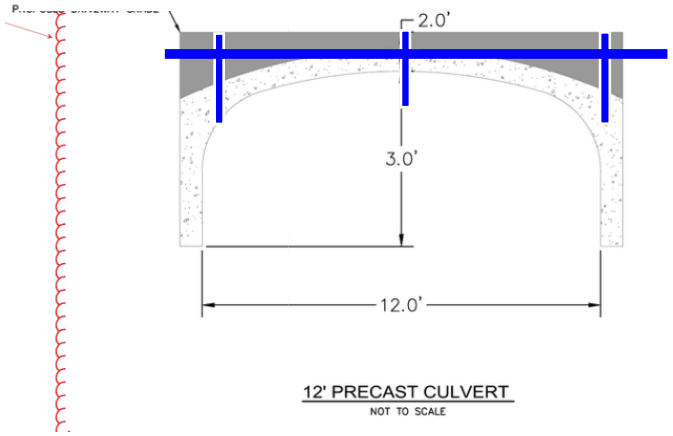


15 SEGMENTAL RETAINING WALL

SCALE: 1/2" = 1'-0"

L-601

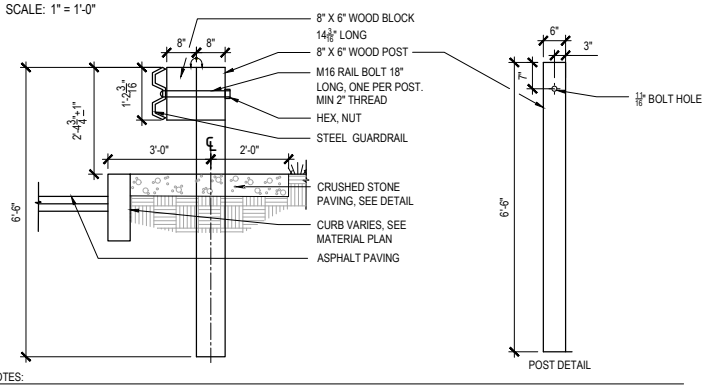
C-602



12' PRECAST CULVERT

NOT TO SCALE

SCALE: 1" = 1'-0"

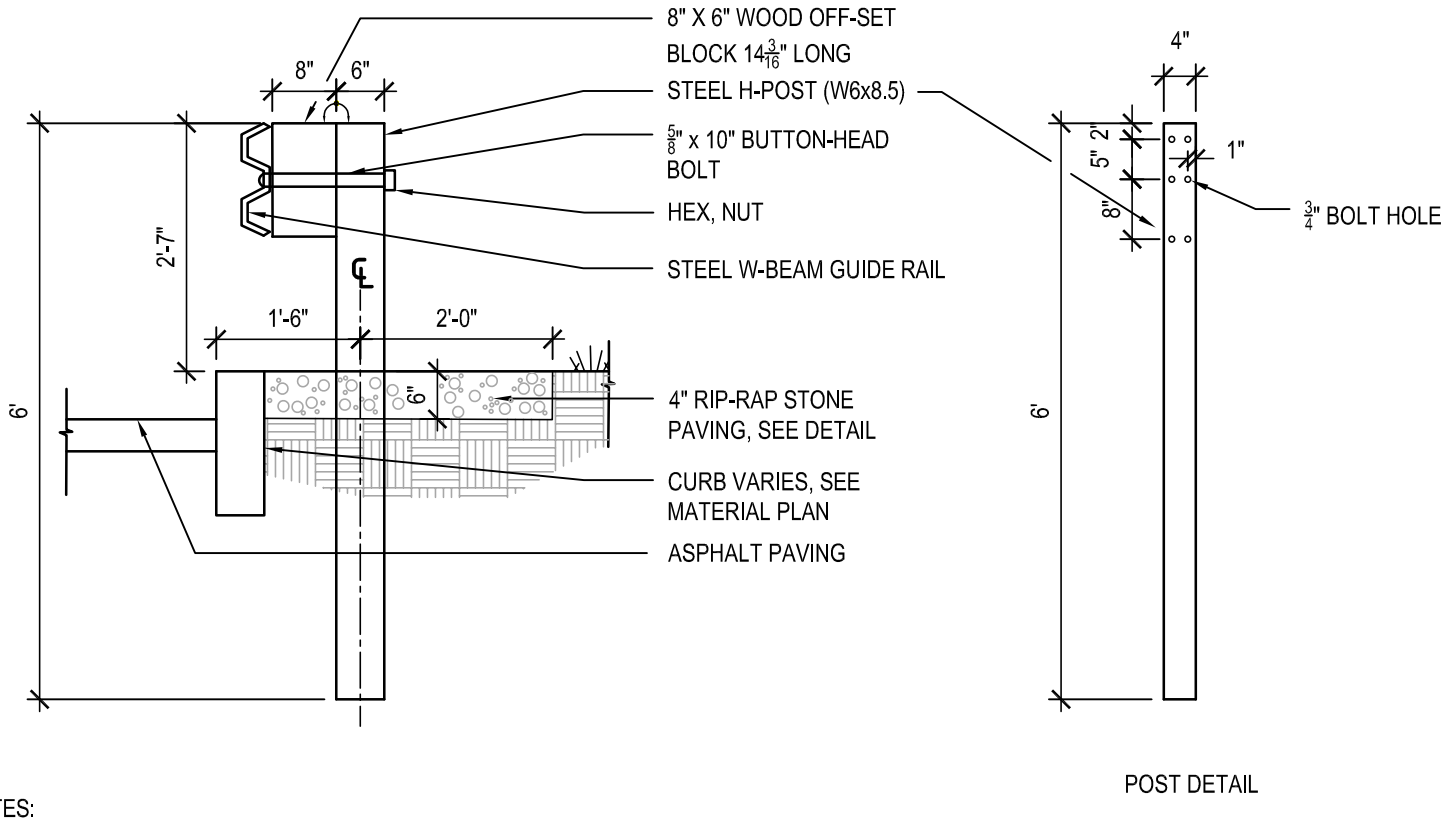


NOTES:

1. 6' O.C. POST SPACING
2. ALL NUTS, BOLTS AND WASHERS ARE TO BE CORTEN STEEL.
3. ALL MATERIALS AND DIMENSIONS OF FITTINGS NOT SHOWN ABOVE ARE TO BE SIMILAR TO THE CORRESPONDING ELEMENTS SHOWN FOR STEEL "H" POSTS
4. ALL SPLICES ARE TO BE MADE AT POSTS
5. FOR THE TYPE OF WOOD AND WOOD TREATMENTS, OTHER MATERIALS AND METHODS OF CONSTRUCTION SEE SPECIFICATIONS
6. STEEL POSTS ARE TO BE SUBSTITUTED A THE SAME BID PRICE, FOR WOOD POSTS IN A WOOD POST RUN WHEN CEMENT CONCRETE EMBEDMENT IN REQUIRED.

12 STEEL GUARDRAIL

SCALE: 1/2" = 1'-0"



POST DETAIL

NOTES:

1. ALL WOOD SHALL BE SELECT STRUCTURAL GRADE SOUTHERN YELLOW PINE OR DOUGLAS FIR, S-4-S.
2. ALL WOOD SHALL BE FULL CELL PROCESS PRESSURE TREATED IN ACCORDANCE W/ AWPB - LP33.
3. ALL NUTS, BOLTS AND WASHERS ARE TO BE CORTEN STEEL OR GALZANIZED.
4. ALL SPLICES ARE TO BE MADE AT POSTS
5. STEEL POSTS ARE TO BE FABRICATED FROM W6x8.5 STEEL SECTION
6. POSTS SHALL BE SPACED 8'-0" ON-CENTER (O.C.)
7. GUARDRAIL AND POST SHALL COMPLY WITH MDOT STANDARD SPECIFICATION M8.07.0

12

STEEL GUIDE RAIL WITH METAL POST & BLOCK

SCALE: 1/2" = 1'-0"

Drummey Rosane Anderson, Inc.
260 Charles Street, 3rd Floor
Waltham, MA 02453
617.964.1700
info@draws.com

Planning | Architecture | Interior Design

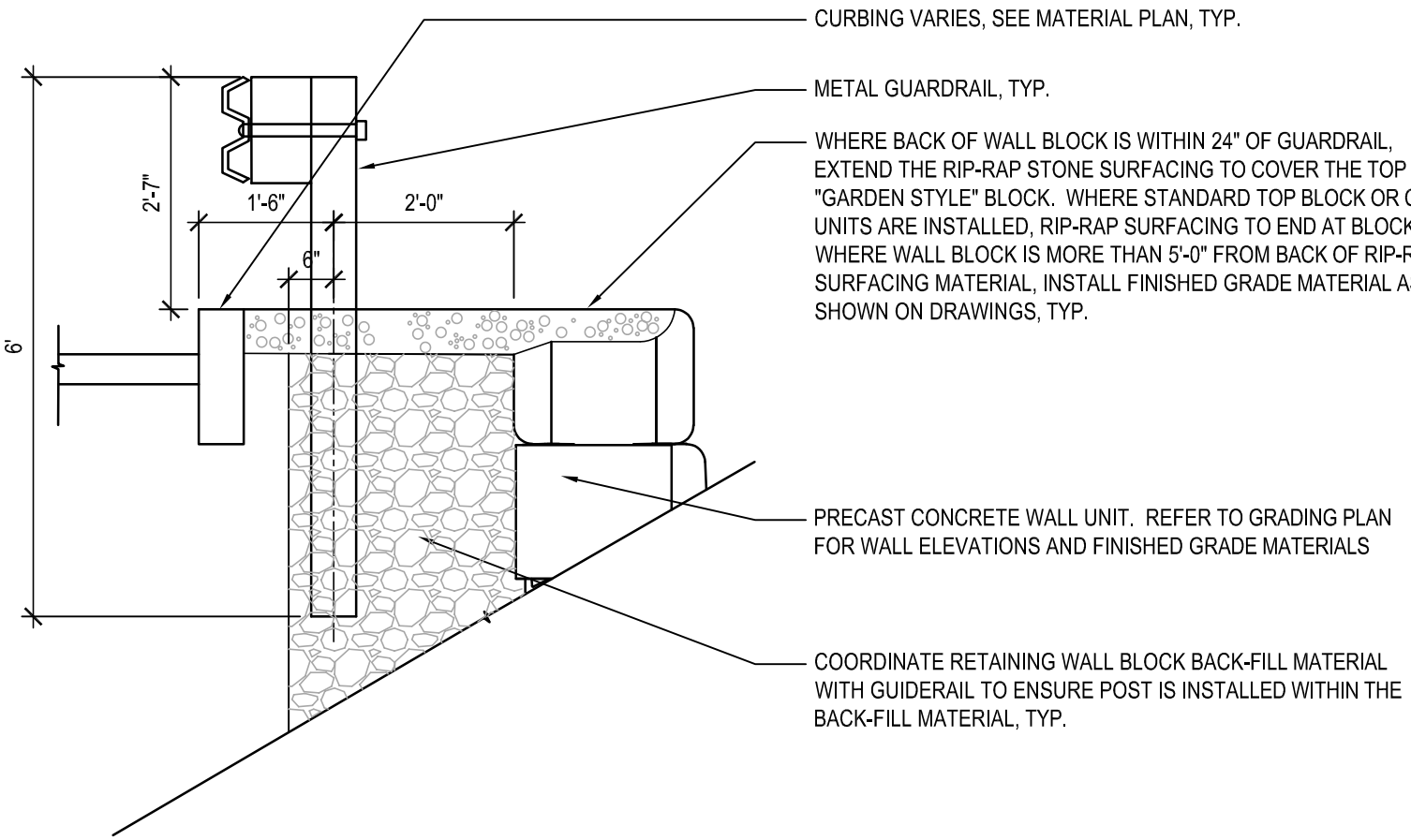
DRA

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 HEMLOCK RD,
WAKEFIELD, MA 01880

SKL - PRE-001
Ref. dwg. - #12 on L601
SKL Title -
RFI#Pre-2: STEEL GUARDRAIL SUPPORT DETAIL: REVISED GUARDRAIL DETAIL

Scale: AS NOTED
Drawn By: JDM
Job No.: 15012.00
Date: 2023-01-13



Drummey Rosane Anderson, Inc.
260 Charles Street, 3rd Floor
Waltham, MA 02453
617.964.1700
info@draws.com

Planning | Architecture | Interior Design

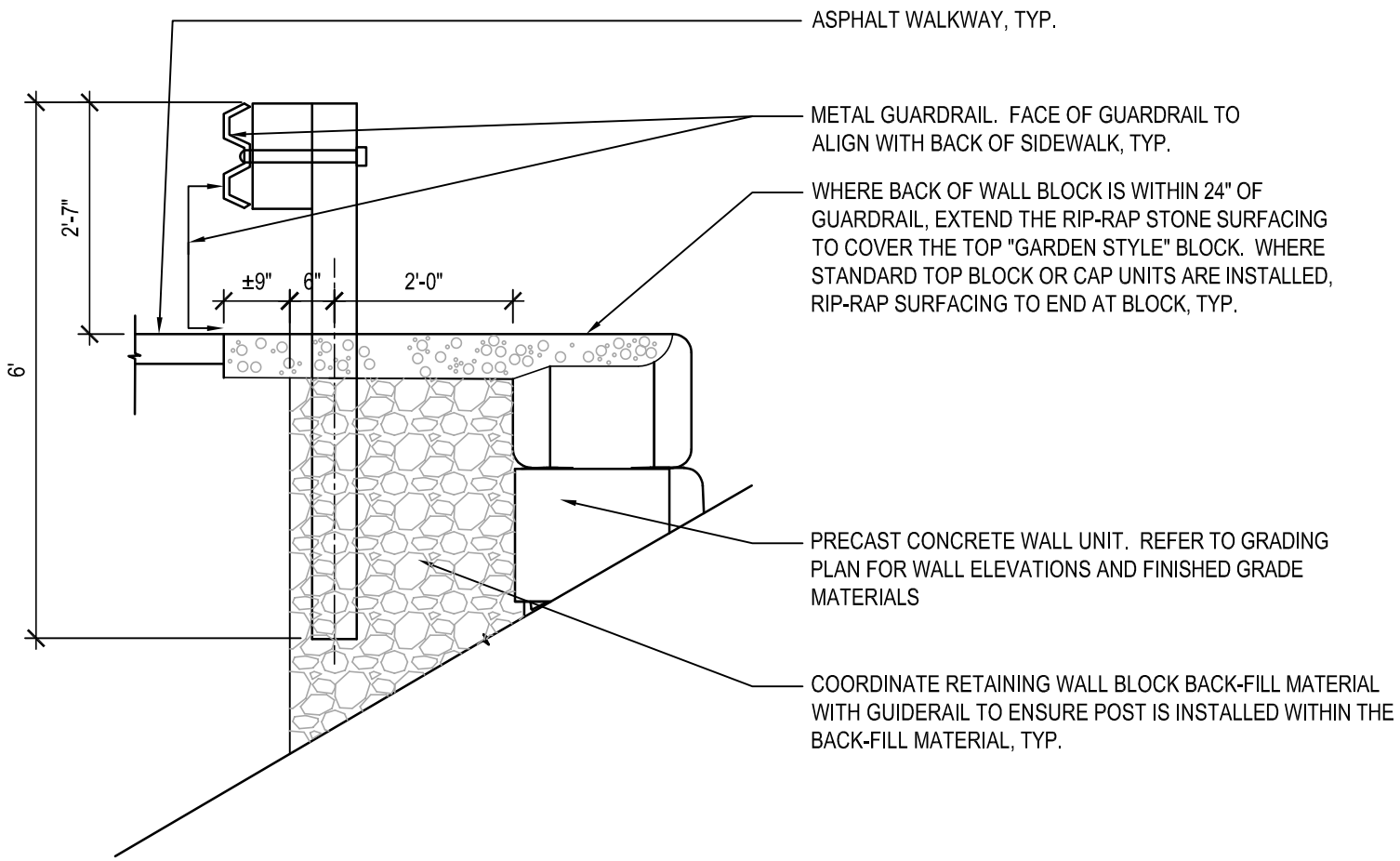
DRA

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 HEMLOCK RD,
WAKEFIELD, MA 01880

SKL - PRE-002
Ref. dwg. - #12 on L601
SKL Title -
RFI#Pre-2: STEEL GUARDRAIL SUPPORT DETAIL: GUARDRAIL DETAIL AT RETAINING WALL

Scale: NOT TO SCALE
Drawn By: JDM
Job No.: 15012.00
Date: 2023-01-13



Drummey Rosane Anderson, Inc.
260 Charles Street, 3rd Floor
Waltham, MA 02453
617.964.1700
info@draws.com

Planning | Architecture | Interior Design

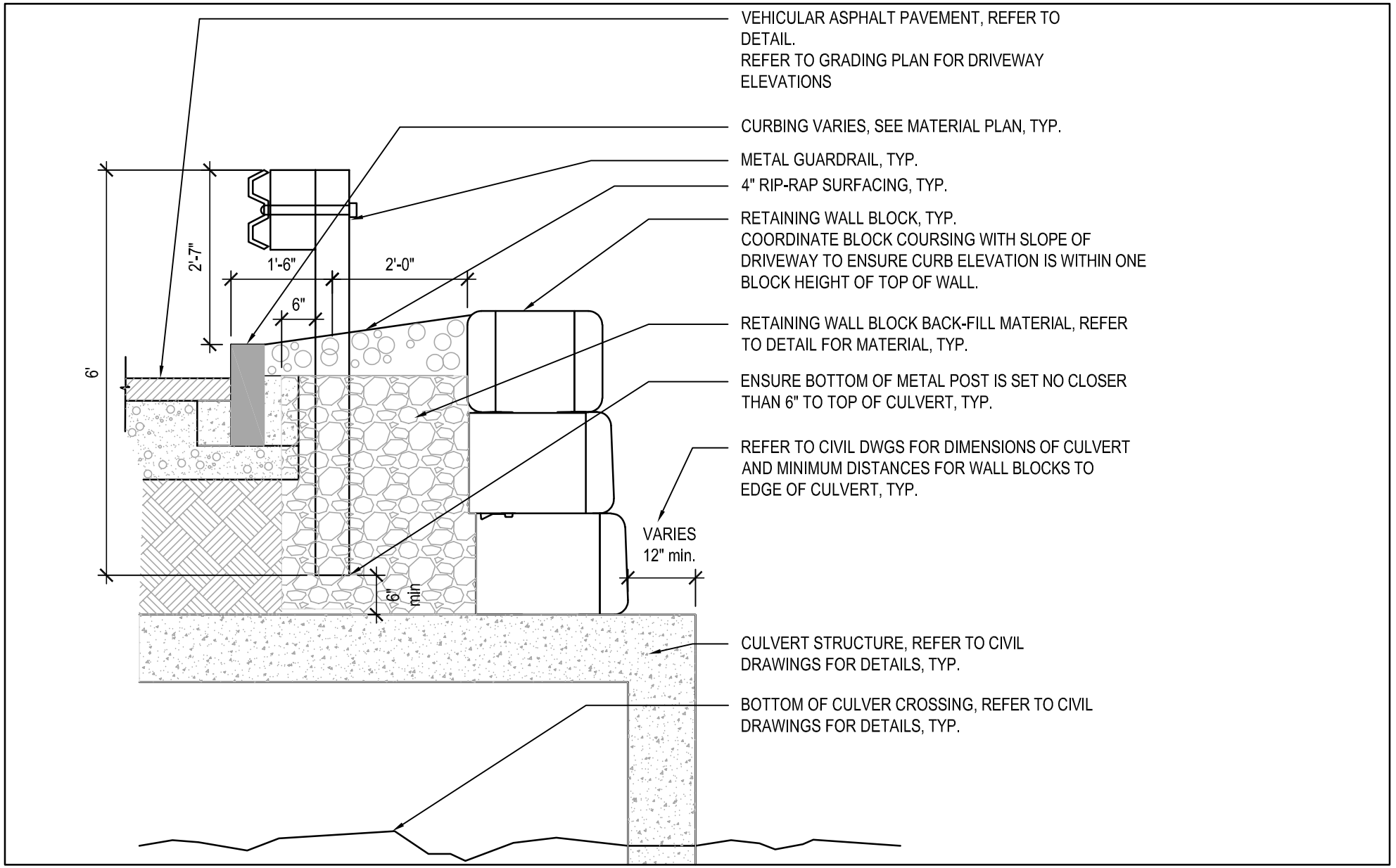
DRA

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 HEMLOCK RD,
WAKEFIELD, MA 01880

SKL - PRE-003
Ref. dwg. - #12 on L601
SKL Title -
RFI#Pre-2: STEEL GUARDRAIL SUPPORT DETAIL: GUARDRAIL DETAIL AT SIDEWALK

Scale: NOT TO SCALE
Drawn By: JDM
Job No.: 15012.00
Date: 2023-01-13



Drummey Rosane Anderson, Inc.
260 Charles Street, 3rd Floor
Waltham, MA 02453
617.964.1700
info@draws.com

Planning | Architecture | Interior Design

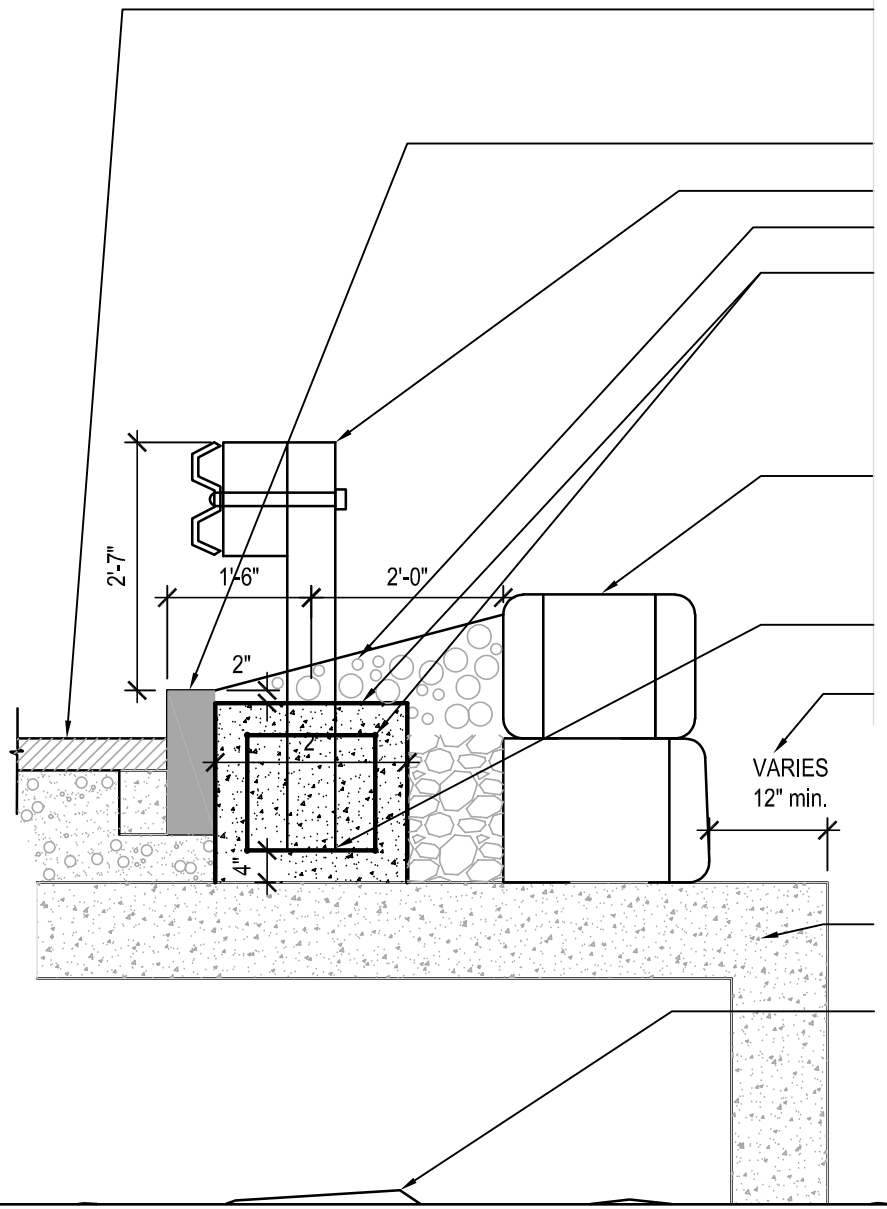
DRA

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 HEMLOCK RD,
WAKEFIELD, MA 01880

SKL - PRE-004
Ref. dwg. - #12 on L601
SKL Title -
RFI#Pre-2: STEEL GUARDRAIL SUPPORT DETAIL: GUARDRAIL DETAIL AT CULVERT - DEEP

Scale: NOT TO SCALE
Drawn By: JDM
Job No.: 15012.00
Date: 2023-01-13



VEHICULAR ASPHALT PAVEMENT, REFER TO DETAIL.
REFER TO GRADING PLAN FOR DRIVEWAY ELEVATIONS

CURBING VARIES, SEE MATERIAL PLAN, TYP.

METAL GUARDRAIL, TYP.

4" RIP-RAP SURFACING, TYP.

WHERE ELEVATION OF CULVERT PREVENTS INSTALL OF A FULL LENGTH METAL POST, TRIM BOTTOM OF METAL POST AND SET INTO CONCRETE FOOTING. CONCRETE FOOTING TO BE A MIN. OF 24" Dia WITH TOP OF FOOTING SET 2" BELOW THE ABUTTING CURB ELEVATION. FOOTING TO HAVE #3-BAR CAGE, TYP.

RETAINING WALL BLOCK, TYP.
COORDINATE BLOCK COURSING WITH SLOPE OF DRIVEWAY TO ENSURE CURB ELEVATION IS WITHIN ONE BLOCK HEIGHT OF TOP OF WALL.

ENSURE BOTTOM OF METAL POST IS SET NO CLOSER THAN 4" TO TOP OF CULVERT, TYP.

REFER TO CIVIL DWGS FOR DIMENSIONS OF CULVERT AND MINIMUM DISTANCES FOR WALL BLOCKS TO EDGE OF CULVERT, TYP.

CULVERT STRUCTURE, REFER TO CIVIL DRAWINGS FOR DETAILS, TYP.

BOTTOM OF CULVER CROSSING, REFER TO CIVIL DRAWINGS FOR DETAILS, TYP.

Drummey Rosane Anderson, Inc.
260 Charles Street, 3rd Floor
Waltham, MA 02453
617.964.1700
info@draws.com

Planning | Architecture | Interior Design

DRA

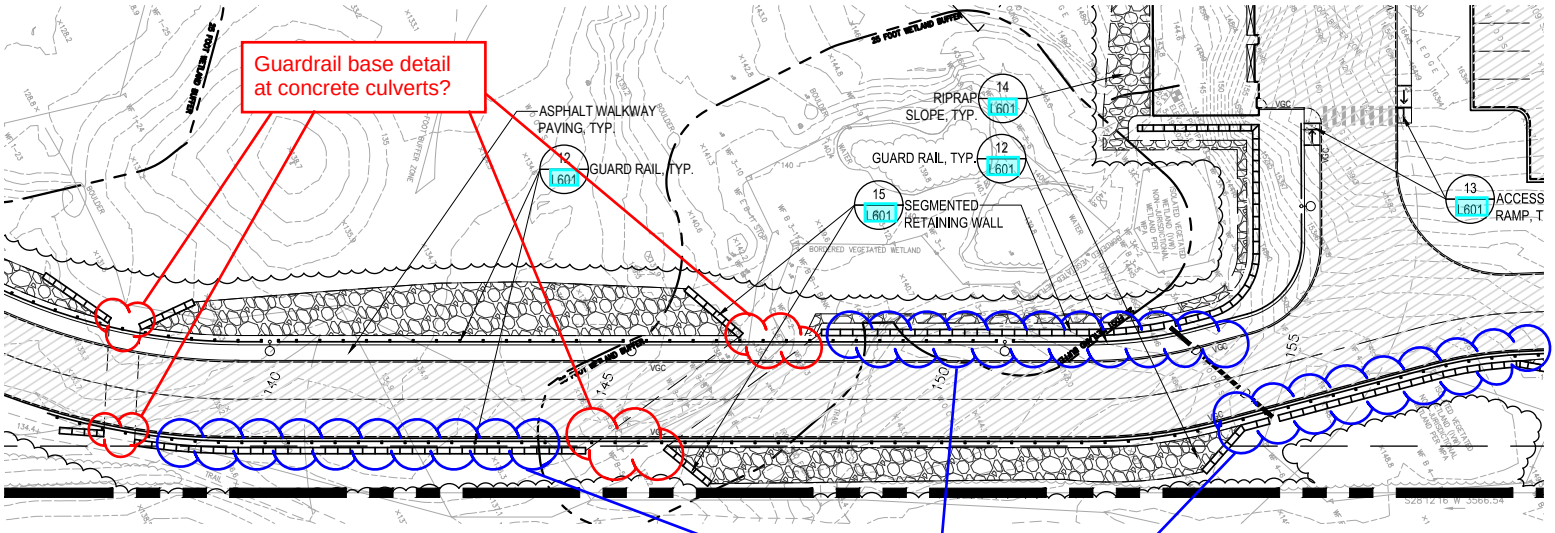
NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 HEMLOCK RD,
WAKEFIELD, MA 01880

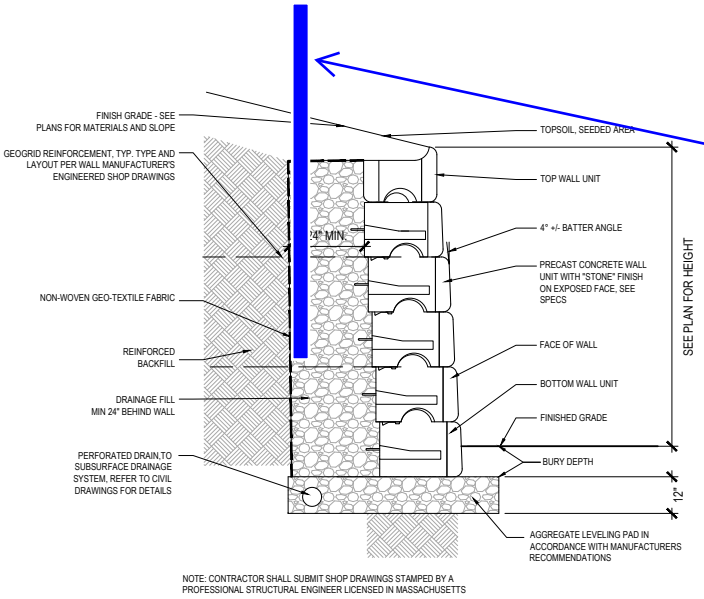
SKL - PRE-005
Ref. dwg. - #12 on L601
SKL Title -
RFI#Pre-2: STEEL GUARDRAIL SUPPORT DETAIL: GUARDRAIL DETAIL AT CULVERT - SHALLOW

Scale: NOT TO SCALE
Drawn By: JDM
Job No.: 15012.00
Date: 2023-01-13

L-302



L-601

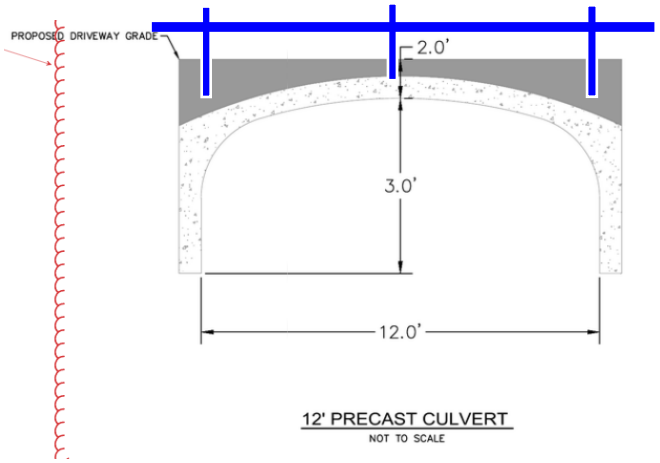


Approximate Guardrail Location

NOTE: CONTRACTOR SHALL SUBMIT SHOP DRAWINGS STAMPED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN MASSACHUSETTS

15 SEGMENTAL RETAINING WALL
SCALE: 1/2" = 1'-0"

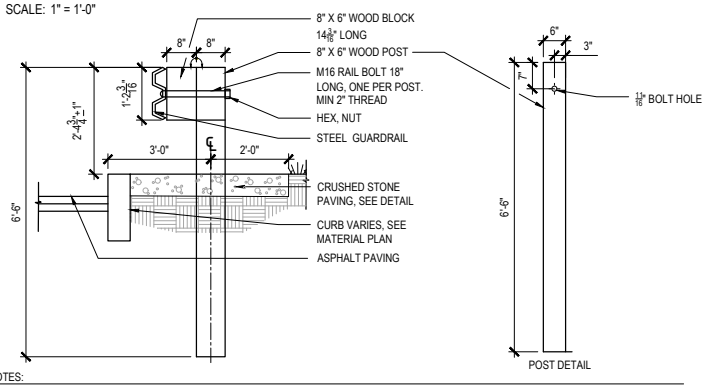
C-602



12' PRECAST CULVERT
NOT TO SCALE

L-601

SCALE: 1" = 1'-0"



NOTES:
1. 6' O.C. POST SPACING
2. ALL NUTS, BOLTS AND WASHERS ARE TO BE CORTEN STEEL.
3. ALL MATERIALS AND DIMENSIONS OF FITTINGS NOT SHOWN ABOVE ARE TO BE SIMILAR TO THE CORRESPONDING ELEMENTS SHOWN FOR STEEL "H" POSTS
4. ALL SPLICES ARE TO BE MADE AT POSTS
5. FOR THE TYPE OF WOOD AND WOOD TREATMENTS, OTHER MATERIALS AND METHODS OF CONSTRUCTION SEE SPECIFICATIONS
6. STEEL POSTS ARE TO BE SUBSTITUTED A THE SAME BID PRICE, FOR WOOD POSTS IN A WOOD POST RUN WHEN CEMENT CONCRETE EMBEDMENT IN REQUIRED.

12 STEEL GUARDRAIL
SCALE: 1/2" = 1'-0"

RFI #Pre-3

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Permanent Site Drainage Connections

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** *(Response Required)*	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	01/05/2023	**STATUS:**	Closed on 04/06/23
LOCATION:		**DUE DATE:**	01/12/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, David Conway **(Nitsch Engineering, Inc.)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Kevin Nigro **(PMA Consultants LLC)**, Page Simmons **(Nitsch Engineering, Inc.)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:41 PM on 01/05/2023

The areas shown highlighted in pink on the attached sketch represent drainage that will flow from the new school site. In general, all of this drainage will flow under the Hemlock Road Access Drive and daylight onto the slope, flowing downhill until it is collected in a small drainage pond. From there it eventually flows out to an existing headwall connection (drainage piping shown highlighted in orange. However, the installation of this piping, as well as the grading to accommodate it, does not get installed until after the new school is online and the current school is no longer in use.

- Please see the attached spreadsheet which includes rim grades and pipe inverts from Drawing C-406 Drainage Table as well as existing finish grades estimated from the Contract Grading plans. This spreadsheet also provides top of pipe elevations and shows the cover over these pipes if installed prior to the final finish grades being established.

1. If the piping is to be installed from the small drainage pond to the headwall, please provide whatever adjustments are necessary to allow for sufficient cover over these drain lines.
2. Please provide any revisions (inverts, hole locations, etc.) to the structures shown on the spreadsheet to accommodate these adjustments.

- Drawing C-402 Drainage Plan III, does not show a WQS between the previously mentioned small drainage pond and the connection at the existing headwall at DMH 376. Please advise if a WQS should be added along this line and if so, provide details as to where it should be located.
- The installation of the drainage between DMH 380 & DMH 381 will most likely require the removal of the temporary classroom trailers located at the front of the school if this drainage needs to be installed prior to the students moving out of the existing school.

Attachments:
RFI Sketch Permanent Site Drainage Connections.pdf RFI Spreadsheet Permanent Site Drainage Connection.xlsx

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, February 9th, 2023 at 4:34PM EST*

Refer to attached RFI response.

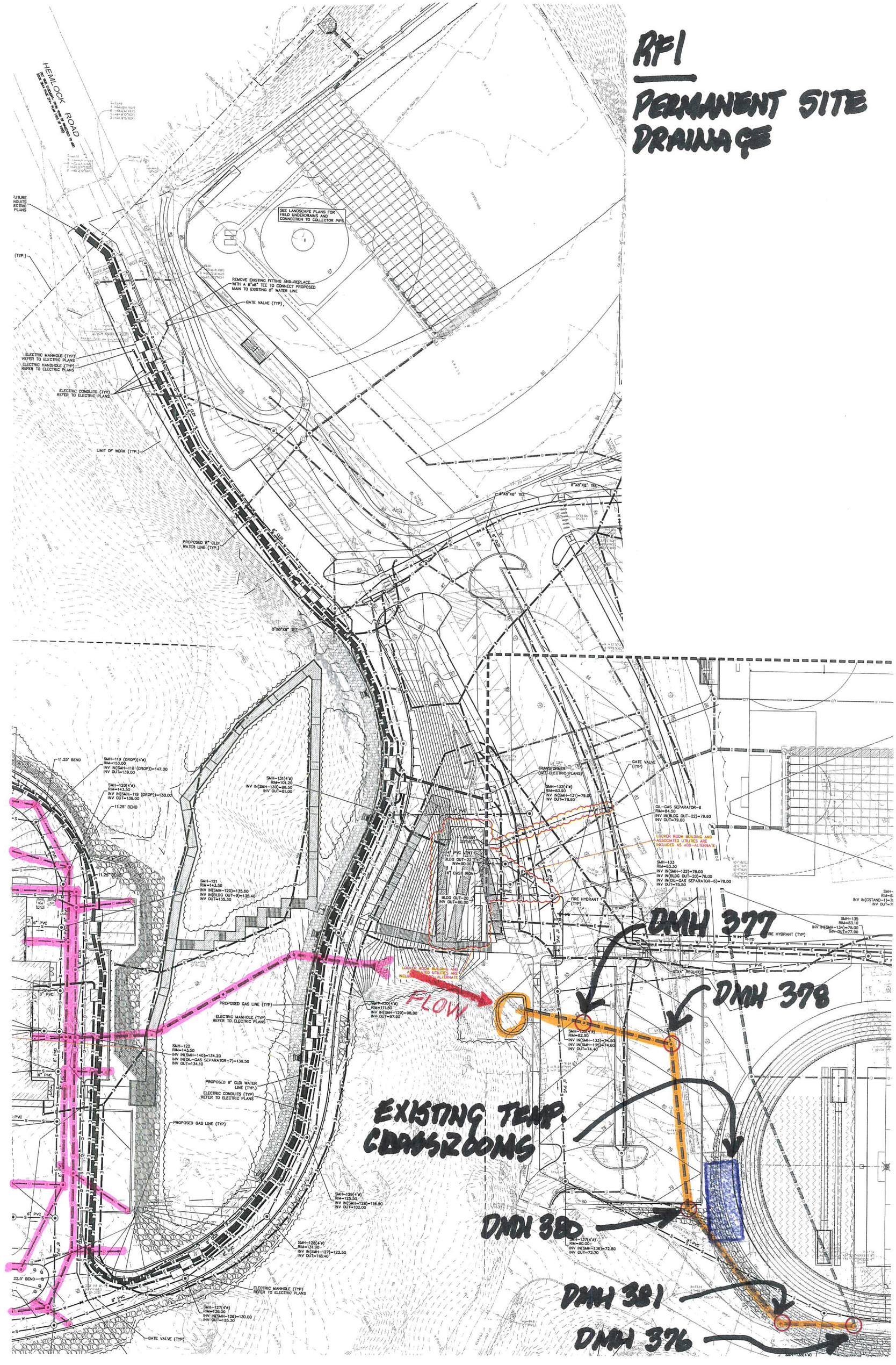
Attachments:
RFI PRE-3_Civ-Permanent Site Drainage Connections-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI

PERMANENT SITE DRAINAGE



RFI #Pre-3

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Permanent Site Drainage Connections

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** *(Response Required)* Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	01/05/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	01/12/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, David Conway **(Nitsch Engineering, Inc.)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Kevin Nigro **(PMA Consultants LLC)**, Page Simmons **(Nitsch Engineering, Inc.)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:41 PM on 01/05/2023

The areas shown highlighted in pink on the attached sketch represent drainage that will flow from the new school site. In general, all of this drainage will flow under the Hemlock Road Access Drive and daylight onto the slope, flowing downhill until it is collected in a small drainage pond. From there it eventually flows out to an existing headwall connection (drainage piping shown highlighted in orange. However, the installation of this piping, as well as the grading to accommodate it, does not get installed until after the new school is online and the current school is no longer in use.

- Please see the attached spreadsheet which includes rim grades and pipe inverts from Drawing C-406 Drainage Table as well as existing finish grades estimated from the Contract Grading plans. This spreadsheet also provides top of pipe elevations and shows the cover over these pipes if installed prior to the final finish grades being established.

1. If the piping is to be installed from the small drainage pond to the headwall, please provide whatever adjustments are necessary to allow for sufficient cover over these drain lines.
2. Please provide any revisions (inverts, hole locations, etc.) to the structures shown on the spreadsheet to accommodate these adjustments.

- Drawing C-402 Drainage Plan III, does not show a WQS between the previously mentioned small drainage pond and the connection at the existing headwall at DMH 376. Please advise if a WQS should be added along this line and if so, provide details as to where it should be located.
- The installation of the drainage between DMH 380 & DMH 381 will most likely require the removal of the temporary classroom trailers located at the front of the school if this drainage needs to be installed prior to the students moving out of the existing school.

DRA RESPONSE:
Refer to NEI response below.

ANGEL KHAZADIAN
02/07/2023

NEI RESPONSE:

The current plans show that the drainage coming down the hill will remain piped.
As reviewed during a coordination meeting with Gilbane on 1/30/2023, the piping from DMH-349 to DMH-378 the 24" line may be installed at a lower elevation so that it is below existing grade (Coordinate elevation with existing waterline, location to be verified in field). The Contractor is responsible for managing stormwater during construction but even at a lower elevation the 24" line can be temporarily connected to the existing 18" drain line that runs parallel to the proposed. The remaining final structures and piping shall be installed and completed during Phase 2 construction.

David Conway
02/07/2023

RFI

PERMANENT SITE DRAINAGE

HEMLOCK ROAD

SEE LANDSCAPE PLANS FOR FIELD UNDERDRAINS AND CONNECTION TO COLLECTOR PIPE

REMOVE EXISTING FITTING AND REPLACE WITH A 8"x8" TEE TO CONNECT PROPOSED MAIN TO EXISTING 8" WATER LINE

GATE VALVE (TYP)

ELECTRIC MANHOLE (TYP) REFER TO ELECTRIC PLANS

ELECTRIC HANDHOLE (TYP) REFER TO ELECTRIC PLANS

ELECTRIC CONDUITS (TYP) REFER TO ELECTRIC PLANS

LIMIT OF WORK (TYP.)

PROPOSED 8" CLDI WATER LINE (TYP.)

8"X8"X8" TEE

11.25° BEND

SMH-119 (DROP)(4'ø)
RIM=153.00
INV IN(SMH-118 (DROP))=147.00
INV OUT=139.00

SMH-120(4'ø)
RIM=143.50
INV IN(SMH-119 (DROP))=138.00
INV OUT=136.00

SMH-131(4'ø)
RIM=101.20
INV IN(SMH-130)=86.50
INV OUT=81.00

SMH-121
RIM=143.50
INV IN(SMH-120)=135.80
INV IN(BLDG OUT-9)=135.40
INV OUT=135.30

SMH-122
RIM=143.50
INV IN(SMH-140)=134.20
INV IN(OIL-GAS SEPARATOR-7)=136.50
INV OUT=134.10

PROPOSED GAS LINE (TYP)

PROPOSED 8" CLDI WATER LINE (TYP.)

ELECTRIC CONDUITS (TYP) REFER TO ELECTRIC PLANS

SMH-129(4'ø)
RIM=125.50
INV IN(SMH-128)=116.50
INV OUT=102.00

SMH-128(4'ø)
RIM=131.90
INV IN(SMH-127)=122.50
INV OUT=118.40

SMH-127(4'ø)
RIM=138.00
INV IN(SMH-126)=130.00
INV OUT=126.30

22.5° BEND

GATE VALVE (TYP)

TRANSFORMER (SEE ELECTRIC PLANS)

SMH-132(4'ø)
RIM=83.90
INV IN(SMH-131)=79.00
INV OUT=78.90

OIL-GAS SEPARATOR-6
RIM=84.50
INV IN(BLDG OUT-22)=79.60
INV OUT=79.00

LOCKER ROOM BUILDING AND ASSOCIATED UTILITIES ARE INCLUDED AS ADD-ALTERNATE

SMH-133
RIM=83.30
INV IN(SMH-132)=78.00
INV IN(BLDG OUT-20)=78.00
INV IN(OIL-GAS SEPARATOR-6)=78.00
INV OUT=75.50

SMH-135
RIM=83.10
INV IN(SMH-134)=78.00
INV OUT=77.90

SMH-134(4'ø)
RIM=82.90
INV IN(SMH-133)=74.50
INV IN(SMH-135)=74.60
INV OUT=74.40

SMH-137(4'ø)
RIM=80.00
INV IN(SMH-136)=72.80
INV OUT=72.70

SMH-138(4'ø)

1" WATER SERVICE

6" PVC SERVICE TO BLDG OUT-22 INV=80.00

6" CAST IRON

BLDG OUT-20
INV OUT=80.00

FIRE HYDRANT (TYP)

8"X4" REDUCER

FLOW

DMH 377

DMH 378

DMH 380

DMH 381

DMH 376

EXISTING TEMP. CLASSROOMS

PERMANENT CONNECTION OF SITE DRAINAGE

STRUCTURE	INV. IN	T.O.PIPE EL.	INV. OUT	T.O.PIPE EL.	RIM GRADE	EXIST. GRADE	COMMENTS
DMH 376	70.20 (DMH 375) 70.00 (DMH 381)	72.60 (30"CPP)	64.70 (EX. H/W2)	67.30 (30"CPP)	83.40	74.50	The 30" CCP from DMH 381 to DMH 376 will have less than 2' of cover if installed prior to final finish grades being established.
DMH 377	77.00 (WQS 616) 75.00 (CB 270)	77.10 (24"CPP)	74.90 (DMH 378)	77.00 (24"CPP)	81.90	78.00	The 24"CCP in and out of DMH 377 will daylight above existing grades if installed prior to final finish grades being established.
DMH 378	76.50 (WQS 617) 74.00 (DMH 377)	76.10 (24"CPP)	73.90 (DMH 380)	76.00 (24"CPP)	81.90	75.80	The 24"CCP in and out of DMH 378 will daylight above existing grades if installed prior to final finish grades being established.
DMH 380	74.00 (WQS 501) 73.00 (DMH 378) 73.50 (WQS 618)	75.10 (24"CPP)	72.00 (DMH 381)	74.60 (30"CPP)	79.00	75.00	The 24" CCP and 30"CCP running in and out of DMH 380 with have little to no cover if installed prior to final finish grades being established.
DMH 381	70.60 (DMH 380)	73.20 (30"CPP)	70.50 (DMH 376)	73.10 (30"CPP)	76.00	72.00	The 30"CCP running in and out of DMH 381 will daylight above existing grades if installed prior to final finish grades being established.
NOTE:							
Noe of the drainage shown highlighted in orange will pass through a WQC prior to being connected into the existing drain at the headwall downstream of DMH 376.							

RFI #Pre-4

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Elevation and Grade Consistency

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** *(Response Required)*	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	01/05/2023	**STATUS:**	Closed on 03/02/23
LOCATION:		**DUE DATE:**	01/12/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Kevin Nigro **(PMA Consultants LLC)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 01:47 PM on 01/05/2023

From quick review of the latest drawings, it appears that the civil, landscaping and underground plumbing use Elevations that differ from the designations on the architectural and structural drawings.
For instance, the civil/landscape drawings show spot grades at entrances (SOG) of 163.48 (upper) and 143.48 (lower) and underground plumbing inverts appear to be based on these elevations. In contrast the architectural and structural drawings indicate elevations of 100.00 (upper) and 80.00 (lower). Please advise how this discrepancy will be addressed.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, January 5th, 2023 at 2:41PM EST*

Refer to attached RFI response.

Attachments:
RFI PRE-4_Arch-Elevation and Grade Consistency-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-4

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Elevation and Grade Consistency

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** *(Response Required)* Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	01/05/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	01/12/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Kevin Nigro **(PMA Consultants LLC)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 01:47 PM on 01/05/2023

From quick review of the latest drawings, it appears that the civil, landscaping and underground plumbing use Elevations that differ from the designations on the architectural and structural drawings.
For instance, the civil/landscape drawings show spot grades at entrances (SOG) of 163.48 (upper) and 143.48 (lower) and underground plumbing inverts appear to be based on these elevations. In contrast the architectural and structural drawings indicate elevations of 100.00 (upper) and 80.00 (lower). Please advise how this discrepancy will be addressed.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to Floor Plan General Note #1 on the Architectural Plans and Foundations Note #1 on the Structural Plans

ANGEL KHAZADIAN
01/05/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-5

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Permanent Site Drainage Connections

TO:	Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	01/19/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	01/26/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			
RECEIVED FROM:			
COPIES TO:			

Question from Lauren Muldoon (Gilbane Building Company) at 12:38 PM on 01/19/2023

The areas shown highlighted in pink on the attached sketch represent drainage that will flow from the new Hemlock Access Road. In general, all of this drainage will flow down the Hemlock Access Road where it will connect to new the new site drainage system, eventually flowing into Subsurface System #2 or an existing DMH located near the exit gate (drainage piping shown highlighted in orange). However, the installation of this piping, as well as the grading to accommodate it, does not get installed until after the new school is online and the current school is no longer in use.

- Please see the attached spreadsheet which includes rim grades and pipe inverts from Drawing C-406 Drainage Table as well as existing finish grades estimated from the Contract Grading plans. This spreadsheet also provides top of pipe elevations and shows the cover over these pipes if installed prior to the final finish grades being established.

1. If the piping is to be installed from the Hemlock Access Road to Subsurface System #2, please provide whatever adjustments are necessary to allow for sufficient cover over these drain lines as well as sufficient flow from the Access Road.
2. Please provide any revisions (inverts, hole locations, etc.) to the structures shown on the spreadsheet to accommodate these adjustments.

Attachments:
RFI Hemlock Access Road Drainage Connection.xlsx RFI Sketch Hemlock Access Road Drainage.pdf

Awaiting an Official Response

All Replies:

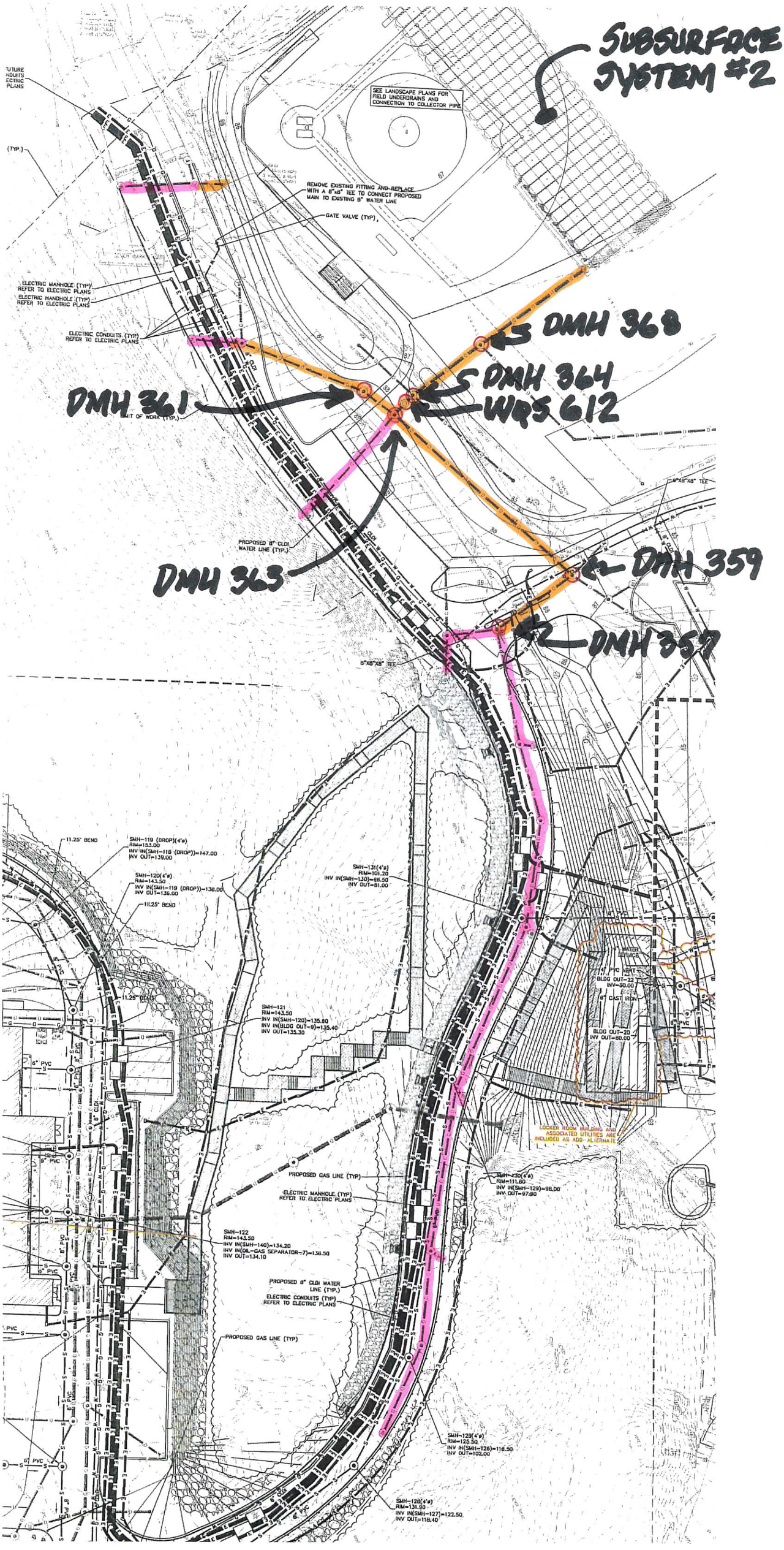
DRA RESPONSE:
Refer to NEI response below.

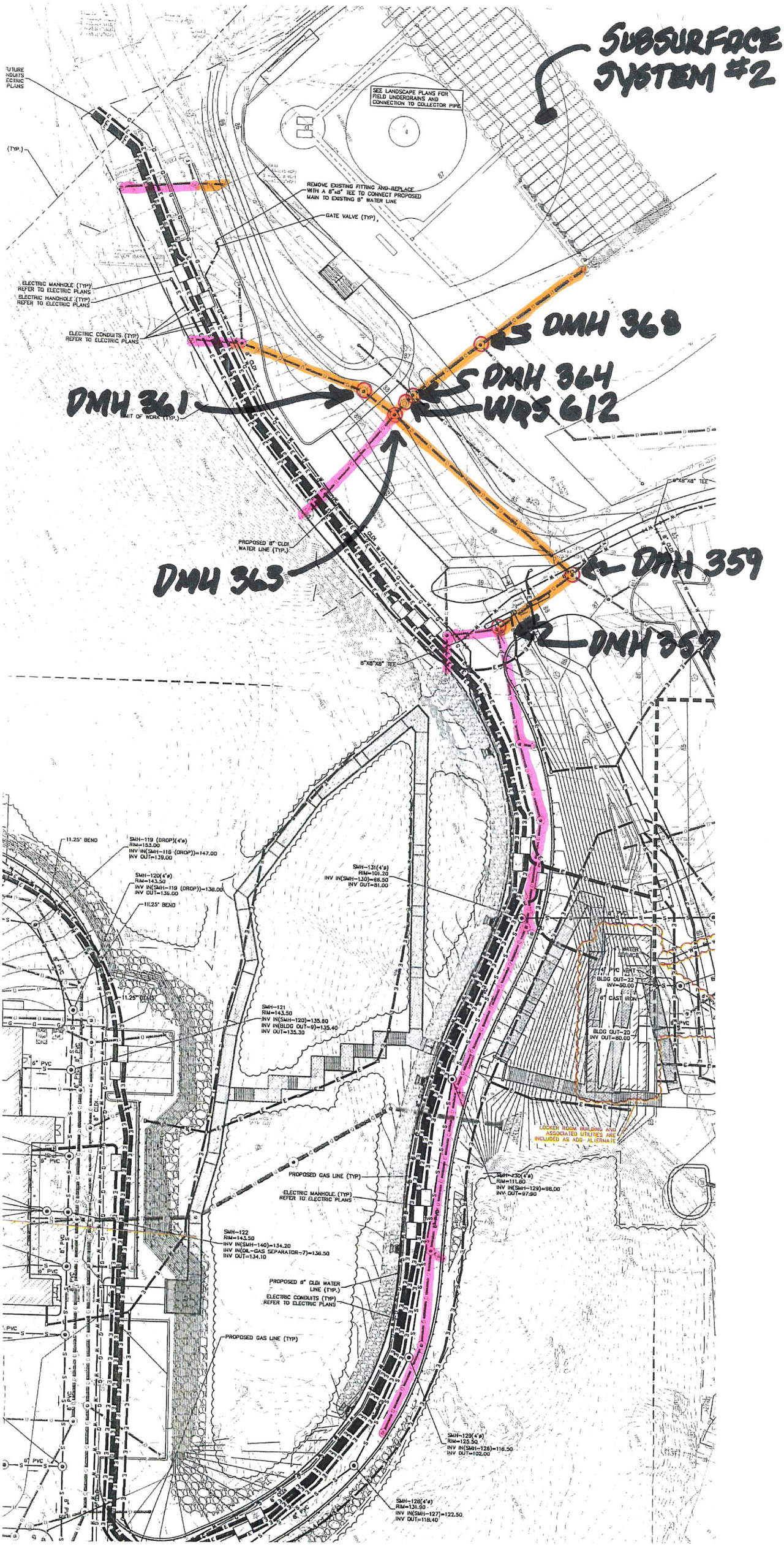
ANGEL KHAZADIAN
02/07/2023

NEI RESPONSE:

The Contractor is responsible for managing stormwater during construction. As reviewed during a coordination meeting with Gilbane on 1/30/2023, the existing drainage system in the vicinity of DMH-357 could be used as a temporary connection if deemed adequate by the Contractor.

David Conway
02/07/2023


SUBSURFACE SYSTEM #2
SEE LANDSCAPE PLANS FOR FIELD UNDERDRAINS AND CONNECTION TO COLLECTOR PIPE
REMOVE EXISTING FITTING AND REPLACE WITH A 8"x8" TEE TO CONNECT PROPOSED MAIN TO EXISTING 8" WATER LINE
GATE VALVE (TYP.)
ELECTRIC MANHOLE (TYP) REFER TO ELECTRIC PLANS
ELECTRIC HANDHOLE (TYP) REFER TO ELECTRIC PLANS
ELECTRIC CONDUITS (TYP) REFER TO ELECTRIC PLANS
DMH 368
DMH 364
WQS 612
DMH 361
DMH 363
DMH 359
DMH 357
PROPOSED 8" CLDI WATER LINE (TYP.)
8"X8"X8" TEE
11.25° BEND
SMH-119 (DROP)(4'ø) RIM=153.00 INV IN(SMH-118 (DROP))=147.00 INV OUT=139.00
SMH-120(4'ø) RIM=143.50 INV IN(SMH-119 (DROP))=138.00 INV OUT=136.00
SMH-131(4'ø) RIM=101.20 INV IN(SMH-130)=86.50 INV OUT=81.00
SMH-121 RIM=143.50 INV IN(SMH-120)=135.80 INV IN(BLDG OUT-9)=135.40 INV OUT=135.30
6" PVC
4" PVC VENT BLDG OUT-22 INV=90.00
6" CAST IRON
BLDG OUT-20 INV OUT=80.00
LOCKER ROOM BUILDING AND ASSOCIATED UTILITIES ARE INCLUDED AS ADD ALTERNATE
PROPOSED GAS LINE (TYP)
ELECTRIC MANHOLE (TYP) REFER TO ELECTRIC PLANS
SMH-130(4'ø) RIM=111.60 INV IN(SMH-129)=98.00 INV OUT=97.90
SMH-122 RIM=143.50 INV IN(SMH-140)=134.20 INV IN(OIL-GAS SEPARATOR-7)=136.50 INV OUT=134.10
PROPOSED 8" CLDI WATER LINE (TYP.)
ELECTRIC CONDUITS (TYP) REFER TO ELECTRIC PLANS
PROPOSED GAS LINE (TYP)
SMH-129(4'ø) RIM=125.50 INV IN(SMH-128)=116.50 INV OUT=102.00
SMH-128(4'ø) RIM=131.50 INV IN(SMH-127)=122.50 INV OUT=118.40


SUBSURFACE SYSTEM #2
SEE LANDSCAPE PLANS FOR FIELD UNDERDRAINS AND CONNECTION TO COLLECTOR PIPE
REMOVE EXISTING FITTING AND REPLACE WITH A 8"x8" TEE TO CONNECT PROPOSED MAIN TO EXISTING 8" WATER LINE
GATE VALVE (TYP.)
ELECTRIC MANHOLE (TYP) REFER TO ELECTRIC PLANS
ELECTRIC HANDHOLE (TYP) REFER TO ELECTRIC PLANS
ELECTRIC CONDUITS (TYP) REFER TO ELECTRIC PLANS
DMH 368
DMH 364
WQS 612
DMH 361
DMH 363
DMH 359
DMH 357
PROPOSED 8" CLDI WATER LINE (TYP.)
8"X8"X8" TEE
11.25° BEND
SMH-119 (DROP)(4'ø) RIM=153.00 INV IN(SMH-118 (DROP))=147.00 INV OUT=139.00
SMH-120(4'ø) RIM=143.50 INV IN(SMH-119 (DROP))=138.00 INV OUT=136.00
SMH-131(4'ø) RIM=101.20 INV IN(SMH-130)=86.50 INV OUT=81.00
SMH-121 RIM=143.50 INV IN(SMH-120)=135.80 INV IN(BLDG OUT-9)=135.40 INV OUT=135.30
6" PVC
4" PVC VENT BLDG OUT-22 INV=90.00
6" CAST IRON
BLDG OUT-20 INV OUT=80.00
LOCKER ROOM BUILDING AND ASSOCIATED UTILITIES ARE INCLUDED AS ADD ALTERNATE
PROPOSED GAS LINE (TYP)
ELECTRIC MANHOLE (TYP) REFER TO ELECTRIC PLANS
SMH-130(4'ø) RIM=111.60 INV IN(SMH-129)=98.00 INV OUT=97.90
SMH-122 RIM=143.50 INV IN(SMH-140)=134.20 INV IN(OIL-GAS SEPARATOR-7)=136.50 INV OUT=134.10
PROPOSED 8" CLDI WATER LINE (TYP.)
ELECTRIC CONDUITS (TYP) REFER TO ELECTRIC PLANS
PROPOSED GAS LINE (TYP)
SMH-129(4'ø) RIM=125.50 INV IN(SMH-128)=116.50 INV OUT=102.00
SMH-128(4'ø) RIM=131.50 INV IN(SMH-127)=122.50 INV OUT=118.40

HEMLOCK ACCESS ROAD SITE DRAINAGE

STRUCTURE	INV. IN	T.O.PIPE EL.	INV. OUT	T.O.PIPE EL.	RIM GRADE	EXIST. GRADE
DMH 357	80.50 DMH 356 84.40 DMH 355	81.60 12" CPP 85.50 12" CPP	80.25 DMH 359	81.60 15" CPP	89.00	85.50
DMH 359	79.70 DMH 357 80.00 DMH 358 82.00 CB 256	81.05 15" CPP 81.10 12" CPP 83.10 12" CPP	79.60 DMH 363	80.95 15" CPP	87.40	84.50
DMH 361	84.10 DMH 360	85.20 12" CPP	79.00 DMH 363	80.10 12" CPP	88.20	88.40
DMH 363	78.60 CB 257 78.60 DMH 361 78.35 DMH 359	79.70 12" CPP 79.70 12" CPP 79.70 15" CPP	78.10 WQS 612	79.70 18" CPP	88.10	88.00
DMH 364	77.60 WQS 612 79.00 AD 115 80.40 AD 114	79.20 18" CPP 80.10 12" CPP 81.50 12" CPP	77.30 DMH 368	78.90 18" CPP	87.00	87.50
DMH 368	75.70 DMH 364 75.00 AB 101	77.30 18" CPP 76.10 12" CPP	74.50 SS#2?	76.10 18" CPP	85.75	85.30
WQS 612	78.00 DMH 363	79.60 18" CPP	77.80 DMH 364	79.40 18" CPP	88.75	88.10
SS#2	74.00 DMH 368	75.60 18" CPP				86.00

NOTE:

COMMENTS
Proposed rim grade of DMH 357 is 3.5' above the existing surface grade. The top of pipe elevation from DMH 355 is at the existing surface grade.
Proposed rim grade of DMH 359 is 2.9' above the existing surface grade.
Proposed rim grade of DMH 368 is 0.45' above the existing surface grade.
Proposed rim grade of WQS 612 is 0.65' above the existing surface grade.
Proposed invert into SS#2 at El. 74.00 is much lower than the existing surface grade and as such it would be difficult for the temporary basin to accept flow from DMH 368. SS#2 needs to be built to appept dranage flow from the Hemlock Access Road system

RFI #Pre-6

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Connection to Existing Water Line on Old Nahant Rd

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	01/23/2023	**STATUS:**	Closed on 03/02/23
LOCATION:		**DUE DATE:**	01/30/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			
RECEIVED FROM:			
COPIES TO:			

Question from Lauren Muldoon (Gilbane Building Company) at 09:22 AM on 01/23/2023

Contract Drawing C-500 contains the following note regarding the connection of a new 8” water line to an existing water line on Old Nahant Road:
“Connect to Ex. Water Line on Old Nahant Road (Exact location to be determined).”
In order for the site bidders to determine the extent of the scope of work for this connection, please provide the exact location of this connection of this new 8” water line on Old Nahant Road along with any details specific to connecting to an existing water line.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, February 8th, 2023 at 11:18AM EST*

Refer to attached RFI response.

Attachments:
RFI PRE-6_Civ-Connections to Existing Water Line-NEI RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-6

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Connection to Existing Water Line on Old Nahant Rd

TO:	Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	01/23/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	01/30/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			
RECEIVED FROM:			
COPIES TO:			

Question from Lauren Muldoon (Gilbane Building Company) at 09:22 AM on 01/23/2023

Contract Drawing C-500 contains the following note regarding the connection of a new 8” water line to an existing water line on Old Nahant Road: “Connect to Ex. Water Line on Old Nahant Road (Exact location to be determined).”
In order for the site bidders to determine the extent of the scope of work for this connection, please provide the exact location of this connection of this new 8” water line on Old Nahant Road along with any details specific to connecting to an existing water line.

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer to NEI response below.

ANGEL KHAZADIAN
02/08/2023

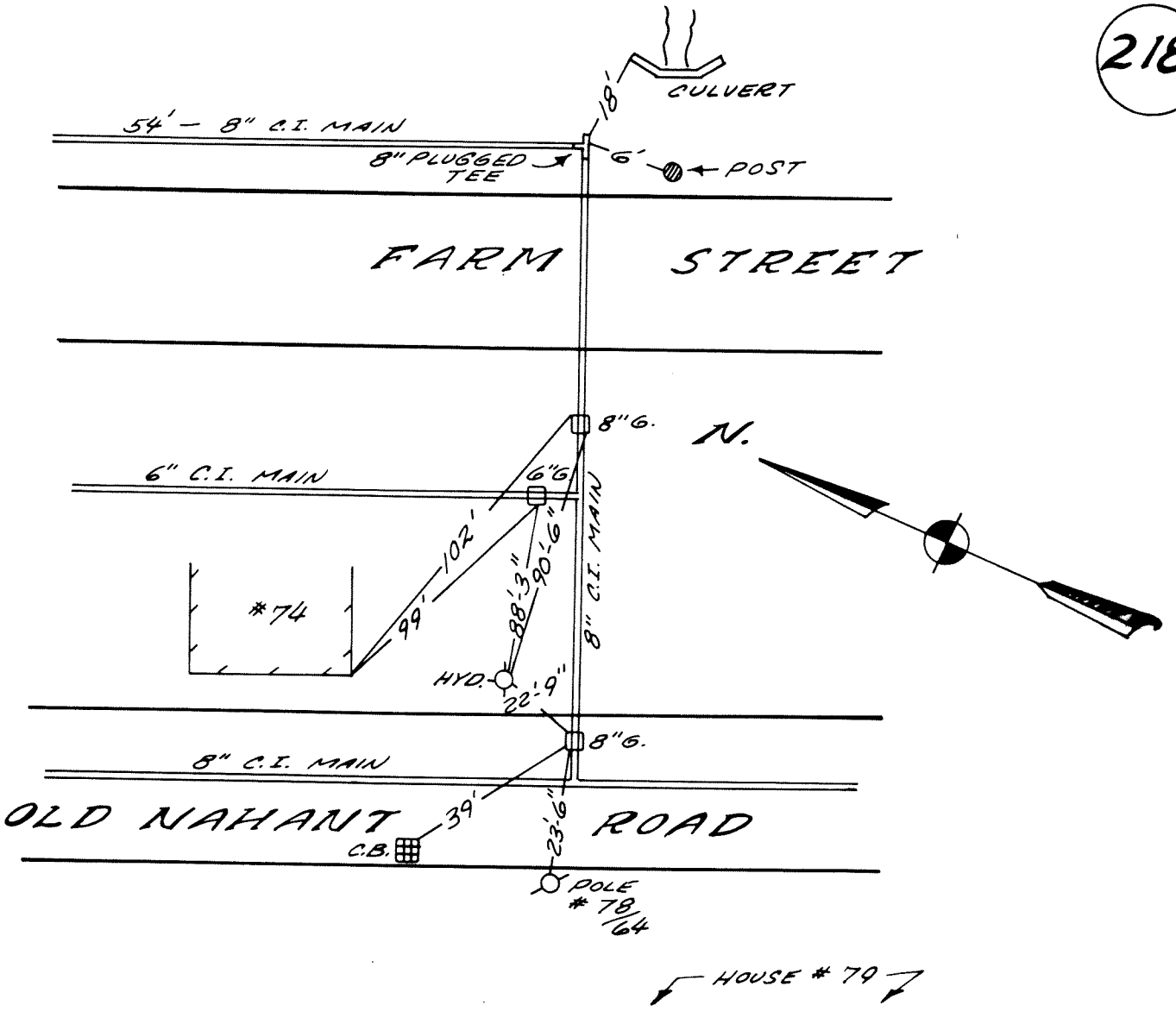
NEI RESPONSE:

See attached record drawing. The water service will connect into the 8" line that crosses Farm Street with a tapping sleeve and valve.

Paige Blanchard
02/07/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**


CULVERT
18'
54' – 8" C.I. MAIN
8" PLUGGED TEE
6'
POST
FARM STREET
8"G.
N.
6" C.I. MAIN
6"G
102'
99'
88'-3"
90'-6"
8" C.I. MAIN
#74
HYD.
22'-9"
8"G.
8" C.I. MAIN
OLD NAHANT ROAD
39'
23'-6"
C.B.
POLE #78/64
HOUSE #79

RFI #Pre-7

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Utility Profiles and Cross Sections

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Paige Blanchard DONT USE **(Nitsch Engineering, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
		STATUS:	Closed on 04/19/23
		DUE DATE:	02/07/2023
DATE INITIATED:	01/31/2023	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Pre-Construction	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:			
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 11:23 AM on 01/31/2023

In order to coordinate the utilities in areas of high congestion, please provide the following:

1. Utility profiles and cross sections at the east end of the school buildings (starting at the NE corner of the building on the loop road continuing to where the loop road meets the Driveway at Sta 21+00.
2. Roadway cross sections showing all utilities in the Driveway from Sta 21+00 to Sta 30+70. Please include cross sections at all utility crossings and at staggered EMH locations.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Tuesday, February 28th, 2023 at 7:14PM EST*

Refer to attached RFI response.

Attachments:
RFI PRE-07_Civ-Utility Profiles and Cross Sections-RESP.pdf

Official Response: **Vladimir Lyubetsky (Drummey Rosane Anderson, Inc.)** *responded on Thursday, February 23rd, 2023 at 4:50PM EST*

Nitsch Engineering Response - 02/23/2023
Refer to Sheet C-506 - Utility Cross Sections submitted with Addendum 1. Cross sections/profiles are indicated at driveway stations 23+00 +/- and 6+00 +/-. The cross sections/profiles are representative of a typical sections. Sheet C-506 will be included in the plan set moving forward and updated as the utility design progresses.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Pre-7

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Utility Profiles and Cross Sections

TO:	Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	01/31/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	02/07/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 11:23 AM on 01/31/2023

In order to coordinate the utilities in areas of high congestion, please provide the following:

1. Utility profiles and cross sections at the east end of the school buildings (starting at the NE corner of the building on the loop road continuing to where the loop road meets the Driveway at Sta 21+00.
2. Roadway cross sections showing all utilities in the Driveway from Sta 21+00 to Sta 30+70. Please include cross sections at all utility crossings and at staggered EMH locations.

Awaiting an Official Response

DRA RESPONSE:
Refer to NEI Response below.

ANGEL KHAZADIAN
02/28/2023

All Replies:

Nitsch Engineering Response - 02/23/2023

Refer to Sheet C-506 - Utility Cross Sections submitted with Addendum 1. Cross sections/profiles are indicated at driveway stations 23+00 +/- and 6+00 +/-. The cross sections/profiles are representative of a typical sections. Sheet C-506 will be included in the plan set moving forward and updated as the utility design progresses.

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Bid-8

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Wetland Scientist

TO:	Lauren Muldoon **(Gilbane Building Company)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/06/2023	**STATUS:**	Closed on 02/15/23
LOCATION:		**DUE DATE:**	02/13/2023
PROJECT STAGE:	Bidding	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:58 PM on 02/03/2023

1. Scope Item # 59 - Wetland Scientist – Who is paying for the wetland scientist services? Ils the landscape contractor doing all plantings in this area?

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Wednesday, February 15th, 2023 at 8:24AM EST*

The wetland scientist should be excluded from this bid package but you will take direction from this person as required. Yes, Site Improvements bid package will include wetlands restoration.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-9

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Straw Wattles

TO:	Paige Blanchard DONT USE **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** David Conway **(Nitsch Engineering, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
		STATUS:	Closed on 04/20/23
		DUE DATE:	02/24/2023
DATE INITIATED:	02/17/2023	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Pre-Construction	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:			
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:24 PM on 02/17/2023

Drawing C-700 provides two details regarding Perimeter Protection Barriers for erosion control. Both details call for 18” straw wattles to be installed. Some of the sitework bidders have commented that straw wattles only come in sizes up the 12”. Please confirm that these details can be revised to show 12” straw wattles being installed at Perimeter Protection Barriers.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Monday, March 13th, 2023 at 9:48AM EDT*

Below is the email that was sent to Gilbane requesting direction and preference on 03/08/2023. No response has been received to date.

Neil and Andy,

We are looking for your direction and preference, see the question from Nitsch below:

“ ….During the contractor debriefs I heard that the contractor’s preferred if we used the filter socks. These are 12” non-biodegradable tubes that have mulch blown into them. If that is the preferred option we are okay with that. What we are currently showing is a detail provided by Gilbane. Also, maintenance of the erosion control will be very important, Gilbane should decide if they want to carry allowance for maintenance or have the contractors include some amount of replacement (to be specified be Gilbane) in their bids ….”

Thank you,
Vladimir

Attachments:

Official Response: **Lauren Muldoon (Gilbane Building Company)** *responded on Tuesday, March 7th, 2023 at 9:08AM EST*

Please confirm that the 12" wattle is acceptable.

Attachments:

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Monday, March 6th, 2023 at 10:17AM EST*

Refer to attached RFI response.

Attachments:
RFI PRE-09_Civ-Straw Wattles-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Pre-9

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Straw Wattles

TO:	Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/17/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	02/24/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:24 PM on 02/17/2023

Drawing C-700 provides two details regarding Perimeter Protection Barriers for erosion control. Both details call for 18" straw wattles to be installed. Some of the sitework bidders have commented that straw wattles only come in sizes up the 12". Please confirm that these details can be revised to show 12" straw wattles being installed at Perimeter Protection Barriers.

Awaiting an Official Response

All Replies:

DRA RESPONSE:
As previously emailed to Gilbane on 2/23/23, the Waddle size came from the Stormwater Management Plan provided by Gilbane, see Below. Gilbane should provide an update plan/size for Civil Review.
ANGEL KHAZADIAN
03/06/2023

NEI RESPONSE:

Email sent on 2/23/23.

RFI Pre 9

PB Paige Blanchard <PBlanchard@nitsch
To Brodeur, Andrew
Cc David Conway; Angel Khazadian; Vladimir Lyubetsky
2/23/2023

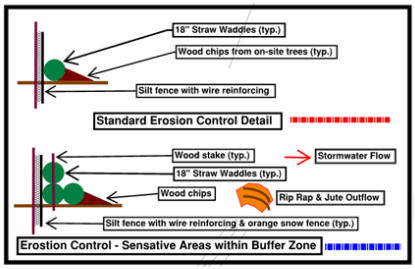
Hi Andy,

We received the RFI below. The Perimeter Protection Barrier Details are based on the Stormwater Management – Site Preparation Phase Plan that Gilbane provided (snip below). How do you want to proceed with this? Thanks.

Question from Lauren Muldoon (Gilbane Building Company) at 12:24 PM on 02/17/2023

Drawing C-700 provides two details regarding Perimeter Protection Barriers for erosion control. Both details call for 18" straw wattles to be installed. Some of the sitework bidders have commented that straw wattles only come in sizes up the 12". Please confirm that these details can be revised to show 12" straw wattles being installed at Perimeter Protection Barriers.

Awaiting an Official Response



Paige Blanchard, PE, LEED Green Associate | Senior Project Engineer
Nitsch Engineering
2 Center Plaza, Suite 430, Boston, MA 02108 | www.nitscheng.com
Main: 617-338-0063 | Direct: 857-206-8721 | PBlanchard@nitscheng.com
A *Boston Globe* 2022 Top Place to Work
Building better communities with you
Boston, MA | Lawrence, MA | Worcester, MA | Washington, DC

RFI #Pre-10R1

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Electric Junction Boxes

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Sean Sullivan **(Bala Consulting Engineers)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Bala Boston CA Email **(Bala Consulting Engineers)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/17/2023	**STATUS:**	Closed on 03/27/23
LOCATION:		**DUE DATE:**	03/27/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:35 PM on 02/17/2023

Please see the attached information. The attached proposed conduit routing drawing shows an interpretation as to how conduit should be installed using the WMGLD pull boxes that have been specified for this project. This interpretation also shows conflicts/issues with this installation. The second attachment includes suggested installation directions for the boxes themselves but is incomplete regarding conduit installation. Please provide all pertinent information/details for the complete installation of these boxes and associated conduit to include, but not be limited to the following:

- Minimum distance required from the edge of the roadway
- Orientation of the boxes to the roadway (parallel or perpendicular?)
- Minimum spacing between the cabinets
- Is any additional protection required (bollards?)
- How the conduits enter the cabinet (do they poke through the side (see below) or do they sweep up into the bottom opening similar to an electric handhole)

Attachments:
Cabinet Suggested Installation May 06.doc NEMT Conduit - GPSK002 - Proposed Conduit Routing.pdf

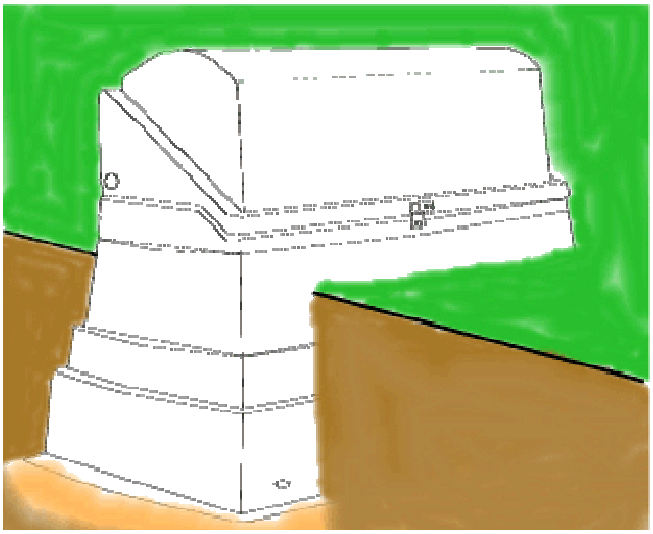
Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, March 24th, 2023 at 7:16PM EDT*

Refer to the revised Site Electrical drawings uploaded with RFI PRE-21 response.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**



Suggested Installation

Excavation:
A firm level base for primary cabinet is very important. Excavate an area roughly 3-6" deeper that the suggested burial height of the unit being installed.

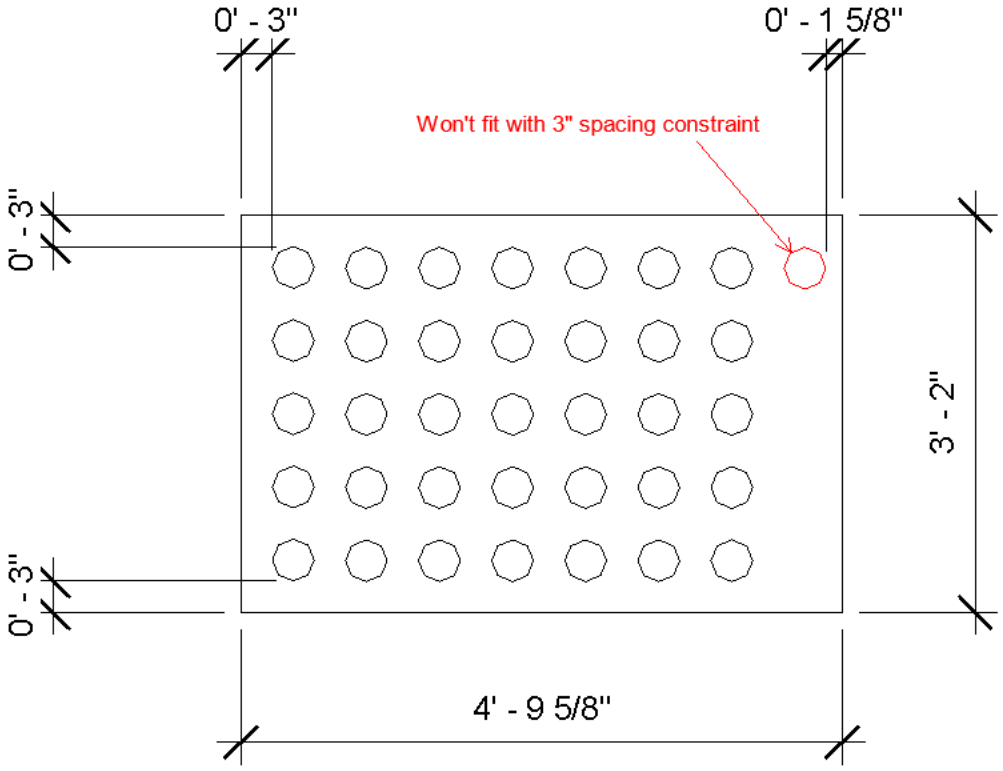
Base Preparation:
Add approximately 3-6" of compacted materials such as gravel, soil or stone dust into the hole.

Installation:
Lift cabinet by attaching slings to the (2) 5/8" inserts on the side of the cabinet. The cabinet can be opened, with the wind locks secured while lowering cabinet into the hole to help facilitate cable positioning. Lower the cabinet into place to the **recommended burial height**.

Backfilling:
Close cover and secure by tightening penta head bolt. This must be done prior to backfilling. Highline recommends 2-4" of clean backfill inside the cabinet to offer additional sidewall support. Back fill the exterior wall with loose material. Avoid using oversize stones, rocks, concrete, frozen chucks, etc. Pack the backfill by foot tamping. Do not use mechanical equipment and do not compact by driving equipment are cabinet. Hydraulic tamping is not recommended.

Recommend Burial Depth

Cabinet Height		Recommended Burial depth (measure from the flange upward)
41		14
53		23
63		26


0' - 3"
0' - 1 5/8"
Won't fit with 3" spacing constraint
0' - 3"
3' - 2"
0' - 3"
4' - 9 5/8"

RFI #Pre-10

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Electric Junction Boxes

TO:	Sean Sullivan **(Bala Consulting Engineers)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/17/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	02/24/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:35 PM on 02/17/2023

Please see the attached information. The attached proposed conduit routing drawing shows an interpretation as to how conduit should be installed using the WMGLD pull boxes that have been specified for this project. This interpretation also shows conflicts/issues with this installation. The second attachment includes suggested installation directions for the boxes themselves but is incomplete regarding conduit installation. Please provide all pertinent information/details for the complete installation of these boxes and associated conduit to include, but not be limited to the following:

- Minimum distance required from the edge of the roadway
- Orientation of the boxes to the roadway (parallel or perpendicular?)
- Minimum spacing between the cabinets
- Is any additional protection required (bollards?)
- How the conduits enter the cabinet (do they poke through the side (see below) or do they sweep up into the bottom opening similar to an electric handhole)

Attachments:
Cabinet Suggested Installation Ma

Awaiting an Official Response

DRA RESPONSE:
Refer to NEI Response below.

ANGEL KHAZADIAN
02/28/2023

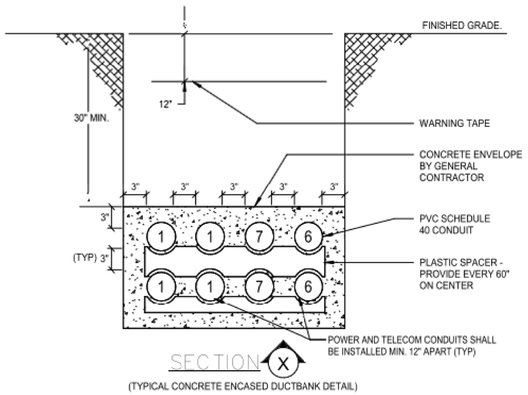
All Replies:

The following are responses from a discussion on 2/23/23 with WMGLD, Gilbane, PMA, DRA, and Bala. Electrical site plan revisions are forthcoming.
- There is no minimum distance requirement from the edge of the roadway, however there are bollards required and the pull boxes must be provided with adequate access.
- Orientation of the boxes to the roadway will be parallel.
- The minimum spacing between cabinets is 2'-0", with additional distance between as required to accommodate incoming and outgoing ductbanks and to allow for the required minimum distance between power and telecom ductbanks.
- Pull boxes require protection. Bollards are an option, but WMGLD also indicated that guard rails would be acceptable too provided they do not interfere with clearance requirements.
- Conduits sweep up into the bottom, typically with a 45 degree elbow up.

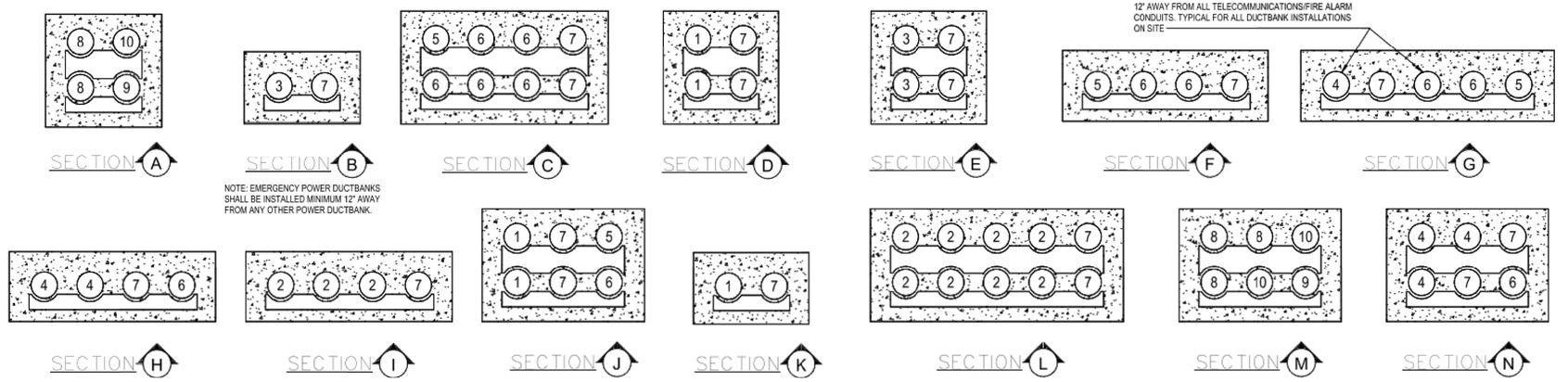
SPS/ZMB - Bala - 02/27/23

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**



(TYPICAL CONCRETE ENCASED DUCTBANK DETAIL)



NOTE: EMERGENCY POWER DUCTBANKS SHALL BE INSTALLED MINIMUM 12" AWAY FROM ANY OTHER POWER DUCTBANK.

NOTE: POWER CONDUITS SHALL BE INSTALLED MINIMUM 12" AWAY FROM ALL TELECOMMUNICATIONS/FIRE ALARM CONDUITS. TYPICAL FOR ALL DUCTBANK INSTALLATIONS ON SITE

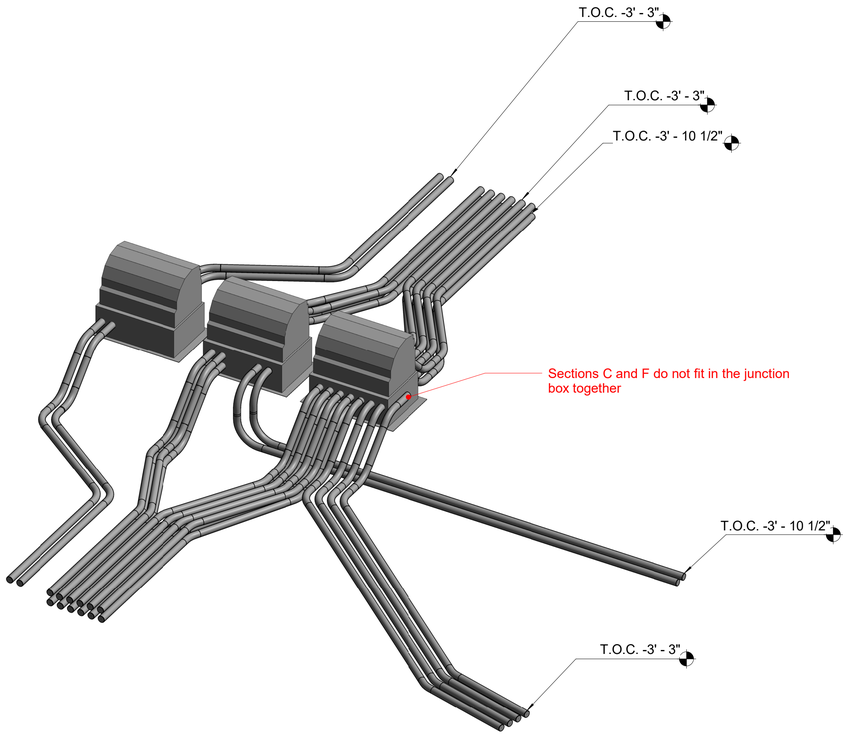
DUCTBANK LEGEND:

1. 4" PVC PRIMARY ELECTRIC SERVICE
2. 4" PVC SECONDARY ELECTRIC SERVICE
3. 4" PVC EMERGENCY ELECTRIC SERVICE
4. 4" PVC POWER
5. 4" PVC FIRE ALARM
6. 4" PVC TELECOM
7. 4" PVC SPARE
8. 2" PVC POWER
9. 2" PVC TELECOM
10. 2" PVC SPARE

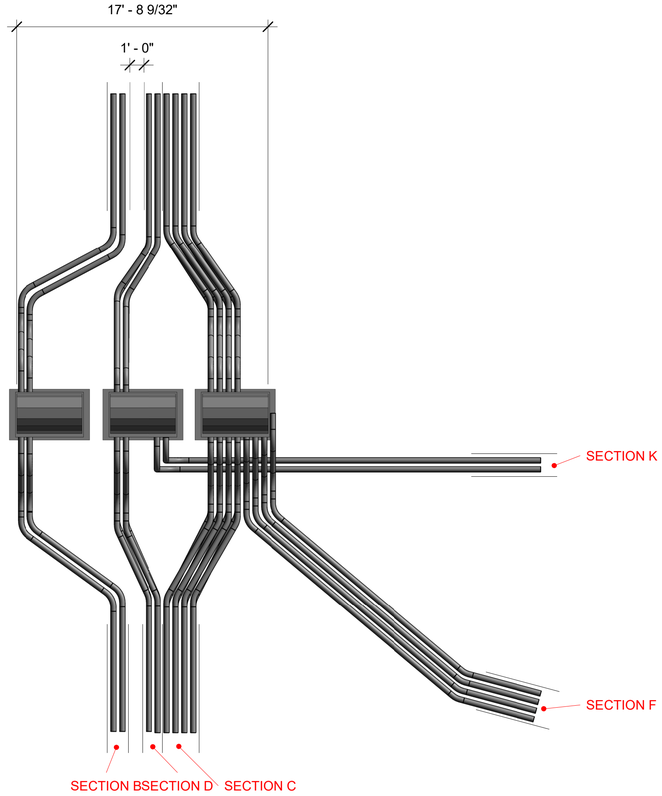
DUCTBANK SECTION DETAILS

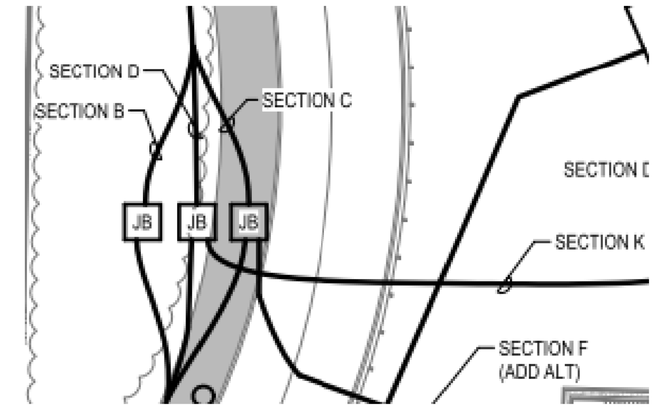
Scale: NOT TO SCALE

3 From E0-1-5



NOTE: Ductbanks shown without concrete for better visual





4 From E0-1-3

Gilbane
Virtual Design & Construction

Number	Revision Description	Revision Date

NORTHEAST METRO TECH HIGH SCHOOL

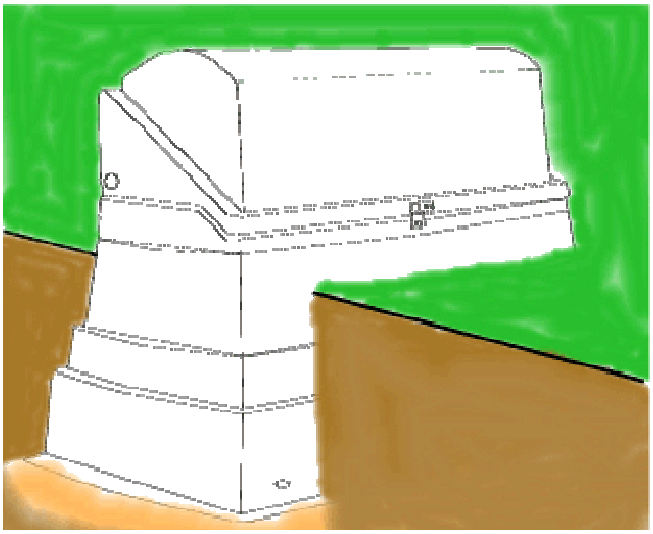
Project Number J09299.000
Date 02.16.2023
Drawn By Author
Checked By Checker

Proposed Conduit Routing

GPSK002

Scale As indicated

2/16/2023 12:55:25 PM



Suggested Installation

Excavation:
A firm level base for primary cabinet is very important. Excavate an area roughly 3-6" deeper that the suggested burial height of the unit being installed.

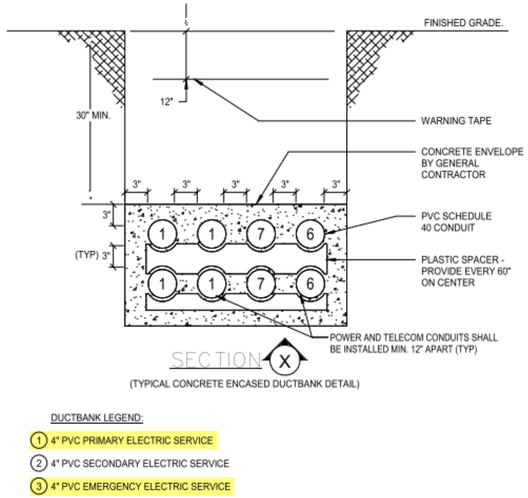
Base Preparation:
Add approximately 3-6" of compacted materials such as gravel, soil or stone dust into the hole.

Installation:
Lift cabinet by attaching slings to the (2) 5/8" inserts on the side of the cabinet. The cabinet can be opened, with the wind locks secured while lowering cabinet into the hole to help facilitate cable positioning. Lower the cabinet into place to the **recommended burial height**.

Backfilling:
Close cover and secure by tightening penta head bolt. This must be done prior to backfilling. Highline recommends 2-4" of clean backfill inside the cabinet to offer additional sidewall support. Back fill the exterior wall with loose material. Avoid using oversize stones, rocks, concrete, frozen chucks, etc. Pack the backfill by foot tamping. Do not use mechanical equipment and do not compact by driving equipment are cabinet. Hydraulic tamping is not recommended.

Recommend Burial Depth

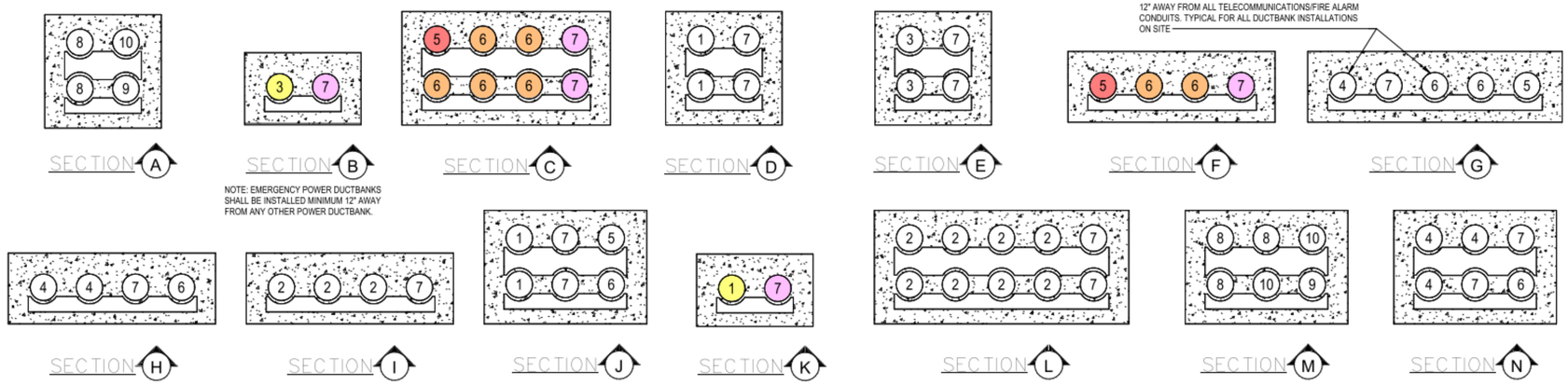
Cabinet Height		Recommended Burial depth (measure from the flange upward)
41		14
53		23
63		26



(TYPICAL CONCRETE ENCASED DUCTBANK DETAIL)

DUCTBANK LEGEND:

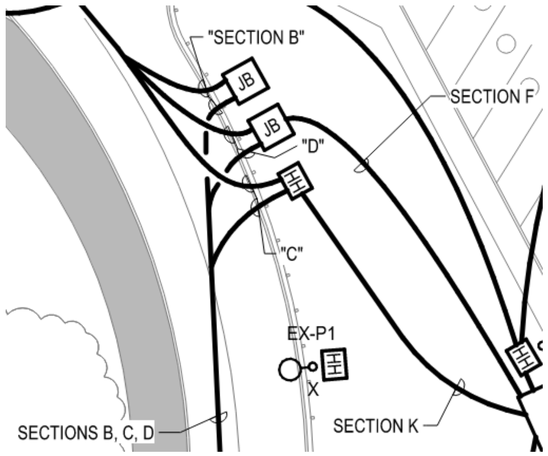
1. 4" PVC PRIMARY ELECTRIC SERVICE
2. 4" PVC SECONDARY ELECTRIC SERVICE
3. 4" PVC EMERGENCY ELECTRIC SERVICE
4. 4" PVC POWER
5. 4" PVC FIRE ALARM
6. 4" PVC TELECOM
7. 4" PVC SPARE
8. 2" PVC POWER
9. 2" PVC TELECOM
10. 2" PVC SPARE



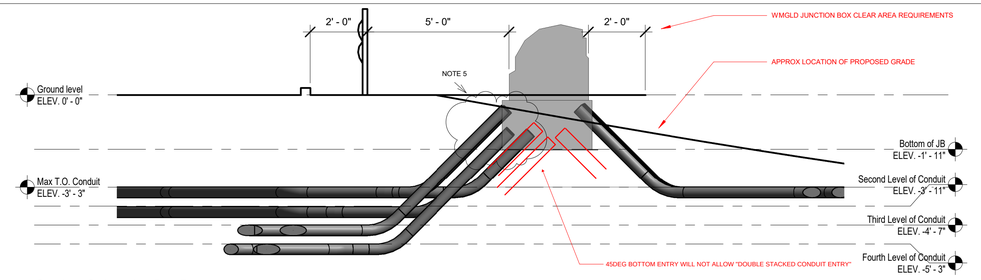
DUCTBANK SECTION DETAILS

Scale: NOT TO SCALE

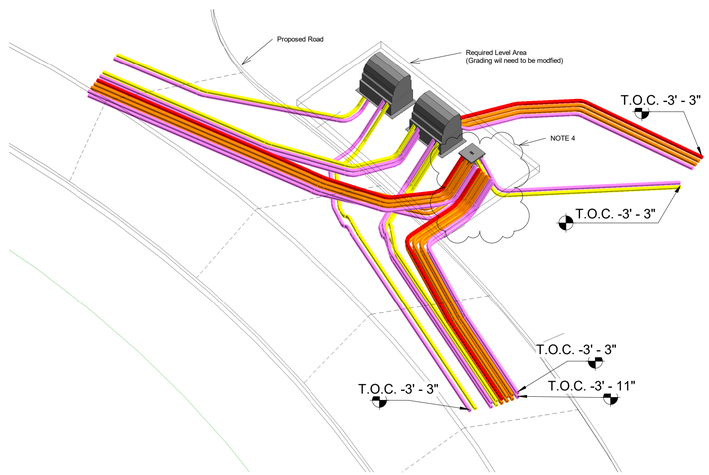
1 From E0-1-5



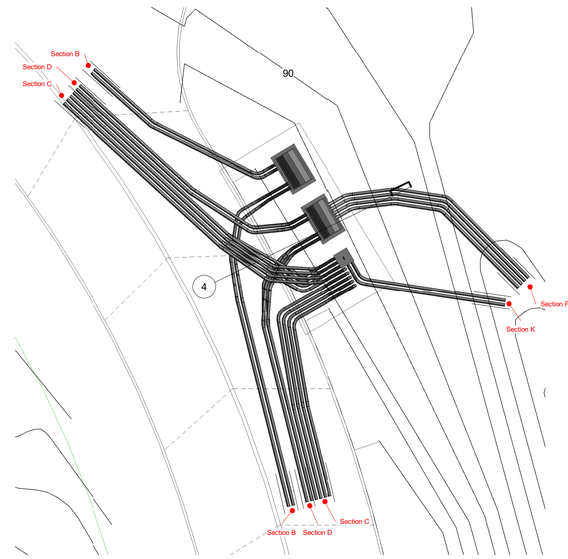
3 From E0-1-3



4 Section @ Junction Box D



5 Axon



6 Plan View

NOTES:

1. DUCTBANKS SHOWN WITHOUT CONCRETE FOR BETTER VISUAL
2. CONDUIT MODELED WITH CONSISTENT 3" SPACING PER DETAILS
3. MAX T.O.C. = - 3' 3" PER DETAIL 1 ON E0-1-5, DISCREPANCY WITH DUCTBANK SECTION DETAILS ON E0-1-5
4. HAND HOLE SHOWN AS 24" x 24" PER DETAIL 2/E01-5. KEY NOTE 9/E0-1-3 CALLS FOR TWO HHs, NEED DIRECTION ON HOW TO SPLIT UP TRENCH C. LIKELY ALSO NEED LARGER HANDHOLES.
5. CONDUITS SHOWN ENTERING JUNCTION BOX/HANDHOLE AT 45 DEGREES, DUCTBANKS WITH TWO LEVELS (SECTIONS C & D) WILL NOT FIT DUE TO THIS ANGLE AND THE 3" REQUIRED SPACING
6. SECTION K CONTAINS PRIMARY POWER AND IS ENTERING A HANDHOLE

Gilbane
Virtual Design & Construction

Number	Revision Description	Revision Date
1	Revision 1	Date 1

NORTHEAST METRO TECH HIGH SCHOOL

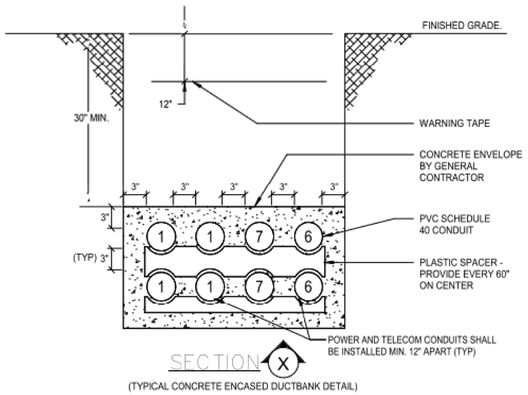
Project Number J09299.000
Date 02.16.2023
Drawn By Author
Checked By Checker

Proposed Conduit Routing

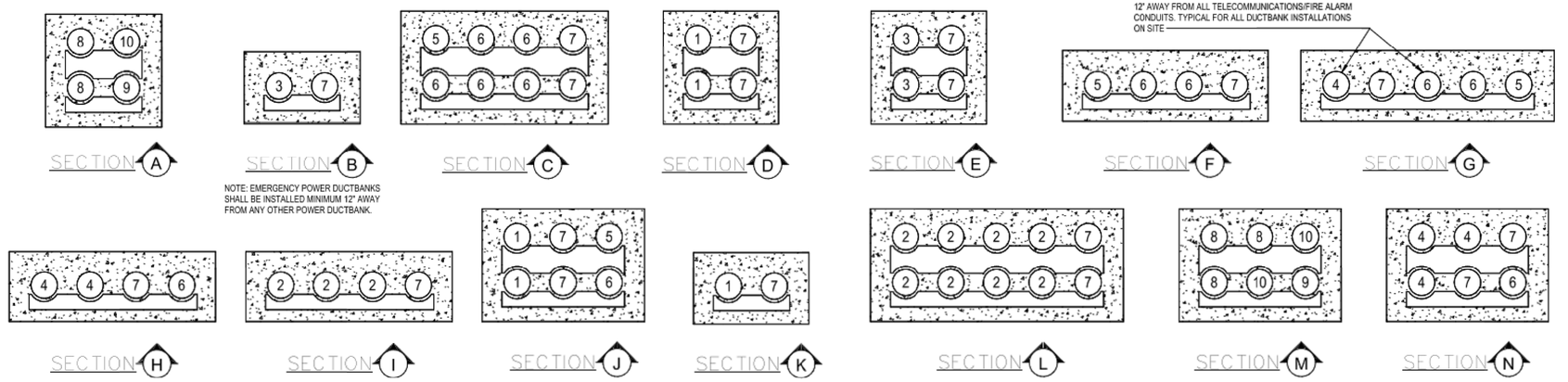
GPSK003

Scale As indicated

3/15/2023 1:39:56 PM



(TYPICAL CONCRETE ENCASED DUCTBANK DETAIL)



NOTE: EMERGENCY POWER DUCTBANKS SHALL BE INSTALLED MINIMUM 12" AWAY FROM ANY OTHER POWER DUCTBANK.

NOTE: POWER CONDUITS SHALL BE INSTALLED MINIMUM 12" AWAY FROM ALL TELECOMMUNICATIONS/FIRE ALARM CONDUITS. TYPICAL FOR ALL DUCTBANK INSTALLATIONS ON SITE

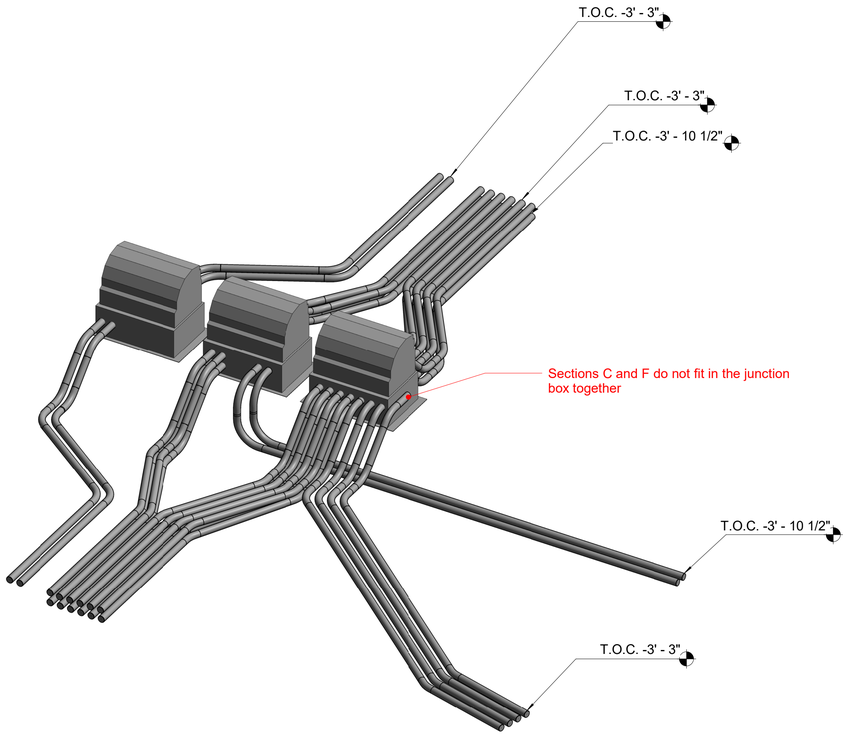
DUCTBANK LEGEND:

1. 4" PVC PRIMARY ELECTRIC SERVICE
2. 4" PVC SECONDARY ELECTRIC SERVICE
3. 4" PVC EMERGENCY ELECTRIC SERVICE
4. 4" PVC POWER
5. 4" PVC FIRE ALARM
6. 4" PVC TELECOM
7. 4" PVC SPARE
8. 2" PVC POWER
9. 2" PVC TELECOM
10. 2" PVC SPARE

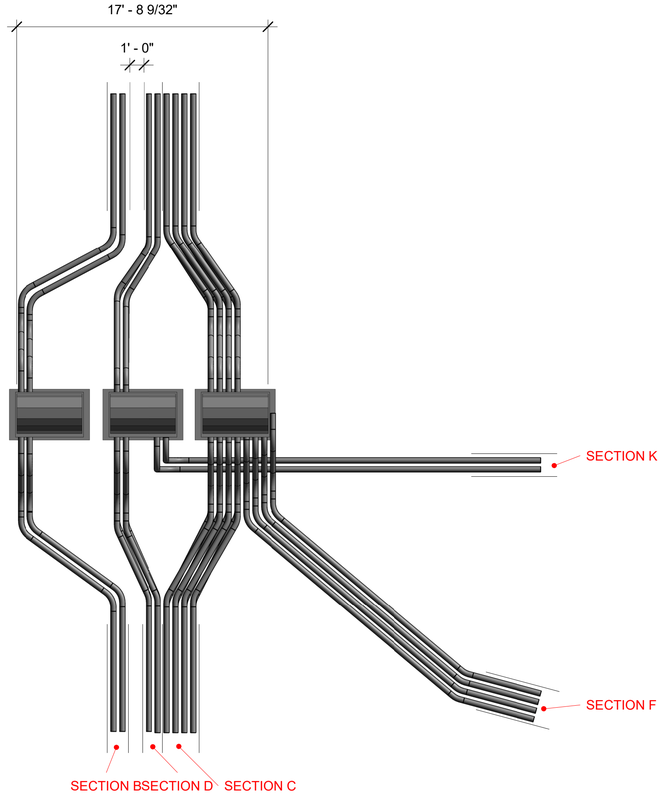
DUCTBANK SECTION DETAILS

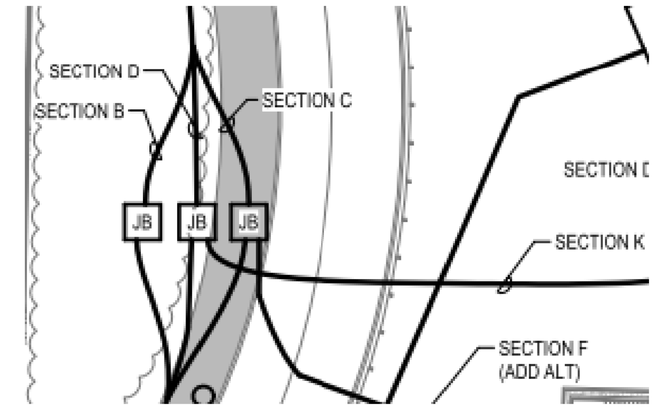
Scale: NOT TO SCALE

3 From E0-1-5



NOTE: Ductbanks shown without concrete for better visual





4 From E0-1-3

Gilbane
Virtual Design & Construction

Number	Revision Description	Revision Date

NORTHEAST METRO TECH HIGH SCHOOL

Project Number J09299.000
Date 02.16.2023
Drawn By Author
Checked By Checker

Proposed Conduit Routing

GPSK002

Scale As indicated

2/16/2023 12:55:25 PM

RFI #Pre-11

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Sewer Pump Station

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** David Conway **(Nitsch Engineering, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
		STATUS:	Closed on 03/02/23
		DUE DATE:	03/01/2023
DATE INITIATED:	02/22/2023	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Pre-Construction	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:			
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**, Donald Venerus **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:38 PM on 02/22/2023

The Sewer Pump Station servicing the Maintenance Building shown on Drawing C-501 is located in a paved area. Please confirm that the pump station shown in the detail provided on Drawing C-704 (e one Model WH472/122/WR472-122) is rated for H20 loading.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Tuesday, February 28th, 2023 at 7:17PM EST*

Refer to attached RFI response.

Attachments:
RFI PRE-11_Civ-Sewer Pump Station-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-11

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Sewer Pump Station

TO:	Paige Blanchard **(Nitsch Engineering, Inc.)** David Conway **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
		STATUS:	Open
		DUE DATE:	03/01/2023
DATE INITIATED:	02/22/2023	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Pre-Construction	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:			
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**, Donald Venerus **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 12:38 PM on 02/22/2023

The Sewer Pump Station servicing the Maintenance Building shown on Drawing C-501 is located in a paved area. Please confirm that the pump station shown in the detail provided on Drawing C-704 (e one Model WH472/122/WR472-122) is rated for H20 loading.

Awaiting an Official Response

All Replies:

DRA RESPONSE:
The Pump station and forced main were deleted from the project, refer to Addendum #1.

ANGEL KHAZADIAN
02/28/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-12

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Fuel and Gas Tanks

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/22/2023	**STATUS:**	Closed on 03/09/23
LOCATION:		**DUE DATE:**	03/01/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 04:40 PM on 02/22/2023

Drawing L104 Demo and Site Preparation shows the demolition of various fuel and gas tanks on the site of the current school. Please provide clarification on the following:

1. Please confirm the existence and size of the two fuel oil tanks (highlighted in yellow). There is a questions as to whether or not the tank furthest from the school exists.
2. Please confirm which of the 5 gas tanks (highlighted in orange) needs to remain in service and which of the tanks can be removed without waiting for the students to move into the new building.
3. Please confirm that the underground used oil storage tank (blue circle on drawing) has been previously removed. The tank shows on the original school drawings and there appears to be an access cover located in roughly the same location.

Attachments:
RFI Fuel & Gas Tanks.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, March 8th, 2023 at 10:32AM EST*
Refer to attached RFI response.

Attachments:
RFI PRE-12_Arch-Fuel & Gas Tanks-RESP.pdf

All Replies:

Response from Angel Khazadian (Drummey Rosane Anderson, Inc.) at 10:32 AM on 03/08/2023

Refer to attached RFI response.

Attachments:
RFI PRE-12_Arch-Fuel & Gas Tanks-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Pre-12

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Fuel and Gas Tanks

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	02/22/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/01/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 04:40 PM on 02/22/2023

Drawing L104 Demo and Site Preparation shows the demolition of various fuel and gas tanks on the site of the current school. Please provide clarification on the following:

1. Please confirm the existence and size of the two fuel oil tanks (highlighted in yellow). There is a questions as to whether or not the tank furthest from the school exists.
2. Please confirm which of the 5 gas tanks (highlighted in orange) needs to remain in service and which of the tanks can be removed without waiting for the students to move into the new building.
3. Please confirm that the underground used oil storage tank (blue circle on drawing) has been previously removed. The tank shows on the original school drawings and there appears to be an access cover located in roughly the same location.

Attachments:
RFI Fuel & Gas Tanks.pdf

Awaiting an Official Response

All Replies:

DRA RESPONSE:
For resposne to items 1 & 3 refer to FSE Response below.

2. Following the meeting discussing all tank, refer to the attached sketch. All Active tanks need to remain in service until the students move into the new building. Inactive tanks may be removed sooner.

ANGEL KHAZADIAN
03/08/2023

FSE RESPONSE:
1. The Site currently has one active underground storage tank (UST) and one active aboveground storage tank (AST). The hot water boilers are supplied by #4 fuel oil stored in one 20,000-gallon UST installed in 1969. The waste oil generated from the Auto Mechanics Shop is stored in one 500-gallon AST prior to off-site disposal.

3. The Site had one former waste oil UST which was removed in 1998. A release of waste oil to soil and groundwater was documented during the UST removal. The release was reported to the MassDEP (RTN 3-17384) on October 6, 1998. Remedial actions including soil excavation and in-situ bio-remediation were completed and release was closed with a Response Ationoutome (RAO) report submitted to the MassDEP in September 2000.

Farooq Siddique
02/23/2023

Inactive Propane tanks serving Pool area. Can be removed prior. Confirm whether or not Propane company will remove them

Active Propane Tank serving Carpentry & HVAC

Active Propane (300 gal) R&D

Active 20,000 gal. oil tank, #4 oil. Carry allowance for 100 cu yards of contaminated soil removal

Tank has been removed (See phase I report). Carry allowance for 100 cu. yards of contaminated soil removal

Active Propane tanks serving Kitchen, Science etc.

No Know tank here

UNDERGROUND USED OIL TANK ? (SHOWS ON ORIGINAL BUILDING DWGS

MATCHLINE – L103

MATCHLINE – L104

MATCHLINE – L105

P&P CLF AND GATES AT EXISTING TRACK, TYP.

P&P CLF

BASE BID: P&P CLF ADD-ALT: R&D CLF

R&D SIGN

R&S ALL SITE BOULDERS, TYP.

R & D SHED

R & D BLEACHERS

S&S LOAM

R & D PLAY EQUIPMENT AND SAFETY SURFACING

S&S LOAM

R & D GAS TANKS

R & D JERSEY BARRIER

R&D PAVEMENT AND STAIRS

R&S ALL SITE BOULDER, TYP.

S&S LOAM

APPROX. LIMIT OF TREE CLEARING, TYP.

R & D BASKETBALL POST, GOALS & HOOPS

R&D PAVEMENT

S&S LOAM

R&D GAS TANK

R&D CLF

R & D EXISTING BUILDINGS AND APPURTENANCES. REFER TO BUILDING DEMOLITION SPECIFICATION AND RECORD DRAWINGS OF ORIGINAL CONSTRUCTION, TYP.

R&D TRAILER

BASE BID: P&P INFIELD ADD-ALT: R&D INFIELD

BASE BID: P&P BACKSTOP ADD-ALT: R&D BACKSTOP

BASE BID: P&P BLEACHERS ADD-ALT: R&D BLEACHERS

R & D GATE

R & D CLF, TYP.

R&D SHED

R&D TREES, TYP.

S&S LOAM, TYP.

R & D EXISTING BUILDINGS AND APPURTENANCES. REFER TO BUILDING DEMOLITION SPECIFICATION AND RECORD DRAWINGS OF ORIGINAL CONSTRUCTION, TYP.

S&S LOAM

R & D EXISTING BUILDINGS AND APPURTENANCES. REFER TO BUILDING DEMOLITION SPECIFICATION AND RECORD DRAWINGS OF ORIGINAL CONSTRUCTION, TYP.

SALVAGE EXISTING SAW-DUST COLLECTION UNIT FOR RE-INSTALLATION, REFER TO M.E.P. DWGS.

S&S LOAM

R & D EXISTING BUILDINGS AND APPURTENANCES. REFER TO BUILDING DEMOLITION SPECIFICATION AND RECORD DRAWINGS OF ORIGINAL CONSTRUCTION, TYP.

R&D SHED

R&D GRAVEL

APPROX. LIMIT OF TREE CLEARING, TYP.

S&S LOAM

R&D TRAILER

R & D EXISTING BUILDINGS AND APPURTENANCES. REFER TO BUILDING DEMOLITION SPECIFICATION AND RECORD DRAWINGS OF ORIGINAL CONSTRUCTION, TYP.

S&S LOAM

R & D METAL GUARDRAIL

R & D CLF, TYP.

S&S LOAM

R&D TREES, TYP.

R&D BENCHES, TYP.

R&D TREES, TYP.

S&S LOAM, TYP.

R&D PAVEMENT

S&S LOAM, TYP.

R&D TREES, TYP.

R&D BENCHES AND PORTABLE TABLES

S&S LOAM, TYP.

R&D WALL

R&D PAVEMENT

R&D PAVERS

R&D WALL AND STAIRS

R&D TRAILER

R & D EXISTING BUILDINGS AND APPURTENANCES. REFER TO BUILDING DEMOLITION SPECIFICATION AND RECORD DRAWINGS OF ORIGINAL CONSTRUCTION, TYP.

SUBSURFACE EXPLORATIONS, REFER TO GEO-TECH REPORT FOR DETAILS, TYP.

R&D TRAILER

R&D HANDRAIL

R&D GUARDRAIL, TYP.

R&D CONC. WALL

R&D FUEL MANHOLES & CONCRETE PADS

R&D CONCRETE STAIRS

R & D AC UNIT

R & D RECREATIONAL EQUIPMENT

R & D TRAILER

R & D METAL GUARDRAIL

R & D CLF, TYP.

R&D CLF, TYP.

FOR EXISTING ELECTRICIAL UTILITIES, REFER TO ELECTRICIAL DWGS., TYP.

R&D GUARDRAIL, TYP.

P&P BIT CONC.

R&D FUEL OIL TANKS, TYP.

R & D JERSEY BARRIER

R & D SHED

R & D GAS TANKS

R & D METAL GUARDRAIL

R & D CLF, TYP.

NORTH

SCALE: 1" = 30'-0"

0 15 30 75

REFER TO SHEET L101 FOR SITE PREPARATION NOTES AND LEGEND

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road, Studio 205, South Windsor, CT 06074

269 Charles Street, Studio 300, Waltham, MA 02453

Planning | Architecture | Interior Design

Tel: 617.964.1700

www.dranarc.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd, Wakefield, MA 01880

WARNER LARSON LANDSCAPE ARCHITECTS

130 WEST BROADWAY, BOSTON MA 02127

617.464.1440 warnerlarson.com

© COPYRIGHT 2022 DRUMMEY ROSANE ANDERSON, INC.

Early Site Preparation Construction Documents

January 13, 2023

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

DEMO AND SITE PREPARATION PLAN - 4

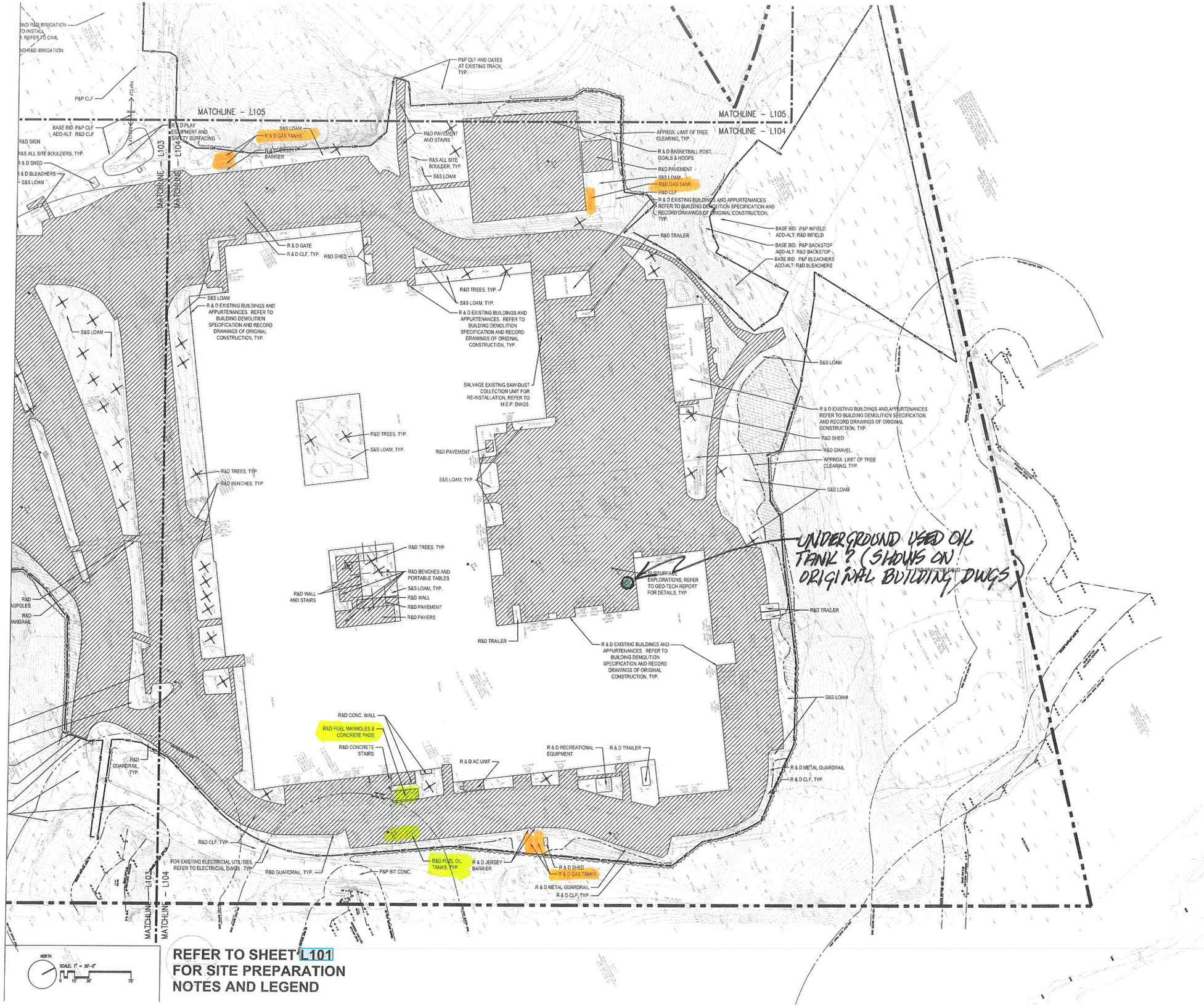
Scale: 1" = 30'-0"

Job No.: 20202.00

Drawn By: JM

Date: January 13, 2023

L104



REFER TO SHEET L101 FOR SITE PREPARATION NOTES AND LEGEND

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road, Studio 205, South Windsor, CT 06074 | 260 Charles Street, Studio 300, Waltham, MA 02453

Planning | Architecture | Interior Design

Tel. 617.964.1700
www.drawn.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

©COPYRIGHT 2022 DRUMMEY ROSANE ANDERSON, INC.

Early Site Preparation Construction Documents

January 13, 2023

KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

DEMO AND SITE PREPARATION PLAN - 4

Scale: 1" = 30'-0"
Job No.: 20202.00
Drawn By: JM
Date: January 13, 2023

L104

RFI #Pre-13

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Utility Crossing at Culverts

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	03/02/2023	**STATUS:**	Closed on 03/23/23
LOCATION:		**DUE DATE:**	03/09/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:39 PM on 03/02/2023

Please review the attached sketch and provide details for the utility crossings at the 10’ and 15’ precast culverts.

Attachments:
RFI Utility Crossings.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Monday, March 13th, 2023 at 9:32AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-13_Civ-Utility crossing at Culverts-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-13

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Utility Crossing at Culverts

TO:	Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	03/02/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/09/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 01:39 PM on 03/02/2023

Please review the attached sketch and provide details for the utility crossings at the 10’ and 15’ precast culverts.

Attachments:
RFI Utility Crossings.pdf

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to NEI response below, and revised sheet C-506 attached.

ANGEL KHAZADIAN
03/13/2023

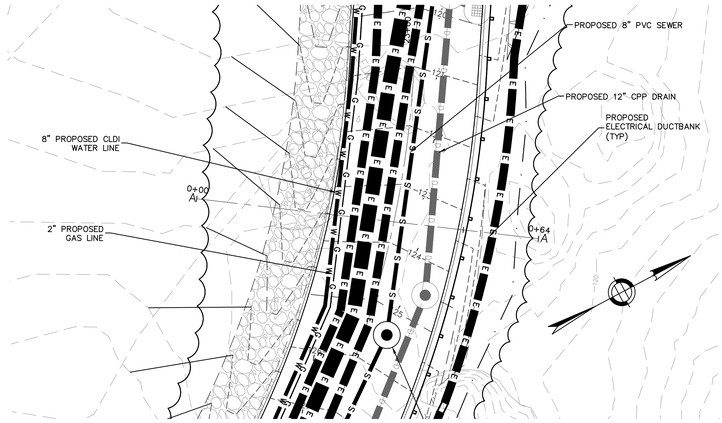
NEI RESPONSE:

Please find revised sheet C-506 attached for details on the utility crossings at the culverts.

PAIGE BLANCHARD
03/10/2020

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

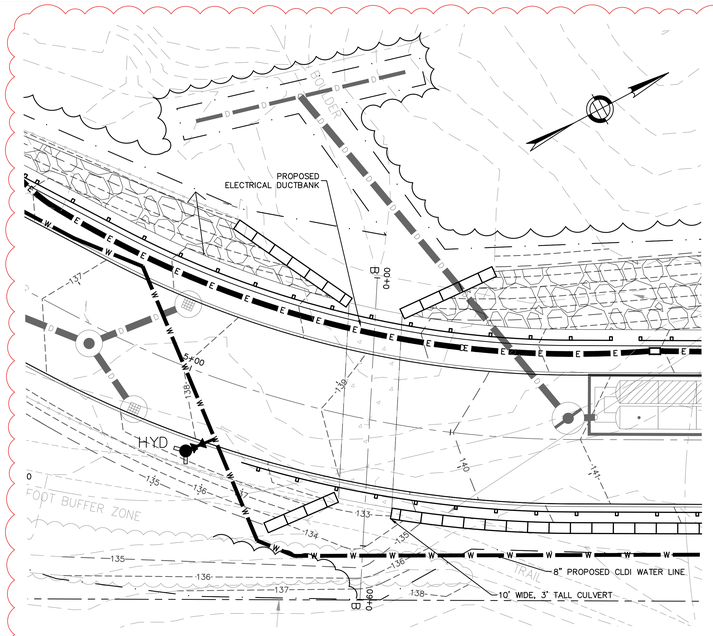
BY **DATE** **COPIES TO**



LOCATION
SECTION A–A

SCALE:
1" = 10'

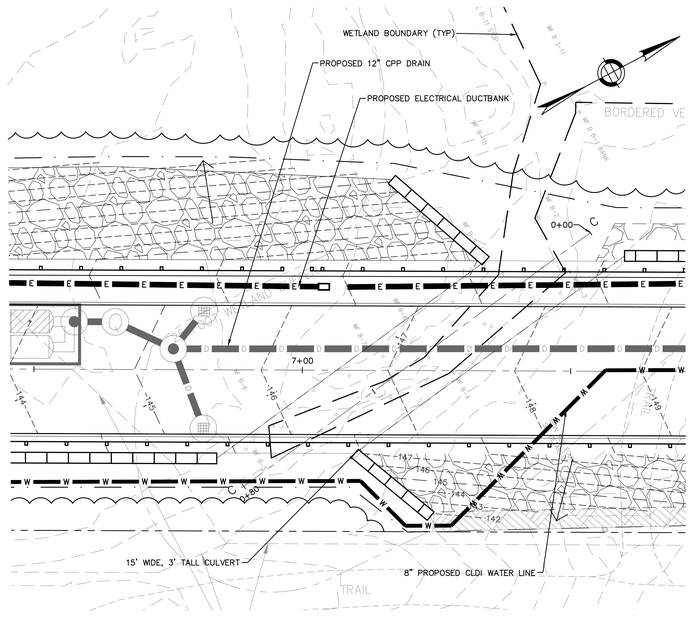
10 5 0 10 20



LOCATION
SECTION B–B

SCALE:
1" = 10'

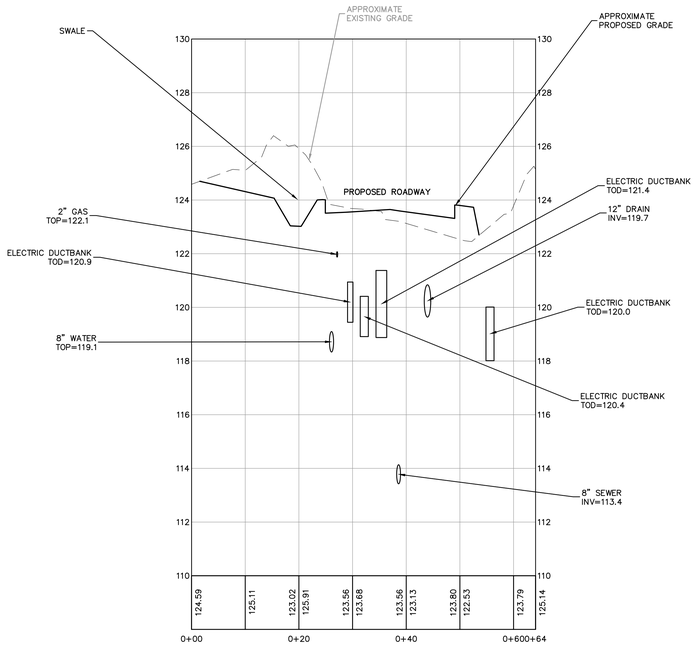
10 5 0 10 20



LOCATION
SECTION C–C

SCALE:
1" = 10'

10 5 0 10 20



UTILITY SECTION
SECTION A–A

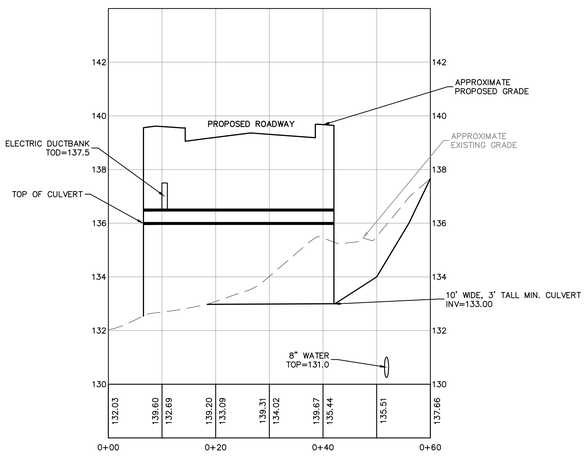
HORIZONTAL SCALE 1"=10'
VERTICAL SCALE 1"=2'

SCALE:
1" = 10'

10 5 0 10 20

2 1 0 2 4

1" = 2'



UTILITY SECTION
SECTION B–B

HORIZONTAL SCALE 1"=10'
VERTICAL SCALE 1"=2'

SCALE:
1" = 10'

10 5 0 10 20

2 1 0 2 4

1" = 2'

UTILITY SECTION
SECTION C–C

HORIZONTAL SCALE 1"=10'
VERTICAL SCALE 1"=2'

SCALE:
1" = 10'

10 5 0 10 20

2 1 0 2 4

1" = 2'

Pre RFI #13
03/10/2023

NOTES:
1. REFER TO SHEET C–000 FOR NOTES, LEGEND AND ABBREVIATIONS.
2. REFER TO THE DRAINAGE PLANS FOR INFORMATION ABOUT THE PROPOSED DRAINAGE SYSTEM.
3. ELECTRICAL INFRASTRUCTURE SHOWN FOR COORDINATION. REFER TO ELECTRICAL SITE PLANS AND DETAIL (SHEETS E0–1–1 TO E01–7).

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering

www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

©COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

NOI RE-SUBMISSION

FEBURARY 16, 2023

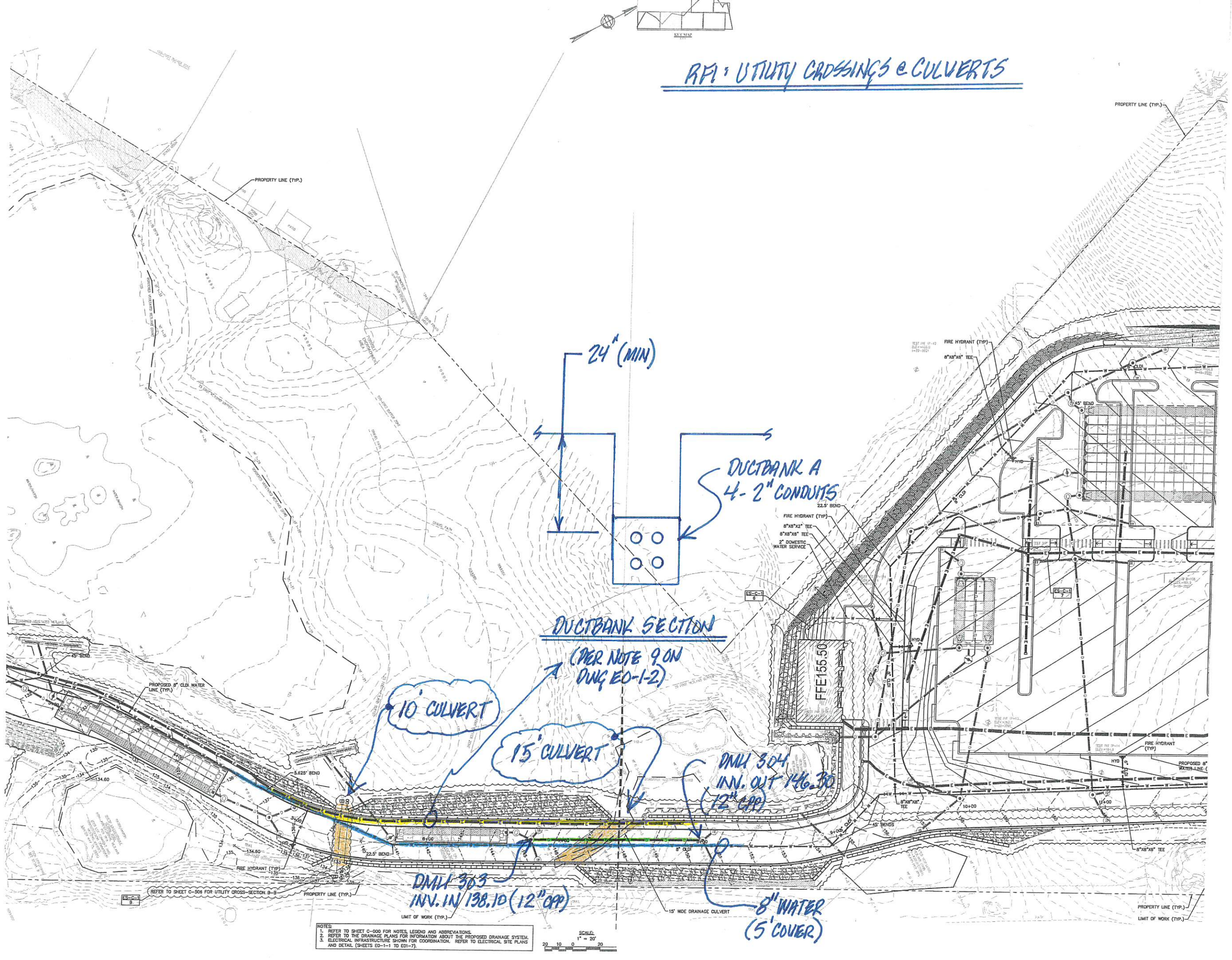
UTILITY X-SECTIONS

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: FEBRUARY 16, 2023

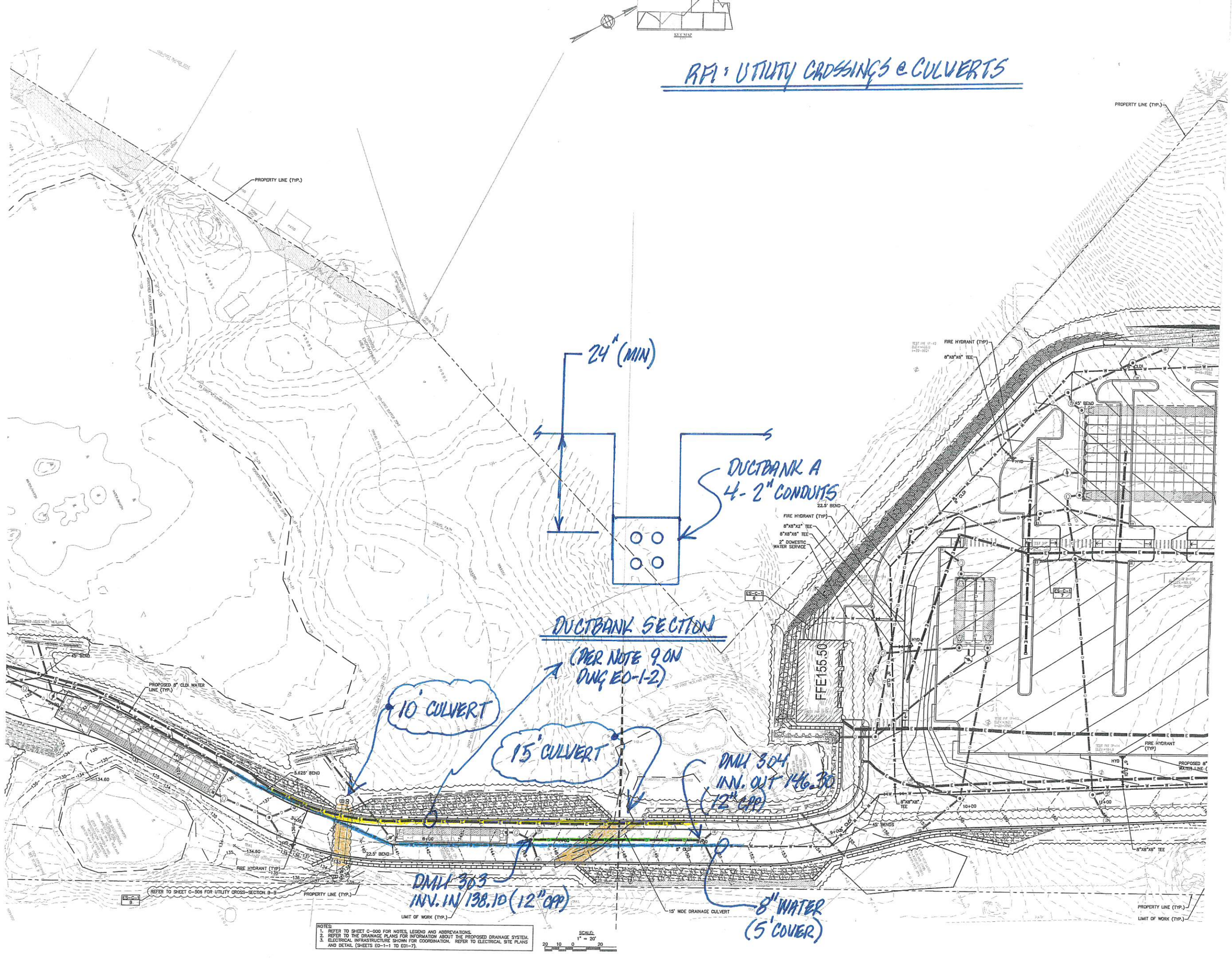
C-506

LAST SAVED: 10/6/2023 2:39 PM
P:\2020\13872\NOI SUBMISSION\PLANS\13872_EXT.DWG

RFI : UTILITY CROSSINGS @ CULVERTS



RFI : UTILITY CROSSINGS @ CULVERTS



RFI #Pre-14

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Concrete Bench Shelf

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Josh Millonig **(Warner Larson Landscape Architects)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
		STATUS:	Closed on 03/23/23
		DUE DATE:	03/09/2023
DATE INITIATED:	03/02/2023	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Pre-Construction	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:			
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:27 PM on 03/02/2023

Please see the attached sketch. Contract Drawing L-303 shows a cast in place concrete bench shelf along the toe of the blast face to provide support for metal shipping containers. It does not appear that there is a detail for this shelf on the Civil, Landscape or Structural drawings. Please provide the necessary details to construct this shelf to support the shipping containers.

Attachments:
RFI Concrete Bench Shelf.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, March 8th, 2023 at 10:05AM EST*

Refer to attached RFI response.

Attachments:
RFI PRE-14_Land-Concrete Bench Shelf-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-14

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Concrete Bench Shelf

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	03/02/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/09/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:27 PM on 03/02/2023

Please see the attached sketch. Contract Drawing L-303 shows a cast in place concrete bench shelf along the toe of the blast face to provide support for metal shipping containers. It does not appear that there is a detail for this shelf on the Civil, Landscape or Structural drawings. Please provide the necessary details to construct this shelf to support the shipping containers.

Attachments:
RFI Concrete Bench Shelf.pdf

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer to WLA response below.

ANGEL KHAZADIAN
03/08/2023

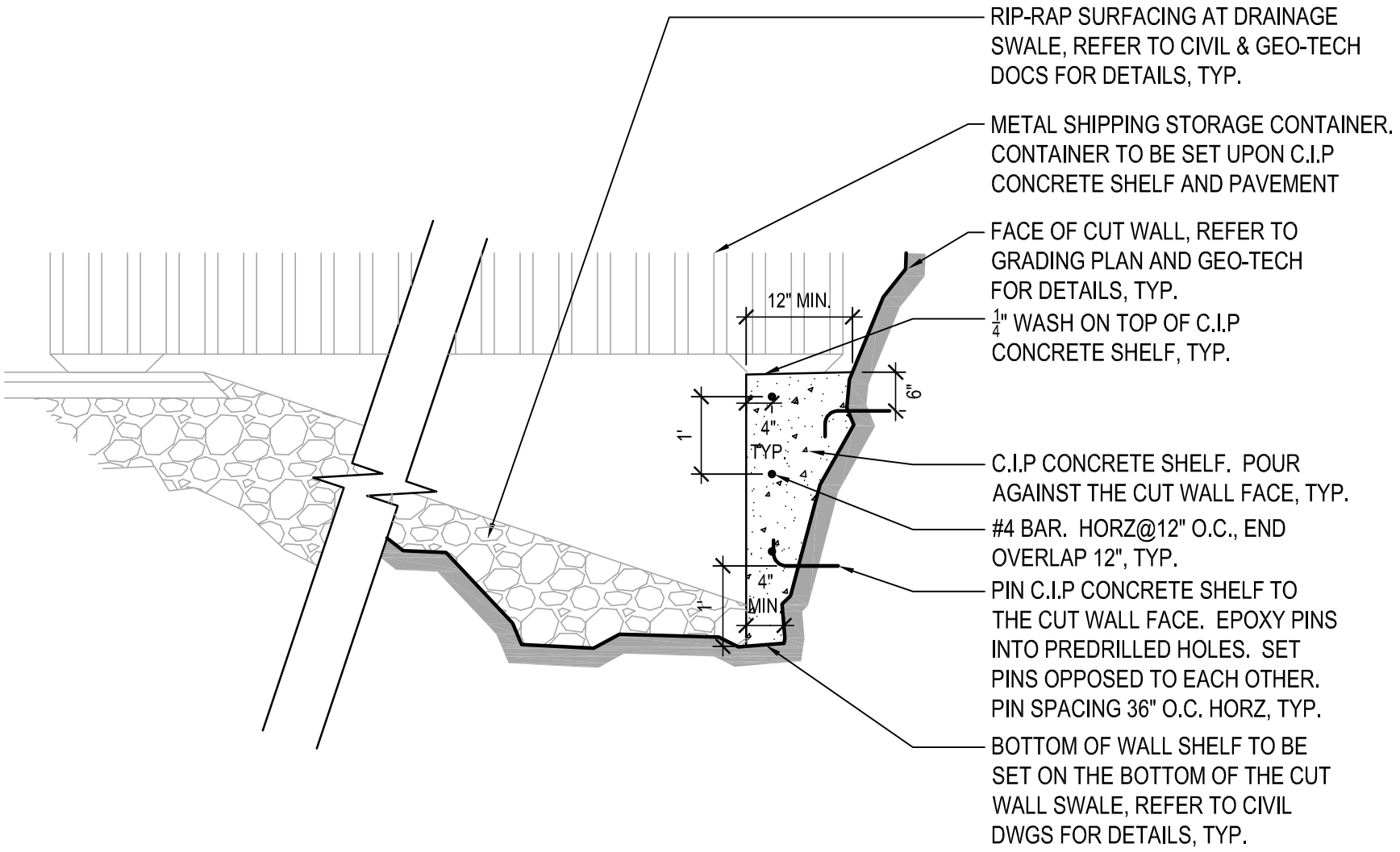
WLA RESPONSE:

See SKL-006, attached, for CIP concrete shelf.

JOSH MILLONIG
03/08/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO
	03/08/2023	



Drummey Rosane Anderson, Inc.
260 Charles Street, 3rd Floor
Waltham, MA 02453
617.964.1700
info@draws.com

Planning | Architecture | Interior Design

DRA

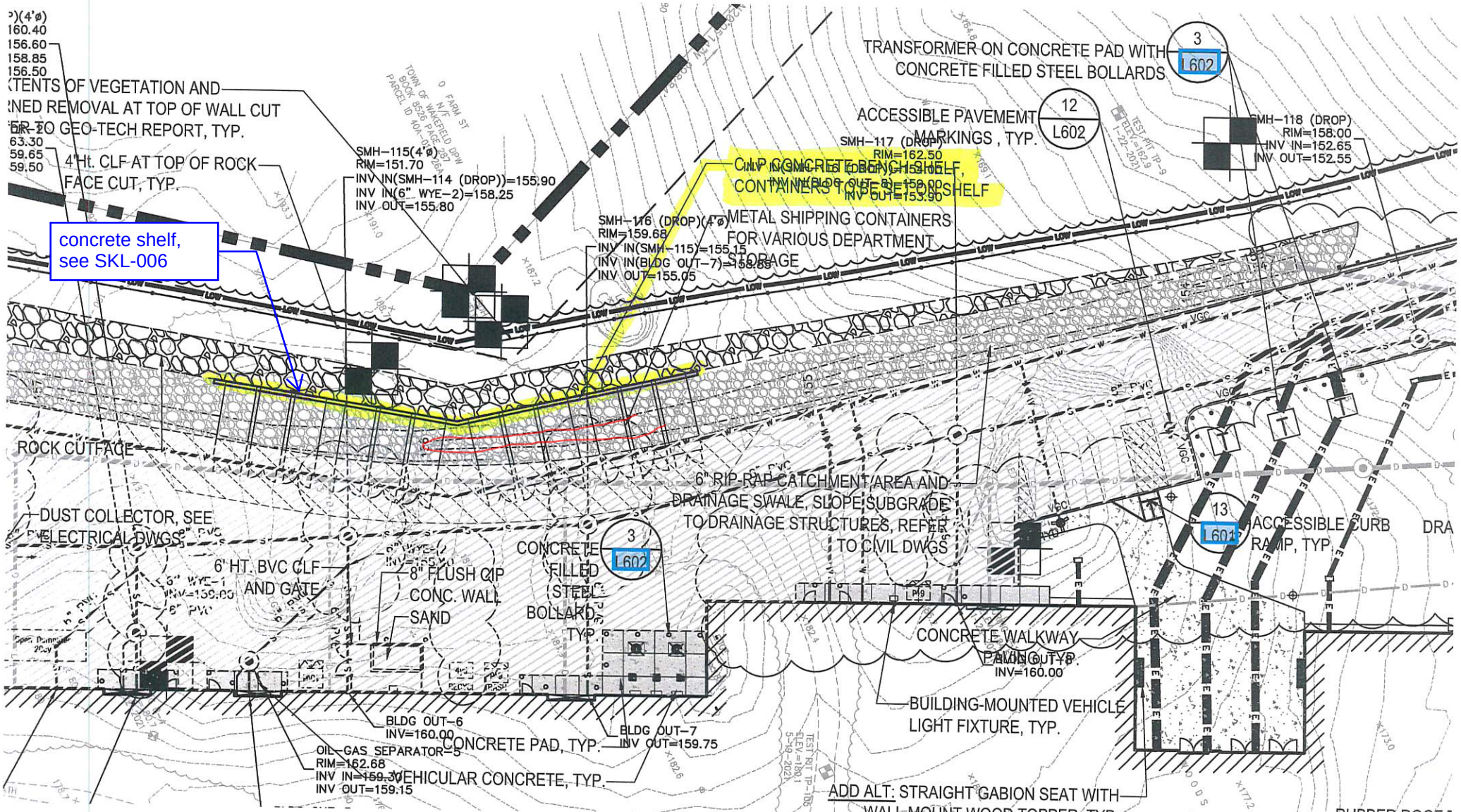
NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 HEMLOCK RD,
WAKEFIELD, MA 01880

SKL - PRE-006
Ref. dwg. - New Detail
SKL Title -
RFI #Pre14:
Concrete Bench Shelf

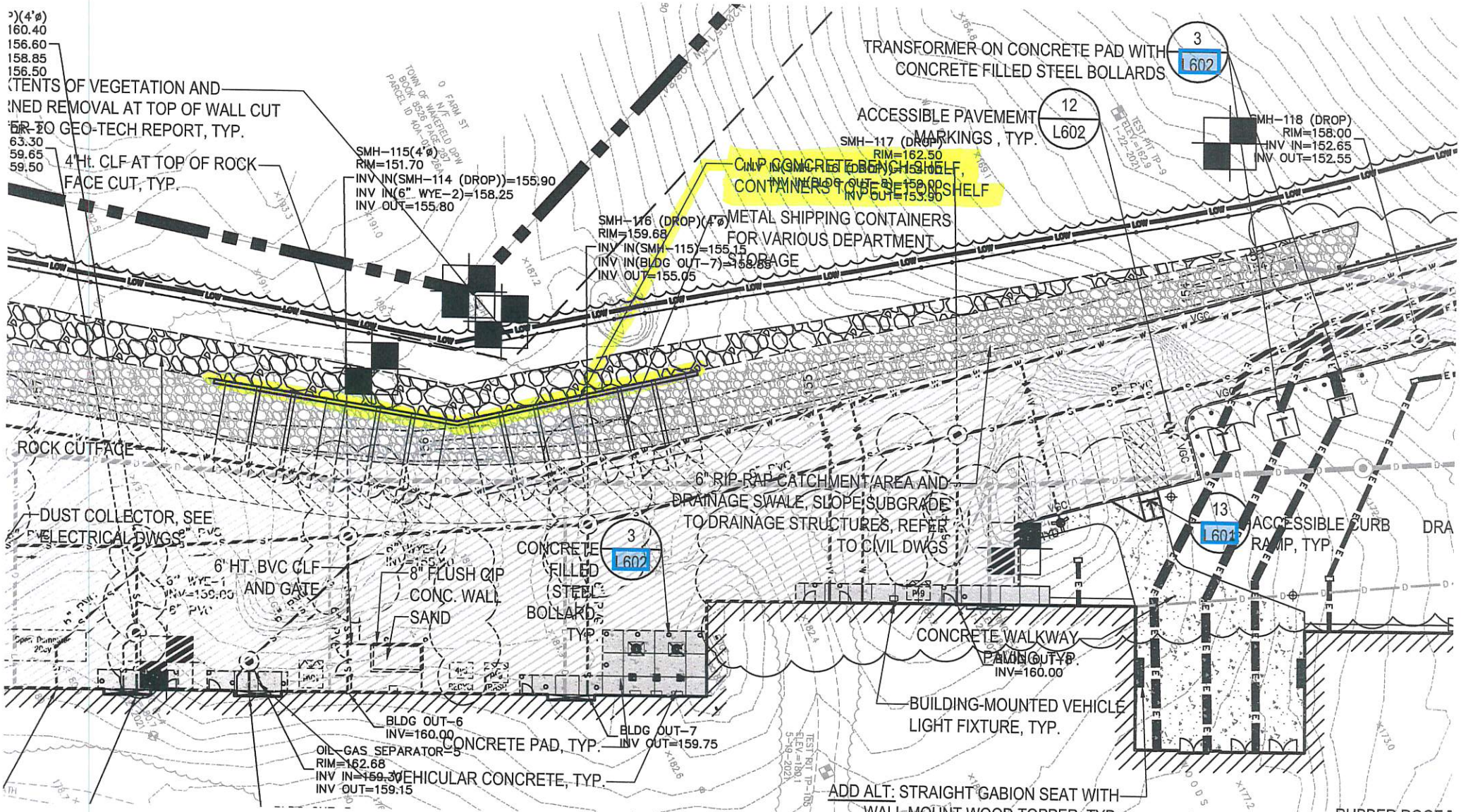
Scale: NOT TO SCALE
Drawn By: JDM
Job No.: 15012.00
Date: 2023-03-07

RFI: CONCRETE BENCH SHELF



FROM DWG. L-303

RFI: CONCRETE BENCH SHELF



FROM DWG. L-303

RFI #Pre-15

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Underslab Drainage

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	03/02/2023	**STATUS:**	Closed on 04/18/23
LOCATION:		**DUE DATE:**	03/09/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:33 PM on 03/02/2023

Please reference Geotechnical Plans GT-0-1 & GT-0-2 and confirm as to whether or not the installation of the underslab drainage system should be part of the Plumbing scope of work.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Monday, March 6th, 2023 at 10:02AM EST*

Refer to the attached updated the response to provide additional clarity.

Attachments:
RFI PRE-15_Arch-Underslab Drainage-RESP2.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, March 3rd, 2023 at 8:24AM EST*

Refer to attached RFI response.

Attachments:
RFI PRE-15_Arch-Underslab Drainage-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-15

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Underslab Drainage

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	03/02/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/09/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:33 PM on 03/02/2023

Please reference Geotechnical Plans GT-0-1 & GT-0-2 and confirm as to whether or not the installation of the underslab drainage system should be part of the Plumbing scope of work.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

As previously noted in the responses to RFI-Pre01, Underslab piping shown on the GeoTechnical Plans will be assigned to the Plumbing Filed Sub Bid. Excavation, treching, stone, and fabric shall be assigned to the site contractor.

ANGEL KHAZADIAN
03/06/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-15

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Underslab Drainage

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	03/02/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/09/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 02:33 PM on 03/02/2023

Please reference Geotechnical Plans GT-0-1 & GT-0-2 and confirm as to whether or not the installation of the underslab drainage system should be part of the Plumbing scope of work.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

As previously noted in the responses to RFI-Pre01, Underslab drainage shown on the GeoTechnical Plans will be assigned to the Plumbing Filed Sub Bid.

ANGEL KHAZADIAN
03/03/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-16

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Ductbank Rebar

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Sean Sullivan **(Bala Consulting Engineers)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/03/2023	**STATUS:**	Closed on 03/23/23
LOCATION:		**DUE DATE:**	03/10/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	E0-1-5		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 03:44 PM on 03/03/2023

Reference drawing E0-1-5. The "Ductbank Section Details" on this drawing do not show rebar in the ductbank sections. Please confirm this is correct (no rebar is required).

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, March 22nd, 2023 at 7:16PM EDT*

Refer to attached RFI response

Attachments:
RFI PRE-16_Elec-Ductbank Rebar-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-16

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Ductbank Rebar

TO:	Sean Sullivan **(Bala Consulting Engineers)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/03/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/10/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 03:44 PM on 03/03/2023

Reference drawing E0-1-5. The "Ductbank Section Details" on this drawing do not show rebar in the ductbank sections. Please confirm this is correct (no rebar is required).

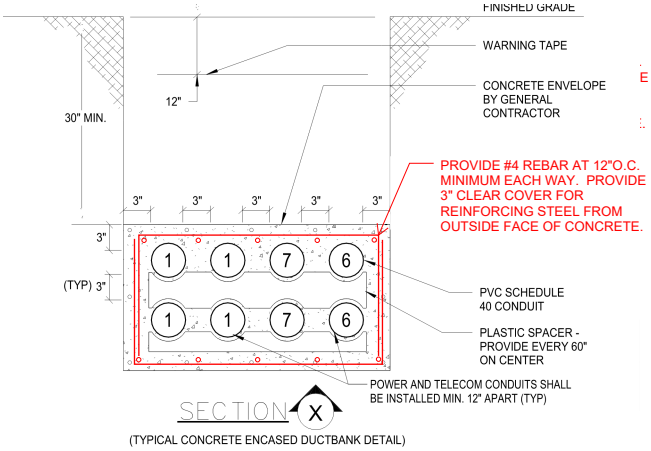
Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to the dutbank detail below with EDG rebar requirements overlayed. Rebar extends for the entire length of the ductbank. Final electrical bid documents will include this information on the drawings.

ANGEL KHAZADIAN
03/22/2023



(TYPICAL CONCRETE ENCASED DUCTBANK DETAIL)

BY **DATE** **COPIES TO**

RFI #Pre-17

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Erosion Control Barrier - Super Silt Fence

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/03/2023	**STATUS:**	Closed on 03/09/23
LOCATION:		**DUE DATE:**	03/10/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 04:01 PM on 03/03/2023

Please advise where the "Erosion Control Barrier Super Silt Fence" on drawing C-700 is referenced on the erosion control plans as a requirement.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, March 9th, 2023 at 9:23AM EST*
Refer to attached RFI response.

Attachments:
RFI PRE-17_Civ-Erosion Control Barrier - Super Silt Fence-RESP.pdf

All Replies:

Response from Angel Khazadian (Drummey Rosane Anderson, Inc.) at 09:23 AM on 03/09/2023

Refer to attached RFI response.

Attachments:
RFI PRE-17_Civ-Erosion Control Barrier - Super Silt Fence-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-17

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Erosion Control Barrier - Super Silt Fence

TO:	Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/03/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/10/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 04:01 PM on 03/03/2023

Please advise where the "Erosion Control Barrier Super Silt Fence" on drawing C-700 is referenced on the erosion control plans as a requirement.

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer to NEI Response below.

ANGEL KHAZADIAN
03/08/2020

NEI RESPONSE:

The 'Erosion Control Barrier Super Silt Fence' is not specified on the Erosion and Sedimentation Control Plans. The detail will be removed from Sheet C-700.

Paige Blanchard
03/08/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-18

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Temporary Drainage Connection Details

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/09/2023	**STATUS:**	Closed on 04/06/23
LOCATION:		**DUE DATE:**	03/16/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 09:15 AM on 03/09/2023

Please review the proposed temporary drainage routing required due to phasing requirements (permanent drainage tie is after existing school demo) and confirm this is acceptable:

In order to accept flow from the permanent drainage system from the new school building, a temporary 18” drain line would be installed to run along the toe of the ledge slope heading toward the gate to Breakheart. Fittings would be installed along this portion of the line to keep it as tight to the toe of slope as possible. An added drain manhole (or water quality structure if necessary) would be installed near the gate to allow the directional change needed to tie into the existing drain manhole currently located in front of the classroom trailers. The flow would then follow thee existing drainage system downstream (running through an existing pipe under the Breakheart Road) and discharge at the concrete headwall into the wetland area in Breakheart. Please review the temporary drainage layout as shown, with the approximate inverts provided, and confirm the following:

1. That the path and associated piping/structures are acceptable
2. That it is acceptable to allow this flow to be discharged as shown/described

Attachments:
Temp Drainage 1 20 23.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Monday, March 13th, 2023 at 4:55PM EDT*
Refer to attached RFI response.

Attachments:
RFI PRE-18_Civ-Temporary Drainage Connection Details-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-18

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Temporary Drainage Connection Details

TO:	Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/09/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/16/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 09:15 AM on 03/09/2023

Please review the proposed temporary drainage routing required due to phasing requirements (permanent drainage tie is after existing school demo) and confirm this is acceptable:

In order to accept flow from the permanent drainage system from the new school building, a temporary 18” drain line would be installed to run along the toe of the ledge slope heading toward the gate to Breakheart. Fittings would be installed along this portion of the line to keep it as tight to the toe of slope as possible. An added drain manhole (or water quality structure if necessary) would be installed near the gate to allow the directional change needed to tie into the existing drain manhole currently located in front of the classroom trailers. The flow would then follow thee existing drainage system downstream (running through an existing pipe under the Breakheart Road) and discharge at the concrete headwall into the wetland area in Breakheart. Please review the temporary drainage layout as shown, with the approximate inverts provided, and confirm the following:

1. That the path and associated piping/structures are acceptable
2. That it is acceptable to allow this flow to be discharged as shown/described

Attachments:
Temp Drainage 1 20 23.pdf

Awaiting an Official Response

All Replies:

DRA RESPONSE:

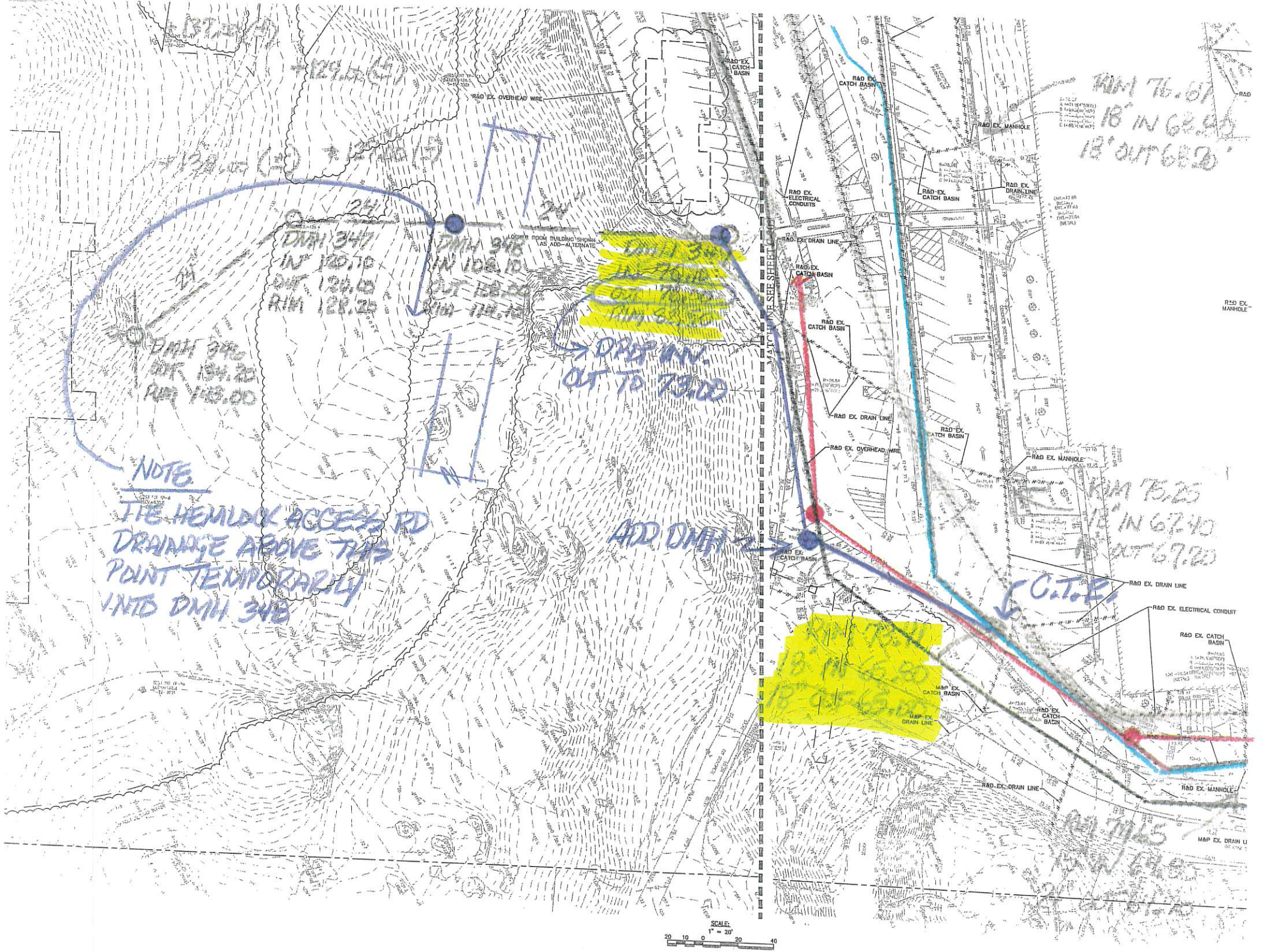
Refer to NEI response below.

ANGEL KHAZADIAN
03/13/2023

NEI RESPONSE:

Nitsch Engineering takes no exception to the proposed routing. Management of stormwater during construction is contractor means and methods, discharges should be compliant with the SWPPP.

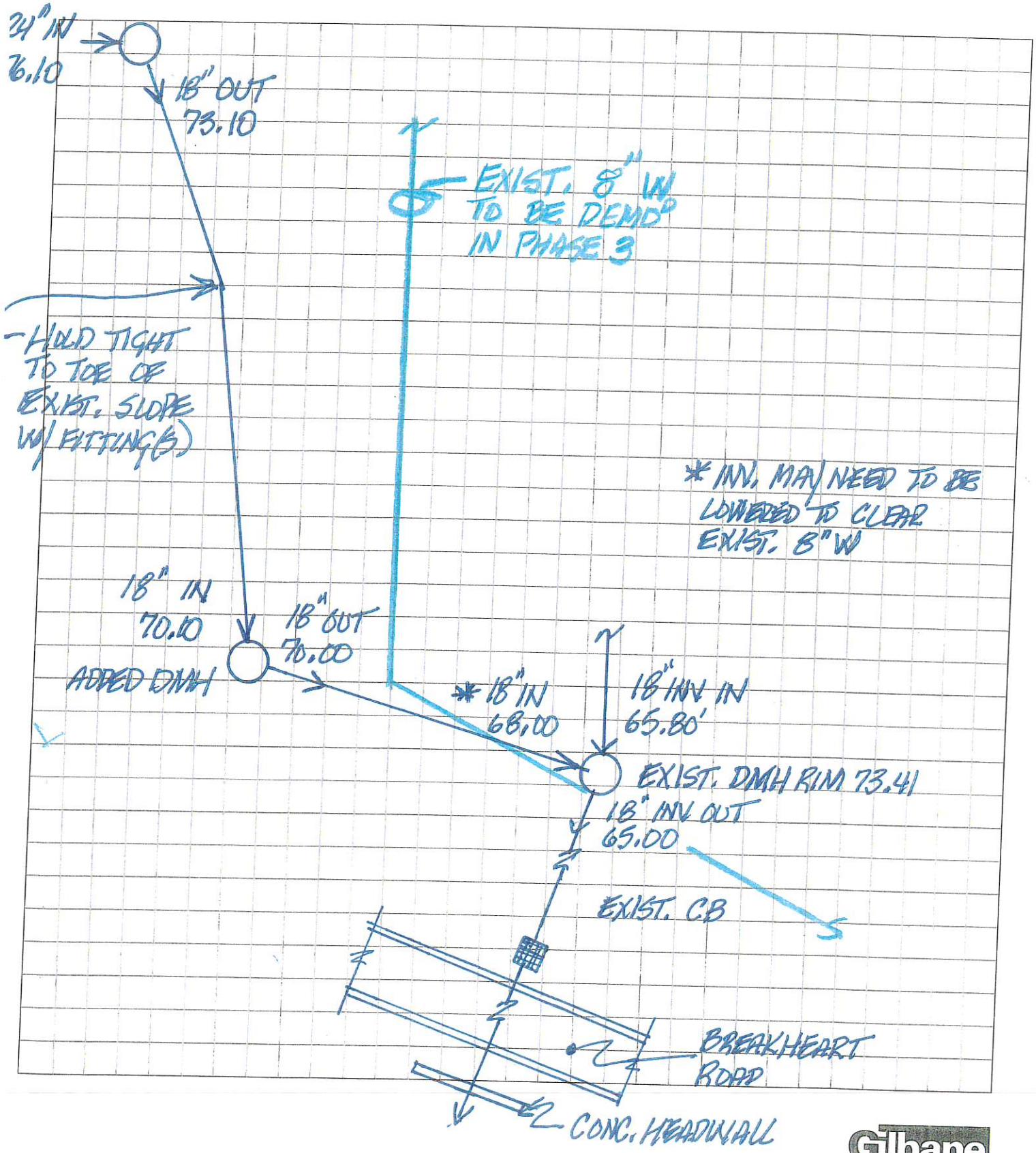
PAIGE BLANCHARD
03/10/2020


R&D EX. OVERHEAD WIRE
R&D EX. CATCH BASIN
R&D EX. MANHOLE
R&D EX. ELECTRICAL CONDUITS
R&D EX. DRAIN LINE
LOCATE ROOF BUILDING SHOWN AS ADD-ALTERNATE
MATCH LINE SEE SHEET C-300
M&P EX. CATCH BASIN
M&P EX. DRAIN LINE
R&D EX. ELECTRICAL CONDUIT
SCALE: 1" = 20'
20 10 0 20 40
NOTE.
TIE HEMLOCK ACCESS RD DRAINAGE ABOVE TUB POINT TEMPORARILY INTO DMH 34B
ADD DMH
C.T.E.

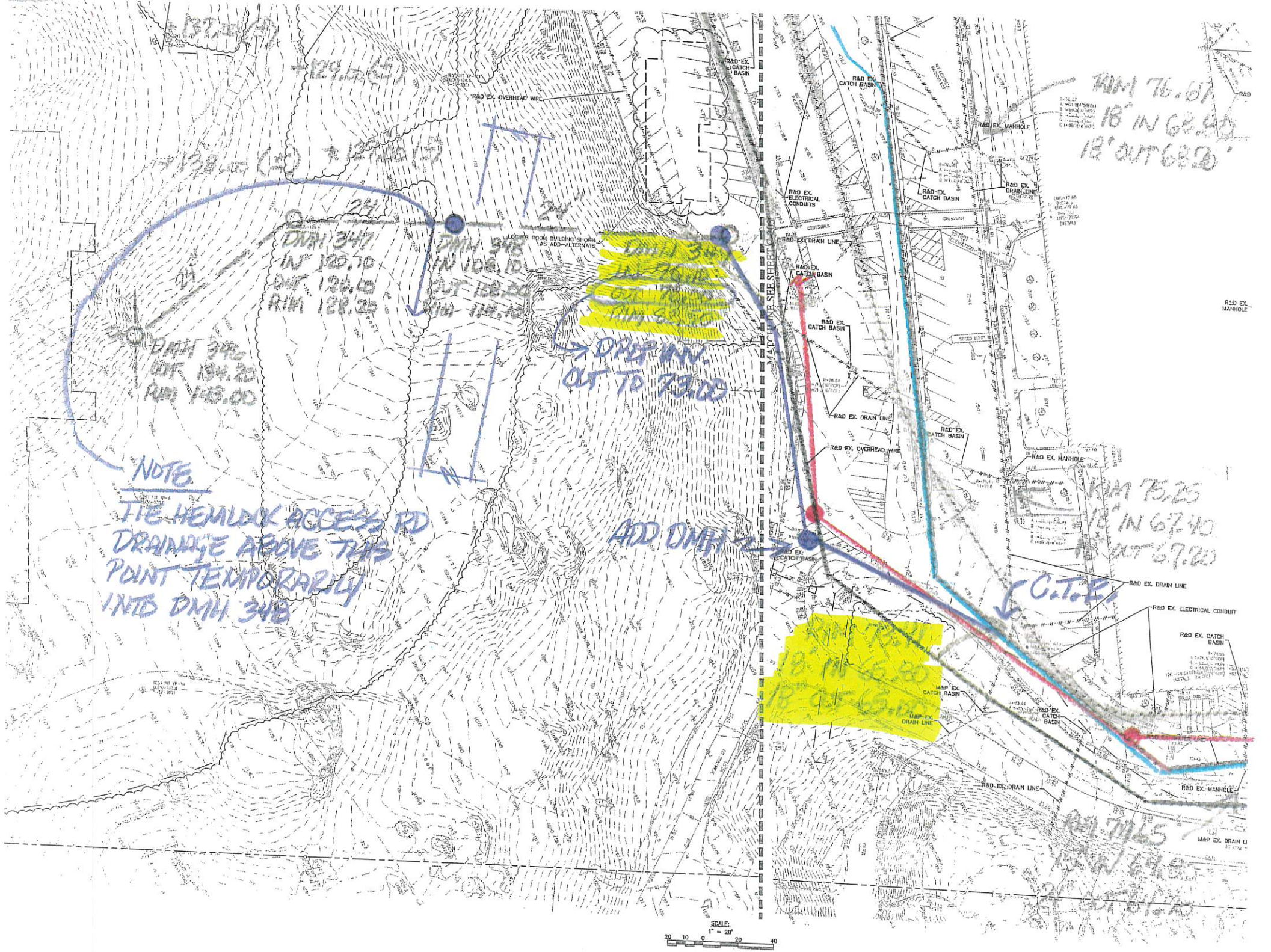
Gilbane Building Company

PROJECT NEMT TEMP. DRAINAGE

DATE 2/20/23



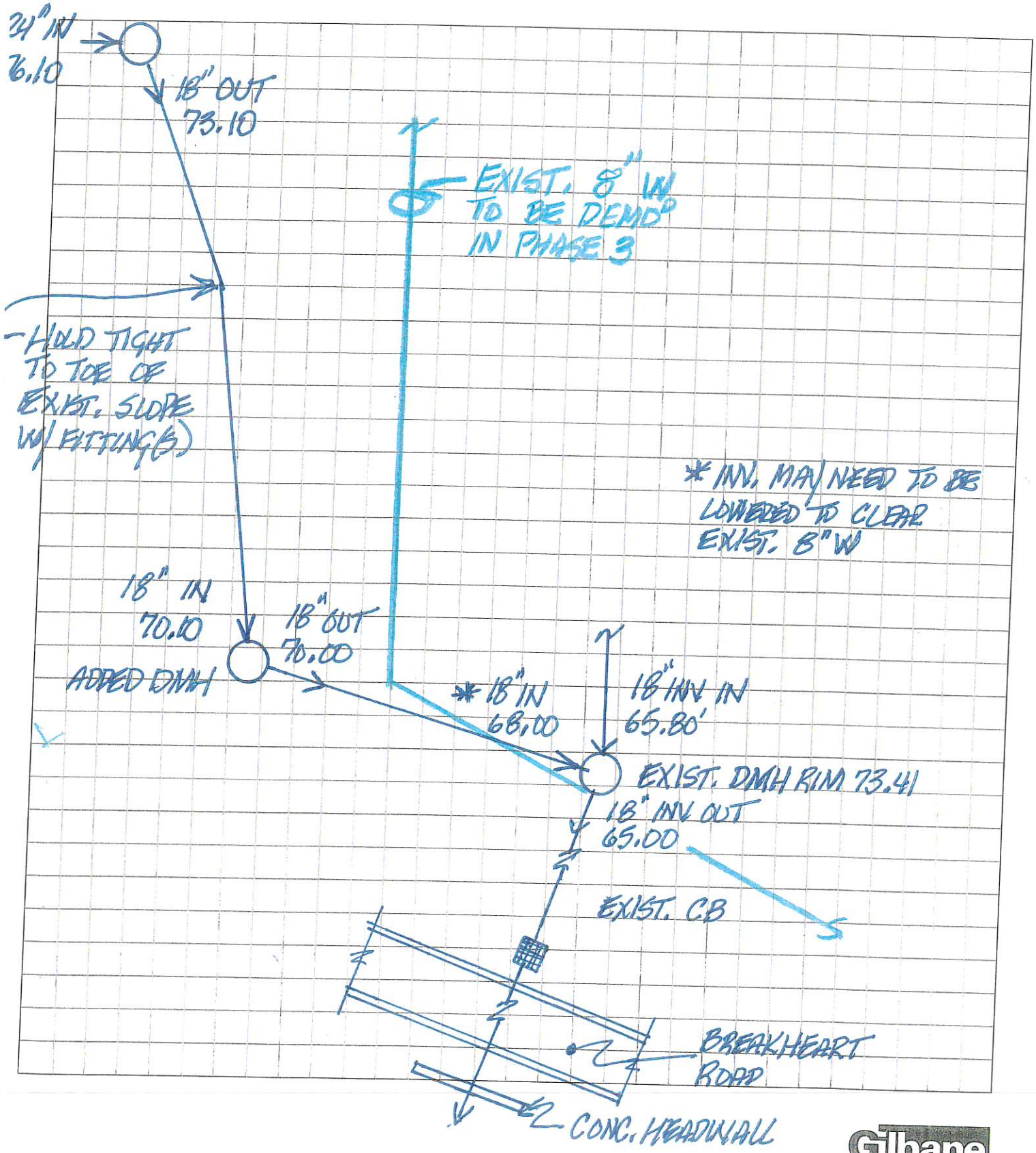
Gilbane


R&D EX. OVERHEAD WIRE
R&D EX. CATCH BASIN
R&D EX. MANHOLE
R&D EX. ELECTRICAL CONDUITS
R&D EX. DRAIN LINE
LOCATE ROOF BUILDING SHOWN AS ADD-ALTERNATE
MATCH LINE SEE SHEET C-300
M&P EX. CATCH BASIN
M&P EX. DRAIN LINE
R&D EX. ELECTRICAL CONDUIT
SCALE: 1" = 20'
20 10 0 20 40
NOTE.
TIE HEMLOCK ACCESS RD DRAINAGE ABOVE TUB POINT TEMPORARILY INTO DMH 34B
ADD DMH
C.T.E.

Gilbane Building Company

PROJECT NEMT TEMP. DRAINAGE

DATE 2/20/23



Gilbane

RFI #Pre-19

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Sitework Addendum 1 Clarifications

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/13/2023	**STATUS:**	Closed on 03/20/23
LOCATION:		**DUE DATE:**	03/20/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 03:34 PM on 03/13/2023

Should there have been re-issued drawings C-402 and C-405 in Addendum 1?

From Bidder:
C-400, C-401, C-403, C-404 and C-406 (list of drainage structures with rims and inverts) were reissued with Post Bid Addendum 1. C-402 and C-405 were not reissued with Post Bid Addendum 1. The numbering on the drainage structures has changed but because C-402 and C-405 were not reissued we're struggling to make sure we're including the most up to date drainage design. For example OCS-403 is not listed on C-406 but is shown on C-401 (with no rims or inverts) with System #3.

In addition, we found a couple of inconsistencies regarding C-402 and C-406:
- Catch Basin CB-232 numbering was used on C-401 and C-401
- Schedule C-406 indicated that DMH-325 was being fed from CB-228 and CB-229. C-402 shows CB-231 and CB-232 feeding DMH-325.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, March 17th, 2023 at 3:12PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-19_CIV-Sitework Addendum 1 Clarifications-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-19

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Sitework Addendum 1 Clarifications

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/13/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/20/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 03:34 PM on 03/13/2023

Should there have been re-issued drawings C-402 and C-405 in Addendum 1?

From Bidder:
C-400, C-401, C-403, C-404 and C-406 (list of drainage structures with rims and inverts) were reissued with Post Bid Addendum 1. C-402 and C-405 were not reissued with Post Bid Addendum 1. The numbering on the drainage structures has changed but because C-402 and C-405 were not reissued we're struggling to make sure we're including the most up to date drainage design. For example OCS-403 is not listed on C-406 but is shown on C-401 (with no rims or inverts) with System #3.

In addition, we found a couple of inconsistencies regarding C-402 and C-406:
- Catch Basin CB-232 numbering was used on C-401 and C-401
- Schedule C-406 indicated that DMH-325 was being fed from CB-228 and CB-229. C-402 shows CB-231 and CB-232 feeding DMH-325.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to NEI Response below.

ANGEL KHAZADIAN
03/16/2023

NEI RESPONSE:

Sheets C-402 and C-405 are attached. They were not previously reissued as there were limited changes on the sheets (structure exact location and naming).

DAVID CONWAY
03/16/2023

KEY MAP
N.T.S.

MATCHLINE SEE SHEET C-401

MATCHLINE SEE SHEET C-404

MATCHLINE SEE SHEET C-403

PROPERTY LINE (TYP.)

LIMIT OF WORK (TYP.)

SWALE

CB-240(4'ø)

DMH-319(4'ø)

12"X6" TEE-3(???'ø)

WQS-608(4'ø)

DMH-322(4'ø)

DMH-342(4'ø)

DMH-320(4'ø)

DMH-321(4'ø)

12" CPP

12"X6" TEE-2
INV=154.20

DMH-318(4'ø)

6" PVC
UNDERDRAIN

BLDG UD-3
INV=161.75

ROOF-3
INV=160.25

6" PVC
UNDERDRAIN
BLDG UD-4
INV=161.75

ROOF-4
INV=160.00

6" PVC
UNDERDRAIN
BLDG UD-5
INV=141.75

WALL UD-2
INV=138.00

AD-112(2'ø)

AD-113(2'ø)

CB-242(4'ø)

18" CPP

8" CPP

ROOF-5
INV=139.50

DMH-345(4'ø)

DMH-344(4'ø)

DMH-323(4'ø)

CB-241(4'ø)

FE-1
INV=105.00

DMH-352(4'ø)

CB-274(4'ø)

CB-268(4'ø)

CURB INLET
AND LEVEL
SPREADER
(TYP)

DMH-354(4'ø)

DMH-355(4'ø)

AD-118(2'ø)

LOCKER ROOM BUILDING AND
ASSOCIATED UTILITIES ARE
INCLUDED AS ADD-ALTERNATE

DMH-353(4'ø)

CB-247(4'ø)

ROOF-12(???'ø)

6" CPP

DMH-372(4'ø)

DMH-

24" CPP

DMH-347(5'ø)

CB-243(4'ø)

DMH-348(5'ø)

WQS-610(4'ø)

24" CPP

10" CPP
ROOF-6
INV=140.25

DMH-346(5'ø)

18" CPP

WQS-609(4'ø)

DMH-343(4'ø)

DMH-333(4'ø)

18" CPP

12"X6" TEE-4
INV=134.87

CB-239(4'ø)

BLDG UD-6
INV=135.60

6" PVC
UNDERDRAIN

DMH-351(4'ø)

CB-245(4'ø)

CURB INLET
AND LEVEL
SPREADER
(TYP)

DMH-350(4'ø)

SWALE

REFER TO SHEET C-505 FOR
UTILITY CROSS-SECTION

CB-244(4'ø)

AD-108(2'ø)

ROOF-9
INV=160.00

10" CPP

AD-109(2'ø)

ROOF-8
INV=159.50

10" CPP

DMH-337(4'ø)

AD-110(2'ø)

DMH-338(4'ø)

DMH-336(4'ø)

ROOF-7
INV=140.00

DMH-332(4'ø)

10" CPP

DMH-341(4'ø)

CB-238(4'ø)

18" CPP

12"X6" WYE
INV=136.70

DMH-331(4'ø)

DMH-327(4'ø)

CB-234(4'ø)

WALL UD-1
INV=138.00

UD

6" PVC
UNDERDRAIN

CB-237(4'ø)

DMH-340(4'ø)

DMH-339(4'ø)

DMH-328(4'ø)

CB-233(4'ø)

CB-229(4'ø)

DMH-325(4'ø)

CB-230(4'ø)

DMH-329(4'ø)

18" CPP

AD-111(2'ø)

DMH-330(4'ø)

CB-236(4'ø)

CB-235(4'ø)

CB-228(4'ø)

CB-231(4'ø)

DMH-326(4'ø)

NOTES:
1. REFER TO SHEET C-000 FOR NOTES, LEGEND, AND ABBREVIATIONS.
2. REFER TO SHEET C-406 DRAINAGE TABLE FOR RIM AND INVERT ELEVATIONS.
3. REFER TO SHEETS C-600 – C-605 FOR DRIVEWAY GRADING INFO. SITE GRADING SHOWN IS FOR COORDINATION PURPOSES ONLY. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR FINAL SITE GRADING.
4. ALL PIPES TO BE 12" CPP UNLESS OTHERWISE NOTED.
5. REFER TO STRUCTURAL DRAWINGS FOR DETAILS OF PERIMETER AND INTERIOR WALL DRAINS.
6. LOCATION OF UNDER-SLAB DRAINAGE PIPES MAY BE ADJUSTED IN THE FIELD AS NEEDED. IF ADJUSTMENT IS MORE THAN 2 FEET, THE GEOTECHNICAL ENGINEER MUST BE NOTIFIED TO REVIEW NEW LOCATION.
7. REFER TO SHEETS C-500 THRU C-505 FOR INFORMATION CONCERNING THE WATER, SEWER, AND OTHER UTILITIES.

SCALE:
1" = 20'
20 10 0 20 40

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering

www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

COMMONWEALTH OF MASSACHUSETTS
DAVID M. CONWAY
CIVIL
No. 52007
REGISTERED PROFESSIONAL ENGINEER
2/16/23

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

NOI RE-SUBMISSION

FEBURARY 16, 2023

DRAINAGE PLAN III

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: FEBRUARY 16, 2023

C-402

LAST SAVED: 2/16/2023 8:49 AM
PLOTTED: 2/16/2023 8:49 AM
X:\2013\13872\SHEET SETS\CIVIL\13872_CIVIL.DWG

KEY MAP
N.T.S.

PROPERTY LINE (TYP.)
LIMIT OF WORK (TYP.)

CB–260(4'ø)
DMH–366(4'ø)
CB–261(4'ø)
AD–119(2'ø)
WQI–502(4'ø)
12" CPP
DMH–385(4'ø)
ROOF–13
INV=82.15
10" CPP
UD–2
INV=82.50

MATCHLINE SEE SHEET C-403

MATCHLINE SEE SHEET C-405

NOTES:
1. REFER TO SHEET C–000 FOR NOTES, LEGEND, AND ABBREVIATIONS.
2. REFER TO SHEET C–406 DRAINAGE TABLE FOR RIM AND INVERT ELEVATIONS.
3. REFER TO SHEETS C–600 – C–605 FOR DRIVEWAY GRADING INFO. SITE GRADING SHOWN IS FOR COORDINATION PURPOSES ONLY. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR FINAL SITE GRADING.
4. ALL PIPES TO BE 12" CPP UNLESS OTHERWISE NOTED.
5. REFER TO SHEETS C–500 THRU C–505 FOR INFORMATION CONCERNING THE WATER, SEWER, AND OTHER UTILITIES.

SCALE:
1" = 20'
20 10 0 20 40

©COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering
www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472
- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

COMMONWEALTH OF MASSACHUSETTS
DAVID M. CONWAY
CIVIL
No. 49001
REGISTERED PROFESSIONAL ENGINEER
2/16/23

NOI RE-SUBMISSION

FEBURARY 16, 2023

DRAINAGE PLAN VI

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: FEBRUARY 16, 2023

C-405

RFI #Pre-20

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Parameters for Blasting

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	03/14/2023	**STATUS:**	Closed on 04/18/23
LOCATION:		**DUE DATE:**	03/21/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	S0-0-1		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 03:26 PM on 03/14/2023

Foundation Note F7 on Drawing S0-0-1 states that blasting shall be completed before any concrete is placed. There do not appear to be any notes that address this requirement in the Geotechnical Report. Since blasting will extend well beyond that which is required to construct foundations for the school building (for utilities, site improvements, etc.), please provide the parameters for blasting once concrete placements have begun.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, March 24th, 2023 at 6:32PM EDT*
Refer to attached RFI response.

Attachments:
RFI PRE-20_Multi-Parameters for Blasting-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-20

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Parameters for Blasting

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	03/14/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/21/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Lauren Muldoon (Gilbane Building Company) at 03:26 PM on 03/14/2023

Foundation Note F7 on Drawing S0-0-1 states that blasting shall be completed before any concrete is placed. There do not appear to be any notes that address this requirement in the Geotechnical Report. Since blasting will extend well beyond that which is required to construct foundations for the school building (for utilities, site improvements, etc.), please provide the parameters for blasting once concrete placements have begun.

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer LGCINC response below.

ANGEL KHAZADIAN
03/24/2023

LGCINC RESPONSE:

As indicated in the Earth Moving Specifications, vibrations should be maintained at less than 2 inches per second (ips). This threshold is applicable to concrete that has fully cured. It has to maintained sitewide throughout the duration of construction.

For fresh/green concrete our recommendations are as follows:

1.No blasting within 24 hours of placing fresh concrete anywhere at the site, i.e., no concrete placement in the 24 hours before blasting.
2.No blasting within 100 feet of concrete that has not reached 100 percent of its compressive strength.
3.We would also like to set a limit for blasting in proximity of concrete that has not reached 70 percent of its compressive strength. The radius will depend on how vibration travels at this site. For now, we recommend a radius of 300 feet, i.e., no blasting within 300 feet of concrete that has not reached 70 percent of its compressive strength.

The limits above may be adjusted after blasting-induced vibration is measured at the site at varying distances from the blasting location.

AMADJID LAHLAF
03/24/2023

RFI #Pre-21

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Revised Site Electrical Drawings

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Sean Sullivan **(Bala Consulting Engineers)**	**FROM:**	Lauren Muldoon **(Gilbane Building Company)** 7 JACKSON WALKWAY PROVIDENCE, Rhode Island 02903
DATE INITIATED:	03/15/2023	**STATUS:**	Closed on 03/27/23
LOCATION:		**DUE DATE:**	03/22/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Shannon Sturtz **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**, Donald Venerus **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Lauren Muldoon (Gilbane Building Company) at 10:52 AM on 03/15/2023

DRA forwarded the attached Electrical Site Plans as a result of discussions with WMGLD on ductbank layout and pull box details. Please confirm that these drawings, along with the details sheets for the pullboxes provided by WMGLD, will be issued as a supplement to the contract documents that are to be included in the early site bid package.

Attachments:
Revised Electrical Site Plan - 3-3-23.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, March 24th, 2023 at 7:15PM EDT*

Attached is the updated Site Electrical drawings. This drawing is not complete for electrical bidding, but it contains enough information for use in the Early Site Package.

Attachments:
Revised Electrical Site Plan - 3-24-23 - FOR REFERENCE ONLY.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

GENERAL NOTES:

1. REFER TO E0-0-3 FOR NOTES ON ELECTRICAL SCOPE OF WORK.
2. REFER TO E3-0-0, 1, AND 2 FOR SINGLE LINE DIAGRAMS.
3. REFER TO E0-1-4, 5, 6, AND 7 FOR ADDITIONAL SITE DETAILS. REFER TO E0-1-5 FOR DUCTBANK SECTIONS.
4. ALL UNDERGROUND CONDUITS SHALL BE IN CONCRETE ENCASED DUCTBANKS UNLESS OTHERWISE NOTED.
5. REFER TO DIVISION 0 AND 1 SPECIFICATIONS FOR ADDITIONAL DETAIL ON ADD ALTERNATES.
6. REFER TO TELECOM/SECURITY DRAWINGS FOR LOCATION OF CCTV DEVICES AND TYPE AND QUANTITY OF CABLES TO BE INSTALLED BY ELECTRICAL CONTRACTOR.
7. ALL EQUIPMENT LOCATIONS AND DUCTBANK ROUTING SHOWN ARE DIAGRAMMATIC. ELECTRICAL AND GENERAL CONTRACTOR SHALL FIELD COORDINATE EXACT LOCATION OF EQUIPMENT AND ROUTING OF DUCTBANKS.
8. UNLESS OTHERWISE NOTED, ALL LINEWORK SHOWN ON THIS SHEET BETWEEN EQUIPMENT DEPICTS UNDERGROUND ELECTRICAL DUCTBANKS.
9. DUCTBANK SECTION CONTENTS ARE SHOWN ON SHEET E0-1-5. IF THE DUCTBANK SECTION IS NOT INDICATED ON THE SITE PLAN, PROVIDE SECTION "A" AS SHOWN ON E0-1-5.

SITE LIGHTING NOTES:

1. REFER TO E0-1-5 FOR SITE LIGHTING FIXTURE SCHEDULE. PROVIDE POLE FOR LIGHTING FIXTURE, WITH HEIGHT TO MATCH FIXTURE MOUNTING HEIGHT SHOWN ON LIGHTING FIXTURE SCHEDULE.
2. UNLESS OTHERWISE NOTED, ALL SITE LIGHTING SHALL BE EQUIPPED WITH INTEGRAL PHOTOCELLS.
3. POWER WIRING FOR ALL SITE LIGHTING CIRCUITS SHALL BE MINIMUM #6 AWG.
4. PROVIDE A SEPARATE HANDHOLE FOR EACH SITE LIGHTING POLE. REFER TO DETAILS FOR SIZE REQUIREMENTS AND MINIMUM CONDUIT REQUIREMENTS BETWEEN HANDHOLE AND POLE.
5. FOR CLARITY, CONDUITS FROM HANDHOLE TO ITS ASSOCIATED LIGHT POLE AREA NOT SHOWN ON THIS SITE PLAN. REFER TO E0-1-5 FOR DETAIL ON CONDUITS REQUIRED BETWEEN EACH LIGHTING/SPORTS LIGHTING POLE AND ITS ASSOCIATED HANDHOLE.
6. SITE LIGHTING POLES ARE REPRESENTED BY VARIOUS SYMBOLS. REFER TO SITE LIGHTING FIXTURE SCHEDULE FOR FIXTURE IDS AND PROVIDE SITE LIGHTING POLE AND FIXTURE WHERE FIXTURE ID IS SHOWN ON THIS SITE PLAN.

ADD ALTERNATES:

1. ALL WORK ASSOCIATED WITH THE LOCKER BUILDING, INCLUDING DUCTBANKS FOR POWER/TELECOM/FIRE ALARM SHOWN ON THIS SITE PLAN.
2. ALL WORK ASSOCIATED WITH THE CONCESSIONS BUILDING, INCLUDING DUCTBANKS FOR POWER/TELECOM/FIRE ALARM SHOWN ON THIS SITE PLAN.
3. ALL WORK ASSOCIATED WITH THE MAINTENANCE BUILDING, INCLUDING DUCTBANKS FOR POWER/TELECOM/FIRE ALARM SHOWN ON THIS SITE PLAN.

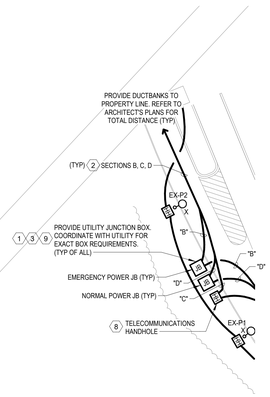
DEMOLITION NOTES:

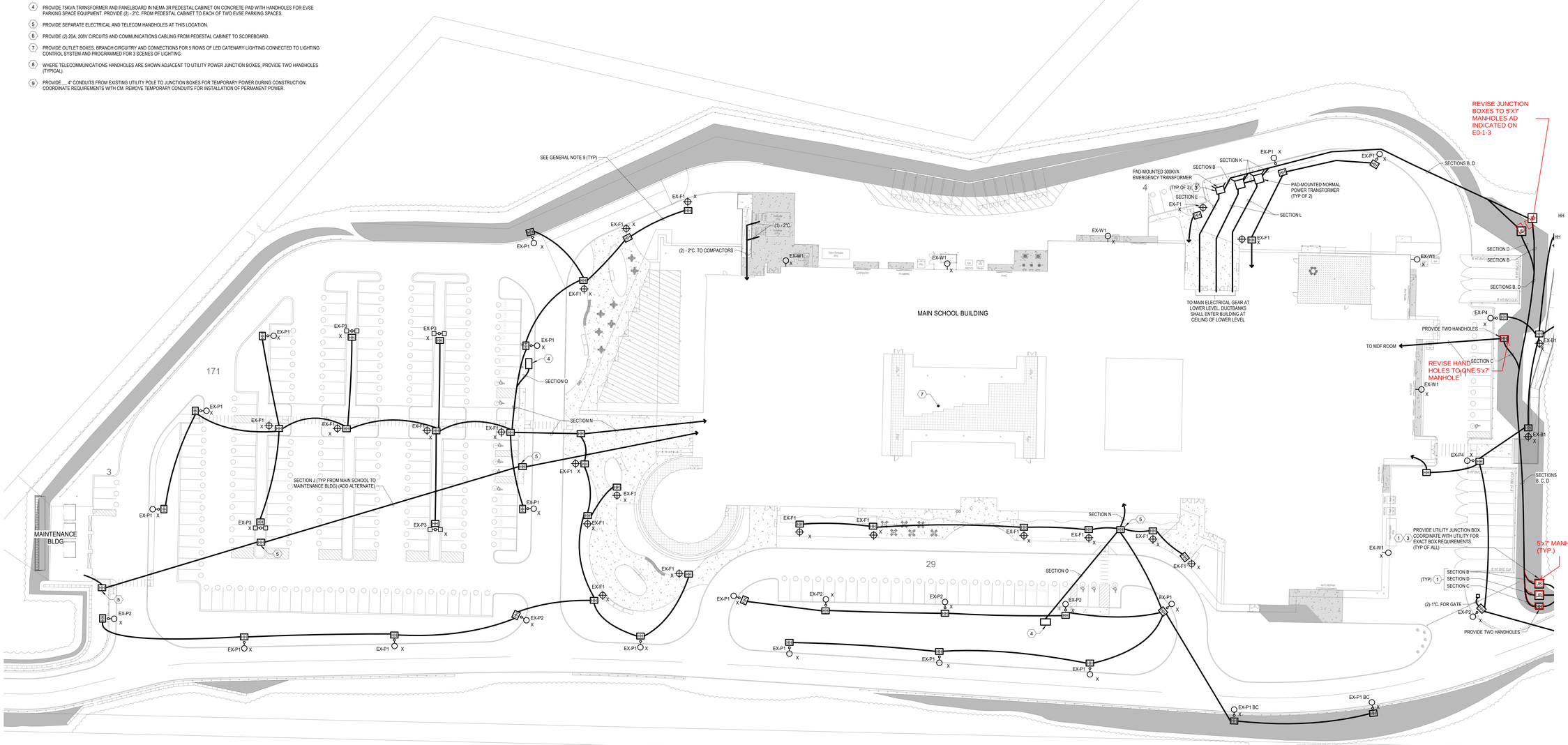
1. DEMOLISH EXISTING OVERHEAD PRIMARY ELECTRIC SERVICE/ TELECOMMUNICATIONS SERVICE ON EXISTING RISER POLES FROM THIS POINT TO EXISTING SCHOOL UNDER PHASE 2.

KEY NOTES:

1. SEPARATE ABOVEGROUND UTILITY JUNCTION BOXES FOR NORMAL POWER, EMERGENCY POWER, AND FIRE ALARM/TELECOM UTILITY SERVICES. COORDINATE WITH UTILITIES FOR EXACT SPECIFICATIONS AND LOCATIONS.
2. ROUTE EACH DUCTBANK TO ITS RESPECTIVE UTILITY JUNCTION BOX, TYP.
3. TRANSFORMER FRONT TO FACE STREET. COMPLY WITH ALL UTILITY GUIDELINES FOR INSTALLATION OF DUCTBANKS, TRANSFORMERS, ETC. REFER TO E0-1-4 FOR UTILITY STANDARD DETAILS.
4. PROVIDE 75KVA TRANSFORMER AND PANELBOARD IN NEMA 3R PEDESTAL CABINET ON CONCRETE PAD WITH HANDHOLES FOR EVSE PARKING SPACE EQUIPMENT. PROVIDE (2) - 2"C. FROM PEDESTAL CABINET TO EACH OF TWO EVSE PARKING SPACES.
5. PROVIDE SEPARATE ELECTRICAL AND TELECOM HANDHOLES AT THIS LOCATION.
6. PROVIDE (2) 20A, 208V CIRCUITS AND COMMUNICATIONS CABLING FROM PEDESTAL CABINET TO SCOREBOARD.
7. PROVIDE OUTLET BOXES, BRANCH CIRCUITRY AND CONNECTIONS FOR 5 ROWS OF LED CATENARY LIGHTING CONNECTED TO LIGHTING CONTROL SYSTEM AND PROGRAMMED FOR 3 SCENES OF LIGHTING.
8. WHERE TELECOMMUNICATIONS HANDHOLES ARE SHOWN ADJACENT TO UTILITY POWER JUNCTION BOXES, PROVIDE TWO HANDHOLES (TYPICAL).
9. PROVIDE __ 4" CONDUITS FROM EXISTING UTILITY POLE TO JUNCTION BOXES FOR TEMPORARY POWER DURING CONSTRUCTION. COORDINATE REQUIREMENTS WITH CM. REMOVE TEMPORARY CONDUITS FOR INSTALLATION OF PERMANENT POWER.

THIS MARK-UP IS BEING PROVIDED TO INDICATE GENERAL INTENT FOR FUTURE SITE ELECTRICAL DRAWING REVISIONS. THESE REVISIONS ARE NOT FULLY COORDINATED. BALA DOES NOT RECOMMEND THAT THESE FOR REFERENCE ONLY DRAWINGS BE ISSUED FOR BID AND IS NOT RESPONSIBLE FOR ANY ISSUES OR CHANGES THAT RESULT FROM BIDDING OF THESE FOR REFERENCE ONLY DRAWINGS.





2 E0-1-1 **ELECTRICAL Level 1 Site**
1" = 30'-0"

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

FOR REFERENCE ONLY

BALA CONSULTING ENGINEERS, INC.
31 TUDOR PLACE
BOSTON, MA 02114-1109
(617) 367-2999 FAX 617 227-5155
www.bala.com

BALA ENGINEERS
MECHANICAL · ELECTRICAL · PLUMBING · FIRE PROTECTION
STRUCTURAL · TECHNOLOGY · COMMISSIONING

PROGRESS SET

February 24th, 2023

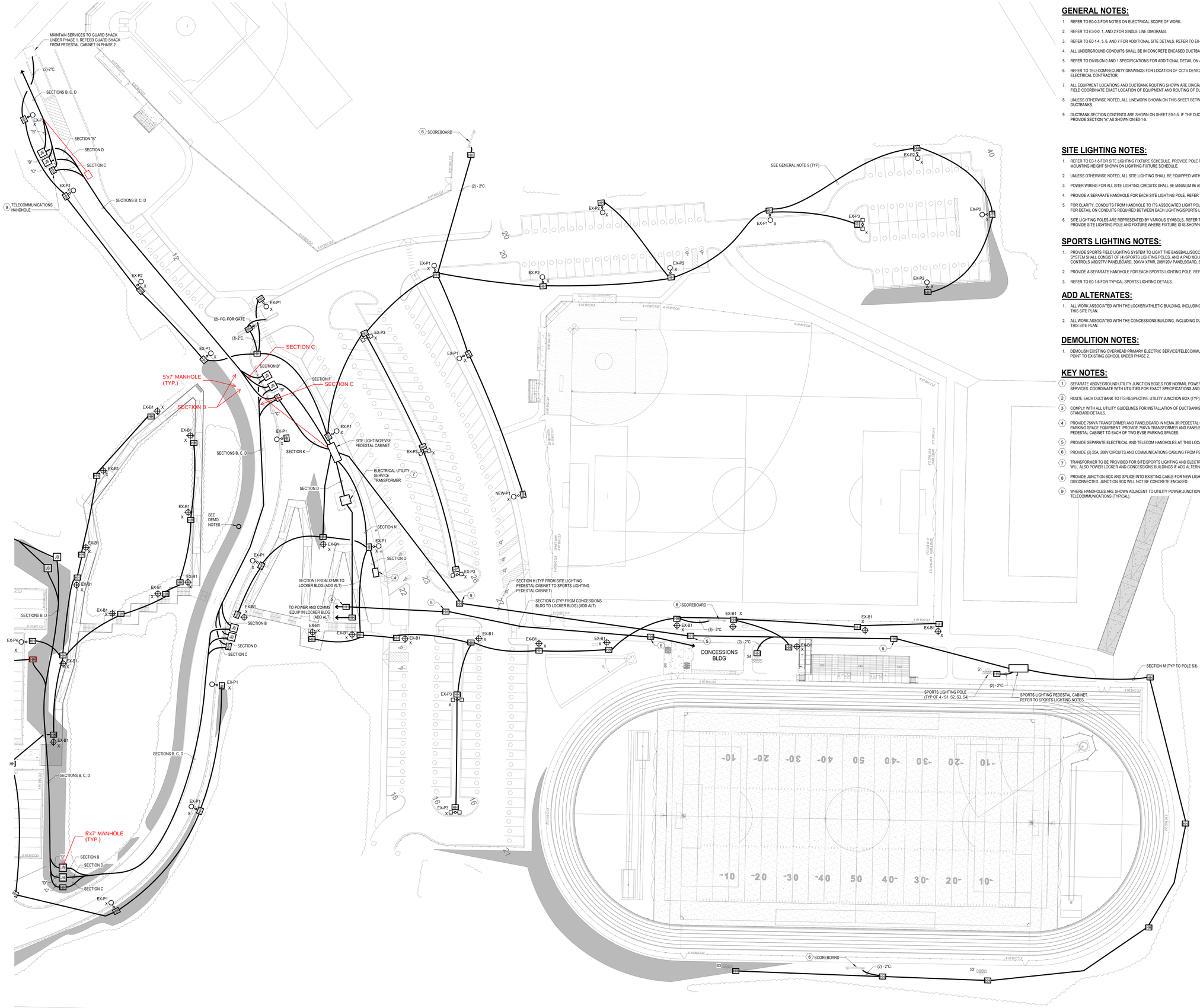
PROJECT NORTH | MAGNETIC NORTH

ELECTRICAL SITE PLAN

Scale: 1" = 30'-0"
Job No.: 20202
Drawn By: DRA
Date: February 24th, 2023

E0-1-1

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.



1 E0-1-3 **ELECTRICAL Level 1 Site East**
1" = 30'-0"

GENERAL NOTES:

1. REFER TO E0-0-3 FOR NOTES ON ELECTRICAL SCOPE OF WORK.
2. REFER TO E3-0-0, 1, AND 2 FOR SINGLE LINE DIAGRAMS.
3. REFER TO E0-1-4, 5, 6, AND 7 FOR ADDITIONAL SITE DETAILS. REFER TO E0-1-5 FOR DUCTBANK SECTIONS.
4. ALL UNDERGROUND CONDUITS SHALL BE IN CONCRETE ENCASED DUCTBANKS UNLESS OTHERWISE NOTED.
5. REFER TO DIVISION 0 AND 1 SPECIFICATIONS FOR ADDITIONAL DETAIL ON ADD ALTERNATES.
6. REFER TO TELECOM/SECURITY DRAWINGS FOR LOCATION OF CCTV DEVICES AND TYPE AND QUANTITY OF CABLES TO BE INSTALLED BY ELECTRICAL CONTRACTOR.
7. ALL EQUIPMENT LOCATIONS AND DUCTBANK ROUTING SHOWN ARE DIAGRAMMATIC. ELECTRICAL AND GENERAL CONTRACTOR SHALL FIELD COORDINATE EXACT LOCATION OF EQUIPMENT AND ROUTING OF DUCTBANKS.
8. UNLESS OTHERWISE NOTED, ALL LINEWORK SHOWN ON THIS SHEET BETWEEN EQUIPMENT DEPICTS UNDERGROUND ELECTRICAL DUCTBANKS.
9. DUCTBANK SECTION CONTENTS ARE SHOWN ON SHEET E0-1-5. IF THE DUCTBANK SECTION IS NOT INDICATED ON THE SITE PLAN, PROVIDE SECTION "A" AS SHOWN ON E0-1-5.

SITE LIGHTING NOTES:

1. REFER TO E0-1-5 FOR SITE LIGHTING FIXTURE SCHEDULE. PROVIDE POLE FOR LIGHTING FIXTURE, WITH HEIGHT TO MATCH FIXTURE MOUNTING HEIGHT SHOWN ON LIGHTING FIXTURE SCHEDULE.
2. UNLESS OTHERWISE NOTED, ALL SITE LIGHTING SHALL BE EQUIPPED WITH INTEGRAL PHOTOCELLS.
3. POWER WIRING FOR ALL SITE LIGHTING CIRCUITS SHALL BE MINIMUM #6 AWG.
4. PROVIDE A SEPARATE HANDHOLE FOR EACH SITE LIGHTING POLE. REFER TO DETAILS FOR SIZE REQUIREMENTS.
5. FOR CLARITY, CONDUITS FROM HANDHOLE TO ITS ASSOCIATED LIGHT POLE AREA NOT SHOWN ON THIS SITE PLAN. REFER TO E0-1-5 FOR DETAIL ON CONDUITS REQUIRED BETWEEN EACH LIGHTING/SPORTS LIGHTING POLE AND ITS ASSOCIATED HANDHOLE.
6. SITE LIGHTING POLES ARE REPRESENTED BY VARIOUS SYMBOLS. REFER TO SITE LIGHTING FIXTURE SCHEDULE FOR FIXTURE IDS AND PROVIDE SITE LIGHTING POLE AND FIXTURE WHERE FIXTURE ID IS SHOWN ON THIS SITE PLAN.

SPORTS LIGHTING NOTES:

1. PROVIDE SPORTS FIELD LIGHTING SYSTEM TO LIGHT THE BASEBALL/SOCCER FIELD AND THE TRACK/FOOTBALL/SOCCER STADIUM. SYSTEM SHALL CONSIST OF (4) SPORTS LIGHTING POLES, AND A PAD MOUNTED NEMA 3R PEDESTAL CABINET WITH POWER AND CONTROLS (480/277V PANELBOARD, 30KVA XFMR, 208/120V PANELBOARD, SPORTS LIGHTING CONTACTORS, ETC.).
2. PROVIDE A SEPARATE HANDHOLE FOR EACH SPORTS LIGHTING POLE. REFER TO DETAILS FOR SIZE REQUIREMENTS.
3. REFER TO E0-1-6 FOR TYPICAL SPORTS LIGHTING DETAILS.

ADD ALTERNATES:

1. ALL WORK ASSOCIATED WITH THE LOCKER/ATHLETIC BUILDING, INCLUDING DUCTBANKS FOR POWER/TELECOM/FIRE ALARM SHOWN ON THIS SITE PLAN.
2. ALL WORK ASSOCIATED WITH THE CONCESSIONS BUILDING, INCLUDING DUCTBANKS FOR POWER/TELECOM/FIRE ALARM SHOWN ON THIS SITE PLAN.

DEMOLITION NOTES:

1. DEMOLISH EXISTING OVERHEAD PRIMARY ELECTRIC SERVICE/TELECOMMUNICATIONS SERVICE ON EXISTING RISER POLES FROM THIS POINT TO EXISTING SCHOOL UNDER PHASE 2.

KEY NOTES:

1. SEPARATE ABOVEGROUND UTILITY JUNCTION BOXES FOR NORMAL POWER, EMERGENCY POWER, AND FIRE ALARM/TELECOM UTILITY SERVICES. COORDINATE WITH UTILITIES FOR EXACT SPECIFICATIONS AND LOCATIONS.
2. ROUTE EACH DUCTBANK TO ITS RESPECTIVE UTILITY JUNCTION BOX (TYP).
3. COMPLY WITH ALL UTILITY GUIDELINES FOR INSTALLATION OF DUCTBANKS, TRANSFORMERS, ETC. REFER TO E0-1-4 FOR UTILITY STANDARD DETAILS.
4. PROVIDE 75KVA TRANSFORMER AND PANELBOARD IN NEMA 3R PEDESTAL CABINET ON CONCRETE PAD WITH HANDHOLES FOR EVSE PARKING SPACE EQUIPMENT. PROVIDE 75KVA TRANSFORMER AND PANELBOARD FOR SITE LIGHTING. PROVIDE (2) - 2"C. FROM PEDESTAL CABINET TO EACH OF TWO EVSE PARKING SPACES.
5. PROVIDE SEPARATE ELECTRICAL AND TELECOM HANDHOLES AT THIS LOCATION.
6. PROVIDE (2) 20A, 208V CIRCUITS AND COMMUNICATIONS CABLING FROM PEDESTAL CABINET TO SCOREBOARD.
7. TRANSFORMER TO BE PROVIDED FOR SITE/SPORTS LIGHTING AND ELECTRIC VEHICLE CHARGERS UNDER BASE BID. TRANSFORMER WILL ALSO POWER LOCKER AND CONCESSIONS BUILDINGS IF ADD ALTERNATES ARE SELECTED.
8. PROVIDE JUNCTION BOX AND SPLICE INTO EXISTING CABLE FOR NEW LIGHTPOLE. RECONNECT EXISTING LIGHTS THAT MAY BE DISCONNECTED. JUNCTION BOX WILL NOT BE CONCRETE ENCASED.
9. WHERE HANDHOLES ARE SHOWN ADJACENT TO UTILITY POWER JUNCTION BOXES, PROVIDE TWO HANDHOLES FOR TELECOMMUNICATIONS (TYPICAL).

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

FOR REFERENCE ONLY

BALA CONSULTING ENGINEERS, INC.
31 STATE PLACE
BOSTON, MA 02111-1330
TEL 617.357.5540 FAX 617.357.5180
WWW.BALA.COM
BALA ENGINEERS
MECHANICAL · ELECTRICAL · PLUMBING · FIRE PROTECTION
STRUCTURAL · TECHNOLOGY · COMMISSIONING

PROGRESS SET

February 24th, 2023

PROJECT NORTH | MAGNETIC NORTH

ELECTRICAL SITE PLAN

Scale: 1" = 30'-0"
Job No.: 20202
Drawn By: DRA
Date: February 24th, 2023

E0-1-3

RFI #Pre-23

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Foundation Waterproofing Clarifications

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/15/2023	**STATUS:**	Closed on 03/23/23
LOCATION:		**DUE DATE:**	03/22/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	A3-2-11		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 01:02 PM on 03/15/2023

While reviewing the details and specs for an early Foundation Waterproofing bid package, some questions arose. Please review and confirm/advise:
- At "typical" concrete foundation walls (earth on both sides of foundation wall), we are using Damproofing product from Spec 071100, correct?
- Dampproofing at "typical" foundation walls extends from top of foundation wall to top of footing, correct?
- The applied product for the earth side of retaining walls (with occupied space at interior) is waterproofing from Spec 071300 Sheet Waterproofing, correct? Drawings had one wall section that indicated this (1/A3-2-11) and the definitions in the dampproofing spec 071100 weren't clear if dampproofing was required at this condition or waterproofing.
- Wall Section 1/A3-2-11 indicates to extend waterproofing down to top of footing. Just confirming that this shouldn't be extend down to bottom of footing (so the keyway joint is waterproofed).
- Assuming that waterproofing is required at earth side of retaining walls (with occupied space at interior), which post-applied sheet waterproofing product (from Spec 071300, Section 2.1.A.1) should be used for this condition? Rubberized Asphalt Sheet Waterproofing or Composite HDPE/Bentonite Sheet Waterproofing?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, March 23rd, 2023 at 12:30PM EDT*

Refer to attached RFI response

Attachments:
RFI PRE-23_Arch-Foundation Waterproofing Clarifications-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-23

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Foundation Waterproofing Clarifications

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/15/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/22/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 01:02 PM on 03/15/2023

While reviewing the details and specs for an early Foundation Waterproofing bid package, some questions arose. Please review and confirm/advise:
1. At "typical" concrete foundation walls (earth on both sides of foundation wall), we are using Damproofing product from Spec 071100, correct?
2. Dampproofing at "typical" foundation walls extends from top of foundation wall to top of footing, correct?
3. The applied product for the earth side of retaining walls (with occupied space at interior) is waterproofing from Spec 071300 Sheet Waterproofing, correct? Drawings had one wall section that indicated this (1/A3-2-11) and the definitions in the dampproofing spec 071100 weren't clear if dampproofing was required at this condition or waterproofing.
4. Wall Section 1/A3-2-11 indicates to extend waterproofing down to top of footing. Just confirming that this shouldn't be extend down to bottom of footing (so the keyway joint is waterproofed).
5. Assuming that waterproofing is required at earth side of retaining walls (with occupied space at interior), which post-applied sheet waterproofing product (from Spec 071300, Section 2.1.A.1) should be used for this condition? Rubberized Asphalt Sheet Waterproofing or Composite HDPE/Bentonite Sheet Waterproofing?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Specification for waterproofing and dampproofing are currently being reviewed and revised.
1. Dampproofing from Section 071100 shall be used on foundation walls where there is earth on both sides of the wall.
2. Dampproofing extends from top of wall or grade to bottom of footing.
3.Section 071300 Sheet waterproofing shall be used in all locations where foundation walls interior face of wall are finished/occupied spaces.
4. Sheet waterproofing shall be extended from top of wall to bottom of footing and tied into foundation drains.
5. Sheet waterproofing shall be Rubberized Asphalt Sheet.

ANGEL KHAZADIAN
03/23/2020

BY **DATE** **COPIES TO**

RFI #Pre-24

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Steel Clarifications - Coatings, Details

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/16/2023	**STATUS:**	Closed on 03/27/23
LOCATION:		**DUE DATE:**	03/23/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Shannon Sturtz **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:21 PM on 03/16/2023

1. Per specs (051200-8 part2.5C-1) Please confirm that *"High Performance Coating"* is not required as this is not call out on -S- plans?

Per Fireproofing notes:
2. *Exposed to view braced frames shall receive 2-hour fire rating by intumencent mastic fireproofing.* Could you please confirm that is the same request for exposed steel to view? RFI
3. Steel will be sprayed with fireproof system. There is some exposed steel in rooms are not accessible for public (Ex: mechanical room, janitory, etc…) Do we have to figure a shop primer to apply in these areas or to figure that it will be fireproofed as well?

4. Will detail 2/S0-0-6 be assigned to the Misc Metals filed sub bid? If this is meant to be a structural steel item, please advise where this detail applies so it can be quantified.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, March 24th, 2023 at 6:41PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-24_Arch-Steel Clarifications - Coating, Details-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-24

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Steel Clarifications - Coatings, Details

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/16/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/23/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 02:21 PM on 03/16/2023

1. Per specs (051200-8 part2.5C-1) Please confirm that *"High Performance Coating"* is not required as this is not call out on -S- plans?

Per Fireproofing notes:
2. *Exposed to view braced frames shall receive 2-hour fire rating by intumencent mastic fireproofing.* Could you please confirm that is the same request for exposed steel to view? RFI
3. Steel will be sprayed with fireproof system. There is some exposed steel in rooms are not accessible for public (Ex: mechanical room, janitory, etc…) Do we have to figure a shop primer to apply in these areas or to figure that it will be fireproofed as well?

4. Will detail 2/S0-0-6 be assigned to the Misc Metals filed sub bid? If this is meant to be a structural steel item, please advise where this detail applies so it can be quantified.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

1. High Performance coating is not required.
2. Exposed to view steel shall receive 2-hour fire rating by intumescent fireproofing.
3. Exposed to view steel in Mechanical, Custodial, and storage rooms shall be rated with cementitious spray on fireproofing. Columns and bracing in these rooms require Medium density spray, while ceilings can be standard durability. Note that all shop ceilings shall be sprayed with Medium Density cementitious spray on fireproofing.
4. Detail 2/S0-0-6 is part of the Metal Fabrications scope. These are used in instances where ductwork passes over the fire and security partitions. The quantity and locations will not be known until the 100% CDs are complete.

ANGEL KHAZADIAN
03/24/2023

RFI #Pre-25

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Curb Detail Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/21/2023	**STATUS:**	Closed on 03/23/23
LOCATION:		**DUE DATE:**	03/28/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:49 AM on 03/21/2023

Contract Drawing C-705 shows a 6” concrete backing being placed on the roadway side of the granite curb on the Vertical Granite Curb Setting Detail. Detail 8 on Contract Drawing L-601 shows concrete being placed on both sides of the granite curb. Please confirm that the detail on C-705 is to be followed for concrete backing at granite curb.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, March 22nd, 2023 at 4:21PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-25_Civ-Curb Detail Clarification_RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-25

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Curb Detail Clarification

TO:	Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/21/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/28/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**

Question from Donald Venerus (Gilbane Building Company) at 10:49 AM on 03/21/2023

Contract Drawing C-705 shows a 6” concrete backing being placed on the roadway side of the granite curb on the Vertical Granite Curb Setting Detail. Detail 8 on Contract Drawing L-601 shows concrete being placed on both sides of the granite curb. Please confirm that the detail on C-705 is to be followed for concrete backing at granite curb.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer NEI response below.

ANGEL KHAZADIAN
03/22/2023

NEI RESPONSE:

Granite curb shall be installed as shown on 8/L-601 (concrete on both sides).

David Conway
03/22/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-26

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Facility Fall Protection

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/21/2023	**STATUS:**	Closed on 03/27/23
LOCATION:		**DUE DATE:**	03/28/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Shannon Sturtz **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 11:23 AM on 03/21/2023

Regarding specification 118129, has the extent of these been determined yet? We would like to include this in the steel bid package, but don't see them on the drawings yet. Can we get some parameters on where these will go (and spacing) or a quantity for bidding purposes?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, March 24th, 2023 at 6:46PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-26_Arch-Facility Fall Protection-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-26

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Facility Fall Protection

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/21/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/28/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Shannon Sturtz **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 11:23 AM on 03/21/2023

Regarding specification 118129, has the extent of these been determined yet? We would like to include this in the steel bid package, but don't see them on the drawings yet. Can we get some parameters on where these will go (and spacing) or a quantity for bidding purposes?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

For bidding purposes carry 20 locations. Also carry Add and Deduct Unit pricing. Locations will be included in the 100% CD documents.

ANGEL KHAZADIAN
03/24/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-27

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Addendum 1 Grading Clarification

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Amy Allen **(Warner Larson Landscape Architects)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/22/2023	**STATUS:**	Closed on 04/05/23
LOCATION:		**DUE DATE:**	03/29/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:34 AM on 03/22/2023

Bidder questions: There is different grading and some different surfacing (including curbing) that we noticed on the provided revised Civil Drawings set however the original bid set has the Landscape Architect providing the grading and material plans for the project. Will you be reissuing the Landscape Architect materials plan (L-300 series) and grading plan (L-400 series)? What should we use for our base bid?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Tuesday, March 28th, 2023 at 1:58PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-27_LAND-Addendum 1 Clarification-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-27

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Addendum 1 Grading Clarification

TO:	Amy Allen **(Warner Larson Landscape Architects)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
		STATUS:	Open
		DUE DATE:	03/29/2023
DATE INITIATED:	03/22/2023	**COST CODE:**	
LOCATION:		**SCHEDULE IMPACT:**	
PROJECT STAGE:	Pre-Construction	**SPEC SECTION:**	
SUB JOB:		**REFERENCE:**	
COST IMPACT:			
DRAWING NUMBER:			
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:34 AM on 03/22/2023

Bidder questions: There is different grading and some different surfacing (including curbing) that we noticed on the provided revised Civil Drawings set however the original bid set has the Landscape Architect providing the grading and material plans for the project. Will you be reissuing the Landscape Architect materials plan (L-300 series) and grading plan (L-400 series)? What should we use for our base bid?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to WLA response below.

ANGEL KHAZADIAN
03/28/2023

WL RESPONSE: Please provide more information as to where the discrepancies are located. Only drawings L101-L105 Demo + Site Prep and L401-L405 Grading have been included for Early Site Prep CDs. The remaining drawings are for reference and are still being coordinated/reviewed.

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

David Warner, Amy Allen	3/28/2023	
BY	**DATE**	**COPIES TO**

RFI #Pre-28

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Segmented Retaining Wall Manufacturer and Size

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Amy Allen **(Warner Larson Landscape Architects)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/22/2023	**STATUS:**	Closed on 03/28/23
LOCATION:		**DUE DATE:**	03/29/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:52 PM on 03/22/2023

One of the sitework bidders has proposed this manufacturer in lieu of the specified segmented retaining wall product. The retaining wall system would be designed and installed as indicated in the contract documents. Please review and confirm this manufacturer is acceptable.

Attachments:
Compac-III_Victorian-Straight.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Tuesday, March 28th, 2023 at 1:59PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-28_LAND-Segmented Retaining Wall Manufacturer & Size-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-28

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Segmented Retaining Wall Manufacturer and Size

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/22/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/29/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:52 PM on 03/22/2023

One of the sitework bidders has proposed this manufacturer in lieu of the specified segmented retaining wall product. The retaining wall system would be designed and installed as indicated in the contract documents. Please review and confirm this manufacturer is acceptable.

Attachments:
Compac-III_Victorian-Straight.pdf

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to WLA response below.

ANGEL KHAZADIAN
03/28/2023

WL RESPONSE: We do not take exception to this proposed manufacturer provided all specified material and performance requirements are met.

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

David Warner, Amy Allen	3/28/2023	
BY	**DATE**	**COPIES TO**

Keystone Compac® - Victorian

STRUCTURAL WALL | KEYSTONE COMPAC® III

KEYSTONE COMPAC® III

A specifier's favorite, Keystone Compac features unrivaled aesthetic options, cost saving versatility and proven wall performance. Installer's prefer the Compac's lighter weight and shorter tail design which make it easy to handle. Trusted by architects, engineers and contractors around the world, the Keystone Compac unit utilizes the proven Keystone pin connection system.

VICTORIAN

STRAIGHT

Brown

Gray

Dimensions: 8"h x 18"w x 12"d

Weight:
Victorian: 77 lbs
Straight: 75 lbs

Units/sq.ft.: 1

Pin Specifications: ½" x 5¼"

2 fiberglass pins required per unit.

FEATURES & BENEFITS

Maximum Versatility and Performance

- The Compac III is lighter weight effectively reducing shipping costs while maintaining structural integrity.
- Allows for various positive connections with reinforcement to build engineered walls in excess of 60 feet (18.2m) tall.
- Increases vertical drainage.
- Manufactured according to ASTM 1372.

Ease of Installation

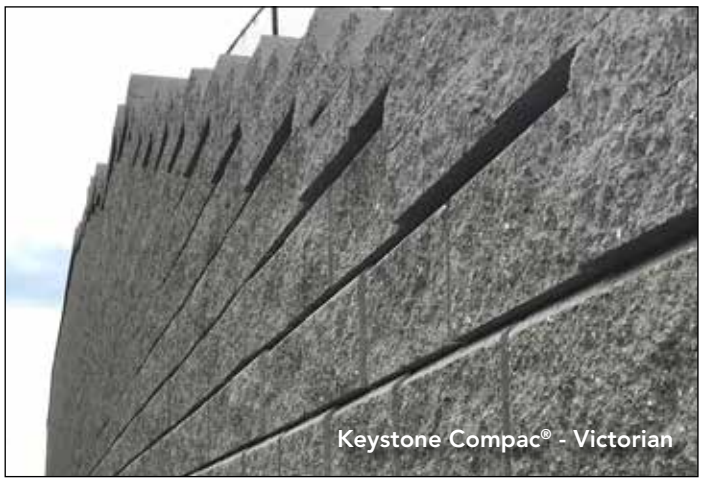
- Unit shape allows for tight radius curves and vertical core alignment.
- Shorter tail design makes for easier handling in the field.
- Triangular shaped pin receiving hole allows for installer-friendly construction adjustments.
- Near vertical or battered setback construction options.

Face Options

- The beveled face of the Victorian unit adds dimension and a classic elegance to your project.
- The Straight split is crisp and distinctive, effectively showcasing the color within each unit.

Keystone Compac® - Straight

Keystone Compac® - Straight


Keystone Compac® - Victorian

KEYSTONE® RETAINING WALL SYSTEMS

www.keystonewalls.com

Manufactured by:

JANDRIS BLOCK SINCE 1920

202 High Street | Gardner, MA 01440
(978) 632-0089 | **www.ajandris.com**

Installed by:

Earth Retention Systems

226 Gibson Hill Road
Sterling, CT 06377
(860) 317-1207

www.ERSWalls.com

©2021 Keystone Retaining Wall Systems LLC

Keystone Compac® - Victorian

STRUCTURAL WALL | KEYSTONE COMPAC® III

KEYSTONE COMPAC® III

A specifier's favorite, Keystone Compac features unrivaled aesthetic options, cost saving versatility and proven wall performance. Installer's prefer the Compac's lighter weight and shorter tail design which make it easy to handle. Trusted by architects, engineers and contractors around the world, the Keystone Compac unit utilizes the proven Keystone pin connection system.

VICTORIAN

STRAIGHT

Brown

Gray

Dimensions: 8"h x 18"w x 12"d

Weight:
Victorian: 77 lbs
Straight: 75 lbs

Units/sq.ft.: 1

Pin Specifications: ½" x 5¼"

2 fiberglass pins required per unit.

FEATURES & BENEFITS

Maximum Versatility and Performance

- The Compac III is lighter weight effectively reducing shipping costs while maintaining structural integrity.
- Allows for various positive connections with reinforcement to build engineered walls in excess of 60 feet (18.2m) tall.
- Increases vertical drainage.
- Manufactured according to ASTM 1372.

Ease of Installation

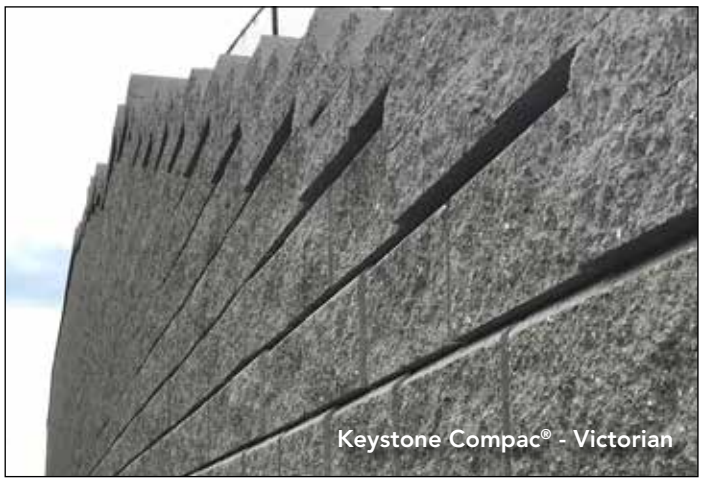
- Unit shape allows for tight radius curves and vertical core alignment.
- Shorter tail design makes for easier handling in the field.
- Triangular shaped pin receiving hole allows for installer-friendly construction adjustments.
- Near vertical or battered setback construction options.

Face Options

- The beveled face of the Victorian unit adds dimension and a classic elegance to your project.
- The Straight split is crisp and distinctive, effectively showcasing the color within each unit.

Keystone Compac® - Straight

Keystone Compac® - Straight


Keystone Compac® - Victorian

KEYSTONE® RETAINING WALL SYSTEMS

www.keystonewalls.com

Manufactured by:

JANDRIS BLOCK SINCE 1920

202 High Street | Gardner, MA 01440
(978) 632-0089 | **www.ajandris.com**

Installed by:

Earth Retention Systems

226 Gibson Hill Road
Sterling, CT 06377
(860) 317-1207

www.ERSWalls.com

©2021 Keystone Retaining Wall Systems LLC

RFI #Pre-29

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Earth Retention at Culverts

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** David Conway **(Nitsch Engineering, Inc.)** Amy Allen **(Warner Larson Landscape Architects)** David Warner **(Warner Larson Landscape Architects)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/23/2023	**STATUS:**	Closed on 03/27/23
LOCATION:		**DUE DATE:**	03/30/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Shannon Sturtz **(Gilbane Building Company)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:49 AM on 03/23/2023

Reference RFI Pre-13 (utilities at culverts). These sections provided initiated a new question when seeing the profile. There is no retaining wall shown over the culverts - how is the earth intended to be retained at these locations?

Attachments:
RFI earth retention at culverts.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, March 24th, 2023 at 6:55PM EDT*

Refer to attached RFI response

Attachments:
RFI PRE-29_Civ-Earth Retention at Culverts-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-29

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Earth Retention at Culverts

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/23/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/30/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:49 AM on 03/23/2023

Reference RFI Pre-13 (utilities at culverts). These sections provided initiated a new question when seeing the profile. There is no retaining wall shown over the culverts - how is the earth intended to be retained at these locations?

Attachments:
RFI earth retention at culverts.pdf

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer NEI response below.

ANGEL KHAZADIAN
03/24/2023

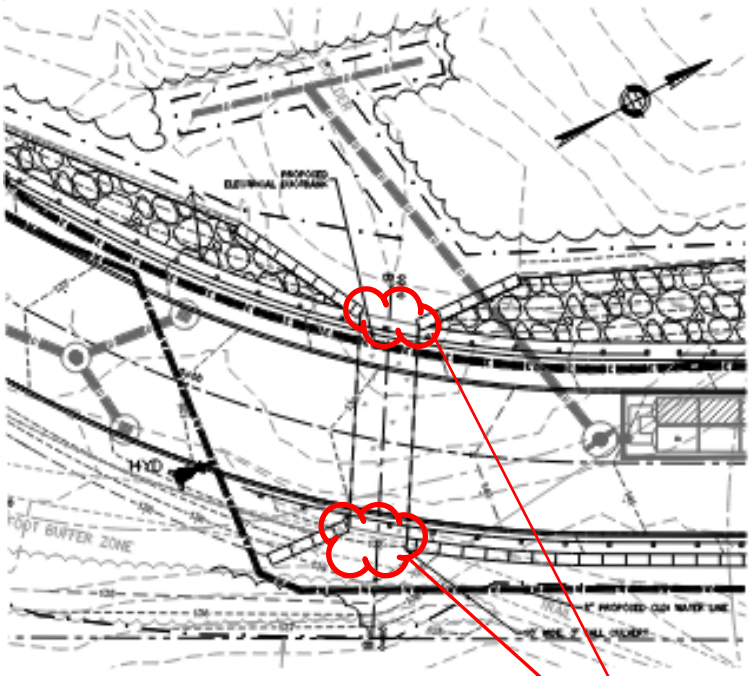
NEI RESPONSE:

The segmental block wing walls continue on top of the culvert to meet finished grade.

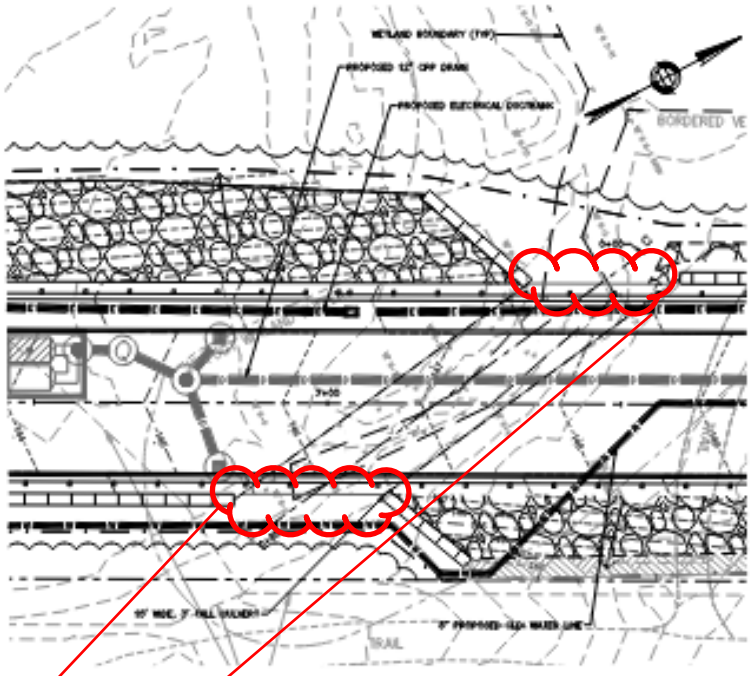
PAIGE BLANCHARD
03/23/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

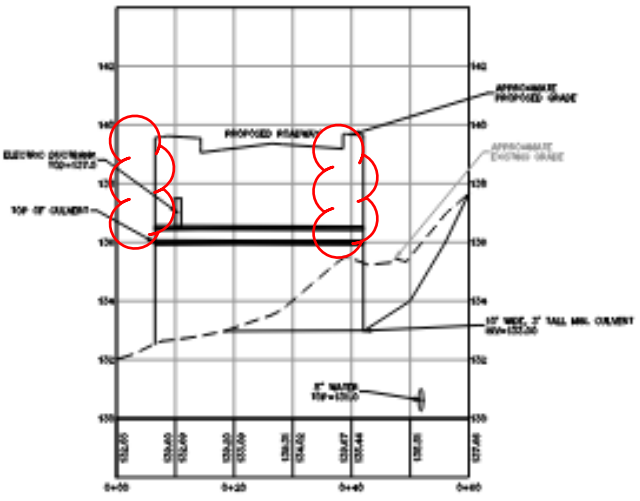


LOCATION
SECTION B–B

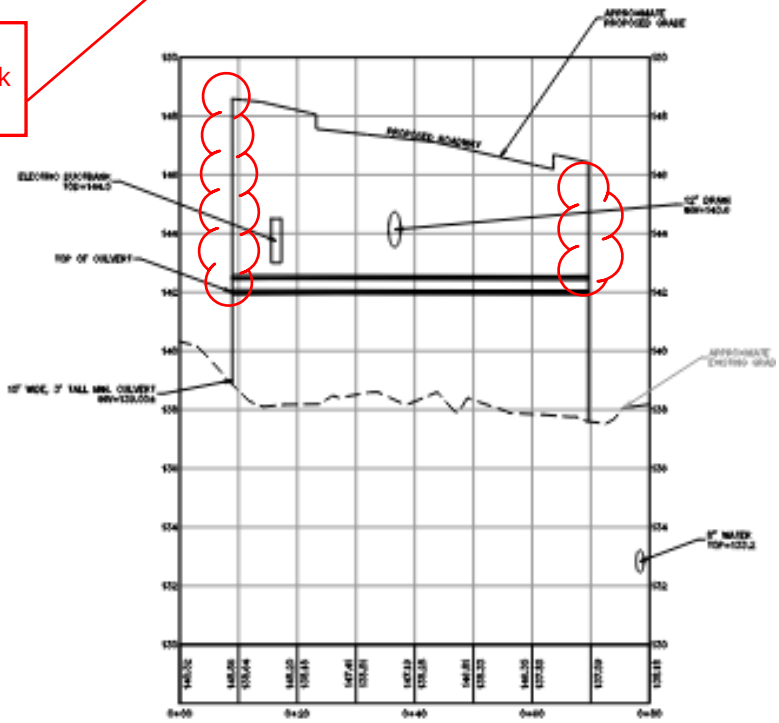


LOCATION
SECTION C–C

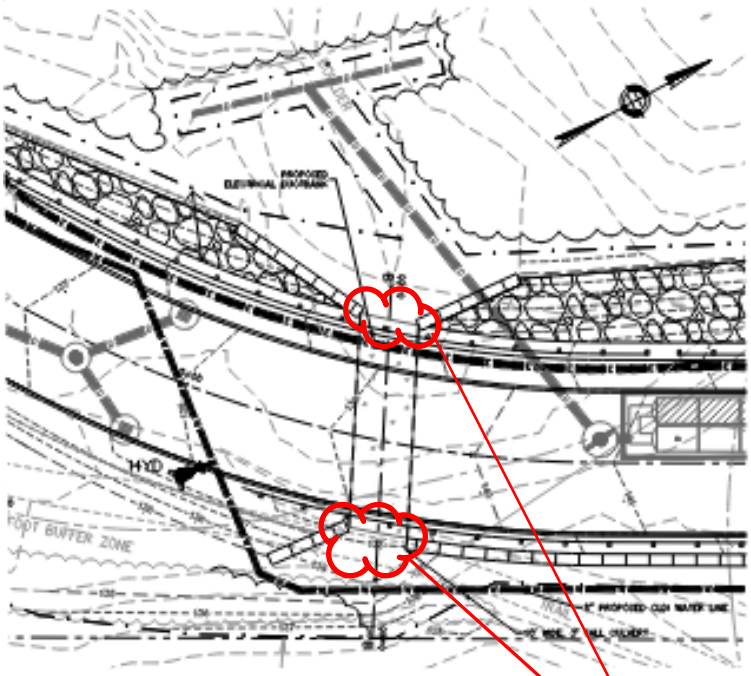
No retaining wall above culvert. How is earthwork restrained?



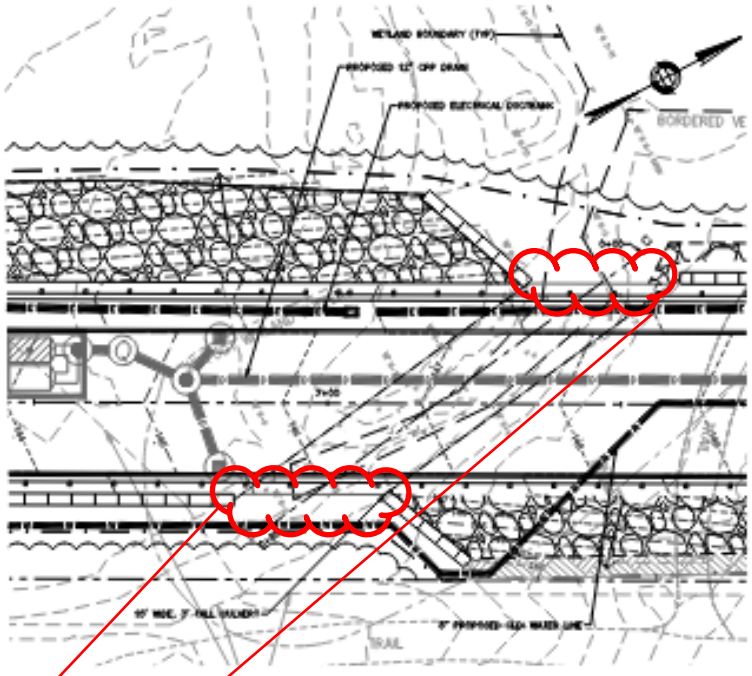
UTILITY SECTION
SECTION B–B



UTILITY SECTION
SECTION C–C

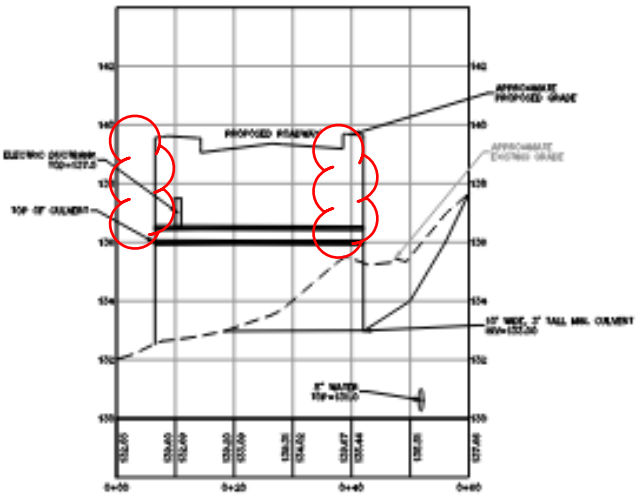


LOCATION
SECTION B–B

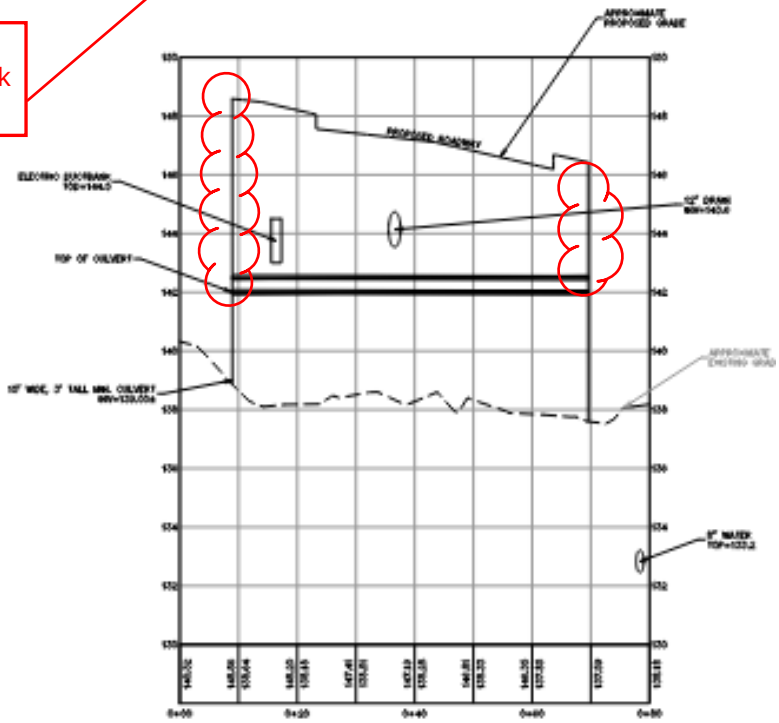


LOCATION
SECTION C–C

No retaining wall above culvert. How is earthwork restrained?



UTILITY SECTION
SECTION B–B



UTILITY SECTION
SECTION C–C

RFI #Pre-30

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Site Electrical Specifications

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Sean Sullivan **(Bala Consulting Engineers)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/24/2023	**STATUS:**	Closed on 03/31/23
LOCATION:		**DUE DATE:**	03/31/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:25 AM on 03/24/2023

Please advise where the site electrical items (ductbank conduit and spacers, structures) are included in the specifications for the Electrical Trade Bids. We need this information for the Early Site Electrical bid package we are currently compiling for bidding.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, March 30th, 2023 at 6:33PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-30_Elec-Site Electrical Specifications-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-30

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Site Electrical Specifications

TO:	Sean Sullivan **(Bala Consulting Engineers)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/24/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	03/31/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:25 AM on 03/24/2023

Please advise where the site electrical items (ductbank conduit and spacers, structures) are included in the specifications for the Electrical Trade Bids. We need this information for the Early Site Electrical bid package we are currently compiling for bidding.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to Bala response below.

ANGEL KHAZADIAN
03/30/2023

BALA RESPONSE:

Specification Section 260543-Underground Ducts and Raceways for Electrical Systems will be included with the 90% CD's.

ZACHARY BARRETT
03/30/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-31

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Bent Plate Size Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/28/2023	**STATUS:**	Closed on 04/05/23
LOCATION:		**DUE DATE:**	04/04/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:59 AM on 03/28/2023

In the 60% documents, details 5 and 6 on S3-0-4 indicated 3/4" bent plates at the slab edges. In the Early Structural Bid Package documents, Detail 6 was revised to 3/8" perimeter bent plate, but detail 5 was not. Should the perimeter bent plate shown on 5/S3-0-4 be 3/8" bent plate also?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, April 5th, 2023 at 9:38AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-31_Struct-Bent Plate Size Clarification-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-31

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Bent Plate Size Clarification

TO:	Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/28/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/04/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:59 AM on 03/28/2023

In the 60% documents, details 5 and 6 on S3-0-4 indicated 3/4" bent plates at the slab edges. In the Early Structural Bid Package documents, Detail 6 was revised to 3/8" perimeter bent plate, but detail 5 was not. Should the perimeter bent plate shown on 5/S3-0-4 be 3/8" bent plate also?

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer to EDG response below.

ANGEL KHAZADIAN
04/04/2023

EDG RESPONSE:

AT SECTION 5 ON S3-0-4: 3/4"-THICK PLATE IS REQUIRED BELOW HSS COLUMNS SUPPORTED ON THE STEEL BEAM BELOW THE EDGE-OF-SLAB.

EDG TAKES NO TECHNICAL EXCEPTION TO SUBSTITUTING A 3/8"-THICK SLAB-EDGE BENT PLATE FOR THE 3/4"-THICK PLATE, AS LONG AS THE HSS COLUMNS ARE SUPPORTED LOCALLY ON A SEPERATE 3/4" BASE PLATE CONNECTED TO THE STEEL BEAM BELOW. THE 3/8"-THICK SLAB-EDGE BENT PLATE SHALL BE SHOP-CUT TO FIT AROUND THE HSS COLUMNS AND BASE PLATES WHERE THESE DETAILS ARE APPLICABLE.

ALEX AUDITORE 04/04/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY | **DATE** | **COPIES TO**

RFI #Pre-32

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Structural Detail Clarifications

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/28/2023	**STATUS:**	Closed on 04/05/23
LOCATION:		**DUE DATE:**	04/04/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:23 AM on 03/28/2023

Question from bidder:
Regarding details 6,7/S2-0-3 and 4,11/S3-0-1; they are not shown on floor plans. Please confirm they are not required.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, April 5th, 2023 at 9:40AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-32_Struct-Structural Detail Clarification-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-32

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Structural Detail Clarifications

TO:	Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/28/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/04/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:23 AM on 03/28/2023

Question from bidder:
Regarding details 6,7/S2-0-3 and 4,11/S3-0-1; they are not shown on floor plans. Please confirm they are not required.

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer to EDG response below.

ANGEL KHAZADIAN
04/04/2023

EDG RESPONSE:

CONFIRMED; SECTIONS 6 & 7 ON S2-0-3 ARE NOT REQUIRED FOR THE PROJECT.

CONFIRMED; SECTION 4 ON S3-0-1 IS NOT REQUIRED FOR THE PROJECT.

SECTION 11 ON S3-0-1 HAS BEEN REVISED AND WILL BE ISSUED FOR STRUCTURAL STEEL ADDENDUM 1 [SS-S-1] 03/31/2023, ALONG WITH UPDATES TO WHERE IT IS CUT ON PLANS. REFER TO THE ABOVE REFERENCED SET OF REVISED CONTRACT DOCUMENTS FOR LOCATIONS WHERE SECTION 11 ON S3-0-1 APPLIES.

ALEX AUDITORE, 04/04/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-33

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Floor Hardener Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/28/2023	**STATUS:**	Closed on 04/07/23
LOCATION:		**DUE DATE:**	04/04/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 01:01 PM on 03/28/2023

CIP Concrete Spec 033000 Section 2.5.B.C indicates to apply floor hardener at "exposed concrete surfaces where no bedding or adhesive will be applied". The Arch Finish plans (such as AF1-1-0C) indicate a floor finish of S. Conc, which is noted as Sealed Concrete.
1) Is the intent for floor hardener to only be applied where Sealed Concrete is noted on the finish plans?
2) If yes, is the hardener the only finish at these locations, or is a roll-on concrete sealer going to be added to the Paints and Coatings Specification?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, April 6th, 2023 at 2:29PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-33_Arch-Floor Hardener Clarification-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-33

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Floor Hardener Clarification

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/28/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/04/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 01:01 PM on 03/28/2023

CIP Concrete Spec 033000 Section 2.5.B.C indicates to apply floor hardener at "exposed concrete surfaces where no bedding or adhesive will be applied". The Arch Finish plans (such as AF1-1-0C) indicate a floor finish of S. Conc, which is noted as Sealed Concrete.
1) Is the intent for floor hardener to only be applied where Sealed Concrete is noted on the finish plans?
2) If yes, is the hardener the only finish at these locations, or is a roll-on concrete sealer going to be added to the Paints and Coatings Specification?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

1. Floor hardener shall be applied for all sealed and painted concrete only. CM to coordinate submitted concrete hardener is compatible with all finish products. CM to also coordinate the required concrete finish texture with the finish products.
2. The high performance epoxy paint finish, to be used where currently listed as sealed concrete on the finish plans, is included in the 90% specifications. Mechanical Penthouse and Mezzanine floors will be "traditional" sealed concrete.

ANGEL KHAZADIAN
04/05/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-34

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Precast Plank Detail Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/30/2023	**STATUS:**	Closed on 04/06/23
LOCATION:		**DUE DATE:**	04/06/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:09 AM on 03/30/2023

Couple of questions regarding precast plank details:
1. Please clarify where detail 3/S2-0-2 applies - don't see the detail referenced on the drawings.
2. Is there a typical section detail for plank to plank joints?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, April 5th, 2023 at 9:47AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-34_Struct-Precast Plank Detail Clarification-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY | **DATE** | **COPIES TO**

RFI #Pre-34

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Precast Plank Detail Clarification

TO:	Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	03/30/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/06/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:09 AM on 03/30/2023

Couple of questions regarding precast plank details:
1. Please clarify where detail 3/S2-0-2 applies - don't see the detail referenced on the drawings.
2. Is there a typical section detail for plank to plank joints?

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer to EDG response below.

ANGEL KHAZADIAN
04/04/2023

EDG RESPONSE:

1. SECTION 3 ON S2-0-2 IS A TYPICAL DETAIL TO CONNECT CONTINUOUS EDGES OF PRECAST CONCRETE PLANKS, AND IS APPLICABLE AT EVERY PLANK-TO-PLANK JOINT WHERE THEY SPAN THE SAME DIRECTION, ON EVERY PLANK MEZZANINE LEVEL [S1-0-1MC, S1-0-1MD, S1-1-1MA, AND S1-1-1MB].

2. SEE RESPONSE ABOVE.

ALEX AUDITORE 04/04/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY | **DATE** | **COPIES TO**

RFI #Pre-35

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Drainage Tee Size

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/05/2023	**STATUS:**	Closed on 04/06/23
LOCATION:		**DUE DATE:**	04/12/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	C-402		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 07:55 AM on 04/05/2023

Please see attached sketch and confirm correct tee size for drainage line.

Attachments:
RFI Fitting Size C-402_ DRAINAGE PLAN.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, April 5th, 2023 at 3:01PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-35_Civ-Drainage Tee Size-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-35

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Drainage Tee Size

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/05/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/12/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 07:55 AM on 04/05/2023

Please see attached sketch and confirm correct tee size for drainage line.

Attachments:
RFI Fitting Size C-402_ DRAINAGE PLAN.pdf

Awaiting an Official Response

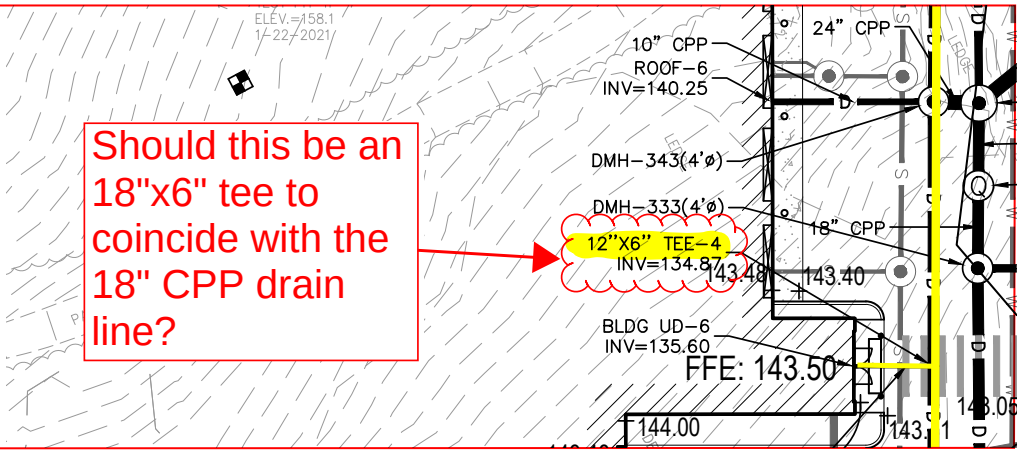
All Replies:

DRA RESPONSE:
Refer to Nitsch response below.

ANGEL KHAZADIAN
04/05/2023

Nitsch Engineering
Response - 04/05/2023

Yes, the tee should be 18"x6".



BY **DATE** **COPIES TO**

KEY MAP
N.T.S.

MATCHLINE SEE SHEET C-401

MATCHLINE SEE SHEET C-404

MATCHLINE SEE SHEET C-403

PROPERTY LINE (TYP.)

LIMIT OF WORK (TYP.)

Should this be an 18"x6" tee to coincide with the 18" CPP drain line?

NOTES:
1. REFER TO SHEET C-000 FOR NOTES, LEGEND, AND ABBREVIATIONS.
2. REFER TO SHEET C-406 DRAINAGE TABLE FOR RIM AND INVERT ELEVATIONS.
3. REFER TO SHEETS C-600 – C-605 FOR DRIVEWAY GRADING INFO. SITE GRADING SHOWN IS FOR COORDINATION PURPOSES ONLY. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR FINAL SITE GRADING.
4. ALL PIPES TO BE 12" CPP UNLESS OTHERWISE NOTED.
5. REFER TO STRUCTURAL DRAWINGS FOR DETAILS OF PERIMETER AND INTERIOR WALL DRAINS.
6. LOCATION OF UNDER-SLAB DRAINAGE PIPES MAY BE ADJUSTED IN THE FIELD AS NEEDED. IF ADJUSTMENT IS MORE THAN 2 FEET, THE GEOTECHNICAL ENGINEER MUST BE NOTIFIED TO REVIEW NEW LOCATION.
7. REFER TO SHEETS C-500 THRU C-505 FOR INFORMATION CONCERNING THE WATER, SEWER, AND OTHER UTILITIES.

SCALE:
1" = 20'
20 10 0 20 40

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering

www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

©COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

90% CD COST ESTIMATE

MARCH 31, 2023

DRAINAGE PLAN III

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: MARCH 31, 2023

C-402

KEY MAP
N.T.S.

MATCHLINE SEE SHEET C-401

MATCHLINE SEE SHEET C-404

MATCHLINE SEE SHEET C-403

PROPERTY LINE (TYP.)

LIMIT OF WORK (TYP.)

Should this be an 18"x6" tee to coincide with the 18" CPP drain line?

NOTES:
1. REFER TO SHEET C-000 FOR NOTES, LEGEND, AND ABBREVIATIONS.
2. REFER TO SHEET C-406 DRAINAGE TABLE FOR RIM AND INVERT ELEVATIONS.
3. REFER TO SHEETS C-600 – C-605 FOR DRIVEWAY GRADING INFO. SITE GRADING SHOWN IS FOR COORDINATION PURPOSES ONLY. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR FINAL SITE GRADING.
4. ALL PIPES TO BE 12" CPP UNLESS OTHERWISE NOTED.
5. REFER TO STRUCTURAL DRAWINGS FOR DETAILS OF PERIMETER AND INTERIOR WALL DRAINS.
6. LOCATION OF UNDER-SLAB DRAINAGE PIPES MAY BE ADJUSTED IN THE FIELD AS NEEDED. IF ADJUSTMENT IS MORE THAN 2 FEET, THE GEOTECHNICAL ENGINEER MUST BE NOTIFIED TO REVIEW NEW LOCATION.
7. REFER TO SHEETS C-500 THRU C-505 FOR INFORMATION CONCERNING THE WATER, SEWER, AND OTHER UTILITIES.

SCALE:
1" = 20'
20 10 0 20 40

DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

Nitsch Engineering

www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Structural Engineering
- Green Infrastructure
- Planning
- GIS

NITSCH PROJECT No. 13872

©COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

90% CD COST ESTIMATE

MARCH 31, 2023

DRAINAGE PLAN III

Scale: AS NOTED
Job No.: 13872
Drawn By: WL
Date: MARCH 31, 2023

C-402

RFI #Pre-36

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Housekeeping Pad Detail on Precast Plank

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/05/2023	**STATUS:**	Closed on 04/12/23
LOCATION:		**DUE DATE:**	04/12/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	S0-0-3		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:37 AM on 04/05/2023

See attached sketch from S1-1-0MC which indicates a housekeeping pad on precast planks. The referenced detail 5/S0-0-3 doesn't address housekeeping pads on precast plank (with topping slab). Please review and advise on this detail.

Attachments:
RFI housekeeping pads on precast.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Tuesday, April 11th, 2023 at 6:25PM EDT*

Refer to attached response.

Attachments:
RFI PRE-36_Struct-Housekeeping Pad Detail on Precast Plank-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-36

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Housekeeping Pad Detail on Precast Plank

TO:	Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/05/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/12/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:37 AM on 04/05/2023

See attached sketch from S1-1-0MC which indicates a housekeeping pad on precast planks. The referenced detail 5/S0-0-3 doesn't address housekeeping pads on precast plank (with topping slab). Please review and advise on this detail.

Attachments:
RFI housekeeping pads on precast.pdf

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to EDG Response below.

ANGEL KHAZADIAN
04/11/2023

EDG:

THE TYPICAL DETAIL FOR SUPPORTING CONCRETE EQUIPMENT PADS ON THE PRECAST CONCRET PLANK MEZZANINES SHALL BE CONSTRUCTED SIMILARLY TO DETAIL 5 ON S0-0-3. (SEE ATTACHED DETAIL FOR GENERAL COMMENTS).

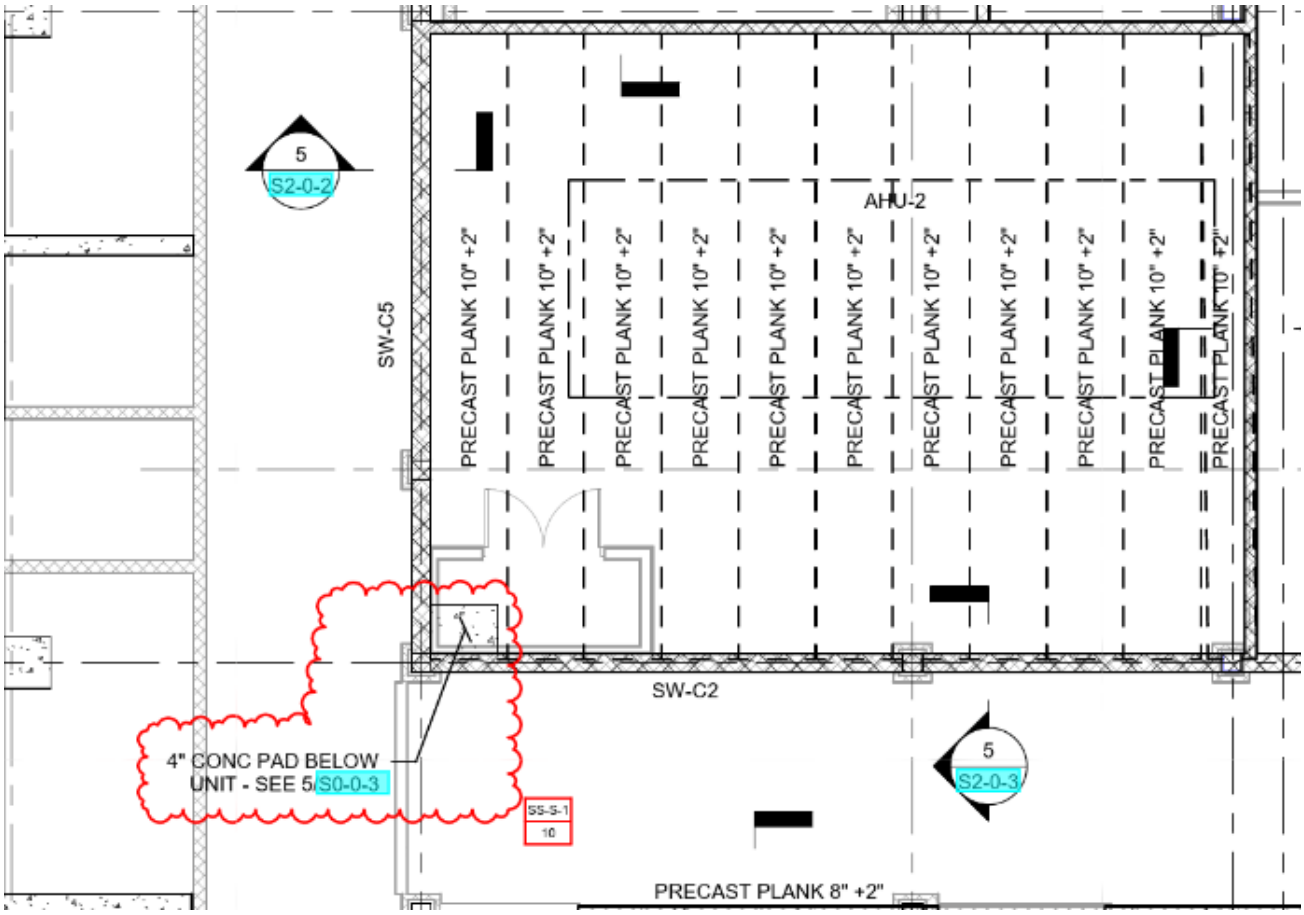
INSTALLATION AND DETAILING OF CONCRETE PADS ON THE PLANK SHALL BE COORDINATED WITH THE PRECAST CONCRETE PLANK DESIGNER.

ALEX AUDITORE, 04/11/2023

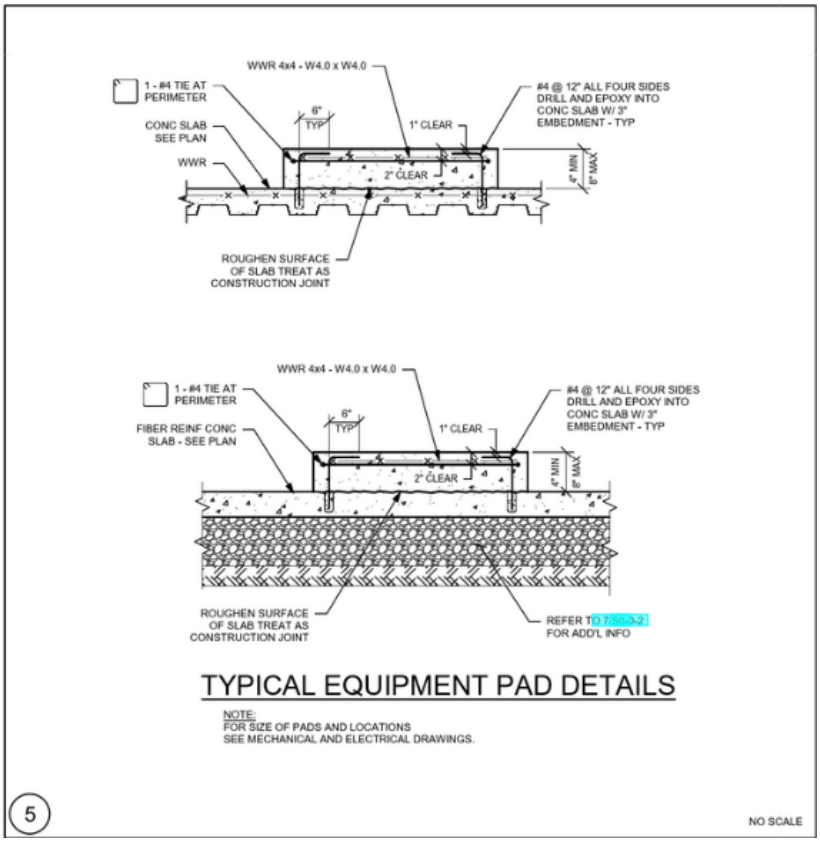
If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

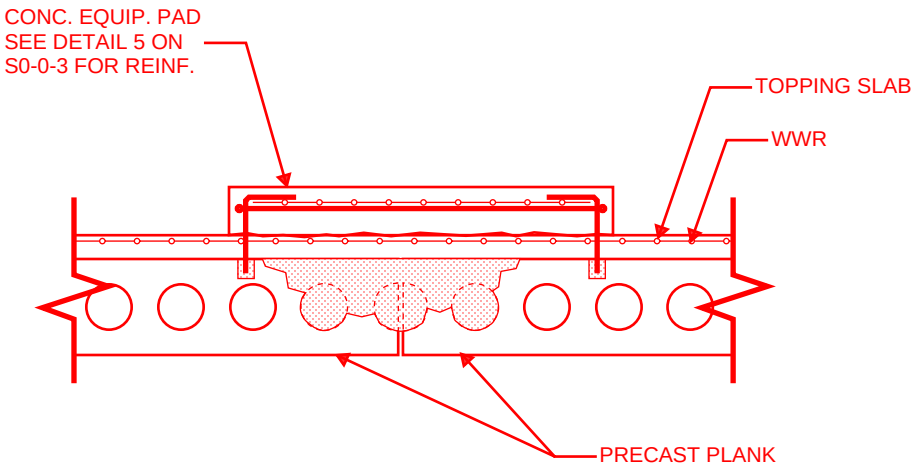
BY **DATE** **COPIES TO**

S1-1-0MC

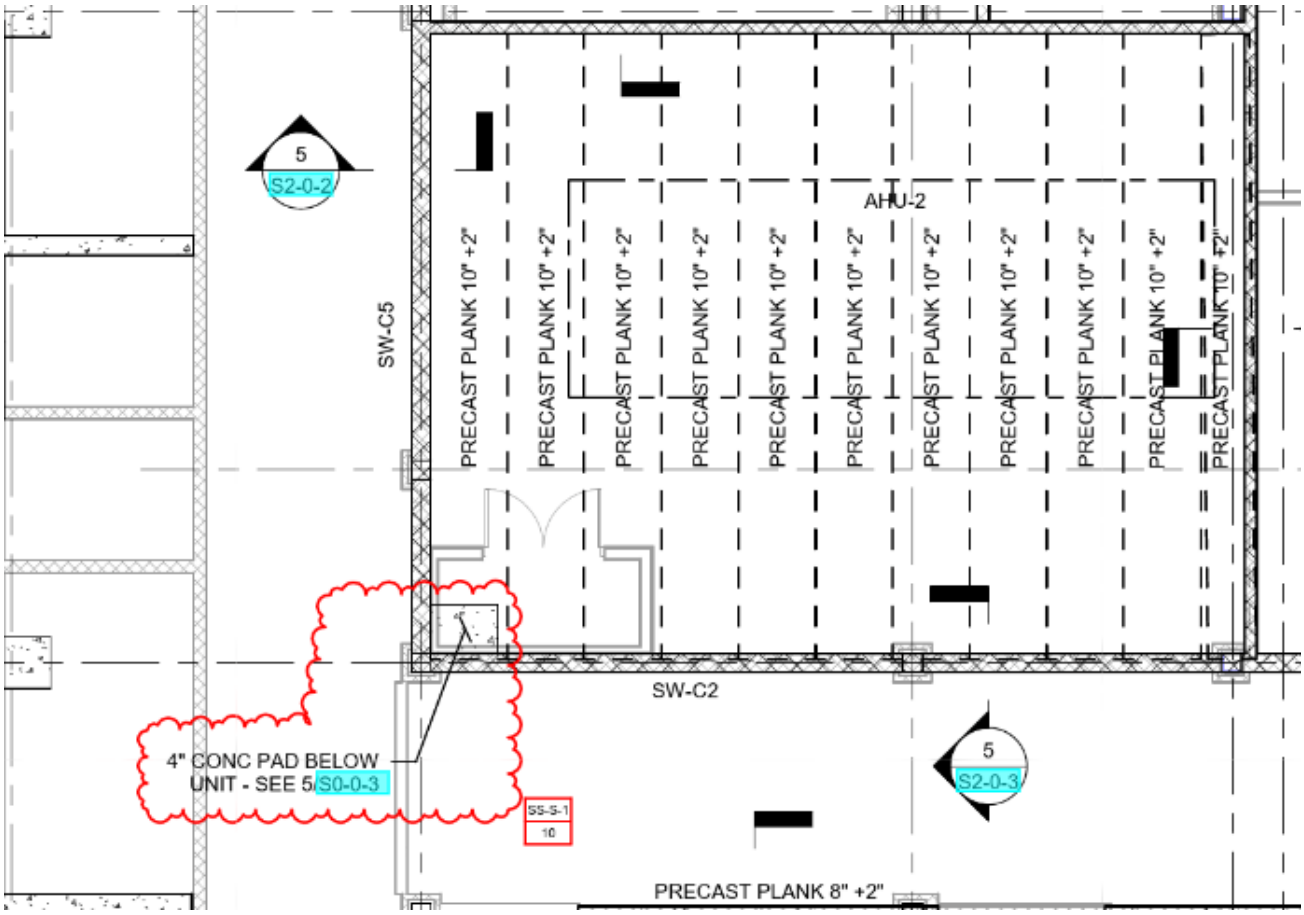


5/S0-0-3

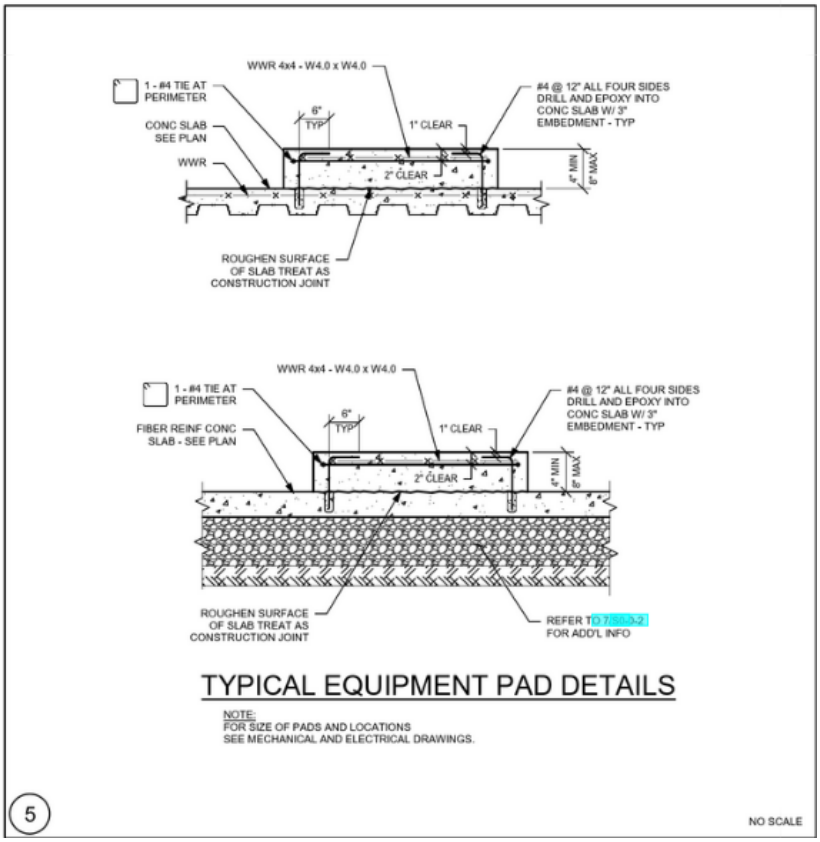



CONC. EQUIP. PAD
SEE DETAIL 5 ON
S0-0-3 FOR REINF.
TOPPING SLAB
WWR
PRECAST PLANK

S1-1-0MC



5/S0-0-3



RFI #Pre-37

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Floor Depressions for Arch Grilles

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/06/2023	**STATUS:**	Closed on 04/07/23
LOCATION:		**DUE DATE:**	04/13/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:34 AM on 04/06/2023

The following rooms indicate Interior Entrance Grill Mats (similar to Mats Inc Mighty Track) on the Architectural Floor Finishes plans: Vest A118, Vest C104, D101. The corresponding locations on the structural plans don't show slab depressions, which are typically required for these types of entrance mats. Will slab depressions be required at these locations (and what depth is needed)?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, April 6th, 2023 at 7:59PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-37_Arch-Floor Depressions for Arch grilles-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-37

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Floor Depressions for Arch Grilles

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/06/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/13/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:34 AM on 04/06/2023

The following rooms indicate Interior Entrance Grill Mats (similar to Mats Inc Mighty Track) on the Architectural Floor Finishes plans: Vest A118, Vest C104, D101. The corresponding locations on the structural plans don't show slab depressions, which are typically required for these types of entrance mats. Will slab depressions be required at these locations (and what depth is needed)?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

The Basis of Design for the referenced FGC Foot Grilles was revised in the 90% specifications to Mats Inc Ultra Entry which does NOT require slab depressions.

ANGEL KHAZADIAN
04/06/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-38

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Volleyball Sleeve Detail

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/07/2023	**STATUS:**	Closed on 04/17/23
LOCATION:		**DUE DATE:**	04/14/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:54 PM on 04/07/2023

The current volleyball sleeve detail is for a slab on grade condition - see 3/S0-0-3. The gym is located on the 2nd floor elevated slab, so we will need a revised detail for these details. We ask this now in case there is any impact to the structural steel.
- Will this sleeve detail extend below bottom of the elevated slab? If yes, will this be a Misc Metals detail to secure the sleeve for the main court?
- Based on the diagrammatic floor striping on the architectural plans it appears there are two side courts with the centerline along 32-line. If the sleeve does go below bottom of slab, we would need a different detail than the main court since there are steel beams running along 32-line at bottom of slab.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, April 13th, 2023 at 5:40PM EDT*

Refer to attached RFI Response.

Attachments:
RFI PRE-38_Struct-Volleyball Sleeve Detail-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-38

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Volleyball Sleeve Detail

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/07/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/14/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:54 PM on 04/07/2023

The current volleyball sleeve detail is for a slab on grade condition - see 3/S0-0-3. The gym is located on the 2nd floor elevated slab, so we will need a revised detail for these details. We ask this now in case there is any impact to the structural steel.
- Will this sleeve detail extend below bottom of the elevated slab? If yes, will this be a Misc Metals detail to secure the sleeve for the main court?
- Based on the diagrammatic floor striping on the architectural plans it appears there are two side courts with the centerline along 32-line. If the sleeve does go below bottom of slab, we would need a different detail than the main court since there are steel beams running along 32-line at bottom of slab.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

1. The typical slab on grade installation shown in the structural drawings does not apply to this project. See EDG response below. The above grade volleyball support adapter is specified in section 116620-Athletic Equipment.

2. While the side basketball courts are centered along column grid 32, the side volleyball courts have been shifted 1'-2" south of the grid to avoid grid 32 steel. This can be seen in both the 60% and 90% Cost Estimate drawings.

ANGEL KHAZADIAN
04/13/2023

EDG RESAPONSE:

THE VOLLEYBALL POST ADAPTER SHALL BE ANCHORED TO THE UNDER-SIDE OF THE SLAB-ON-DECK. ANCHORS SHALL BE SET IN THE FLUTES OF THE DECK ONLY. DECK SPACING/INSTALLATION SHALL BE COORDINATED WITH THE MANUFACTURER REQUIRED ANCHOR SPACING.

REFER TO THE MANUFACTURER'S DRAWINGS FOR ANCHORAGE DETAILS AND INSTALLATION, AND COORDINATE FASTENING TO SLAB-ON-DECK WITH SECTION 096460-WOOD ATHLETIC FLOORING.

AN OPENING IN THE DECK IS REQUIRED FOR THE SLEEVE TO EXTEND THROUGH TO THE TOP-OF-SLAB ELEVATION. ADDITIONAL REINFORCING IS REQUIRED AROUND EACH OPENING PER DETAIL 1 ON S0-0-8.

ALEX AUDITORE, 04/13/2023

RFI #Pre-39

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Building Corner Locations

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** David Warner **(Warner Larson Landscape Architects)** Amy Allen **(Warner Larson Landscape Architects)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/10/2023	**STATUS:**	Closed on 04/12/23
LOCATION:		**DUE DATE:**	04/17/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:41 AM on 04/10/2023

Please provide building corner locations from existing property line coordinates.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, April 12th, 2023 at 9:33AM EDT*
Refer to attached RFI response.

Attachments:
RFI PRE-39_LAND-Building Corner Locations-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-39

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Building Corner Locations

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/10/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/17/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:41 AM on 04/10/2023

Please provide building corner locations from existing property line coordinates.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to WLA response below.

ANGEL KHAZADIAN
04/12/2023

See coordinates added to L202 Layout Plan - 2 & L203 Layout Plan - 3, attached.

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

Amy Allen, David Warner	4/12/2023	
BY	**DATE**	**COPIES TO**

MATCHLINE – L201
MATCHLINE – L202
MATCHLINE – L202
MATCHLINE – L203

RFI 39
INTERSECTION OF COLUMN LINE: 3 AND D
NORTHING: 3004703.90
EASTING: 778725.68

RFI 39
INTERSECTION OF COLUMN LINE: RD7 AND RD1
NORTHING: 3004829.42
EASTING: 778920.54

NORTH
SCALE: 1" = 30'-0"
0 15' 30' 75'

MATCHLINE – L201
MATCHLINE – L202
MATCHLINE – L202
MATCHLINE – L203

© COPYRIGHT 2022 DRUMMEY ROSANE ANDERSON, INC.

DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

NOI RE-SUBMISSION

March 30, 2023

KEY PLAN
A B C D

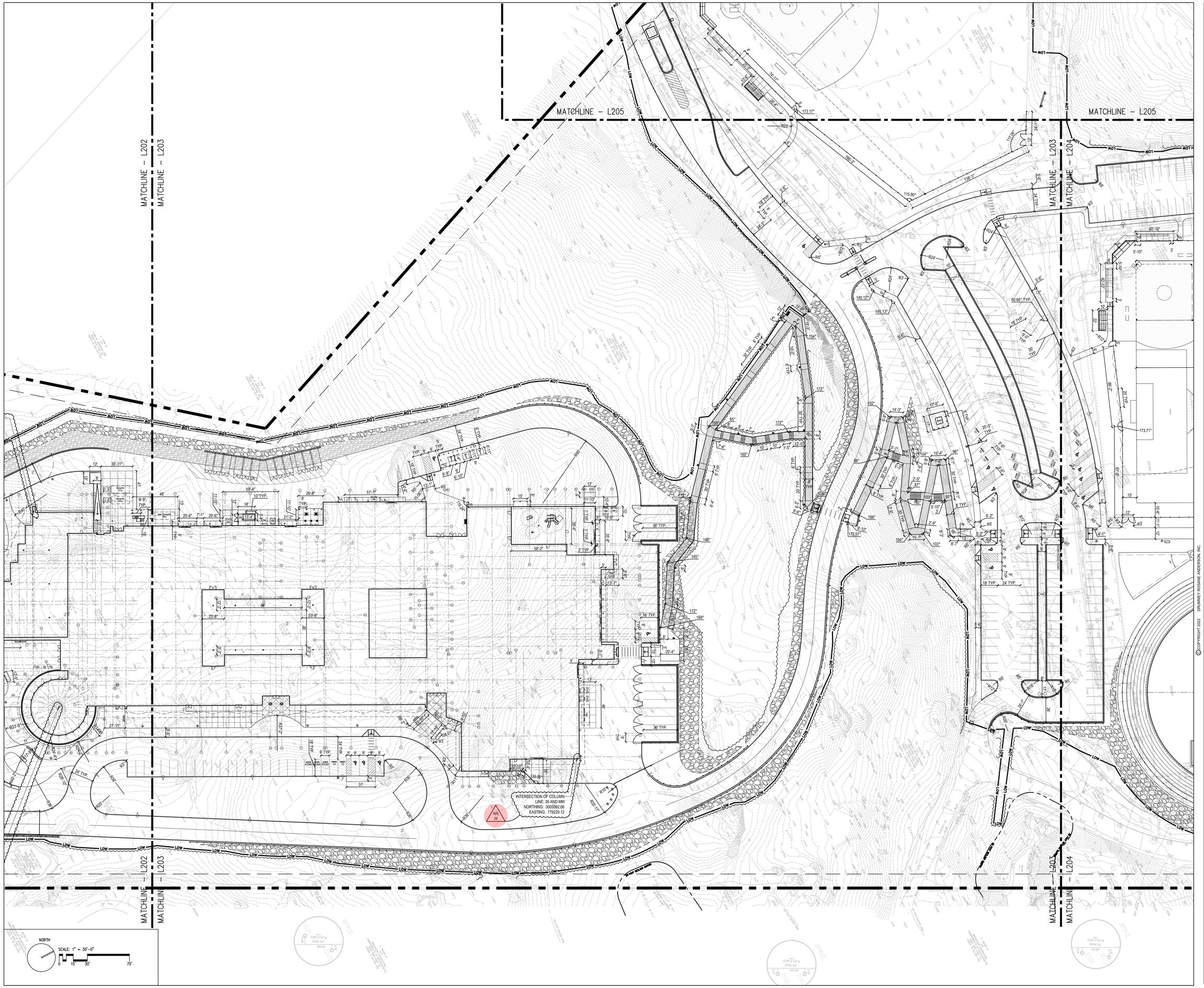
PROJECT NORTH
MAGNETIC NORTH

LAYOUT PLAN - 2

RFI #PRE-39

Scale: 1" = 30'-0"
Job No.: 20202.00
Drawn By: JM/AA
Date: March 31, 2023

L202



DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning | Architecture | Interior Design

Tel: 617.964.1700
www.draws.com

NORTHEAST METROPOLITAN REGIONAL VOCATIONAL HIGH SCHOOL

100 Hemlock Rd,
Wakefield, MA 01880

WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

©COPYRIGHT 2022 DRUMMEY ROSANE ANDERSON, INC.

NOI RE-SUBMISSION

March 30, 2023

KEY PLAN

PROJECT NORTH	MAGNETIC NORTH

LAYOUT PLAN - 3

RFI #PRE-39

Scale:	1" = 30'-0"
Job No.:	20202.00
Drawn By:	JM/AA
Date:	March 31, 2023

L203

RFI #Pre-40

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Grease Trap Pit and Spill Containment Details

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Bala Boston CA Email **(Bala Consulting Engineers)** Alex Auditore **(Engineers Design Group, Inc.)** Sean Sullivan **(Bala Consulting Engineers)** Paige Blanchard DONT USE **(Nitsch Engineering, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/10/2023	**STATUS:**	Closed on 04/21/23
LOCATION:		**DUE DATE:**	04/17/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:16 AM on 04/10/2023

1. S1-1-A notes several grease pit locations and references to see plumbing drawings. Plumbing drawing P2-0-0A provides pit dimensions and elevations. Is 7/S0-0-3 Concrete Pit Typical Detail the correct structural detail for these grease pits?
2. Drawing EQ2.2 in Auto Collision C022, at 15/PP references a floor grille with a note "Spill Containment".
   - Is this a depressed pit? If yes, what structural detail applies and what are the dimensions of the pit?
   - This Spill Containment has no connection to plumbing, correct?
   - Will this grille be a misc metals item or an equipment (FF&E) item?

Official Response: **Vladimir Lyubetsky (Drummey Rosane Anderson, Inc.)** *responded on Monday, April 17th, 2023 at 1:53PM EDT*

See attached response

Attachments:
RFI PRE-40_Multi-Grease Trap Pit and Spill Containment Details Response.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-40

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Grease Trap Pit and Spill Containment Details

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/10/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/17/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:16 AM on 04/10/2023

1. S1-1-A notes several grease pit locations and references to see plumbing drawings. Plumbing drawing P2-0-0A provides pit dimensions and elevations. Is 7/S0-0-3 Concrete Pit Typical Detail the correct structural detail for these grease pits?
2. Drawing EQ2.2 in Auto Collision C022, at 15/PP references a floor grille with a note "Spill Containment".
   - Is this a depressed pit? If yes, what structural detail applies and what are the dimensions of the pit?
   - This Spill Containment has no connection to plumbing, correct?
   - Will this grille be a misc metals item or an equipment (FF&E) item?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

1. Refer to EDG response below.
2. Spill containment does not require a pit, it is surface mounted with no connection to plumbing. This is an FF&E item similar to this →

ANGEL KHAZADIAN
04/12/2023

EDG Response: 1. Detail 7/S0-0-3 is the correct detail for the pits, coordinate dimensions, depths and details for grating support with plumbing drawings.

Response by Mehul Dhruv April 17, 2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-41

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Auto Technology - Alignment Rack and Spill Containment Details

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/10/2023	**STATUS:**	Closed on 04/17/23
LOCATION:		**DUE DATE:**	04/17/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:42 AM on 04/10/2023

Regarding Auto Technology D003, please review the following and advise:
1. Drawing EQ2.3 indicates Item AT07 Alignment Rack is a Hunter RX16. Hunter RX16 racks appear to be flush mount and require a recessed pit, but none is shown on the Structural drawings. Is a pit required and can a pit detail and size/depth be provided?
2. Drawing EQ2.3 indicates at Spill Containment near 36/EE.9. Similar questions to RFI Pre-40. Is there a pit required? Pit detail and depth? Provided by Misc Metals or FF&E? No plumbing tie-in?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, April 13th, 2023 at 3:32PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-41_Multi-Auto Tech - Alignment Rack and Spill Containment Details-RESP.pdf

All Replies:

Response from Angel Khazadian (Drummey Rosane Anderson, Inc.) at 03:32 PM on 04/13/2023

Refer to attached RFI response.

Attachments:
RFI PRE-41_Multi-Auto Tech - Alignment Rack and Spill Containment Details-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-41

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Auto Technology - Alignment Rack and Spill Containment Details

TO:	Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/10/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/17/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:42 AM on 04/10/2023

Regarding Auto Technology D003, please review the following and advise:
1. Drawing EQ2.3 indicates Item AT07 Alignment Rack is a Hunter RX16. Hunter RX16 racks appear to be flush mount and require a recessed pit, but none is shown on the Structural drawings. Is a pit required and can a pit detail and size/depth be provided?
2. Drawing EQ2.3 indicates at Spill Containment near 36/EE.9. Similar questions to RFI Pre-40. Is there a pit required? Pit detail and depth? Provided by Misc Metals or FF&E? No plumbing tie-in?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

1. The model of the Alignment Rack is incorrect. The correct model for AT07 is It will be the Hunter RX9 which is surface mounted and does not require a slab depression.
2. The spill containment is a stand alone FF&E item similar to this
It does not require a depression and has no connection to plumbing.

ANGEL KHAZADIAN
04/13/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-42

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

HVAC Technology Walk-In Freezer

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/10/2023	**STATUS:**	Closed on 04/13/23
LOCATION:		**DUE DATE:**	04/17/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	EQ2.4		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:18 PM on 04/10/2023

Drawing EQ2.4 indicates in HVAC Technology B103 an owner furnished item HV03 Walk-In Freezer. The Walk-In Freezers/Coolers in the Main Kitchen and Culinary Kitchen areas require a depressed slab for installation (see 1/FS4-3-1). There is currently no depression shown in the slab for this unit, but this is a much smaller unit. Will a slab depression be required? If so, what are the depressed slab details and dimensions?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, April 13th, 2023 at 8:06AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-42_FF&E - HVAC Tech Walk-IN Freezer-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-42

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

HVAC Technology Walk-In Freezer

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/10/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/17/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:18 PM on 04/10/2023

Drawing EQ2.4 indicates in HVAC Technology B103 an owner furnished item HV03 Walk-In Freezer. The Walk-In Freezers/Coolers in the Main Kitchen and Culinary Kitchen areas require a depressed slab for installation (see 1/FS4-3-1). There is currently no depression shown in the slab for this unit, but this is a much smaller unit. Will a slab depression be required? If so, what are the depressed slab details and dimensions?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

No depression is required for the Walk-in-Cooler in B103 HVAC Technology.

ANGEL KHAZADIAN
04/13/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-43

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Gymnasium Roof Framing/Deck Finish Questions

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/11/2023	**STATUS:**	Closed on 04/13/23
LOCATION:		**DUE DATE:**	04/18/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 03:53 PM on 04/11/2023

1. Note 2 on drawing S1-1-4D indicates "IN GYMNASIUM JOISTS ALONG GRIDS EE, GG, AND KK SHALL RECEIVE 1-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING." They joists don't specifically align with grid lines at EE line, but is the intent that only 3 joists get coated with intumenscent mastic fireproofing? If yes, what finish is required on the other joists?
2. Note 4 indicates that "METAL ROOF DECK TO RECEIVE 1-HOUR FIRE RATING BY CEMENTITOUS FIREPROOFING." Does the Gymnasium acoustical roof deck receive 1 hour cementitous fireproofing also?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, April 12th, 2023 at 7:01PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-43-Arch - Gymnasium Roof Framing Deck Finish Questions-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-43

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Gymnasium Roof Framing/Deck Finish Questions

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/11/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/18/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 03:53 PM on 04/11/2023

1. Note 2 on drawing S1-1-4D indicates "IN GYMNASIUM JOISTS ALONG GRIDS EE, GG, AND KK SHALL RECEIVE 1-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING." They joists don't specifically align with grid lines at EE line, but is the intent that only 3 joists get coated with intumenscent mastic fireproofing? If yes, what finish is required on the other joists?
2. Note 4 indicates that "METAL ROOF DECK TO RECEIVE 1-HOUR FIRE RATING BY CEMENTITOUS FIREPROOFING." Does the Gymnasium acoustical roof deck receive 1 hour cementitous fireproofing also?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

1. The joist have shifted. Intumescent paint is only required at the joists along grid GG& KK. The remaining joist will remain exposed to view and painted.
2. The gymnasium roof deck does NOT receive cementitious fireproofing. The roof deck will remain exposed to view and painted.

ANGEL KHAZADIAN
04/12/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-44

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Precast Plank Bid Questions

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/12/2023	**STATUS:**	Closed on 04/17/23
LOCATION:		**DUE DATE:**	04/19/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 03:16 PM on 04/12/2023

1. Please confirm the specified LL = 150 psf includes the weight of the RTU's
2. Note that the specified 8" thick plank does not have the load capacity to accommodate the design loads in the following areas: Between column lines M-N; Q-R, S-T, and X-Z. Please advise if 10" thick plank should be utilized in these areas.
3. Note that specified 10" thick plank does not have the load capacity to accommodate the design loads in the following area unless the 2" cip topping slab is normal wt concrete and acts compositely with the plank. Please advise. Between column lines DD-FF

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, April 14th, 2023 at 11:07AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-44_Struct - Precast Plank Bid Questions-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-44

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Precast Plank Bid Questions

TO:	Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/12/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/19/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 03:16 PM on 04/12/2023

1. Please confirm the specified LL = 150 psf includes the weight of the RTU's
2. Note that the specified 8" thick plank does not have the load capacity to accommodate the design loads in the following areas: Between column lines M-N; Q-R, S-T, and X-Z. Please advise if 10" thick plank should be utilized in these areas.
3. Note that specified 10" thick plank does not have the load capacity to accommodate the design loads in the following area unless the 2" cip topping slab is normal wt concrete and acts compositely with the plank. Please advise. Between column lines DD-FF

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to EDG response below.

ANGEL KHAZADIAN
04/13/2023

EDG RESPONSE:

1. The LL of 150 psf includes the weight of the Mechanical Equipment.
2. Note the 8" plank plus 2" normal weight concrete topping are to act compositely, these composite planks can span from 27 feet to 29 feet for supporting LL=150 psf depending on location of the strands from bottom of the plank.
3. Note the 10" plank plus 2" normal weight concrete topping are to act compositely, these composite planks can span from 36 feet to 38 feet for supporting LL=150 psf depending on location of the strands from bottom of the plank.

In all cases the Plank flooring shall be designed to maintain a 2 hour rating.

AMEHUL DHRUV
04/13/2020

RFI #Pre-45

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Precast Joint Clarifications

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/13/2023	**STATUS:**	Closed on 04/17/23
LOCATION:		**DUE DATE:**	04/20/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:00 PM on 04/13/2023

1. RFI Pre-34 indicates that 3/S2-0-2 applies to every plank to plank joint showing a rebar tie in plank to plank at 8 foot on center. Assume that the entire joint is grouted between these rebar tie-in locations, is that correct?
2. The project team has noted that a backer rod and sealant joint should be provided at the underside of the precast plank to plank joints. Please confirm this will be added to a detail and drawing referenced for the Waterproofing, Dampproofing and Caulking bid package.

Official Response: **Vladimir Lyubetsky (Drummey Rosane Anderson, Inc.)** *responded on Sunday, April 16th, 2023 at 5:12PM EDT*

Question
1. RFI Pre-34 indicates that 3/S2-0-2 applies to every plank to plank joint showing a rebar tie in plank to plank at 8 foot on center. Assume that the entire joint is grouted between these rebar tie-in locations, is that correct?
EDG Response (4/16/23) - Yes
2. The project team has noted that a backer rod and sealant joint should be provided at the underside of the precast plank to plank joints. Please confirm this will be added to a detail and drawing referenced for the Waterproofing, Dampproofing and Caulking bid package.
DRA Response (4/16/23) - Per Vladimir's conversation with Andy on 4/14/23 - The joint treatment as required for the grout and toping installation is means and methods. Gilbane with assign this scope to a subcontractor, NOT to the Waterproofing, Dampproofing and Caulking bid package. In the areas where the precast plank is exposed to view from the space below, the joints shall be sealed and the backer rod installed by Waterproofing, Dampproofing and Caulking bid package. These areas will be identified on the Reflected Ceiling Plan (RCP) drawings.

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-46

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Steel Bid Detail Questions

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/13/2023	**STATUS:**	Closed on 04/17/23
LOCATION:		**DUE DATE:**	04/20/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Michael Mallett **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 03:41 PM on 04/13/2023

1. Please confirm there is no thermal barrier paint required for the project.
2. Detail 2/S0-0-7 supersede note 6 on S1-1-5A (PJP weld instead 5/16 fillet weld). Acceptable?
3. Assume that we weld all stiffeners only on 3 sides per detail 2&3/S3-0-3. Correct?
4. Specification 051200 Section 2.1.A indicates "All steel is to consist of a minimum of 95 percent recycled steel with over 80 percent post-consumer and 15 percent pre-consumer recycled content as defined in the USGBC LEED for Schools v4 credit descriptions." It has been noted that HSS shapes will only be able to achieve up to 30% recycled content, and there is a significant amount of HSS shapes on the project. We will have an issue meeting this requirement. Please review and acknowledge/confirm. 5. It's unclear where detail 5/S0-0-8 Typical Mechanical Support Detail is required. Please advise where this detail is needed.

Official Response: **Vladimir Lyubetsky (Drummey Rosane Anderson, Inc.)** *responded on Sunday, April 16th, 2023 at 11:04AM EDT*

Question

1. Please confirm there is no thermal barrier paint required for the project.

DRA Response: The thermal barrier paint is not required on the project at this time.

1. Detail 2/S0-0-7 supersede note 6 on S1-1-5A (PJP weld instead 5/16 fillet weld). Acceptable?

EDG Response: Yes this is acceptable.

1. Assume that we weld all stiffeners only on 3 sides per detail 2&3/S3-0-3. Correct?

EDG Response: The internal stiffeners are required to be welded only on three sides of the member, see snippet from detail 2/S3-0-3:
See attached file for additional information.

1. Specification 051200 Section 2.1.A indicates "All steel is to consist of a minimum of 95 percent recycled steel with over 80 percent post-consumer

and 15 percent pre-consumer recycled content as defined in the USGBC LEED for Schools v4 credit descriptions." It has been noted that HSS shapes will only be able to achieve up to 30% recycled content, and there is a significant amount of HSS shapes on the project. We will have an issue meeting this requirement. Please review and acknowledge/confirm.

EDG Response: This is a sustainability requirement. The Contractor shall submit supporting documentation proving that based on the industry standards this requirement can not be achieved.

1. It's unclear where detail 5/S0-0-8 Typical Mechanical Support Detail is required. Please advise where this detail is needed.

EDG Response: This detail is required at mechanical equipment support directly on the deck and not on concrete slab. As per the note on the detail, refer to Architectural and Mechanical drawings for quantity, size and locations.

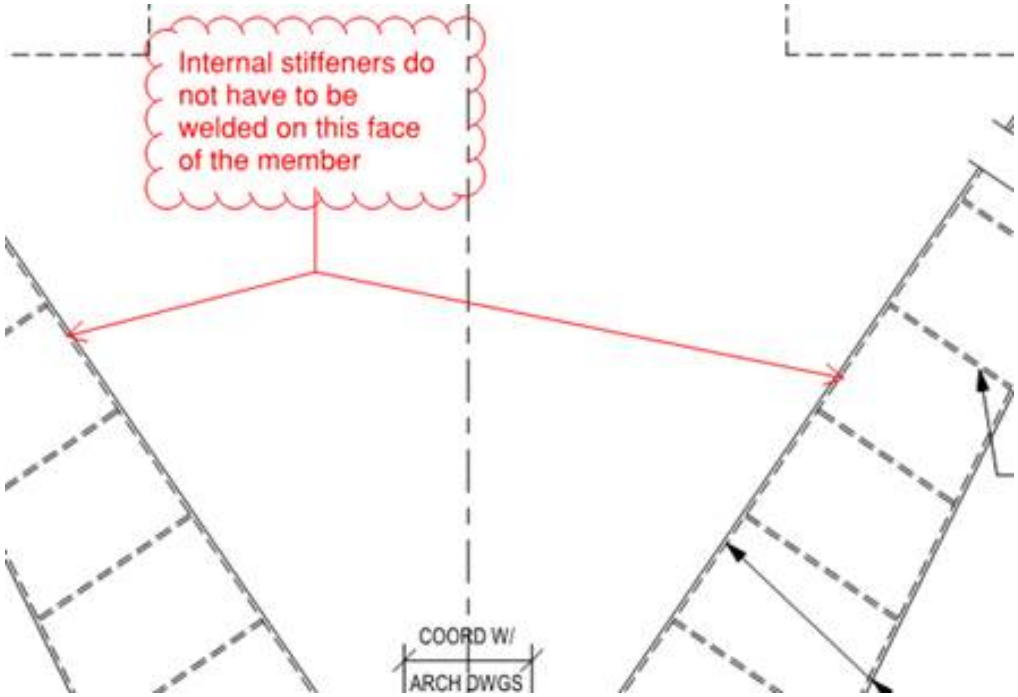
Thanks and Regards

Mehul Dhruv
Engineers Design Group Inc.
389 Main Street, Suite 401
Malden, MA 02148
Phone: (781) 396-9007 ext. 13
Email: mdhruv@edginc.com
Web: http://www.edginc.com

Attachments:
RFI PRE-46_Struct - Steel Bid Detail Questions_3 Sketch.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**


Internal stiffeners do not have to be welded on this face of the member
COORD W/
ARCH DWGS

RFI #Pre-47

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Alternate Plank Details

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/14/2023	**STATUS:**	Closed on 04/17/23
LOCATION:		**DUE DATE:**	04/21/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:35 PM on 04/14/2023

During the bid process, one of the bidders suggested some alternate details for bidding purposes. They indicated that these were used on a previous DRA plank project.
Please review and advise if these details will be allowable so we can advise the bidders accordingly.

Attachments:
RFI precast details.pdf

Official Response: **Vladimir Lyubetsky (Drummey Rosane Anderson, Inc.)** *responded on Sunday, April 16th, 2023 at 5:01PM EDT*

See EDG's notes on the attached sketches.

DRA 4/16/2023

Attachments:
RFI PRE-47_Struct - Alternate Plank Details (002) _EDG Response.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-47

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Alternate Plank Details

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/14/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	04/21/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:35 PM on 04/14/2023

During the bid process, one of the bidders suggested some alternate details for bidding purposes. They indicated that these were used on a previous DRA plank project.
Please review and advise if these details will be allowable so we can advise the bidders accordingly.

Attachments:
RFI precast details.pdf

Awaiting an Official Response

All Replies:

EDG Response: See Annotation on the attached details.

Response by Mehul Dhruv April 16, 2023

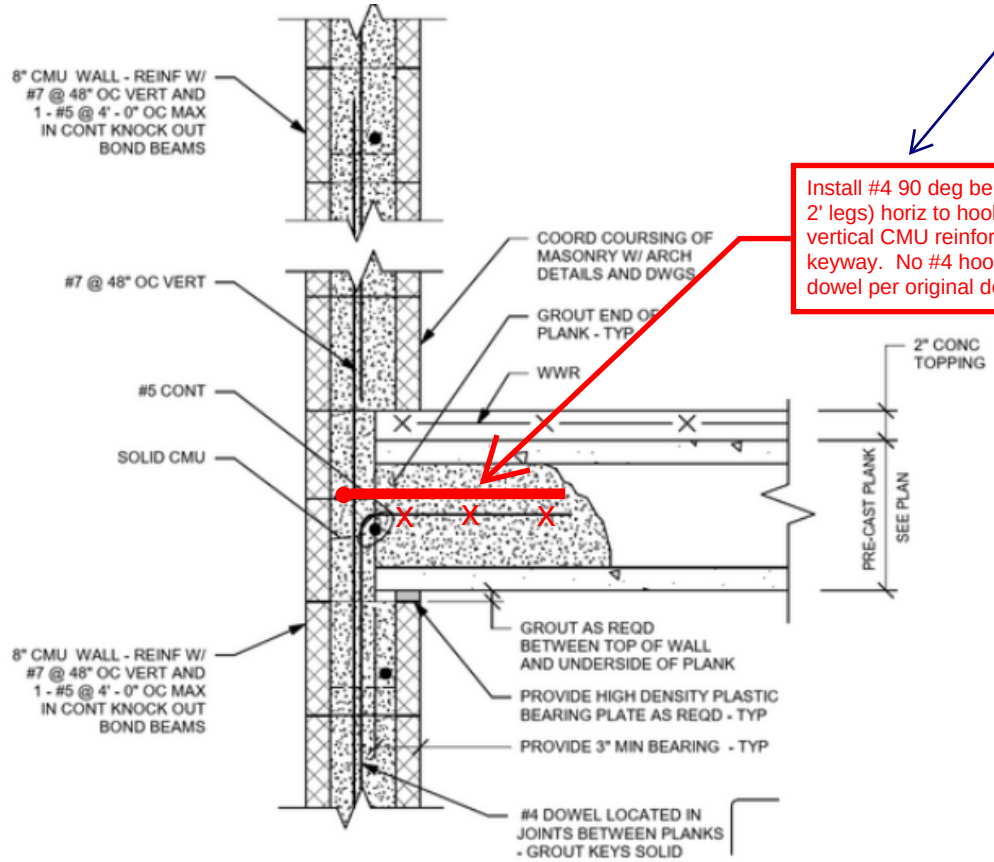
If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

5/S2-0-3

This alternate detail is acceptable as a substitution of the contract detail

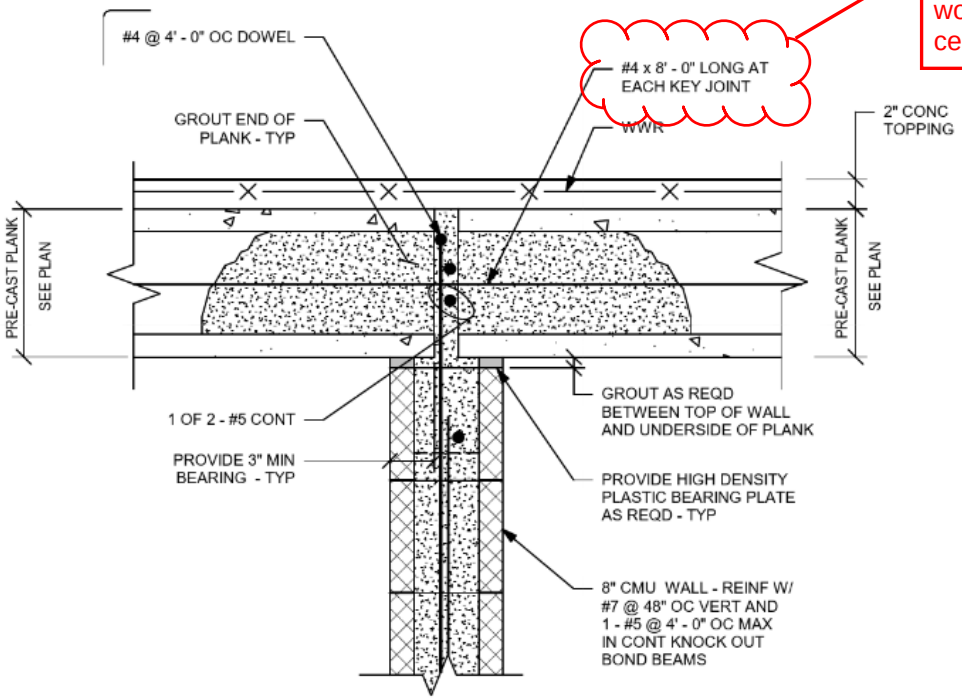
Install #4 90 deg bent bar (2' x 2' legs) horiz to hook around vertical CMU reinforcing at each keyway. No #4 hooked bar dowel per original detail.



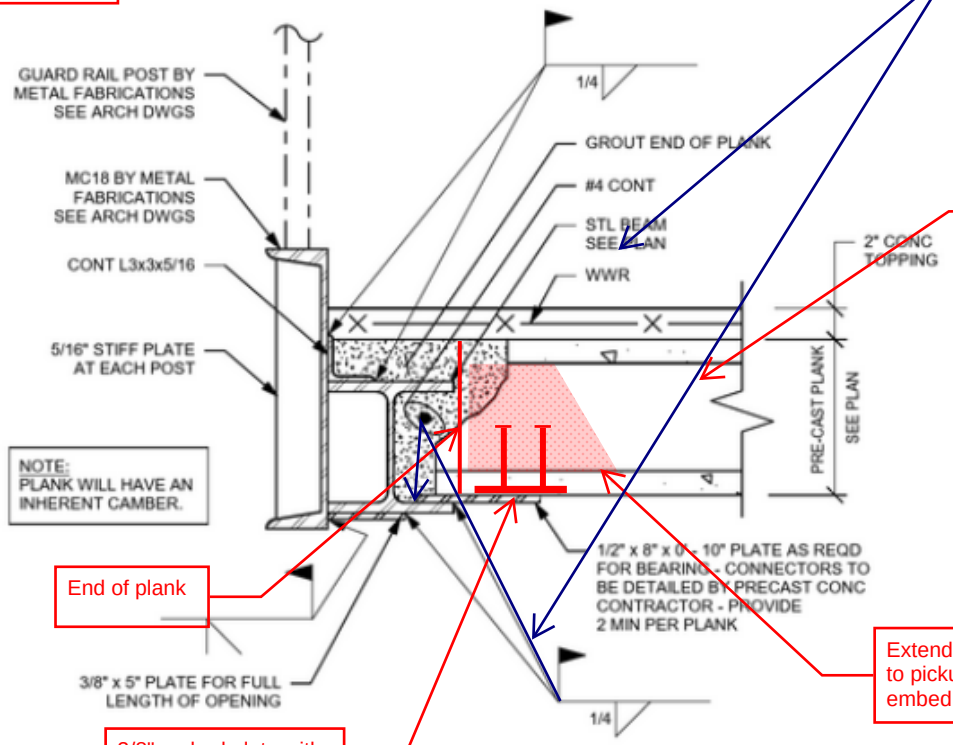
This alternate detail is acceptable as a substitution of the contract detail

4/S2-0-2

Propose using #4 x 5'-0" at 4' o.c.. Assuming plank widths +/- 8' would be located at keyways and center of plank.



1/S2-0-3

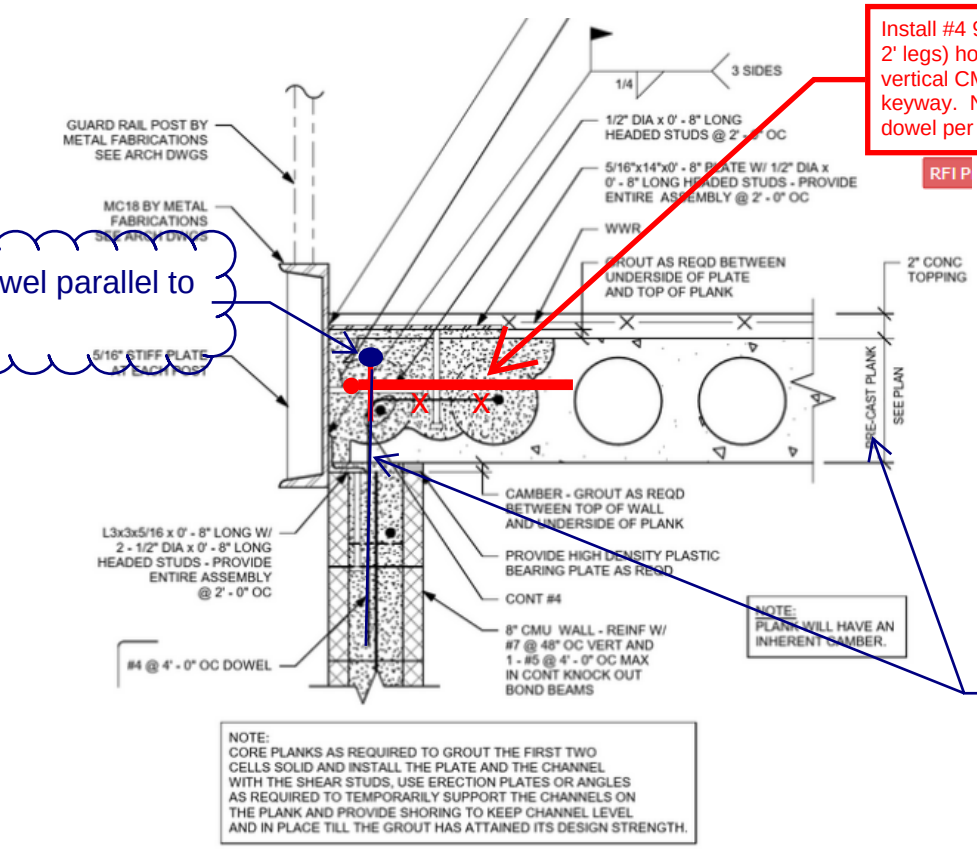


This alternate detail is acceptable as a substitution of the contract detail with the modifications as noted

Propose to end plank at wide flange (and not cope plank). Planks would have embed plate at 4' o.c.

Extend grout to pickup embed.

3/8" embed plate with headed studs (welded to bearing plate)



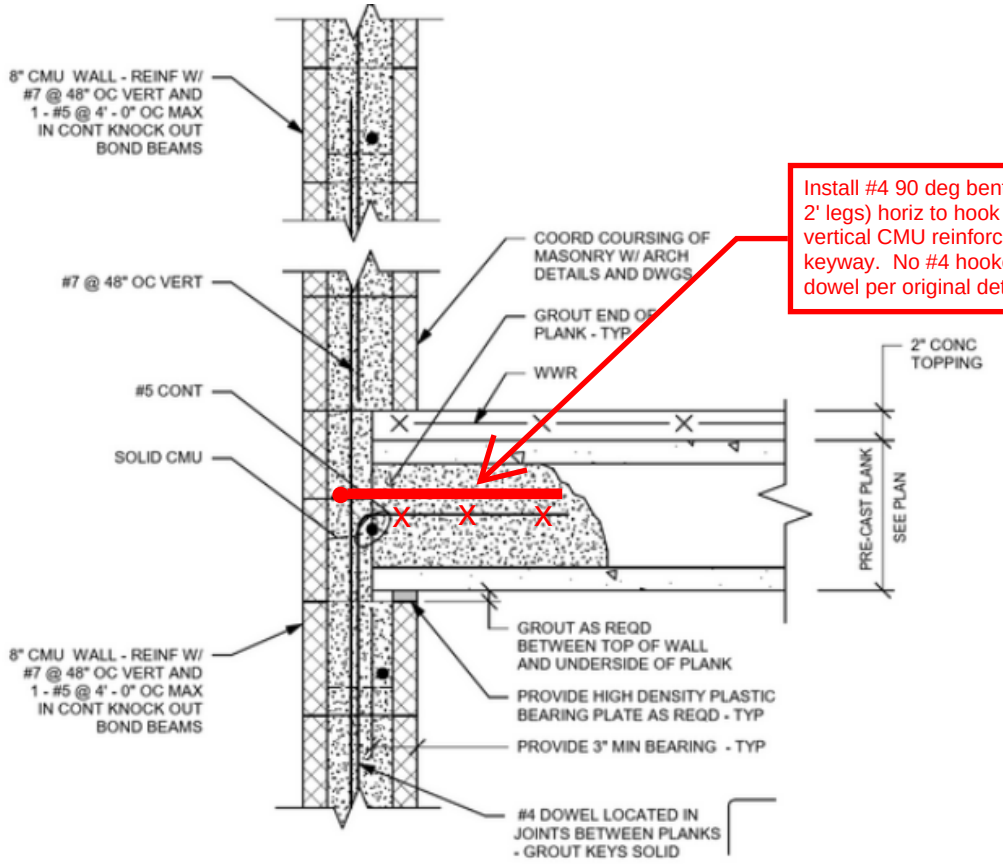
Install #4 90 deg bent bar (2' x 2' legs) horiz to hook around vertical CMU reinforcing at each keyway. No #4 hooked bar dowel per original detail.

RFI P

Turn dowel parallel to Wall

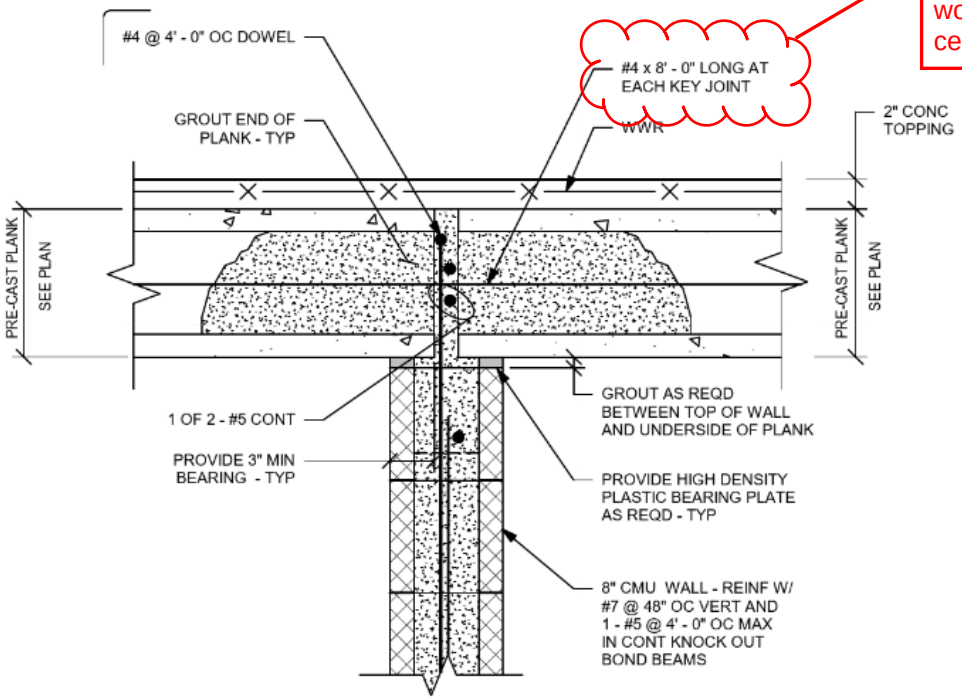
This alternate detail is acceptable as a substitution of the contract detail with the modifications as noted

5/S2-0-3



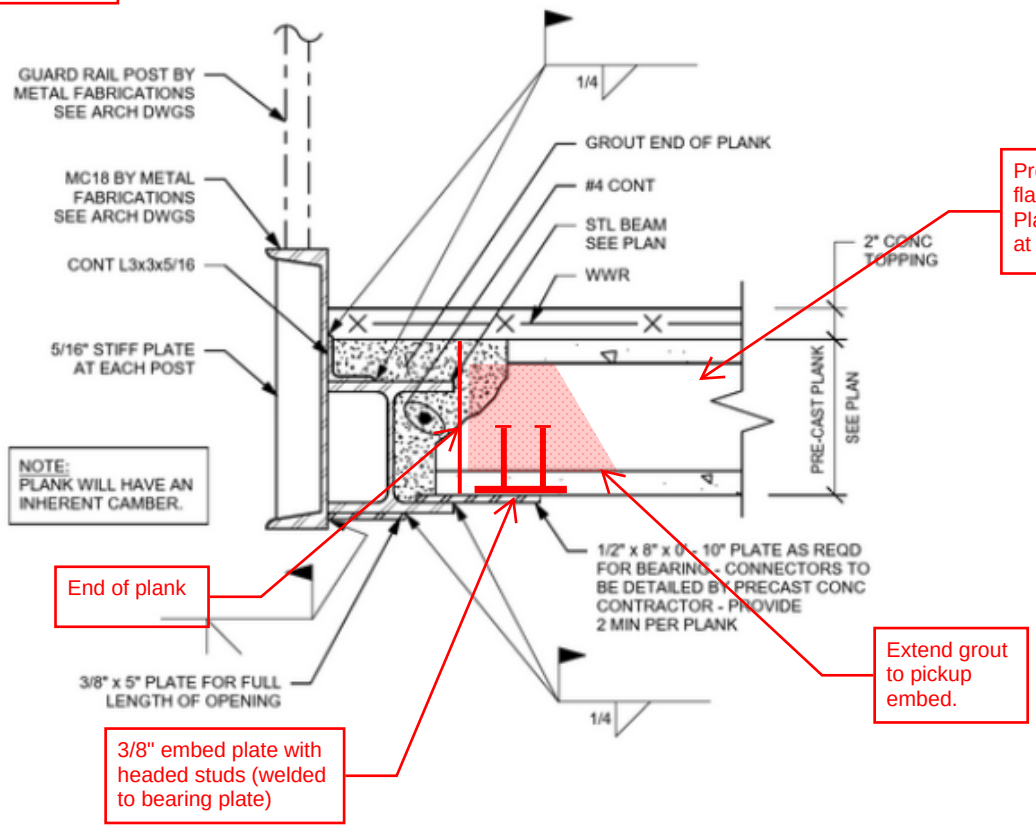
Install #4 90 deg bent bar (2' x 2' legs) horiz to hook around vertical CMU reinforcing at each keyway. No #4 hooked bar dowel per original detail.

4/S2-0-2

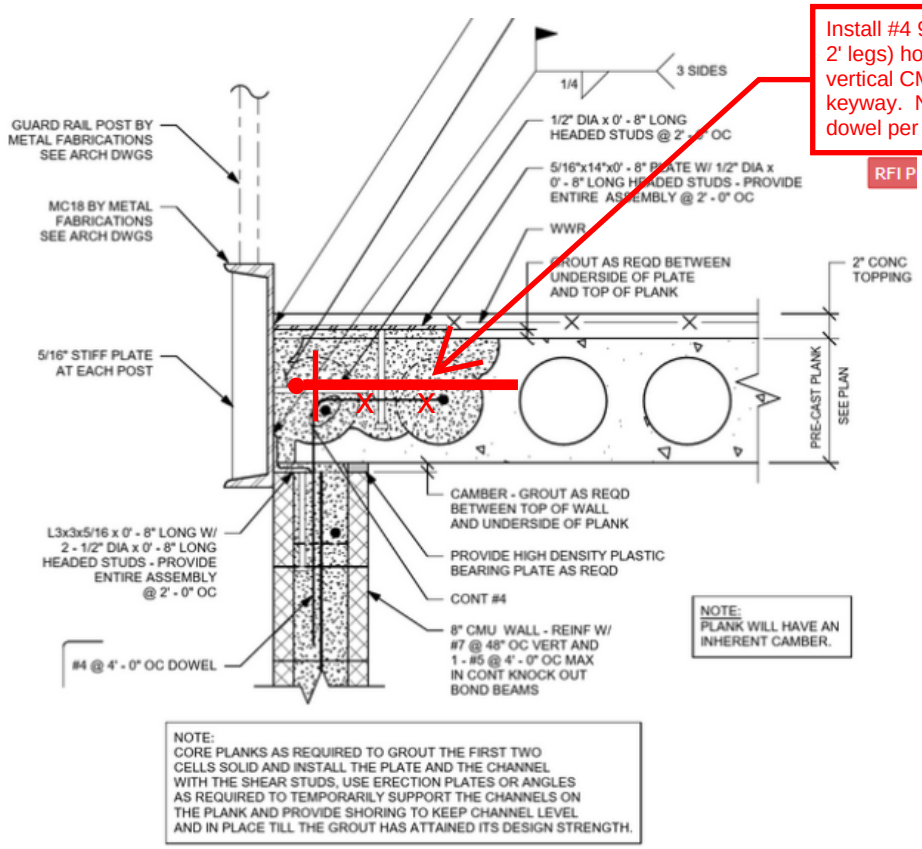


Propose using #4 x 5'-0" at 4' o.c.. Assuming plank widths +/- 8' would be located at keyways and center of plank.

1/S2-0-3



Propose to end plank at wide flange (and not cope plank). Planks would have embed plate at 4' o.c.



Install #4 90 deg bent bar (2' x 2' legs) horiz to hook around vertical CMU reinforcing at each keyway. No #4 hooked bar dowel per original detail.

RFI P

NOTE:
CORE PLANKS AS REQUIRED TO GROUT THE FIRST TWO CELLS SOLID AND INSTALL THE PLATE AND THE CHANNEL WITH THE SHEAR STUDS, USE ERECTION PLATES OR ANGLES AS REQUIRED TO TEMPORARILY SUPPORT THE CHANNELS ON THE PLANK AND PROVIDE SHORING TO KEEP CHANNEL LEVEL AND IN PLACE TILL THE GROUT HAS ATTAINED ITS DESIGN STRENGTH.

RFI #Pre-48

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Structural Detail for Mechanical Units

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/17/2023	**STATUS:**	Closed on 04/21/23
LOCATION:		**DUE DATE:**	04/24/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 04:02 PM on 04/17/2023

Reference RFI Pre-46, item 5:
It's unclear where detail 5/S0-0-8 Typical Mechanical Support Detail is required. Please advise where this detail is needed.
EDG Response: This detail is required at mechanical equipment support directly on the deck and not on concrete slab. As per the note on the detail, refer to Architectural and Mechanical drawings for quantity, size and locations.

Several of the units are supported at a concrete pad or steel dunnage - so the referenced detail doesn't apply there. But there are other units that aren't supported by concrete pad or dunnage - it's not clear if these other mechanical units require that structural detail or if a different structural detail applies.
- Fans and Kitchen Exhaust Fans - is detail 5/S0-0-8 required to support these items? If yes, are just two channels needed in direction of deck at curb location? If no, what structural detail applies?
- GVI and GVR units on Area A roof - same questions as fans.
- Larger GV units on Area C roof - seems like a larger unit, but these are not in the schedules yet. Does the referenced detail apply and if yes, what size is the unit?

Official Response: **Vladimir Lyubetsky (Drummey Rosane Anderson, Inc.)** *responded on Thursday, April 20th, 2023 at 5:41PM EDT*

See EDG's responses below:

Question

Reference RFI Pre-46, item 5:
It's unclear where detail 5/S0-0-8 Typical Mechanical Support Detail is required. Please advise where this detail is needed.
EDG Response: This detail is required at mechanical equipment support directly on the deck and not on concrete slab. As per the note on the detail, refer to Architectural and Mechanical drawings for quantity, size and locations.

Several of the units are supported at a concrete pad or steel dunnage - so the referenced detail doesn't apply there. But there are other units that aren't supported by concrete pad or dunnage - it's not clear if these other mechanical units require that structural detail or if a different structural detail applies.
EDG Response: See response above.
- Fans and Kitchen Exhaust Fans - is detail 5/S0-0-8 required to support these items? If yes, are just two channels needed in direction of deck at curb location? If no, what structural detail applies?
EDG Response: Yes, See response above.
- GVI and GVR units on Area A roof - same questions as fans.
EDG Response: Yes, See response above.

- Larger GV units on Area C roof - seems like a larger unit, but these are not in the schedules yet. Does the referenced detail apply and if yes, what size is the unit?
EDG Response: Yes, See response above. Mech. MEP & FP documents are work in progress at this time.

Thanks and Regards

Mehul Dhruv
Engineers Design Group Inc.
389 Main Street, Suite 401
Malden, MA 02148
Phone: (781) 396-9007 ext. 13
Email: mdhruv@edginc.com
Web: http://www.edginc.com

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-49

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Metal Deck Clarifications

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/18/2023	**STATUS:**	Closed on 04/21/23
LOCATION:		**DUE DATE:**	04/25/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:55 PM on 04/18/2023

1. Drawing S1-1-3C includes deck noted as 3". There is no listing for just 3" in the typical Framing Notes. Please clarify deck specification.
2. Drawing S1-1-4D includes deck noted as 3" NA, which is not listed in the typical Framing Notes. Please clarify deck specification.
3. The typical Framing Notes indicates a deck type NCAS which is 18/20 Galvanized Cellular Acoustic Steel Roof Deck. Is this type of deck required? Couldn't find a reference to this deck type on the structural drawings.
4. Specification 053100 Section 2.2.B.2 indicates a Type NSA 3" perforated roof deck with acoustic batts filled into ribs. Couldn't find this type of deck on the drawings - is any of this type required?
5. Regarding acoustic decking, please clarify if the acoustical batts are to be factory or field installed.

Official Response: **Vladimir Lyubetsky (Drummey Rosane Anderson, Inc.)** *responded on Thursday, April 20th, 2023 at 3:28PM EDT*

EDG response below in red:
Question

1. Drawing S1-1-3C includes deck noted as 3". There is no listing for just 3" in the typical Framing Notes. Please clarify deck specification.

EDG Response: This note will be added in Addendum # 2. 3” indicates span of 3”, 20 gage, Type N roof deck.

1. Drawing S1-1-4D includes deck noted as 3" NA, which is not listed in the typical Framing Notes. Please clarify deck specification.

EDG Response: 3” NA indicates span of 3” deep, 20 gage Type N acoustic deck.

1. The typical Framing Notes indicates a deck type NCAS which is 18/20 Galvanized Cellular Acoustic Steel Roof Deck. Is this type of deck required? Couldn't find a reference to this deck type on the structural drawings.

EDG Response: 3” NCAS, cellular acoustic deck is not required anywhere in the project.

1. Specification 053100 Section 2.2.B.2 indicates a Type NSA 3" perforated roof deck with acoustic batts filled into ribs. Couldn't find this type of deck on the drawings - is any of this type required?

EDG Response: 3” NSA is the same as 3” NA, see response to item 2 above.

1. Regarding acoustic decking, please clarify if the acoustical batts are to be factory or field installed.

EDG Response: CM to coordinate, assumption is that the acoustic batts will be field installed, it may not be feasible to have it factor installed for regular acoustic deck.

Thanks and Regards

Mehul Dhruv
Engineers Design Group Inc.
389 Main Street, Suite 401
Malden, MA 02148
Phone: (781) 396-9007 ext. 13
Email: mdhruv@edginc.com
Web: http://www.edginc.com

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-50

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Joist Connection Detail Clarification

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/20/2023	**STATUS:**	Closed on 04/21/23
LOCATION:		**DUE DATE:**	04/27/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 01:14 PM on 04/20/2023

Reference detail 6/S0-0-9 "Typical Steel Beam - To - Open Web Joist Connection Detail", which is indicated as a typical detail for beam to joist connection. Beams along 19.1 between DD and MM have a specific section noted as detail 4/S3-0-3. Detail 4/S3-0-3 doesn't show the same back to back angle connection as 6/S0-0-9. Is the connection detail in 6/S0-0-9 required for the wide flange beams noted along 19.1 also?

Official Response: **Vladimir Lyubetsky (Drummey Rosane Anderson, Inc.)** *responded on Thursday, April 20th, 2023 at 5:56PM EDT*
See EDG's response below:

Question
Reference detail 6/S0-0-9 "Typical Steel Beam - To - Open Web Joist Connection Detail", which is indicated as a typical detail for beam to joist connection. Beams along 19.1 between DD and MM have a specific section noted as detail 4/S3-0-3. Detail 4/S3-0-3 doesn't show the same back to back angle connection as 6/S0-0-9. Is the connection detail in 6/S0-0-9 required for the wide flange beams noted along 19.1 also?
EDG Response: Section 4/S3-0-3 shows the arrangement of the components but does not show the connection between the Steel beam and the Joist. Refer to detail 6/S0-0-9 for all beam connections to joists.

Thanks and Regards

Mehul Dhruv
Engineers Design Group Inc.
389 Main Street, Suite 401
Malden, MA 02148
Phone: (781) 396-9007 ext. 13
Email: mdhruv@edginc.com
Web: http://www.edginc.com

Attachments:

All Replies:

RFI #Pre-50

Response from Vladimir Lyubetsky (Drummey Rosane Anderson, Inc.) at 05:56 PM on 04/20/2023

See EDG's response below:

Question

Reference detail 6/S0-0-9 "Typical Steel Beam - To - Open Web Joist Connection Detail", which is indicated as a typical detail for beam to joist connection. Beams along 19.1 between DD and MM have a specific section noted as detail 4/S3-0-3. Detail 4/S3-0-3 doesn't show the same back to back angle connection as 6/S0-0-9. Is the connection detail in 6/S0-0-9 required for the wide flange beams noted along 19.1 also?

EDG Response: Section 4/S3-0-3 shows the arrangement of the components but does not show the connection between the Steel beam and the Joist. Refer to detail 6/S0-0-9 for all beam connections to joists.

Thanks and Regards

Mehul Dhruv
Engineers Design Group Inc.
389 Main Street, Suite 401
Malden, MA 02148
Phone: (781) 396-9007 ext. 13
Email: mdhruv@edginc.com
Web: http://www.edginc.com

Attachments:

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY | **DATE** | **COPIES TO**

RFI #Pre-51

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Purlins for Stage Lighting Battens

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/25/2023	**STATUS:**	Closed on 04/27/23
LOCATION:		**DUE DATE:**	05/02/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	TR-1		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Ian Carney **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:32 PM on 04/25/2023

Drawing TR-1 (Theater Rigging Plan) has a note "Purlins supporting stage lighting battens, see S-Drawings" and dimension noting they are 8'-0" on center. These are not shown on S1-1-3C so they are not part of the structural steel bid package currently. Will these be detailed in the 100% set and included in the Misc Metals bid package (or be part of the Theater Rigging details and scope)?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, April 26th, 2023 at 9:21PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-51_Struct-Purlins for Stage Battens-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-51

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Purlins for Stage Lighting Battens

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/25/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/02/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Ian Carney **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:32 PM on 04/25/2023

Drawing TR-1 (Theater Rigging Plan) has a note "Purlins supporting stage lighting battens, see S-Drawings" and dimension noting they are 8'-0" on center. These are not shown on S1-1-3C so they are not part of the structural steel bid package currently. Will these be detailed in the 100% set and included in the Misc Metals bid package (or be part of the Theater Rigging details and scope)?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

The wide flange purlins shown in detail 3/TR-1 will be revised in future bid documents. The purlins have been revised to Unistrut or other support members spaced 6'-0" O.C. They will be part of the Theater Rigging scope of work Section 116133. As noted in the structural documents, the Joist Engineer (delegated design) shall coordinate the joist design with the rigging loads and connection points.

ANGEL KHAZADIAN
04/26/2020

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-52

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

HSS Elevation Question S1-1-2A

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/26/2023	**STATUS:**	Closed on 04/27/23
LOCATION:		**DUE DATE:**	05/03/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	S1-1-2A		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:55 AM on 04/26/2023

Please advise what the correct elevation is for the HSS identified in the attached sketch (drawing S1-1-2A along 31 line, K to L) based on architectural detail coordination.

Attachments:
RFI HSS elevation.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, April 26th, 2023 at 7:36PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-52_Arch-HSS Elevation Question S1-1-2A-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-52

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

HSS Elevation Question S1-1-2A

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	04/26/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/03/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:55 AM on 04/26/2023

Please advise what the correct elevation is for the HSS identified in the attached sketch (drawing S1-1-2A along 31 line, K to L) based on architectural detail coordination.

Attachments:
RFI HSS elevation.pdf

Awaiting an Official Response

All Replies:

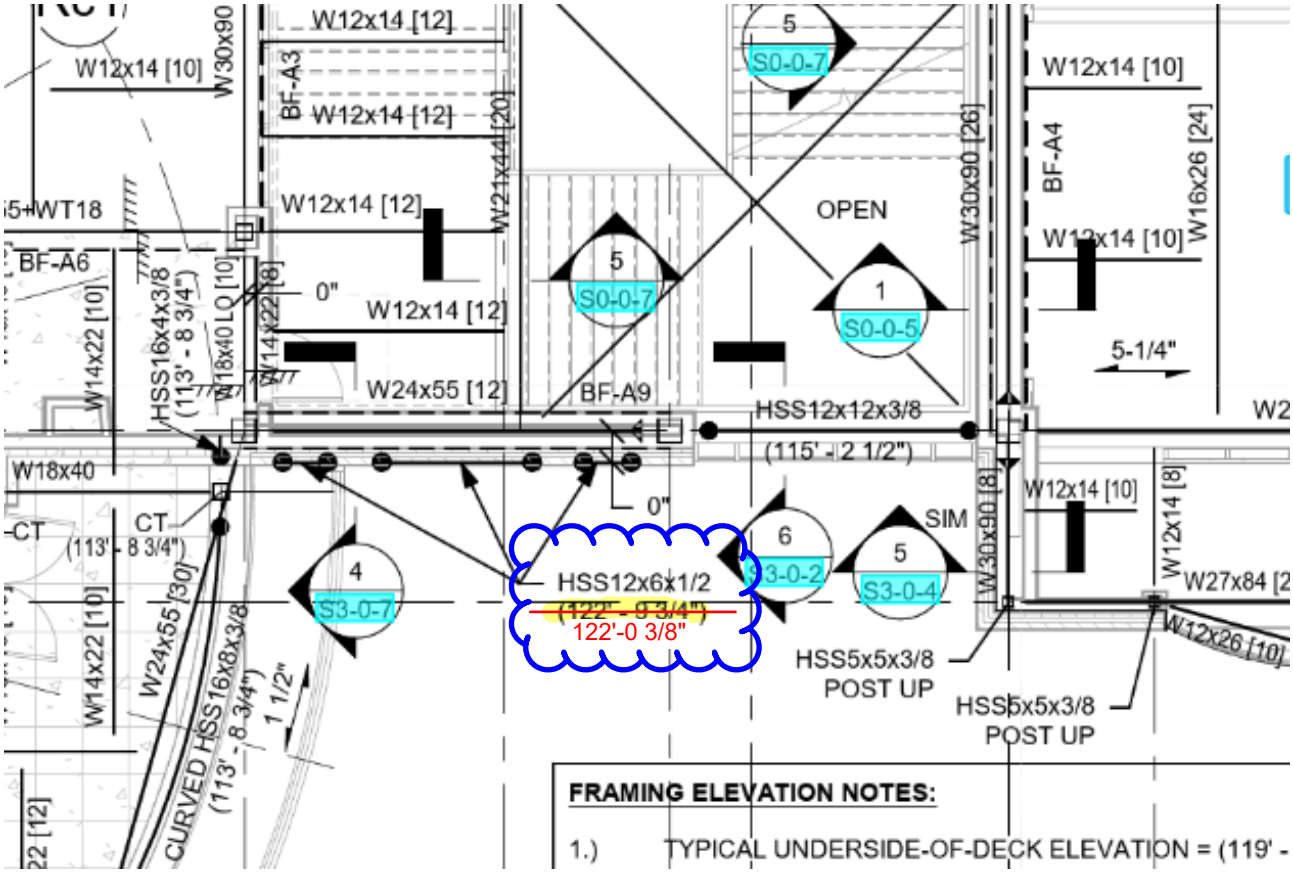
DRA RESPONSE:

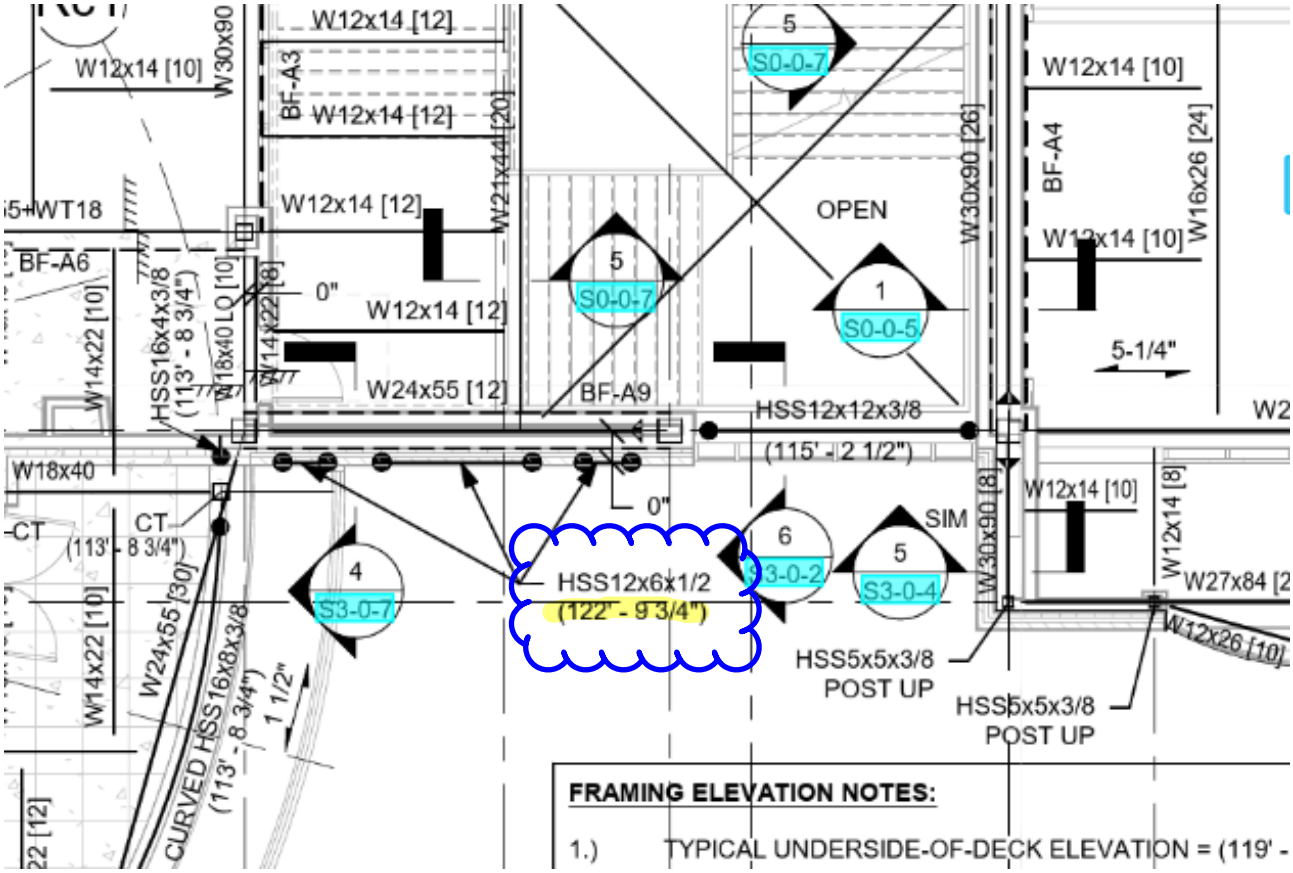
The reference HSS top of steel elevation shall be 122'-0 3/8".

ANGEL KHAZADIAN
04/26/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**


W12x14 [12]
W12x14 [10]
W30x90
BF-A3
W12x14 [12]
W21x44 [20]
5
S0-0-7
W12x14 [10]
BF-A4
W16x26 [24]
W30x90 [26]
OPEN
W12x14 [12]
W12x14 [10]
BF-A6
W14x22 [10]
HSS16x4x3/8
(113' - 8 3/4")
W18x40 LO [10]
W14x22 [8]
0"
W12x14 [12]
5
S0-0-7
1
S0-0-5
5-1/4"
W24x55 [12]
BF-A9
HSS12x12x3/8
(115' - 2 1/2")
W18x40
0"
W12x14 [10]
W12x14 [8]
W30x90 [8]
SIM
CT
(113' - 8 3/4")
4
S3-0-7
HSS12x6x1/2
(122' - 8 3/4")
122'-0 3/8"
6
S3-0-2
5
S3-0-4
W27x84 [2
W12x26 [10]
W14x22 [10]
W24x55 [30]
CURVED HSS16x8x3/8
(113' - 8 3/4")
1 1/2"
HSS5x5x3/8
POST UP
HSS5x5x3/8
POST UP
FRAMING ELEVATION NOTES:
1.) TYPICAL UNDERSIDE-OF-DECK ELEVATION = (119' -


W12x14 [12]
W30x90
W12x14 [10]
BF-A3
W12x14 [12]
W21x44 [20]
5
S0-0-7
W12x14 [10]
BF-A4
W16x26 [24]
W30x90 [26]
OPEN
WT18
W12x14 [12]
BF-A6
W14x22 [10]
HSS16x4x3/8
(113' - 8 3/4")
W18x40 LO [10]
W14x22 [8]
0"
W12x14 [12]
5
S0-0-7
1
S0-0-5
W12x14 [10]
5-1/4"
W24x55 [12]
BF-A9
HSS12x12x3/8
(115' - 2 1/2")
W18x40
0"
CT
(113' - 8 3/4")
CT
4
S3-0-7
HSS12x6x1/2
(122' - 9 3/4")
6
S3-0-2
5
S3-0-4
SIM
W30x90 [8]
W12x14 [10]
W12x14 [8]
W27x84 [2
W12x26 [10]
W14x22 [10]
W24x55 [30]
CURVED HSS16x8x3/8
(113' - 8 3/4")
1 1/2"
HSS5x5x3/8
POST UP
HSS5x5x3/8
POST UP
22 [12]
FRAMING ELEVATION NOTES:
1.) TYPICAL UNDERSIDE-OF-DECK ELEVATION = (119' -

RFI #Pre-53

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Precast Plank Clarification - 8" Plank Spans

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/09/2023	**STATUS:**	Closed on 05/17/23
LOCATION:		**DUE DATE:**	05/16/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	S1-1-1MA		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 07:54 AM on 05/09/2023

During the scope reviews for Precast Concrete Planks, it was noted by bidders that the 8" thick plank does not have the load capacity to accommodate the design loads between column lines M-N, Q-R, S-T and X-Z. The suggestion was to change these planks to 10" thick planks to increase the load capacity. Please review and advise which planks (if any) will be changed to 10" plank.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Monday, May 15th, 2023 at 8:16AM EDT*

Attached is the corrected RFI response

Attachments:
RFI PRE-53_Struct-Precast Plank Carification - 8 inch Plank Spans-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-53

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Precast Plank Clarification - 8" Plank Spans

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/09/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/16/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 07:54 AM on 05/09/2023

During the scope reviews for Precast Concrete Planks, it was noted by bidders that the 8" thick plank does not have the load capacity to accommodate the design loads between column lines M-N, Q-R, S-T and X-Z. The suggestion was to change these planks to 10" thick planks to increase the load capacity. Please review and advise which planks (if any) will be changed to 10" plank.

Awaiting an Official Response

DRA RESPONSE:

Refer to EDG response on the next page.

ANGEL KHAZADIAN
05/11/2023

EDG RESPONSE:

All the loading and plank depth should be per the Bid Documents. The openings in the plank would be coordinated during the shop drawings review phase. The limits to the loading will be considered based on the openings required in the planks.

Mehul Dhruv
05/11/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-54

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Loading Capacity for Lifts

TO:	Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/09/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/16/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:21 AM on 05/09/2023

Please provide loading capacity for scaffold/lift use on the Courtyard, Gymnasium and Multipurpose/Auditorium slabs on deck.

Awaiting an Official Response

DRA RESPONSE:

Refer to EDG response on the next page.

ANGEL KHAZADIAN
05/11/2023

EDG RESPONSE:

All the loading and plank depth should be per the Bid Documents. The openings in the plank would be coordinated during the shop drawings review phase. The limits to the loading will be considered based on the openings required in the planks.

Mehul Dhruv
05/11/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-54

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Loading Capacity for Lifts

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/09/2023	**STATUS:**	Closed on 05/17/23
LOCATION:		**DUE DATE:**	05/16/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	S0-0-1, S1-1-1C, S1-1-2B, S1-1-2D		

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:21 AM on 05/09/2023

Please provide loading capacity for scaffold/lift use on the Courtyard, Gymnasium and Multipurpose/Auditorium slabs on deck.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, May 11th, 2023 at 2:36PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-54_Loading Capacity for Lifts-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-54

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Loading Capacity for Lifts

TO:	Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/09/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/16/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:21 AM on 05/09/2023

Please provide loading capacity for scaffold/lift use on the Courtyard, Gymnasium and Multipurpose/Auditorium slabs on deck.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to EDG response on the next page.

ANGEL KHAZADIAN
05/11/2023

EDG RESPONSE:

The supported floor in these areas have been designed for a Live Load of 100 psf. Limit the loads from the equipment and stored material to the Live Load Capacity

Mehul Dhruv
05/11/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-55

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Concrete - Waterstop Material

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/17/2023	**STATUS:**	Closed on 05/25/23
LOCATION:		**DUE DATE:**	05/24/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 11:10 AM on 05/17/2023

As a potential costs savings option, can the Concrete Subcontractors use bentonite waterstops in lieu of the specified PVC waterstop?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, May 24th, 2023 at 10:09AM EDT*
Refer to attached RFI response.

Attachments:
RFI PRE-55_Concrete Water Stop Material-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-55

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Concrete - Waterstop Material

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/17/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/24/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Dylan Albert **(Gilbane Building Company)**, Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 11:10 AM on 05/17/2023

As a potential costs savings option, can the Concrete Subcontractors use bentonite waterstops in lieu of the specified PVC waterstop?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Due to the potential of water infiltration the PVC waterstops shall remain.

ANGEL KHAZADIAN
05/23/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-56

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Locker Base Detail Clarification

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/17/2023	**STATUS:**	Closed on 05/25/23
LOCATION:		**DUE DATE:**	05/24/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	A9-1-1		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:10 PM on 05/17/2023

Reference drawing A9-1-1, specifically the locker base details, and please clarify the following:
1. Do all "island" locker locations get a concrete locker base per 16/A9-1-1? Is rebar, wire mesh or fiber reinforcement required and what is the concrete strength needed?
2. The other details on the page show concrete base and wood framed base details. Please clarify which lockers require a concrete base and which have the wood framed base. If concrete is required, is rebar, wire mesh or fiber reinforcement required and what is the concrete strength needed?

Official Response: **Donald Venerus (Gilbane Building Company)** *responded on Thursday, May 25th, 2023 at 2:29PM EDT*

Per followup with DRA the following clarifications were discussed:
Concrete bases are used in the following rooms of the Main Building:
A105, A141B, A148A B101B, B103B, B104B, C004C, C023, C022, C027
D003B, D117, D117B, D117C, D122, D122B, D122C
The remainder of the lockers in the Main Building are on Wood bases.

All locker bases in the Locker Room Building are on Concrete Bases.

Attachments:

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, May 24th, 2023 at 10:11AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-56_Locker Base Detail Clarification-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-56

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Locker Base Detail Clarification

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/17/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/24/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 12:10 PM on 05/17/2023

Reference drawing A9-1-1, specifically the locker base details, and please clarify the following:
1. Do all "island" locker locations get a concrete locker base per 16/A9-1-1? Is rebar, wire mesh or fiber reinforcement required and what is the concrete strength needed?
2. The other details on the page show concrete base and wood framed base details. Please clarify which lockers require a concrete base and which have the wood framed base. If concrete is required, is rebar, wire mesh or fiber reinforcement required and what is the concrete strength needed?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

1. "Island" lockers only exist in the Locker room areas and all have concrete bases. Bases shall be constructed with the same stregnth concrete as the slab they are on and reinforced similarly to the Typical Equipment Pad on sheet 5/S0-0-3.
2. The base type at each locker location was recently denoted in the 90% Cost Estimate set.

ANGEL KHAZADIAN
05/23/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-57

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Architectural Concrete Location Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/18/2023	**STATUS:**	Closed on 05/25/23
LOCATION:		**DUE DATE:**	05/25/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	A1-1-0C		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 07:39 AM on 05/18/2023

Regarding Specification 033300 Architectural Concrete, some of the wall sections (such as 2/A3-2-11 in Metal Fabrication C004) indicate to "Provide Architectural Finish at all exposed to view Structural Concrete - see Structural Spec". Some of the sections such as 1/A3-2-19 indicates "Concrete Foundation wall - see Structural" with no reference to Architectural Finish (this section is taken in the Recycling Room). Is Architectural Concrete only required at "public" areas such as Metal Fabrication C004, Corridor C011, Stair 3 S3 and Small Engines D003H and not required in Storage, Cust Rooms, and MEP rooms (Electrical, Plumbing, IDF, etc)?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, May 24th, 2023 at 10:13AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-57_Architectural Concrete Location Clarifications-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-57

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Architectural Concrete Location Clarification

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/18/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/25/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 07:39 AM on 05/18/2023

Regarding Specification 033300 Architectural Concrete, some of the wall sections (such as 2/A3-2-11 in Metal Fabrication C004) indicate to "Provide Architectural Finish at all exposed to view Structural Concrete - see Structural Spec". Some of the sections such as 1/A3-2-19 indicates "Concrete Foundation wall - see Structural" with no reference to Architectural Finish (this section is taken in the Recycling Room). Is Architectural Concrete only required at "public" areas such as Metal Fabrication C004, Corridor C011, Stair 3 S3 and Small Engines D003H and not required in Storage, Cust Rooms, and MEP rooms (Electrical, Plumbing, IDF, etc)?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Architectural Finish is required at all locations where concrete walls are exposed to view, regardless of the room usage. Note: The use of white portland cement is not required in any location as all walls will be painted.

ANGEL KHAZADIAN
05/23/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-58

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Beam Clarification - Area D Mezzanine

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/18/2023	**STATUS:**	Closed on 06/02/23
LOCATION:		**DUE DATE:**	05/25/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	S1-1-0MD		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:24 AM on 05/18/2023

Reference S-1-1MD Mezz Floor Framing Plan Area D. The extent of the W8x31 noted along EE line between 22 and 26 line isn't clear on the drawings. Does this beam bear on the masonry walls and is it's length the width of the opening plus bearing requirements?

Attachments:
RFI beam at precast.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, May 26th, 2023 at 10:26AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-58_Beam Clarification - Area D Mezzanine-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Pre-58

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Beam Clarification - Area D Mezzanine

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/18/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/25/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:24 AM on 05/18/2023

Reference S-1-1MD Mezz Floor Framing Plan Area D. The extent of the W8x31 noted along EE line between 22 and 26 line isn't clear on the drawings. Does this beam bear on the masonry walls and is it's length the width of the opening plus bearing requirements?

Attachments:
RFI beam at precast.pdf

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer EDG response below

ANGEL KHAZADIAN
05/26/2023

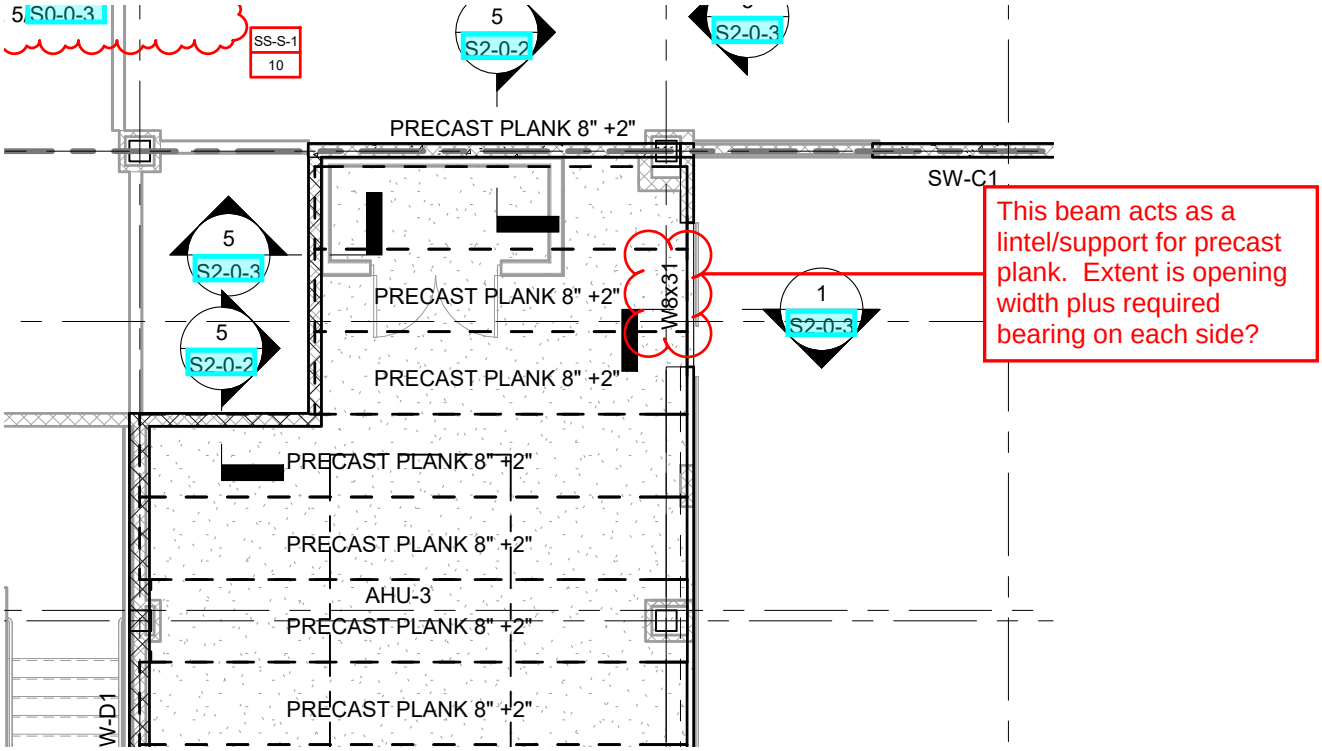
EDG:

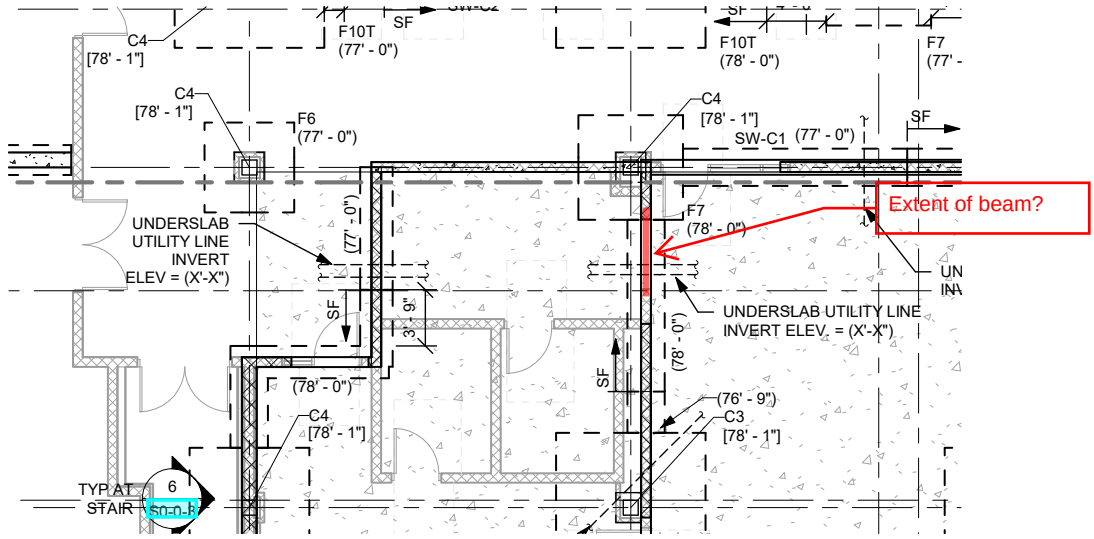
THE W8x31, (REFERENCED ON THE FOLLOWING PAGE), SPANS ACROSS THE WIDTH OF THE OPENING IN THE CONCRETE-MASONRY WALL, AND SHALL BEAR ON THE JAMBS AT THE EDGES OF THE OPENING SIMILAR TO DETAIL 5 ON S0-0-5.

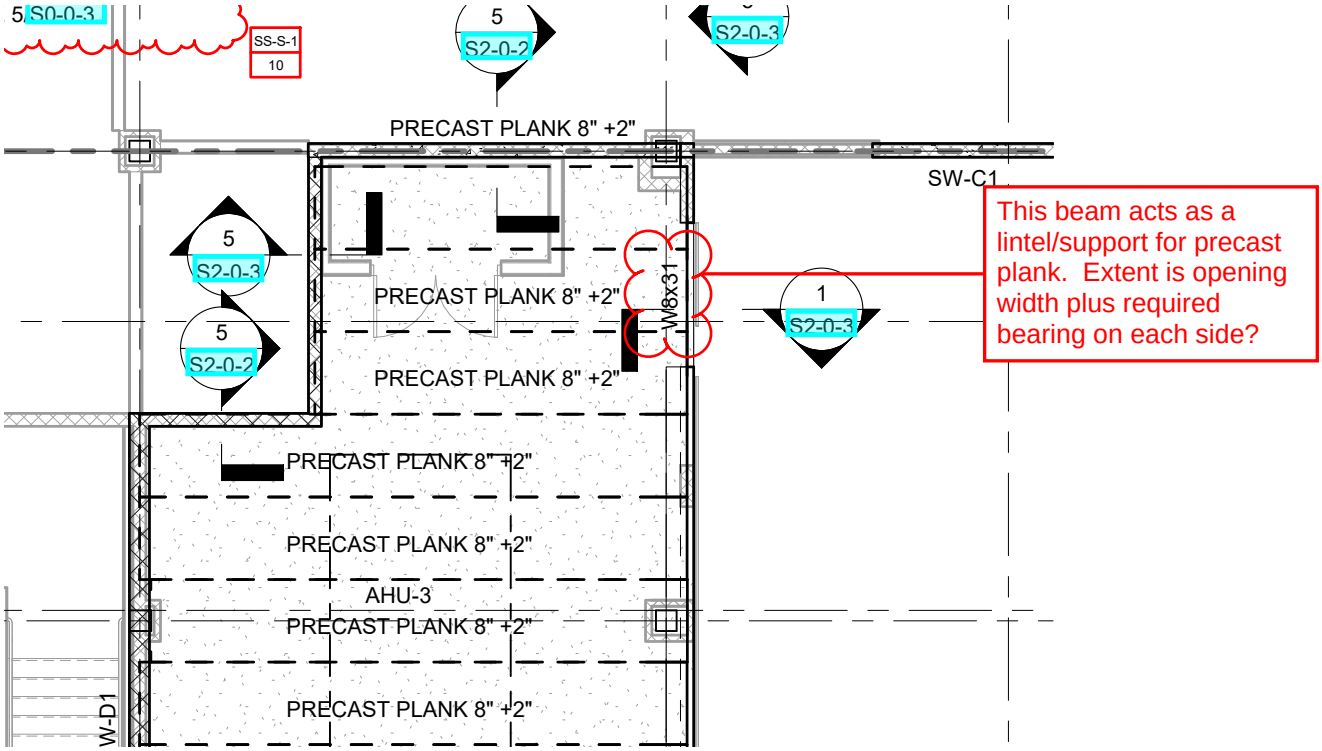
ALEX AUDITORE, 05/25/2023

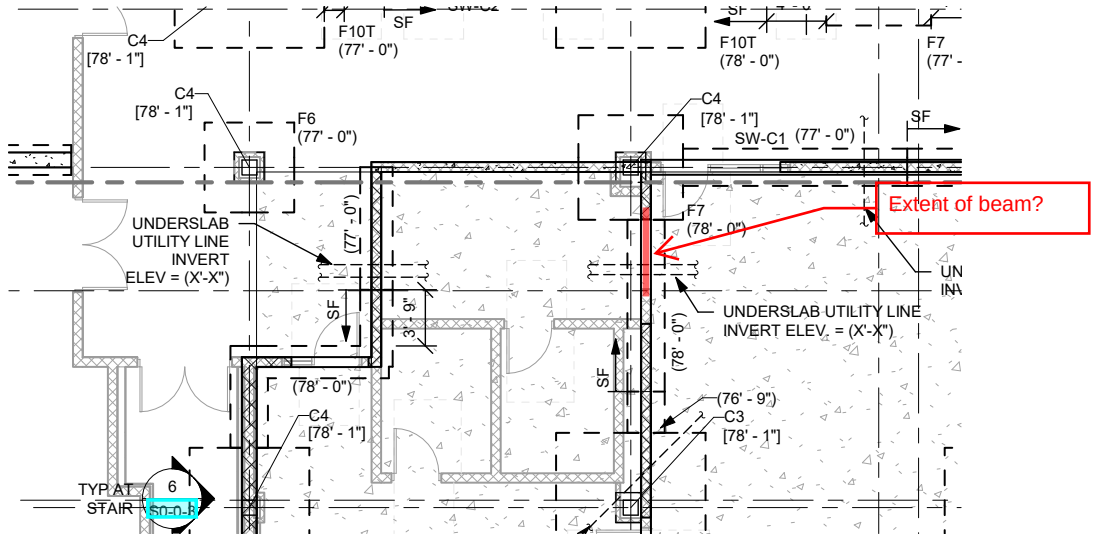
If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**


5 S0-0-3
SS-S-1
10
5
S2-0-2
S2-0-3
PRECAST PLANK 8" +2"
SW-C1
5
S2-0-3
5
S2-0-2
PRECAST PLANK 8" +2"
W8x31
1
S2-0-3
PRECAST PLANK 8" +2"
PRECAST PLANK 8" +2"
PRECAST PLANK 8" +2"
AHU-3
PRECAST PLANK 8" +2"
W-D1
This beam acts as a lintel/support for precast plank. Extent is opening width plus required bearing on each side?


C4
[78' - 1"]
F10T
(77' - 0")
SF
F10T
(78' - 0")
F7
(77' -
C4
[78' - 1"]
F6
(77' - 0")
C4
[78' - 1"]
SW-C1 (77' - 0")
SF
UNDERSLAB
UTILITY LINE
INVERT
ELEV = (X'-X")
(77' - 0")
F7
(78' - 0")
Extent of beam?
UN
IN
SF
3' - 9"
UNDERSLAB UTILITY LINE
INVERT ELEV. = (X'-X")
(78' - 0")
SF
(78' - 0")
(76' - 9")
C4
[78' - 1"]
C3
[78' - 1"]
TYP AT
STAIR
6
S0-0-8


5 S0-0-3
SS-S-1
10
5
S2-0-2
S2-0-3
PRECAST PLANK 8" +2"
SW-C1
5
S2-0-3
5
S2-0-2
PRECAST PLANK 8" +2"
W8x31
1
S2-0-3
PRECAST PLANK 8" +2"
PRECAST PLANK 8" +2"
PRECAST PLANK 8" +2"
AHU-3
PRECAST PLANK 8" +2"
W-D1
This beam acts as a lintel/support for precast plank. Extent is opening width plus required bearing on each side?


C4
[78' - 1"]
F10T
(77' - 0")
SF
F10T
(78' - 0")
F7
(77' -
C4
[78' - 1"]
F6
(77' - 0")
C4
[78' - 1"]
SW-C1 (77' - 0")
SF
UNDERSLAB
UTILITY LINE
INVERT
ELEV = (X'-X")
(77' - 0")
F7
(78' - 0")
Extent of beam?
UN
IN
SF
3' - 9"
UNDERSLAB UTILITY LINE
INVERT ELEV. = (X'-X")
(78' - 0")
SF
(78' - 0")
(76' - 9")
C4
[78' - 1"]
C3
[78' - 1"]
TYP AT
STAIR
6
S0-0-8

RFI #Pre-59

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Spray Fireproofing at Locker Building

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/22/2023	**STATUS:**	Closed on 05/24/23
LOCATION:	Locker Building	**DUE DATE:**	05/29/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	SL-1-1		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 11:08 AM on 05/22/2023

Is spray fireproofing required for the Locker Building structure?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Tuesday, May 23rd, 2023 at 2:37PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-59_Spray Fireproofing at Locker Building-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-59

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Spray Fireproofing at Locker Building

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/22/2023	**STATUS:**	Open
LOCATION:	Locker Building	**DUE DATE:**	05/29/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 11:08 AM on 05/22/2023

Is spray fireproofing required for the Locker Building structure?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Spray fireproofing is not required in the free-standing Locker Building.

ANGEL KHAZADIAN
05/23/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-60

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Mezzanine Level AHU Housekeeping Pads

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Sean Sullivan **(Bala Consulting Engineers)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/23/2023	**STATUS:**	Closed on 05/25/23
LOCATION:		**DUE DATE:**	05/30/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	M2-0-3		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:46 AM on 05/23/2023

Detail 1/M2-0-3 has notes indicating to provide AHU housekeeping pads for AHU-9 and AHU-10, along with a hatched area adjacent to the AHUs. Other enlarged mechanical details for AHUs on Mezzanine level (M2-0-1 and M2-0-2) don't have the same notes for pads, but some have similar hatching. During a concrete scope review, it was discussed that the concrete housekeeping pads may not be required. Please review and advise if housekeeping pads are required under the Mezzanine level AHUs, and if so, what is the extent required?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Tuesday, May 23rd, 2023 at 2:35PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-60_Mezzanine Level AHU Housekeeping Pads-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Pre-60

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Mezzanine Level AHU Housekeeping Pads

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/23/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/30/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:46 AM on 05/23/2023

Detail 1/M2-0-3 has notes indicating to provide AHU housekeeping pads for AHU-9 and AHU-10, along with a hatched area adjacent to the AHUs. Other enlarged mechanical details for AHUs on Mezzanine level (M2-0-1 and M2-0-2) don't have the same notes for pads, but some have similar hatching. During a concrete scope review, it was discussed that the concrete housekeeping pads may not be required. Please review and advise if housekeeping pads are required under the Mezzanine level AHUs, and if so, what is the extent required?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to Bala response below.

ANGEL KHAZADIAN
05/23/2023

BALA RESPONSE:

AHUs located on mezzanines do not require house keeping pads. Other AHUs require house keeping pads as indicated on the drawings. The hatched areas indicate each units clear space requirements and are not related to house keeping pad requirements.

Bala - SPS - 5/23/23

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-61

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Slab on Grade Fiber Reinforcing Requirements

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/23/2023	**STATUS:**	Closed on 06/02/23
LOCATION:		**DUE DATE:**	05/30/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	S0-0-1, S1-1-0C, S1-1-0D, S1-1-1A, S1-1-1B, S1-1-1C		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:09 AM on 05/23/2023

During the concrete scope reviews, the bidders indicated varying dosage amounts for fiber reinforcing the slab on grade (lb/cy). Please advise the correct amount of fiber content the bidders should include in their best and final pricing.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, May 26th, 2023 at 9:22AM EDT*
Refer to attached RFI response.

Attachments:
RFI PRE-61_Slab on grade Fiber Reinforcing Requirements-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-61

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Slab on Grade Fiber Reinforcing Requirements

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	05/23/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	05/30/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Mark Tucker **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:09 AM on 05/23/2023

During the concrete scope reviews, the bidders indicated varying dosage amounts for fiber reinforcing the slab on grade (lb/cy). Please advise the correct amount of fiber content the bidders should include in their best and final pricing.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to EDG response below.

ANGEL KHAZADIAN
05/26/2023

EDG RESPONSE:

The dosage for fiber reinforcing is slabs on grade is 3 lb/cy of concrete.

MEHUL DHRUV
05/26/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-62

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Wall Cladding Support System Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/07/2023	**STATUS:**	Closed on 06/14/23
LOCATION:		**DUE DATE:**	06/14/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	A3-2-3		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:44 AM on 06/07/2023

Is the thermally broken Wall Cladding Support System defined in 077700 required for Metal Wall Panels? For Sheet Metal Siding also (if yes, will reference be added to Spec 076100)? Is this the extent of the requirements for the Wall Cladding Support System?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Monday, June 12th, 2023 at 8:33AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-62R1_Arch-Wall Cladding Support System Clarification-RESP.pdf

Official Response: **Donald Venerus (Gilbane Building Company)** *responded on Friday, June 9th, 2023 at 8:51AM EDT*

GBCo followup question: The corrugated metal panels indicated for the Courtyard on elevation A2-1-7 do not have a wall section at this time. Assume these are the Exposed Fastener Lap-Seam Metal Wall Panels from Spec 074200, correct? Are these going to require the Thermally Broken Wall Cladding Support System similar to the Sheet Metal Siding?

Attachments:

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, June 8th, 2023 at 12:56PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-62_Arch-Wall Cladding Support System Clarification-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-62

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Wall Cladding Support System Clarification

TO:	Angel Khazadian **(Drummey Rosane Anderson, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/07/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/14/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:44 AM on 06/07/2023

Is the thermally broken Wall Cladding Support System defined in 077700 required for Metal Wall Panels? For Sheet Metal Siding also (if yes, will reference be added to Spec 076100)? Is this the extent of the requirements for the Wall Cladding Support System?

Awaiting an Official Response

All Replies:

Response from Donald Venerus (Gilbane Building Company) at 08:51 AM on 06/09/2023

GBCo followup question: The corrugated metal panels indicated for the Courtyard on elevation A2-1-7 do not have a wall section at this time. Assume these are the Exposed Fastener Lap-Seam Metal Wall Panels from Spec 074200, correct? Are these going to require the Thermally Broken Wall Cladding Support System similar to the Sheet Metal Siding?

Attachments:

DRA RESPONSE:

The corrugated metal panels in the courtyard are specified under Exposed-Fastener Lap-Seam Metal Wall Panels and are supported on the Thermally Broken Wall Cladding support (referenced as aluminum clip system in drawings). Refer to wall sections 4 & 6/A3-2-3 for wall sections at Courtyard through corrugated metal panels. Wall section keys can be found on the floor plans.

ANGEL KHAZADIAN
06/09/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-62

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Wall Cladding Support System Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/07/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/14/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:44 AM on 06/07/2023

Is the thermally broken Wall Cladding Support System defined in 077700 required for Metal Wall Panels? For Sheet Metal Siding also (if yes, will reference be added to Spec 076100)? Is this the extent of the requirements for the Wall Cladding Support System?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

The wall cladding support system specified in Section 077700, will be used for sheet metal siding. It can be seen in the drawings references as Aluminum Clip System. See details 6, 13, & 14 on sheet A3-3-1 as an example. The specifications have been updated for the next submission to cross reference the two sections.

ANGEL KHAZADIAN
06/08/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Pre-62

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Wall Cladding Support System Clarification

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/07/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/14/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:44 AM on 06/07/2023

Is the thermally broken Wall Cladding Support System defined in 077700 required for Metal Wall Panels? For Sheet Metal Siding also (if yes, will reference be added to Spec 076100)? Is this the extent of the requirements for the Wall Cladding Support System?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

The wall cladding support system specified in Section 077700, will be used for sheet metal siding. It can be seen in the drawings references as Aluminum Clip System. See details 6, 13, & 14 on sheet A3-3-1 as an example. The specifications have been updated for the next submission to cross reference the two sections.

ANGEL KHAZADIAN
06/08/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Pre-63

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Stainless Steel Hollow Metal Doors and Frame Locations

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/07/2023	**STATUS:**	Closed on 06/09/23
LOCATION:		**DUE DATE:**	06/14/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	081119 - Stainless-Steel Doors and Frames
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:21 PM on 06/07/2023

Not finding any doors or frames noted as Stainless Steel in the door schedules (except elevator doors) - are there any doors required per Specification 081119 Stainless Steel Doors and Frames?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, June 8th, 2023 at 1:01PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-63_Arch-SS Hollow Metal Doors and Frame Locations-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-63

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Stainless Steel Hollow Metal Doors and Frame Locations

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/07/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/14/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	081119 - Stainless-Steel Doors and Frames
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 02:21 PM on 06/07/2023

Not finding any doors or frames noted as Stainless Steel in the door schedules (except elevator doors) - are there any doors required per Specification 081119 Stainless Steel Doors and Frames?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

We are currently evaluating if any openings will require Stainless Steel frames and doors and will update the final submission accordingly

ANGEL KHAZADIAN
06/08/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-65

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Surcharge/Earth Loading on Retaining Wall

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Alex Auditore **(Engineers Design Group, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/13/2023	**STATUS:**	Closed on 06/27/23
LOCATION:		**DUE DATE:**	06/20/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:58 AM on 06/13/2023

We are including an alternate in the Concrete bid package to provide temporary shoring at the high retaining wall between Area B and Areas C/D to possibly allow earlier backfill operation.

Please provide surcharge and/or earth load that should be considered for this temporary shoring so this can be priced.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Monday, June 19th, 2023 at 10:59AM EDT*

Refer to attached RFI response

Attachments:
RFI PRE-65R1_Multi-Surcharge Earth Loading on Retaining Wall-RESP.pdf

All Replies:

Response from Angel Khazadian (Drummey Rosane Anderson, Inc.) at 10:59 AM on 06/19/2023

Refer to attached RFI response

Attachments:
RFI PRE-65R1_Multi-Surcharge Earth Loading on Retaining Wall-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-65

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Surcharge/Earth Loading on Retaining Wall

TO:	Alex Auditore **(Engineers Design Group, Inc.)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/13/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/20/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:58 AM on 06/13/2023

We are including an alternate in the Concrete bid package to provide temporary shoring at the high retaining wall between Area B and Areas C/D to possibly allow earlier backfill operation.

Please provide surcharge and/or earth load that should be considered for this temporary shoring so this can be priced.

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer to EDG and LGCI response below

ANGEL KHAZADIAN
06/19/2023

LGCI RESPONSE:

The lateral earth pressure for wall design, including surcharges, are provided in Section 3.6-Lateral Pressures for Wall Design on page 25 of our geotechnical report dated August 123, 2022, which is included in the specifications.

Madjid Lahlaf
06/14/2023

EDG RESPONSE:

The wall has been designed so that the backfill can be placed after the concrete has attained the design strength, the buttress walls, the return walls and the elevator pit walls have been constructed prior to erection of the steel framing. It should be noted that the fill on the low side should be placed to its design height. The surcharge load on the high side should be limited to 100 psf Live or Construction loading and should be limited to normal construction loading with no heavy construction equipment located within the influence line on the wall.

Mehul Dhruv
06/19/2023

RFI #Pre-66

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Fire Protection, Site Utilities Division of Work

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Bala Boston CA Email **(Bala Consulting Engineers)** Sean Sullivan **(Bala Consulting Engineers)** David Conway **(Nitsch Engineering, Inc.)** Paige Blanchard **(Nitsch Engineering, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/19/2023	**STATUS:**	Closed on 07/05/23
LOCATION:		**DUE DATE:**	06/26/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	C-502, FP0-0-1, FP1-1-1B		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:17 AM on 06/19/2023

- FP0-0-1, Note 5 indicates: "All dedicated water supply work on site, inside of the property line, including connection to the utility if applicable, serving the Fire Protection System (pipe, fitting, hydrants, etc.) shall be installed under this contract.
- FP1-1-1B notes 8" FP Water Service (Limit of Work 10'-0")

1. Regarding the Fire Protection service entrance in Area B, please clarify how this division of work between Sitework and Fire Protection will be indicated in the 100% documents (the notes and the drawings don't currently match per above).
2. How will the division of work be identified at the hydrant work (water piping and hydrants)? Hydrants are currently specified under the sitework specification so the sitework contractor is furnishing the material? Who is installing?
3. How is the material being specified for site water work that would be provided under this bid package?
4. Do the Utility Site Plans (C-500 thru C-505) need to be listed in Specification 210000 General Requirements for Fire Protection to capture this as referenced drawings?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, June 29th, 2023 at 4:48PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-66_FP-FireProtection Site Utility Division of Work-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-66

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Fire Protection, Site Utilities Division of Work

TO:	Sean Sullivan **(Bala Consulting Engineers)** Bala Boston CA Email **(Bala Consulting Engineers)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/19/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/26/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:17 AM on 06/19/2023

- FP0-0-1, Note 5 indicates: "All dedicated water supply work on site, inside of the property line, including connection to the utility if applicable, serving the Fire Protection System (pipe, fitting, hydrants, etc.) shall be installed under this contract.
- FP1-1-1B notes 8" FP Water Service (Limit of Work 10'-0")

1. Regarding the Fire Protection service entrance in Area B, please clarify how this division of work between Sitework and Fire Protection will be indicated in the 100% documents (the notes and the drawings don't currently match per above).
2. How will the division of work be identified at the hydrant work (water piping and hydrants)? Hydrants are currently specified under the sitework specification so the sitework contractor is furnishing the material? Who is installing?
3. How is the material being specified for site water work that would be provided under this bid package?
4. Do the Utility Site Plans (C-500 thru C-505) need to be listed in Specification 210000 General Requirements for Fire Protection to capture this as referenced drawings?

Awaiting an Official Response

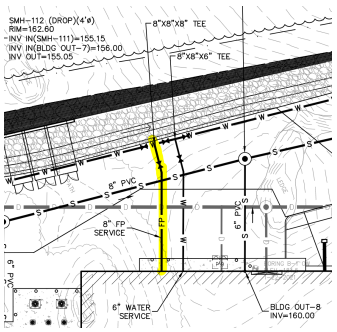
DRA RESPONSE:
Refer to Bala response below.

ANGEL KHAZADIAN
06/29/2023

All Replies:

- Note 5 on FP0-0-1 shall be revised to suit the project. "All dedicated Fire Protection water supply work on site, inside of the property line, serving the Fire protection system (pipe, fittings, etc.) shall be installed under this contract.
- Note on FP1-1-1B shall be revised to be coordinated with what is shown on drawing C-502. This drawing will be referenced as part of the FP Contractor Limit of work.

1. The highlighted portion shown below shall be installed by the FPC. This is the portion of the site water supply system which is dedicated to fire protection. Site/civil shall own the 8"x8"x8" tee, and the FPC will own the piping at the outlet of the tee on site and into the building.
2. The dedicated portion of the service is the only portion required to be installed by the FPC. As there are no hydrants on the dedicated FP main to the building, there will be no hydrants as part of the FPC scope of work.
3. The final specifications will make clear that the materials will be furnished under the Civil scope and installed by the Fire Protection Contractor.
4. Yes, they are currently listed under the Specification 210000 General Requirements.



Richard Rivera, Bala
6/28/23

RFI #Pre-67

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Utility Make-Safe at Existing Building

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Bala Boston CA Email **(Bala Consulting Engineers)** Sean Sullivan **(Bala Consulting Engineers)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/19/2023	**STATUS:**	Closed on 07/05/23
LOCATION:		**DUE DATE:**	06/26/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:28 AM on 06/19/2023

Will the Filed Sub Bid Plumbing, Fire Protection and Electrical be responsible for any make safe or cut/cap prior to the demolition of the existing school in the 100% contract documents? Or will this be the responsibility of the building demolition contractor?

Will any existing refrigerant recovery/cut/cap be provided by the building demo contractor or will this work be assigned to the Mechanical Filed Sub Bid contractor?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, June 29th, 2023 at 4:53PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-67_Multi-Utility Make-Safe at Exist Bldg-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Pre-67

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Utility Make-Safe at Existing Building

TO:	Sean Sullivan **(Bala Consulting Engineers)** Bala Boston CA Email **(Bala Consulting Engineers)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/19/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/26/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:28 AM on 06/19/2023

Will the Filed Sub Bid Plumbing, Fire Protection and Electrical be responsible for any make safe or cut/cap prior to the demolition of the existing school in the 100% contract documents? Or will this be the responsibility of the building demolition contractor?

Will any existing refrigerant recovery/cut/cap be provided by the building demo contractor or will this work be assigned to the Mechanical Filed Sub Bid contractor?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

All make safe and cutting/capping of the existing building will be the responsibility of the Demo Contractor.

ANGEL KHAZADIAN
06/29/2023

Bala does not have any demolition scope for the existing building.

Richard Rivera, Bala
6/28/23

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-68

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Dust Collection/Fire Protection Scope

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Bala Boston CA Email **(Bala Consulting Engineers)** Sean Sullivan **(Bala Consulting Engineers)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/19/2023	**STATUS:**	Closed on 07/05/23
LOCATION:		**DUE DATE:**	06/26/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:58 AM on 06/19/2023

Will any scope be identified in the 100% contract documents for the Fire Protection Filed Sub Bid contractor regarding the Dust Collection system in Carpentry A141?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, June 29th, 2023 at 4:55PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-68_FP-Dust Collection-Fire Protection Scope-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY | **DATE** | **COPIES TO**

RFI #Pre-68

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Dust Collection/Fire Protection Scope

TO:	Sean Sullivan **(Bala Consulting Engineers)** Bala Boston CA Email **(Bala Consulting Engineers)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/19/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/26/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 10:58 AM on 06/19/2023

Will any scope be identified in the 100% contract documents for the Fire Protection Filed Sub Bid contractor regarding the Dust Collection system in Carpentry A141?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to Bala response below.

ANGEL KHAZADIAN
06/29/2023

There will be no scope identified in the 100% CD documents for the FP Filed Sub Bid Contractor regarding the dust collection system.

Richard Rivera, Bala
6/28/23

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-69

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Plumbing Clarification - TW and TWR references

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Bala Boston CA Email **(Bala Consulting Engineers)** Sean Sullivan **(Bala Consulting Engineers)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/20/2023	**STATUS:**	Closed on 06/29/23
LOCATION:		**DUE DATE:**	06/27/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	P0-0-1		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:37 AM on 06/20/2023

Please clarify what the abbreviations "TW" and "TWR" stand for. Found the references on the Area A plumbing plans and couldn't find it in the plumbing legend.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Thursday, June 29th, 2023 at 7:47AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-69_Plumb-TW & TWR References-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-69

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Plumbing Clarification - TW and TWR references

TO:	Sean Sullivan **(Bala Consulting Engineers)** Bala Boston CA Email **(Bala Consulting Engineers)** Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/20/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/27/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 08:37 AM on 06/20/2023

Please clarify what the abbreviations "TW" and "TWR" stand for. Found the references on the Area A plumbing plans and couldn't find it in the plumbing legend.

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Refer to Bala response below.

ANGEL KHAZADIAN
06/29/2023

TW - Tepid Water
TWR - Tepid Water Return

These will be added to the plumbing legend for the 100% documents.

Richard Rivera, Bala
6/28/23

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-70

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Plastic Laminate - Manufactured Casework

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/20/2023	**STATUS:**	Closed on 07/05/23
LOCATION:		**DUE DATE:**	06/27/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	EQ2.7, EQ2.8, EQ2.9, EQ2.11, EQ2.13, EQ2.15		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 11:01 AM on 06/20/2023

- Specification 123000 Manufactured Casework indicates specified manufacturers for Plastic Laminate casework. For this casework material, is it acceptable for bidders for fabricate this type of casework in house (in lieu of the specified manufacturers)?
- Specification 123000 Section 2.7 has a schedule of sinks to be provided by the Casework contractor. Drawing EQ2.13 doesn't identify sink types yet - will these be added in the 100% construction set or will these be added to the Plumbing scope of work? Similar questions for drawings EQ2.7, EQ2.8, EQ2.9, EQ2.11, EQ2.15 (some are noted, some are not).
- Drawing EQ2.12 has outstanding elevations to provide.

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Wednesday, July 5th, 2023 at 9:09AM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE-70_PLS-Plastic Laminate-Manufactured casework-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-70

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Plastic Laminate - Manufactured Casework

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/20/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	06/27/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 11:01 AM on 06/20/2023

- Specification 123000 Manufactured Casework indicates specified manufacturers for Plastic Laminate casework. For this casework material, is it acceptable for bidders for fabricate this type of casework in house (in lieu of the specified manufacturers)?
- Specification 123000 Section 2.7 has a schedule of sinks to be provided by the Casework contractor. Drawing EQ2.13 doesn't identify sink types yet - will these be added in the 100% construction set or will these be added to the Plumbing scope of work? Similar questions for drawings EQ2.7, EQ2.8, EQ2.9, EQ2.11, EQ2.15 (some are noted, some are not).
- Drawing EQ2.12 has outstanding elevations to provide.

Awaiting an Official Response

All Replies:

DRA RESPONSE:
Refer to PLS response below.

ANGEL KHAZADIAN
06/30/2023

PLS RESPONSE:

1. It is the intent, and basis of design, to have a product from a manufacturer that conforms with the specifications and is certified by AWI.
2. All sinks and fixtures within casework are to be supplied under 12 30 00 with final connection by Plumbing. Our annotations and details are still ongoing and will be completed in the 100% documents.

PETER CONSTABLE
06/30/2023

unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY	DATE	COPIES TO

RFI #Pre-71

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Door A207 Curtainwall Type and Bracing

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/29/2023	**STATUS:**	Closed on 07/07/23
LOCATION:		**DUE DATE:**	07/06/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	S1-1-2A, S4-0-1, A1-1-2A, A6-3-4		
RECEIVED FROM:	Donald Venerus **(Gilbane Building Company)**		

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Samuel Labbe **(Norgate Metal 2012, Inc.)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 07:41 AM on 06/29/2023

- The curtainwall type is obscured at door A207. Is this CW30?
- It appears that the diagonal bracing is in the same bay as this door and may be in conflict? Please review and advise.

Attachments:
RFI - door A207.pdf

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, July 7th, 2023 at 2:05PM EDT*

Refer to attached RFI response.

Attachments:
RFI PRE071_Multi-Door A207 Curtainwall Type and Bracing-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-71

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Door A207 Curtainwall Type and Bracing

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	06/29/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	07/06/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM: Donald Venerus **(Gilbane Building Company)**

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Samuel Labbe **(Norgate Metal 2012, Inc.)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 07:41 AM on 06/29/2023

- The curtainwall type is obscured at door A207. Is this CW30?
- It appears that the diagonal bracing is in the same bay as this door and may be in conflict? Please review and advise.

Attachments:
RFI - door A207.pdf

Awaiting an Official Response

All Replies:

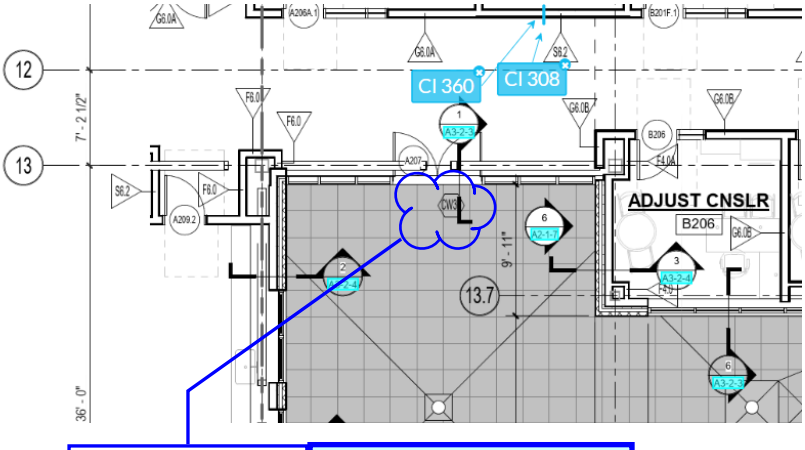
DRA RESPONSE:

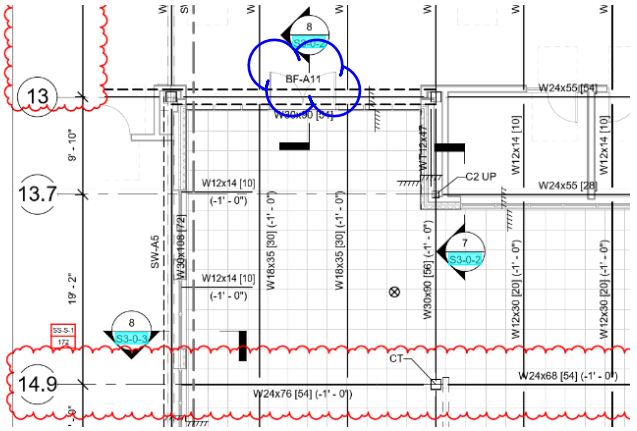
Refer to responses on the next page.

ANGEL KHAZADIAN
07/07/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

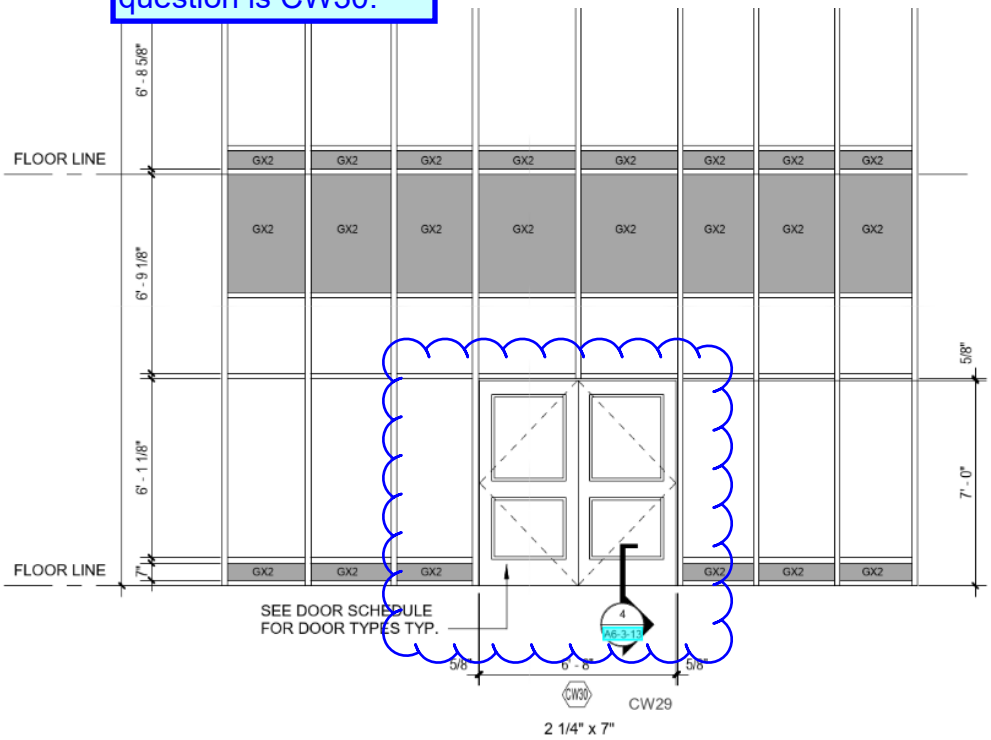
BY **DATE** **COPIES TO**

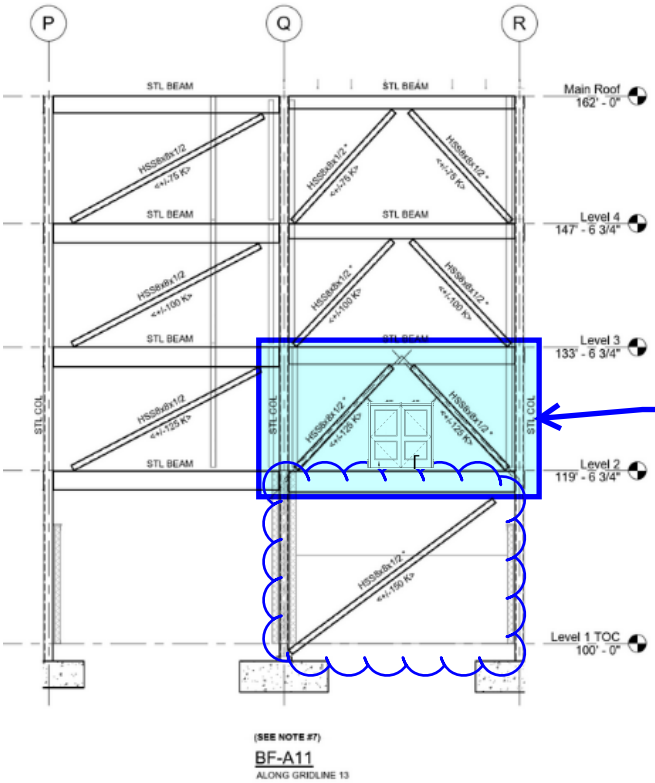




Is this CW30?

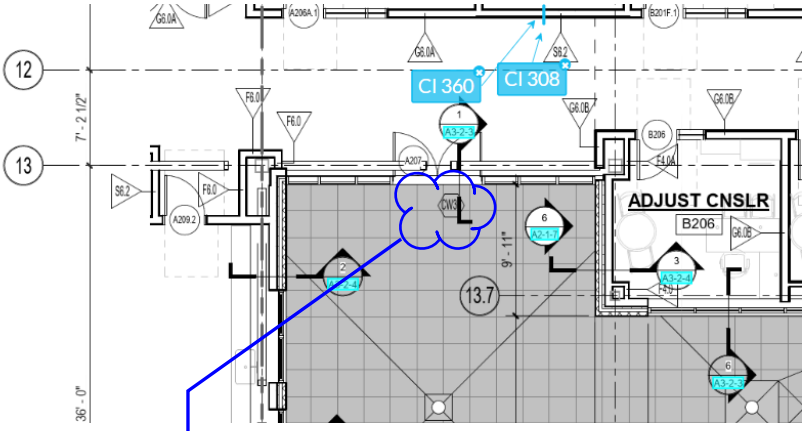
Yes, the curtainwall in question is CW30.

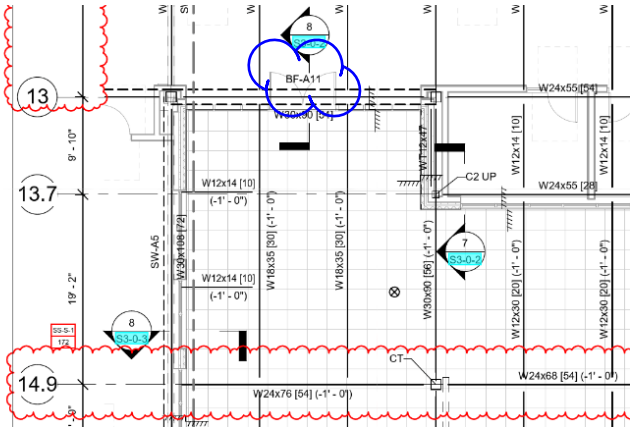




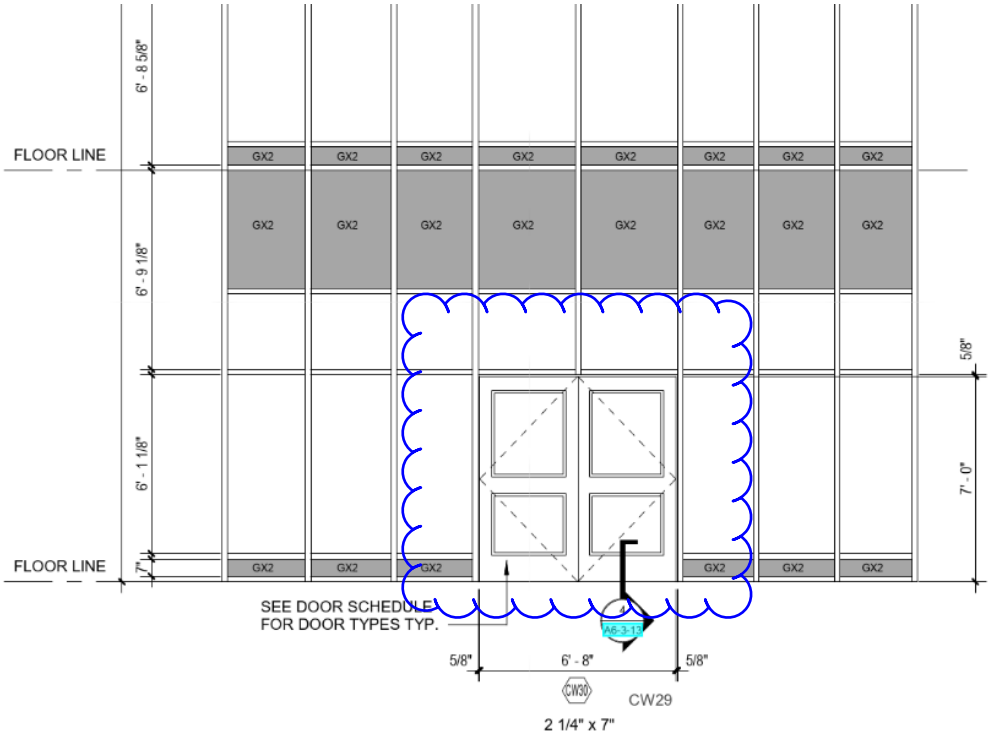
The Brace and door in quesiton are on the second floor, not the first floor.

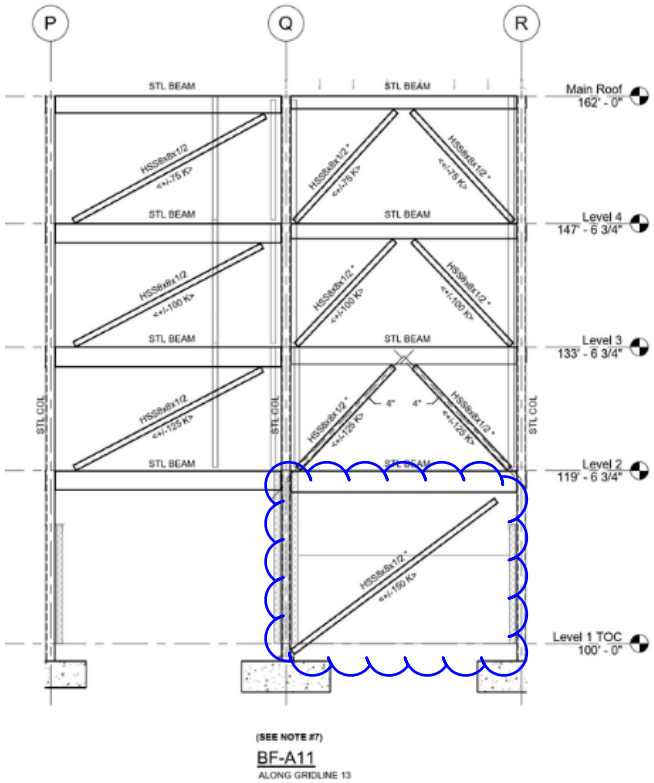
(SEE NOTE #7)
BF-A11
ALONG GRIDLINE 13





Is this CW30?





(SEE NOTE #7)

BF-A11

ALONG GRIDLINE 13

RFI #Pre-72

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA
100 Hemlock Road
Wakefield, Massachusetts 01880

Fire Rating Requirements at Precast Plank Mezzanine Floors

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	07/06/2023	**STATUS:**	Closed on 07/18/23
LOCATION:		**DUE DATE:**	07/13/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:	S1-1-0MC		

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Ian Carney **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:14 AM on 07/06/2023

Reference Framing Notes 18 and 19 on S1-1-0MC which indicate that the Mezzanine Precast Plank to be designed for minimum 2 Hour Fire Rating.
- This means each penetration thru the plank needs to be firestopped with a 2 hour fire rated assembly, correct?
- Regarding duct penetrations thru the planks, are fire/smoke dampers required?

If yes to these items, can they be indicated on the 100% contract drawings?

Official Response: **Angel Khazadian (Drummey Rosane Anderson, Inc.)** *responded on Friday, July 14th, 2023 at 2:09PM EDT*

Refer to attached RFI response.

Attachments:
RFI Pre072_Arch-Fire Rating Requirements at Precast Plank Mezz-RESP.pdf

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

RFI #Pre-72

Gilbane Building Company
10 Channel Center Street
Suite 100
Boston, Massachusetts 02210
Phone: (617) 478-2981

Project: J09299.000 - Northeast Metro Tech High School - Wakefield, MA

Fire Rating Requirements at Precast Plank Mezzanine Floors

TO:	Vladimir Lyubetsky **(Drummey Rosane Anderson, Inc.)** Angel Khazadian **(Drummey Rosane Anderson, Inc.)**	**FROM:**	Donald Venerus **(Gilbane Building Company)** 10 Channel Center St Suite 100 Boston, 02210
DATE INITIATED:	07/06/2023	**STATUS:**	Open
LOCATION:		**DUE DATE:**	07/13/2023
PROJECT STAGE:	Pre-Construction	**COST CODE:**	
SUB JOB:		**SCHEDULE IMPACT:**	
COST IMPACT:		**SPEC SECTION:**	
DRAWING NUMBER:		**REFERENCE:**	
LINKED DRAWINGS:			

RECEIVED FROM:

COPIES TO:
Neil Benner **(Gilbane Building Company)**, Andy Brodeur **(Gilbane Building Company)**, Joseph DeSantis **(PMA Consultants LLC)**, Anthony Lopresti **(PMA Consultants LLC)**, Tripp Mcelroy **(Gilbane Building Company)**, Lauren Muldoon **(Gilbane Building Company)**, Kevin Nigro **(PMA Consultants LLC)**, Thiago Palma **(Gilbane Building Company)**, Marco Zappala **(PMA Consultants LLC)**

Question from Donald Venerus (Gilbane Building Company) at 09:14 AM on 07/06/2023

Reference Framing Notes 18 and 19 on S1-1-0MC which indicate that the Mezzanine Precast Plank to be designed for minimum 2 Hour Fire Rating.
- This means each penetration thru the plank needs to be firestopped with a 2 hour fire rated assembly, correct?
- Regarding duct penetrations thru the planks, are fire/smoke dampers required?

If yes to these items, can they be indicated on the 100% contract drawings?

Awaiting an Official Response

All Replies:

DRA RESPONSE:

Firestopping at the mezzanine floor openings and fire/smoke dampers in ductwork at mezzanine floors are not required

ANGEL KHAZADIAN
07/13/2023

If the information provided in the response to this RFI constitutes a change in contract price or time, the trade contractor shall not proceed with this work unless authorized to do so by the Construction Manager in writing. The trade contractor shall provide the Construction Manager written notice within five (5) working days from receipt of this Request for Information that this RFI constitutes a change, all in accordance with Article 8 of the Contract Agreement. Should no change be required, a no cost change will be issued to you incorporating this RFI into your contract.

BY **DATE** **COPIES TO**

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Specification Section 04 00 01 - Masonry

1. **Provide all labor, materials, equipment and services required to complete all exterior and interior masonry work at all locations as defined in Specification Sections 040001 MASONRY WORK, 042000 UNIT MASONRY, 044313 CALCIUM SILICATE MASONRY VENEER (CAST STONE), Section 044200 Exterior Stone Cladding, Section 070800 - Thermal and Moisture Protection Systems Commissioning, Section 072100 - Thermal Insulation, Section 078440 - Fire-Resistive Joint Systems and as further defined by this Proposal Form.**

2. **Provide all labor, materials, equipment, services and incidentals required to complete all interior & exterior masonry work, cast stone and stone veneer. This work includes, but is not limited to all concrete masonry units (CMU), decorative concrete masonry units, brick veneer & veneer base, cast stone work, associated attachments, reinforcing, ties, anchors, dowels, insulation, grouting, mortars, cavity drainage materials, weeps, weep vents, flashings, and compressible filler/acoustic seal.**

3. **Coordinate with other Trade Contractors for the installation (and/or testing) of their work with masonry components/assemblies. Items include, but are not limited to, light boxes, conduit, pipes, plates, toilet accessories, elevator call boxes, fire hose and extinguisher cabinets, rails, signage, insulation, and fire connections.**

4. **Accommodate the work of others built into masonry including all cutting to accommodate the exposed and concealed work of other trades.**

5. **Provide all attachments required for a proper installation of work, whether or not shown. All masonry attachments welded to structural steel shall be installed prior to spray fireproofing work where applicable. Include costs for additional mobilizations and equipment (aerial lifts) to complete this work.**

6. **Receive, unload, inventory, store, distribute, hoist, layout and install all items furnished by others and built into masonry construction. This includes, but is not limited to, miscellaneous metal, loose lintel, sleeves, access panels/doors, embeds for structural steel and elevator steel and rails, precast plank, knox boxes, wood blocking and nailers. This Trade Contractor shall be responsible for immediately reporting to the Construction Manager during receipt, storage or installation any missing, incorrect or damaged items they have received from others for installation.**

7. **Provide bond beam lintels at elevator door frames.**

8. **All hollow metal door/borrowed lite frames and windows within masonry partitions will be furnished, installed and braced by other Subcontractors. It is the responsibility of this Trade Contractor to provide assist with layout in the field for the installation of this work. Provide grouting of all hollow metal door and window frames installed in masonry and concrete construction.**

9. **Provide coursing of all masonry elements as shown in the elevations provided in the Contract Drawing and in accordance with the Project Specifications. It is understood that cutting of masonry may be required in order to provide coursing shown in these elevations.**

10. **All dowels for masonry work shall be furnished, drilled, installed, and epoxied by this Trade Contractor. Dowels within concrete foundations will be provided by others.**

11. **This Trade Contractor shall perform all necessary cutting and fitting of masonry materials as required to accommodate minor job discrepancies within tolerances.**

12. **All cutting of masonry elements shall be done utilizing a wet saw. Contain runoff and cleanup daily. Provide enclosure/ventilation and adequate dust control of mixing areas for the protection of the other trades in proximity. Refer to the Project Safety Plan for the OSHA Standard pertaining to Silica Exposure.**

13. **Repair of air/vapor barrier and waterproofing membranes after installation of masonry dowels and anchorage shall be the responsibility of this Trade Contractor. All repair methods will be in accordance with the membrane manufacture's recommendations.**

14. **Provide all insulation behind (integral to) the work of this Bid Package. Refer to Drawings/Details for any special conditions pertaining to insulation and/or spray foam insulation. Provide insulation behind masonry relieving angles – reference detail 2/A3-3-1 (Wall Detail at Lintel) and similar details.**

15. **Establish brick coursing and establish elevations for relieving angles so that they may be set prior to the start of your work. Provide elevation drawing to the Construction Manager within two (2) weeks after award to allow coordination with the structural steel supports.**

16. **Provide all metal flashings, of the size, material, and shape specified to be installed within masonry and between masonry & adjoining construction. This Trade Contractor shall be responsible for coordination of this work with the Building Waterproofing Trade Contractor and shall be responsible for the completion (furnishing & installation) of the air/vapor barrier flashing over the masonry flashing.**

17. **Provide all scaffolding, staging, platforms and lifts, interior and exterior, for your work. Disregard any references to scaffold/staging being provided by the Construction Manager – all scaffold/staging required to complete this work will be provided by this bid package. This Trade Contractor shall allow access to all exterior scaffolding, staging, and platforms to the Construction Manager, Owner, Owner Agencies and Architect for inspections. If planking is used at scaffolding and staging, it must be left in place for the full height of the staging system and proper guardrails and toe boards must be provided. If mast climbing work platforms are used, this Trade Contractor shall operate and be responsible for their use while other Trades perform their work. Comply with all applicable safety requirements and Gilbane Safety Plan. Allow access to staging/scaffolding for MEP Coordination. At the elevator shafts, allow use of staging provided to Structural Steel Subcontractor for hoist beam, etc installation.**

18. **Properly protect all surrounding work and concrete slabs, in particular those area scheduled to receive exposed concrete finishes. Protection is defined as poly and plywood at a minimum.**

Removal of mortar and other masonry debris from adjacent surfaces is the responsibility of this Trade Contractor.

19. **Provide all bracing, shoring, hoisting and fall protection required to complete your work.**

20. **Provide drill holes where requested by the Construction Manager to verify grout installation. Patch holes after testing.**

21. **This Trade Contractor shall prep and clean all exposed masonry partitions to receive finish paint in accordance with the contract documents.**

22. **Remove and replace guardrails and other safety structures as necessary to complete the work of this bid package. Coordinate with the Construction Manager prior to removal. Closely follow safety procedures while structures are removed.**

23. **Provide dumpsters for disposal of masonry debris. This Trade Contractor shall comply with the Construction Waste Management and Disposal program and ensure that all masonry debris is 100% recycled in accordance with the requirements for LEED. Documentation to include weight of each container, location of recycling facility and end use of each reclaimed material. Reference LEED Specification for additional information on required reporting.**

24. **This Trade Contractor shall be responsible for his own daily cleanup to dumpsters. Dumpsters for Masonry debris shall be provided by this Trade Contractor. Failure to adequately cleanup daily will result in the Construction Manager performing the cleanup for this Trade Contractor at this Trade Contractor's expense. All debris removal must adhere to LEED requirements and reporting, meet specified recycling rate of 90%, and multiple diversion streams per 017400 Construction Waste Management.**

25. **Overhead MEP rough-ins will be in progress or completed prior to construction of interior masonry partitions. This Trade Contractor shall include costs to accommodate this condition. Bond beams will be required above MEP penetrations.**

26. **Provide all heat, fuel, heat containment, and protection to complete your work per the milestone schedule. Include all costs for inefficiencies and over-time to maintain the Project Schedule as necessary to comply with weather and temperature requirements. This Trade Contractor is responsible for snow and ice removal as necessary for your work to proceed. Include means to protect from the elements, and heat materials and surfaces as required for the proper installation of materials.**

27. **Provide all compressible filler within masonry work and between masonry work and adjacent construction.**

28. **This Trade Contractor is responsible for performing a complete field survey of all masonry shelves, relieving angles, etc. that receive the work of this Bid Package. This survey must be completed sufficiently in advance of your work to allow for corrections, and no later than two (2) weeks prior to the start of masonry work. This Trade Contractor shall advise the Construction manager of any unacceptable conditions, otherwise the work is accepted by this Trade Contractor.**

29. **Temporary Water will be available from an on-site source. This Trade Contractor is responsible for all means (i.e. hoses, etc.) for water distribution from this source to their operation.**

30. **Provide temporary power and lighting as needed for your work. Include the cost of electrical hook-ups and generators.**

31. **Provide all required temporary heat (equipment and fuel) and required heat containment based on the Milestones in Exhibit C.**

32. **Provide all cleanings of all masonry work in accordance with the project specifications. Utilize cleaning agents that will in no way harm other building cladding.**

33. **Provide architectural mockups per the contract documents locations designated by the Construction Manager. All mockups shall be constructed far enough in advance as to not delay the progress of construction. This Trade Contractor shall coordinate with the other trades in the construction of the Wall Mockup. Mockups shall include all components required for a complete wall installation (wall ties, insulation, flashing, weeps, etc) whether shown or not. Include costs for all modifications as necessary to obtain required approvals of all mockups. Mockups are to remain in place until removal is authorized by Owner, Architect and CM.**

34. **Assume that temporary membrane roofs will be in-place and completed prior to installation of the work of this Bid Package. This includes interior courtyard roof levels and low roof areas with masonry above (including, but not limited to, 2nd floor Area C roof, 1st Floor Area C roof at Playground, 2nd floor Area B roof and 2nd floor Area A). This Trade Contractor shall be responsible to properly protect all roof areas from damage during the performance of this work. This protection shall include but not limited to complete coverage of the roof within the area of work with one (1) layer of 1" standard rigid insulation board covered with one (1) layer of ¾" exterior grade, fire-retardant plywood with joints between abutting sheets of plywood securely taped with durable, waterproof tape. Proper drainage of the roof to roof drains shall be maintained. At all scaffolding supports in contact with roofing materials provide adequate bridging and/or cribbing materials to properly distribute the loads imposed by the loaded scaffolding on the underlying roofing materials so as to note damage the roofing materials. The removal and proper disposal of all temporary protection provided by this Trade Contractor shall be the responsibility of this Trade Contractor.**

35. **Adequately distribute loadings over the elevated floors and roof decks. Provide sufficient dunnage necessary to distribute the loads and remove and dispose of dunnage when no longer required.**

36. **Interior masonry head of wall seismic clips will be furnished and installed by others, unless there is a key note indicating a Masonry Trade Contractor installation. Assist with layout as required.**

37. **No dovetail slots will be cast into the foundation or retaining walls that serve as masonry backup walls. Provide all required post-installed anchors and ties to accommodate this condition.**

38. **This contractor shall be responsible to participate in the requirements stipulated under Section 013100-PROJECT MANAGEMENT AND COORDINATION, paragraph 1.7- BUILDING ENVELOPE COORDINATION DRAWINGS. The Construction Manager to conduct a series of meetings with the various involved subcontractors. The Trade/Subcontractors will then provide details to the Metal Panel contractor to incorporate and produce the coordination drawings. Drawings to include all mechanical penetrations and signage. The coordination drawing will be used by the framing contractor for window layout purposes. This will not be managed through the BIM process.**

39. **Reference specification 070800 Thermal and Moisture Protection Systems Commissioning. Participate in Building Envelope Commissioning process and testing as required by the contract documents. Provide reporting as required and responses to Commissioning field reports and make corrections as required by any Corrective Action Logs issued.**

40. **Note that the elevator shafts will require a comeback operation to assist with and tooth in the elevator door frames after the elevator cabs are installed.**

41. **Provide OSHA approved rebar protection caps at any protruding rebar and maintain until completion of all your work.**

42. **Provide masonry infill and patching work for an additional 5,000 sf (in multiple locations). This is above and beyond what is shown or noted on the contract drawings.**

43. **Note that this project will use Advanced Planning and Scheduling (APS) techniques for planning and scheduling work. Each contractor will be required to adhere to the requirements in project manual document "Coordination of Advanced Planning & Scheduling Procedures".**

44. **Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule. Note that this project will require multiple crews working on different building elevations concurrently.**

45. **The use of the site or municipal drainage systems for the purpose of equipment cleaning is not permitted. Provide a masonry containment wash-out box to be located as directed by the Construction Manager. It is not allowed to indiscriminately wash-out mortar mixers or other mortar containing vessels on the site except in the designated wash-out box. Remove and legally dispose of same, including hardened wasted mortar from the wash-out box. Penalties or the cost of clean-up will be imposed if rules are not followed.**

46. **Warranty start dates will be based on the substantial completion date for the Building or Exterior Work.**

47. **Note that there are penetrations that will be in place prior to masonry veneer installation. These include, but are not limited to sunshades or ladder brackets, etc.**

48. **Note that there are several locations where building leave-outs are required for material loading and will be completed as a comeback operation – see Trash Out Leave Out Plan. In addition, a leaveout is required for mechanical unit access at the L7 Louver and below at Mechanical A201 to exterior. Provide two 8ft x 8ft leaveouts for interior CMU walls for equipment access.**

49. Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.

50. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

51. Note that the slab on grade will not be in place during the initial mobilization for Precast Plank bearing wall installation.

52. Installation of CMU bearing walls for precast plank shall be performed on 10 hour days and Saturdays until the work is complete. Costs for this overtime shall be part of the bid pricing.

53. Provide field drilled ¾" "weep" holes in underside of precast planks at each hollowcore cell. Patch holes upon direction from project team. Assume 7 hollowcore cells per 4' wide plank for quantity purposes.

54. Provide fire rated CMU as required to provide required fire ratings per partition types and contract documents. Provide top of wall firestopping joint at all fire rated CMU partitions.

55. Furnish and install <u>all</u> welded couplers and associated plates as indicated for all CMU shear walls, whether noted on detail (or not). Welding of these plates is by this Trade Contract.

56. Provide grout at beam pocket leveling plates and grout infill (if infill is indicated).

57. Provide drypack grout under precast planks bearing on CMU after plank installation.

58. Install all flashings provided by other trades, including, but not limited to, counterflashings in masonry for roof upturn terminations.

59. Provide (or install) lintels at all openings in CMU for door frames and MEP penetrations. Reference contract documents for delineation of whether bond beam or steel lintels are specified.

60. Include 320 manhours to cut/rework CMU to accommodate items in early bearing walls that could not be coordinated in time.

61. Receive, unload and install W8x31 lintel beam (with connection embeds, etc) for precast support bearing on CMU along EE line between 22 and 26 lines (Mezzanine Level Area D). Grout leveling plates as required prior to installation of lintel beam. Material is furnished by others.

62. Note that there is a Live Load Capacity of 100psf for the slabs in the Courtyard, Gymnasium and Multipurpose Rooms per RFI Pre-54. Bidders shall make the proper arrangements for lifts and/or staging that adhere to this requirement. Provide engineering analysis for all staging required on elevated decks to confirm proposed system will not exceed capacity restrictions. Analysis must be stamped by the Professional Engineer registered in the Commonwealth of Massachusetts.

63. Reference guardrail detail 2/S2-0-2 and similar details at edge of precast mezzanines. Provide selective sawcut demo of the edge cells of precast planks for guardrail embed installation by

others. Provide continuous #4 rebar in edge cell as noted. Grout edge cells after embed and rebar installation.

64. Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".

65. Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"

66. All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.

67. Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.

68. The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.

69. Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.

70. Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.

71. City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use locatio n(s) and protect these systems throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.

72. Provide temporary generator power, temporary lighting as needed for the Work of this bid package.

73. All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).

74. This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).

75. Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.

76. No trade parking will be allowed within the school property and within the project limits.

77. Working hours of the project are 7:00am to 3:30pm.

78. This subcontractor shall be responsible for obtaining all field measurements required to complete its work.

79. This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.

80. Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.

81. Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.

82. Provide all required documentation to support the LEED program.

83. This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.

EXCLUSIONS:

END OF SECTION

EXHIBIT C – Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 04 00 01 - Masonry

A. BP 04A MASONRY MILESTONE DATES*

1. **Submit Shop Drawings, Submittals, Etc.: Within 15 days of Notice of Contract Award**
2. **Commence Bearing Walls for Precast Planks Area C/D: April 26, 2024**
3. **Ready for Precast Plank Installation Area C/D: May 17, 2024**
4. **Commence Bearing Walls for Precast Planks Area A/B: April 5, 2024**
5. **Ready for Precast Plank Installation Area A/B: April 26, 2024**
6. **Commence Exterior Masonry Area B: November 1, 2024**
7. **Complete Washdown Area B: March 6, 2025**
8. **Commence Exterior Masonry Area C: December 24, 2024**
9. **Complete Washdown Area C: March 12, 2025**
10. **Commence Exterior Masonry Area D: October 7, 2024**
11. **Complete Washdown Area D: March 6, 2025**
12. **Commence Exterior Masonry Area A: December 9, 2024**
13. **Complete Washdown Area A: March 11, 2025**
14. **Commence Phase 3 Buildings (Locker, Concessions): January 19, 2027**

B. GENERAL PROJECT MILESTONE DATES*

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date**

may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Specification Section 05 00 01 – Miscellaneous and Ornamental Iron

1. **Provide all labor, materials, equipment and services required to complete all Metal work as shown on the Drawings (all buildings and site), defined in Specification Sections 050001 – Miscellaneous and Ornamental Iron, 055000 Metal Fabrications, 055100 Metal Stairs and Landings, 055300 Metal Gratings, 057300 Decorative Metal Railings and as further defined by the following Scope of Work.**

2. **Furnish all loose lintels as shown or required to be installed by others. Member size per schedules on drawings. Review MEP drawings for the extent of mechanical, electrical and plumbing penetrations through masonry walls.**

3. **Furnish and install all steel stairs, including but not limited to stair pans, stringers, landings, treads, egress gates handrails/guardrails, supports, hangers and attachments. Protect stair treads from damage during construction. Include all kicker angles as required for a complete installation of the stairs.**

4. **Provide all exterior handrails/railings. In addition to the architectural drawings refer to civil and landscape drawings for lay-out and extents. This trade contractor shall core drill and epoxy grout solid all guardrails and handrails per the site details.**

5. **All posts and anchoring required is by this Trade Contractor.**

6. **Provide all exterior and interior ladders complete. Coordinate the installation of all ladders with other trades work that the ladders attach to and/or through.**

7. **Provide a blocking lay-out drawing providing location(s) for all blocking required for the support of this bid package's work.**

8. **Furnish embedded items to the Concrete Slab and Masonry Trade Contractors in sufficient time to allow casting or placing in the concrete or masonry. This Trade Contractor shall be responsible for the cost of remedial/corrective work required due to the late delivery of embedded items.**

9. **Furnish and install all attachments, support systems, stiffeners, internal reinforcing, braces clip angles, support angles, bolts and fasteners for a proper installation, whether or not shown.**

10. **Furnish and install all shimming as necessary or required to properly install your work.**

11. **Furnish and install field touchup of shop coatings (galvanizing, painting, etc.) of your work.**

12. **Coordinate with other Subcontractors for the installation of their work.**

13. **This Trade Contractor shall field measure for all items to be installed on or between existing surfaces prior to fabrication. Notify the Construction Manager of any issues. This Trade Contractor shall be responsible for all modifications and remedial work required if field measurements are not performed.**

14. **This Trade Contractor shall examine substrates, areas and conditions to which the work in this scope will be applied for compliance with requirements. Verify, to the Construction Manager, that surfaces and conditions are suitable prior to commencing work in an area. This Trade Contractor shall advise the Construction manager of any unacceptable conditions, otherwise the work is accepted by this Trade Contractor.**

15. **Properly protect all surrounding work. Removal of welding splatter, metal cuttings, shavings, and other debris from adjacent surfaces is the responsibility of this Trade Contractor. Repairs to roofing systems will be completed by the Roofing Trade Contractor at the expense of this Trade Contractor.**

16. **Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the schedule. This project is a phased project which will require multiple mobilization and may require multiple crews working on different buildings concurrently.**

17. **The warranty start dates will be based on the substantial completion date for the Building and Exterior Work.**

18. **Fire safe and caulk all penetrations made by this Trade Contractor.**

19. **Provide all pit ladders, sill angles, and sump pit covers located in the elevator pits and elevator shaft. Installation of this work is to be coordinated with the Elevator Trade Contractor.**

20. **Provide all supplemental framing for support and attachment of rolling grilles, overhead doors, moveable partitions/folding doors, projection screens, etc. This includes head, jamb and track steel as needed.**

21. **Furnish loose lintels for masonry openings in Architectural mockup.**

22. **Provide an additional 5 ton weight of misc iron shapes for items required, but not shown or indicated in this scope of work. Assume primed finish and welded connection for each piece.**

23. **Reference guardrail detail 2/S2-0-2 and similar details at edge of precast mezzanines. Masonry Trade Contractor shall provide selective sawcut demo of the edge cells. Furnish and install all**

embedded items required for the guardrails. Include all stabilization/shoring of embedded channel to ensure proper alignment/levelness until embeds are grouted. Grouting of planks after embed installation is by others.

24. Provide all Masonry Anchorage Details, unless noted as by Masonry Trade Contractor in notes (such as Shear Wall Anchorage Details 6/S0-0-5, which are provided by the Mason as noted). At rated CMU partitions, allow for installation of top of wall firestop prior to installation or CMU anchorage angles, etc.

25. Provide Mechanical support detail 2/S0-0-6 where ductwork passes over fire and security partitions and as further defined by the contract documents.

26. Provide support steel for all equipment screens (unless keynote indicates structural steel item). All girts and clips angles for attaching the screenwalls will be by others.

27. Provide all casework and millwork Misc Metals support angles and brackets, unless noted as a purchased item (such as Raaks, etc).

28. In addition to the scope noted in this document and on the Structural Drawings, provide (furnish and install) angles, plates and anchors for the following Structural Details:

- **Typical Steel to Masonry Connection detail 4/S0-0-5**
- **Continuous 3/8" bent plate connection detail from CMU to Steel beam per 11/S0-0-7**
- **Embedded angle in slab on grade per 7/S2-0-1**
- **Curtainwall support angle per 9 and 9A/S2-0-1 and 9/S2-0-3**
- **Embedded angle at loading dock area per 9/S2-0-2**
- **Curtainwall support bent plate at edge of slab per 11/S2-0-2**
- **Embedded angle for stair stringer connection 1/S2-0-4**
- **Embedded channels in slab on grade per 8/S2-0-4**
- **Embedded angles at equipment pit per 9A/S2-0-4**
- **Continuous angles connection detail at HSS beam per details 2 and 3/S3-0-6**
- **Continuous bent plate connection detail at CMU to Beam/HSS per 1 and 10/S3-0-7**
- **Curtainwall support angle at detail 11/S3-0-7**
- **Continuous bent plate attachment detail at CMU to Beam per 1 and 5/S3-0-8**

29. Provide flexible stainless steel safety netting in Gymnasium. See interior elevations.

30. Listing of specific details and or drawings above is to call attention to specific items of work. This Trade Contractor shall refer to the specifications and drawings for all items to be included in the trade bid.

31. Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.

32. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

33. Provide Delegated Design for items provided by this Trade Contract as indicated in the Specifications and Contract Drawings. Note that all Misc Metals items detailed on the Structural Drawings will require a Delegated Design whether indicated or not.

34. Provide an additional mobilization to coordinate and field drill holes as required for support steel for the folding doors.

35. Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".

36. Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"

37. All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.

38. Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.

39. Builders Risk Deductible The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.

40. Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process

shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.

41. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

42. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.**

43. **Provide temporary generator power, temporary lighting as needed for the Work of this bid package.**

44. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

45. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**

46. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

47. **No trade parking will be allowed within the school property and within the project limits.**

48. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.**

49. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

50. Working hours of the project are 7:00am to 3:30pm.

51. This subcontractor shall be responsible for obtaining all field measurements required to complete its work.

52. This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.

53. Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.

54. Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.

55. Provide all required documentation to support the LEED program.

56. This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.

END OF SECTION

EXHIBIT C: Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 05 00 01 – Miscellaneous and Ornamental Iron

B. GENERAL PROJECT MILESTONE DATES*

1. **Anticipated Date of Contract Award: October 2, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: Within 25 days of Notice of Contract Award**
3. **Furnish Embeds for Slab on Grade: October 1, 2024**
4. **Furnish Loose Lintels for CMU Bearing Walls: April 1, 2024**
5. **Provide Embeds for Precast Plank Railings: April 1, 2024**
6. **Install embeds for Mezzanine Railings – Areas A and B: May 1, 2024**
7. **Install embeds for Mezzanine Railings – Areas C and D: June 1, 2024**
8. **Commence Mezzanine Stairs and Railings – Areas A and B: December 10, 2024**
9. **Commence Mezzanine Stairs and Railings – Areas C and D: November 19, 2024**
10. **Commence Stair Installation: January 17, 2025**
11. **Complete Stair Installation: April 22, 2025**

B. GENERAL PROJECT MILESTONE DATES*

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day**

that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Specification Section 070001 – Waterproofing, Dampproofing and Caulking

1. **Provide all labor, materials, equipment and services required to complete all exterior and interior waterproofing and sealant work as shown on the drawings, as defined in the Specification Sections 070001 Waterproofing, Damproofing and Caulking, Section 070800 - Thermal and Moisture Protection Systems Commissioning, 071100 Bituminous Dampproofing, 071300 Sheet Waterproofing, 071610 Crystalline Waterproofing, 072700 Air Barriers, 079200 Joint Sealants and as further defined by this Proposal Form.**

2. **Note that there is a Live Load Capacity of 100psf for the slabs in the Courtyard, Gymnasium and Multipurpose Rooms per RFI Pre-54. Bidders shall make the proper arrangements for lifts and/or staging that adhere to this requirement.**

3. **Reference specification 070800 Thermal and Moisture Protection Systems Commissioning. Participate in Building Envelope Commissioning process and testing as required by the contract documents. Provide reporting as required and responses to Commissioning field reports and make corrections as required by any Corrective Action Logs issued.**

4. **This contractor shall be responsible to participate in the requirements stipulated under Section 013100-PROJECT MANAGEMENT AND COORDINATION, paragraph 1.7- BUILDING ENVELOPE COORDINATION DRAWINGS. The Construction Manager to conduct a series of meetings with the various involved subcontractors. The Trade/Subcontractors will then provide details to the Metal Panel contractor to incorporate and produce the coordination drawings. Drawings to include all mechanical penetrations and signage. The coordination drawing will be used by the framing contractor for window layout purposes. This will not be managed through the BIM process.**

5. **This trade contractor shall submit a certified statement issued by the manufacturer of all waterproofing, dampproofing, air barrier and sealant/caulking materials for the project and countersigned by this contractor, attesting that all areas and surfaces designated to receive waterproofing, dampproofing, air barrier and sealant/caulking have been inspected and found satisfactory for the reception of all work associated with this bid package. Application of materials prior to this certified statement being completed and submitted to the Construction Manager will be construed as acceptance of all surfaces; any and all re-work or faulty work due to insufficient substrate(s) shall be repaired and re-installed at no cost to the project by this contractor.**

6. **Prior to submittal submission this contractor shall confirm all products carried associated with this bid package and scheduled for the project ie: Dampproofing, Self-Adhering Sheet Waterproofing and Air Barriers are compatible with one another and do not pose a potential failure. Any and all compatibility issues are to be brought to the attention of the Construction Manager.**

7. **Provide silicone or modified bituminous air barrier transitions as noted in the Contract Drawings and Specifications.**

8. **Provide AVB wrap around all window/louver blocking at sill, head and jamb conditions. Provide spray foam at ALL perimeter gaps as indicated in specs.**

9. **Waterproofing/dampproofing at foundation walls shall extend from top of foundation wall to bottom of footing. Reference RFI Pre-23 for additional information.**

10. **Note that the Waterproofing on the Retaining Wall will be completed on 10 hour days and Saturdays until complete. Include all costs associated with this requirement.**

11. **Waterproofing at tiles areas to be provided by others.**

12. **Provide all joint sealants shown on drawings, unless noted as related work provided by others in other Specifications. Sealants provided by others include but are not limited to, sealants within glazing, perimeter sealants at glazing systems, drywall acoustical partition joints, joints within floor tiling, joints at acoustical ceiling edge moldings, acoustical sealing MEP penetrations thru partitions, sealant joints at plumbing fixtures. If key notes direct to a specification section provided by others, sealant joint is by others. Firestopping of partitions and penetrations is by others.**

13. **Provide paintable joint sealants at perimeter of all door frames and borrowed lights.**

14. **Provide backer rod and sealant at interior and exterior masonry expansion joints. In addition to joints noted on the drawings, assume spacings of no more than 20 foot on center for exterior CMU, 30 foot on center for exterior brick (and at corners), and 20 foot on center for interior CMU. Provide sealant joint at underside of exterior brick lintel head joints.**

15. **Assume that this bid package shall provide a sealant joint between all dissimilar exterior materials.**

16. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the**

material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.

17. **Note that there are several locations where building leave-outs are required in Curtainwall systems for material loading/trash out and will be completed as a comeback operation – see Trash Out Leave Out Plan.**

18. **Note that a section of storefront SF11 and metal panel will be left out to allow lift access into the Courtyard. Work will be completed in a comeback operation. Lift or staging load capacity in Courtyard will be 100psf per RFI Pre-54.**

19. **Note that the following leave-outs for mechanical unit access and will be completed in a comeback operation: (a) 12' x 12' opening in metal panel exterior wall along 19.1 for AHU-9 and AHU-10; (b) added leave-out is required for mechanical unit AHU-2 access at the L7 Louver and below at Mechanical A201 to exterior.**

20. **Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule. This project is a phased project which will require multiple mobilization and may require multiple crews working on different buildings concurrently.**

21. **The warranty start dates will be based on the substantial completion date for the Building or Exterior Work.**

22. **Provide low temperature materials based on the milestone schedule installation timeframes.**

23. **Include cost to provide an additional 500 hours of waterproofing man hours to be used at the discretion of the Construction Manager for out of sequence penetration patching and other rework items.**

24. **Provide architectural mockups per the contract documents locations designated by the Construction Manager. All mockups shall be constructed far enough in advance as to not delay the progress of construction. This Trade Contractor shall coordinate with the other trades in the construction of the Wall Mockup. Mockups shall include all components required for a complete wall installation (wall ties, insulation, flashing, weeps, etc) whether shown or not. Include costs for all modifications as necessary to obtain required approvals of all mockups. Mockups are to remain in place until removal is authorized by Owner, Architect and CM.**

25. **Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.**

26. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

27. Note clarifications to waterproofing and dampproofing requirements for foundation walls in RFI Pre-23.

28. Provide AVB tie-ins at building expansion joints to ensure continuity of air/vapor barrier system.

29. Provide AVB tie-ins at all perimeter frame items thru the exterior wall, including but not limited to curtainwall/storefronts, windows, translucent wall panels, louvers, doors, etc. to ensure continuity of air/vapor barrier system.

30. Provide final tie-in from roofing AVB to wall AVB to ensure continuity of air/vapor barrier system. Roofer shall leave roofing AVB long to allow tie-in.

31. The Masonry Trade Contractor shall be responsible for final tie-in masonry thru-wall flashing to building AVB installed under this bid package.

32. Provide backer rod and sealant joints at underside of precast planks at exposed ceiling locations. Precast planks are located at Mezzanine levels of Areas A thru D. Reference reflected ceiling plans for relevant exposed ceiling conditions.

33. Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".

34. Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"

35. All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.

36. Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those

Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.

37. **The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

38. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

39. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

40. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.**

41. **Provide temporary generator power, temporary lighting as needed for the Work of this bid package.**

42. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

43. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**

44. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

45. **No trade parking will be allowed within the school property and within the project limits.**

46. **Working hours of the project are 7:00am to 3:30pm.**

47. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

48. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

49. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

50. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

51. **Provide all required documentation to support the LEED program.**

52. **This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.**

END OF SECTION

EXHIBIT C: Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 07 00 01 – Waterproofing, Dampproofing and Caulking

A. BP 07A WATERPROOFING MILESTONE DATES*:

1. **Submit Shop Drawings, Submittals, Etc.: Within 14 days of Notice of Contract Award**
2. **Commence Waterproofing on High Retaining Wall: On or About March 14, 2024**
3. **Commence Dampproofing Foundations Area C/D: March 8, 2024**
4. **Complete Dampproofing Foundations Area C/D: March 14, 2024**
5. **Commence AVB Area C/D: September 16, 2024**
6. **Complete AVB Area C/D: January 9, 2025**
7. **Commence Dampproofing Foundations Area B: March 18, 2024**
8. **Complete Dampproofing Foundations Area B: April 29, 2024**
9. **Commence AVB Area B: October 10, 2024**
10. **Complete AVB Area B: December 17, 2024**
11. **Commence Dampproofing Foundations Area A: June 5, 2024**
12. **Complete Dampproofing Foundations Area A: June 11, 2024**
13. **Commence AVB Area A: November 15, 2024**
14. **Complete AVB Area A: December 20, 2024**

B. GENERAL PROJECT MILESTONE DATES*:

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Specification Section 070002 – Roofing and Flashing

1. **Provide all labor, materials, equipment and services required to complete all roofing work as shown on the Drawings, defined in Specification Sections 070002 – Roofing and Flashing Filed Sub Bid, Section 070800 - Thermal and Moisture Protection Systems Commissioning, Section 072100 - Thermal Insulation, 075400 Thermoplastic Membrane Roofing, 075565 Extensive Green Roof System, 076100 Sheet Metal Siding, 076200 Sheet Metal Flashing and Trim, 077100 Roof Specialties, 077200 Roof Accessories, Section 077273 Membrane Integrity Testing, 077700 Wall Cladding Support System, Section 116800 - Playground Equipment Section 321816.13 - Playground Protective Surfacing Curbing, Section 321823 - Synthetic Turf, Section 323000 - Site Improvements Curbing, Section 329500 - Vegetated Roof Assemblies and as further defined by this Scope of Work.**

2. **Note that there is a Live Load Capacity of 100psf for the slabs in the Courtyard, Gymnasium and Multipurpose Rooms per RFI Pre-54. Bidders shall make the proper arrangements for lifts and/or staging that adhere to this requirement.**

3. **Provide sheet metal siding as indicated. All materials outside of the AVB shall be provided by the Roofing Trade Contractor as part of the sheet metal siding system. Provide all installation accessories required for a complete installation, including, but not limited to thru wall flashing (at perimeter of this system), insulation, trim pieces, sealants, galvanized utility deck, insect screens, etc.**

4. **Provide Wall Cladding Support System per Specification 077700 behind all Sheet Metal Siding. At Sheet Metal Siding, extend Wall Cladding Support down to base of wall (below bottom of Sheet Metal Siding) to support plywood/sheathing for roof upturns. Also, extend Wall Cladding Support behind ACM bands and corner details adjacent to Sheet Metal Siding. See details 6 and 13/A3-3-1 and similar details for ACM support work required. Support behind other insulated panel and ACM locations is by others.**

5. **Provide Delegated Design for sheet metal siding as indicated in specifications.**

6. **Furnish and install all roof expansion systems/assemblies within roof field or at transition to vertical wall. Include all AVB to maintain continuity of system across expansion joint, as well as joint insulation and flashing at terminations. This Trade Contractor shall provide pre-formed transitions at all changes in direction and is ultimately responsible for a watertight transition between roof expansion joints and wall expansion joints (provided by others).**

7. **Extend and temporarily secure roof membrane at edges as necessary until building façade components and windows are completed. Rework edges as necessary to complete edge cornice/fascia details after the associated trades have completed their work. Coordinate with various trades to install penetrations and equipment and re-work roof as necessary.**

Roof installation by area will require multiple roofing activities such as installation of main roof field, completion of edge details, roofing penetrations, and final detailing.

8. **Include in this scope of work membrane replacement/patches for 20,000 sqft of roof area as directed by the Construction Manager to replace any damaged areas.**

9. **Furnish and install all flashing within the work of this Bid Package and between the work of this Bid Package and the work of others. Furnish and install all materials to integrate flashing with the material of other Trade Contractors. Furnish counterflashing built into masonry walls (for counterflashing) for installation by Masonry Trade Contractor.**

10. **This Trade Contractor shall integrate the roofing system into roof drain assemblies provided by others. All Roof Drain Sump Receivers (furnished by the Plumbing Trade Contractor) shall be installed by this Trade Contractor.**

11. **Provide spray foam infill to close all gaps between roof insulation and roof drain bodies. Provide all Spray Foam Insulation/Sealant typical to any roofing penetrations as required to complete this scope of work.**

12. **Provide all sealants and adhesives required within the work of this Trade Contract and at all roofing terminations per manufacturers details.**

13. **Scope of work includes vapor retarder beneath all work of this package. This includes proper edge, seam and penetration terminations as required to maintain continuity of vapor barrier. This Trade Contractor is responsible for sealing/taping/terminating all vapor retarders/vapor barriers to any roof penetrations as required to provide a complete air vapor barrier. Vapor barriers shall be left long (and temporarily secured to sheathing) to allow tie-ins from the wall AVB by the Waterproofing Trade Contractor. In areas where a silicone transition membrane is shown from roof AVB to wall transition, the silicone transition sheet shall be provided by this bid package. Reference 9/A5-3-02 and similar details.**

14. **Unless otherwise noted, ALL Roof Blocking will be provided by others. This Trade Contractor shall provide all details, including insulation thicknesses, and coordinate the roof system with necessary blocking.**

15. **Provide all flashing work at pipe penetrations, vent stacks, equipment curbs, equipment supports, and other assemblies/penetrations installed on or through the work of this bid package. Provide pipe boots and sealants as required at MEP penetrations. This Trade Contractor shall review all associated MEP drawings to determine the extent of duct, pipe, and other penetrations that will be required.**

16. **This Trade Contractor shall furnish to all of the MEP Trade Contractors, caulking/flashing, compatible with the approved roofing system, to allow for <u>temporary</u> sealing of any roof penetrations in the event the roofer is not on site as a <u>temporary</u> measure. This does not relieve the roofer of providing the approved roofing system/details at these locations.**

17. **Provide OSHA approved temporary roof rails (Garlock or similar) at all new flat roof perimeters. Include removal of railing system upon the CM's direction.**

18. **This Trade Contractor shall adequately secure all materials both during and after the work day to the satisfaction of the CM.**

19. **Provide temporary watertight protection at all roof curb locations.**

20. **Roof penetrations for items such as conduit, piping shall be provided after the roof is complete. All steel and dunnage penetrations will be in place prior to roofing start. Work harmoniously with others to cut back roofing and sub sequentially flash and roof to such areas/items once in place leaving a weather tight installation.**

21. **Clean all roof decks prior to installation of this work.**

22. **Provide all cleanup and debris removal from roofing operations (including hoisting time for removal of roof debris). Provide dumpsters for all roofing debris and excess materials. Daily cleanup is a requirement. Frequency of hoisting debris off the roof will be coordinated with the CM Superintendent. Cleanup debris stockpiled on the roof until hoisting occurs must be secured to protect against wind blown debris, etc. This Trade Contractor shall comply with the Construction Waste Management and Disposal program and ensure that all roofing debris is recycled in accordance with the requirements for LEED reporting. Documentation to include weight of each container, location of recycling facility and end use of each reclaimed material. Reference LEED Specification for additional information on reporting requirements. All debris removal must adhere to LEED requirements and reporting, meet specified recycling rate of 90%, and multiple diversion streams per 017400 Construction Waste Management.**

23. **Protect insulation against damage from rain and snow as work is being completed. Edge of insulation should be sealed daily to prevent water from entering under the insulation.**

24. **Provide all fasteners, supports, and attachments required to complete the work of this Bid Package, whether or not shown.**

25. **Refer to Gilbane Building Company Safety Plan in the Project Manual for additional requirements for elevated work.**

26. **Provide all hoisting, shoring, rigging, bracing, staging and fall protection required to complete the work of this Bid Package, regardless of elevation. Coordinate the location of all hoisting equipment with the Construction Manager. This Trade Contractor shall unload all deliveries to the building as required.**

27. **Provide mockups required at locations designated by the Construction Manager. All mockups shall be constructed far enough in advance as to not delay the progress of construction. This Trade Contractor shall coordinate with the other trades in the**

construction of the Wall Mockup as indicated on the contract documents. Mockups shall include all components required for a complete roof installation whether shown or not. Include costs for all modifications as necessary to obtain required approvals of all mockups. Mockups are to remain in place until removal is authorized by Owner, Architect and CM.

28. **This contractor shall be responsible to participate in the requirements stipulated under Section 013100-PROJECT MANAGEMENT AND COORDINATION, paragraph 1.7- BUILDING ENVELOPE COORDINATION DRAWINGS. The Construction Manager to conduct a series of meetings with the various involved subcontractors. The Trade/Subcontractors will then provide details to the Metal Panel contractor to incorporate and produce the coordination drawings. Drawings to include all mechanical penetrations and signage. The coordination drawing will be used by the framing contractor for window layout purposes. This will not be managed through the BIM process.**

29. **Reference specification 070800 Thermal and Moisture Protection Systems Commissioning. Participate in Building Envelope Commissioning process and testing as required by the contract documents. Provide reporting as required and responses to Commissioning field reports and make corrections as required by any Corrective Action Logs issued.**

30. **Provide all heat, heat containment, and weather protection as required to complete your work. Include costs to maintain work schedule as necessary to comply with weather and temperature requirements. This Trade Contractor is responsible for snow and ice removal as necessary for your work to proceed. Include means to protect from the elements, and heat materials and surfaces as required for the proper installation of materials.**

31. **Provide for use of low temperature materials as required for continuation of your work.**

32. **Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule. This project is a phased project which will require multiple mobilization and may require multiple crews working on different buildings concurrently.**

33. **Provide all gutters and downspout systems. Provide and install downspout adapters. Provide final connection of downspout to drainage riser.**

34. **Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.**

35. **Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.**

36. **Provide temporary roofing at the following locations: interior courtyard roof levels and low roof areas with masonry above (including, but not limited to), 2nd floor Area C roof, 1st Floor Area B roof at Playground, 2nd floor Area B roof and 2nd floor Area A. . Temporary roof shall be protection board and black rubber roof 45 mils. Include removal of same and prep needed for installing permanent roof system. In addition, provide 400 hours to patch temporary roofing in bid pricing.**

37. **Provide temporary protection sheet (45 mils black rubber roof membrane) over permanent roof at rooftop HVAC units. At RTUs, provide 6 foot perimeter around units. At smaller CU/ACCU/VCU (typically on dunnage), etc provide 6 foot perimeter around units. Include labor to cut around dunnage posts to tuck under smaller units. Include removal of same.**

38. **Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".**

39. **Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"**

40. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

41. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.**

42. **Builders Risk Deductible The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

43. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

44. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

45. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.**

46. **Provide temporary generator power, temporary lighting as needed for the Work of this bid package.**

47. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

48. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**

49. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

50. **No trade parking will be allowed within the school property and within the project limits.**

51. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

52. **Working hours of the project are 7:00am to 3:30pm.**

53. **Warranty start dates will be based on Substantial Completion for the Building or Exterior Work.**

54. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

55. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

56. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

57. Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.

58. Provide all required documentation to support the LEED program.

This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.

END OF SECTION

EXHIBIT C – Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 07 00 02 – Roofing and Flashing

A. 07D ROOFING MILESTONE DATES*:

1. **Anticipated Date of Contract Award: October 3, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: Within 20 days of Notice of Contract Award**
3. **Commence Roof System at Area C/D: October 25, 2024**
4. **Complete Roof System at Area C/D: January 24, 2025**
5. **Commence Roof System at Area B: October 31, 2024**
6. **Complete Roof System at Area B: January 16, 2025**
7. **Commence Green Roof Systems: April 15, 2025**
8. **Commence Roof System at Area A: December 4, 2024**
9. **Complete Roof System at Area A: January 16, 2025**
10. **Commence Roofing for Phase 3 Buildings (Locker, Concessions): February 15, 2027**

B. GENERAL PROJECT MILESTONE DATES*:

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool**

on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Specification Section 08 00 02 – Glass and Glazing

1. **Provide all labor, materials, equipment, hoisting and services required to complete all Glass & Glazing work as defined in Specification Sections 080002 – Glass and Glazing, 088000 – Glazing and as further defined by this Scope of Work.**

2. **This trade contractor shall include furnishing and installing all unframed mirrors. All framed mirrors specified under Division 10 shall be provided by others.**

3. **Note that glazing requirements associated with EXTERIOR work (i.e. Aluminum Entrances & Storefront framing, Curtain Walls, Aluminum Windows, Glazed Sectional Doors, etc.) will be provided by the Metal Windows Trade Contractor and Special (Overhead) Doors Subcontractor. Unless noted otherwise (i.e. factory glazed wood doors, etc), this Trade Contractor shall provide all other glazing requirements. Provide glazing that meets the required fire rating.**

4. **Interior Storefront and Aluminum Entrances will be glazed by others.**

5. **Glazing within millwork or casework will be provided by others. Glass Doors and Shelves integral to Display Cases shall be provided by others.**

6. **Provide all sealant as required for the work of this bid package. This work shall be performed by a competent sealant contractor with a minimum of 5 years' experience in this field of work. Include backer rod and other filler as required.**

7. **Flag new work to avoid breakage but do not mark glass. Include removal prior to substantial completion of the project.**

8. **Final cleaning will be performed by the Construction Manager. This Trade Contractor shall remove all stickers, adhesives, sealants and any other "grimes" left as a result of the installation and clean all glass.**

9. **All hollow metal & fiberglass door frames, hollow metal borrowed light frames, hollow metal sidelights and transoms, window frames, and hollow metal, stainless steel will be furnished by the Doors, Frames, and Hardware Subcontractor, and installed by the General Trades Subcontractor. Provide and coordinate the associated field glazing work with the work of these Subcontractors.**

10. **Provide all frameless borrowed light materials for a complete installation, including, but not limited to aluminum channel, glazing, setting blocks, fasteners, glazing tape and sealants.**

11. **Field measure for all glazing openings prior to release of materials.**

12. **Include removal and reinstallation of all stops at glazing frames provided by others (door lites, etc).**

13. **Finish glass samples are to be submitted in conjunction with shop drawings, brochures, and test reports to ensure release of all work in a timely fashion.**

14. **At locations where glazing is installed within frames at fire rated partitions provide fire rated glazing as needed to achieve the specified rating, whether shown or not.**

15. **Provide all hoisting, shoring, bracing, staging and fall protection required to complete the work of this Bid Package.**

16. **This Trade Contractor is responsible for inspecting areas to receive the work of this bid package prior to the start of said work and in a timely fashion to allow for any corrective measures. Advise the Construction Manager of any unacceptable conditions, otherwise the job conditions are accepted by this Trade Contractor.**

17. **Deliver materials in quantities to be installed within 2 weeks. Overstocking of project with material will not be allowed. Coordinate deliveries with Construction Manager.**

18. **Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule. Note that there will be work occurring in multiple buildings concurrently, and there will be gaps in time required on site (multiple mobilizations).**

19. **The warranty start dates will be based on the Substantial Completion date for the Building or Exterior Work.**

20. **Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.**

21. **Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.**

22. **Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".**

23. **Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an**

alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"

24. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

25. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.**

26. **Builders Risk Deductible The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

27. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

28. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

29. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.**

30. **Provide temporary generator power, temporary lighting as needed for the Work of this bid package.**

31. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

32. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**

33. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor,**

material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.

34. **No trade parking will be allowed within the school property and within the project limits.**

35. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.**

36. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

37. **Working hours of the project are 7:00am to 3:30pm.**

38. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

39. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

40. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

41. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

42. **Provide all required documentation to support the LEED program.**

43. **This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.**

END OF SECTION

EXHIBIT C: Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 08 00 02 – Glass and Glazing

B. 08B GLASS AND GLAZING MILESTONE DATES*

1. **Anticipated Date of Contract Award: October 3, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: within 25 days of Notice of Contract Award**
3. **Commence Glass & Glazing Work at Area C/D: February 2, 2025**
4. **Commence Glass & Glazing Work at Area B: March 12, 2025**
5. **Commence Glass & Glazing Work at Area A: March 3, 2025**

B. GENERAL PROJECT MILESTONE DATES*

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event**

the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Technical High School
Specification Section 08 00 01 – Metal Windows

1. **Provide all labor, materials, equipment and services required to complete all Metal Window, Aluminum Entrances/Storefront/Curtainwall, and Fiberglass Panel Work as defined in the Drawings, Specification Sections 080001 – Metal Windows Filed Sub Bid, 084110 Aluminum Framed Entrances and Storefronts, 084410 Glazed Aluminum Curtainwalls, 084523 Fiberglass Sandwich Panel Assemblies, 085110 Aluminum Windows, 086510 – Pass Windows, 088050 - Fire Rated Glazing and Frames, 107110 Exterior Sun Control and as further defined by the following Scope of Work.**

2. **This contractor shall be responsible to participate in the requirements stipulated under Section 013100-PROJECT MANAGEMENT AND COORDINATION, paragraph 1.7- BUILDING ENVELOPE COORDINATION DRAWINGS. The Construction Manager to conduct a series of meetings with the various involved subcontractors. The Trade/Subcontractors will then provide details to the Metal Panel contractor to incorporate and produce the coordination drawings. Drawings to include all mechanical penetrations and signage. The coordination drawing will be used by the framing contractor for window layout purposes. This will not be managed through the BIM process.**

3. **This contractor shall be responsible to participate in the requirements stipulated under Section 01 91 15 – BUILDING EXTERIOR COMMISSIONING, Part 3 - EXECUTION. The Construction Manager to conduct a series of meetings with the various involved subcontractors related to commissioning. The subcontractors shall assist with all Building Enclosure Commissioning requirements, including pre-testing, inspection, and testing.**

4. **Include all costs for commissioning, testing, manufacturer's representation on site, test devices, test reports, etc. as it relates to the work of this bid package. Provide sufficient manpower to complete Commissioning activities as it relates to your work. Provide a dedicated "competent" person to work along with the Building Envelope Commissioning Agent during all commissioning activities.**

5. **Provide stand alone architectural mockups per the contract documents locations designated by the Construction Manager. All mockups shall be constructed far enough in advance as to not delay the progress of construction. This Trade Contractor shall coordinate with the other trades in the construction of the Wall Mockup. Mockups shall include all components required for a complete wall installation (AVB tie ins, sealants) whether shown or not. Include costs for all modifications as necessary to obtain required approvals of all mockups. Mockups are to remain in place until removal is authorized by Owner, Architect and CM.**

6. **Provide all fire rated glazed assemblies per Specification 088050. Provide doors within fire rated glazing assemblies. Install door hardware for fire rated glazing assembly doors (hardware material furnished by others).**

7. **Provide all insulated metal infill panels within curtainwall and storefront systems.**

8. **Install louvers indicated within framing members for curtainwall or storefront systems. Louvers furnished by others.**

9. **Note requirements for bullet proof glass on storefront/curtainwall details.**

10. **Provide metal panning detail on steel columns to match adjacent storefront at Cafeteria A114 Coiling Door supports (reference 15/A6-2-4 and similar).**

11. **Provide Exterior Sun Control details per drawings and Specification 107110.**

12. **Provide all pass windows per specification 085610 and contract drawings. Note requirements for bullet proof glass.**

13. **Precise installation of windows is important to coordinate correctly with the rainscreen system. This Trade Contractor shall be responsible to inspect rough openings. Openings are to be inspected when exterior framing has commenced, and again at 50% completion to ensure proper dimensions and details.**

14. **Coordinate work of this trade with hardware, electrical, and security contractors. Provide pathway to allow wiring per hardware requirements.**

15. **Provide any additional hardware beyond what is specifically listed to complete the operation of the units (i.e. operable vent latches).**

16. **Furnish and install all door hardware for doors provided by this bid package Contractor.**

17. **Provide all sealants internal to all systems within the scope of this work. This work shall be performed by a competent sealant contractor with a minimum of 5 years' experience in this field of work.**

18. **Provide all perimeter sealants between frame members (for all systems provided under this bid package) and adjacent materials. This Trade Contractor is responsible to close all open-ended extrusions to allow for proper sealant.**

19. **This Trade Contractor is responsible to properly tie systems that are included in this bid package into the AVB system as required for a continuous AVB and/or as detailed in the drawings and specifications. This includes but is not limited to silicone sheet transition membranes.**

20. **Provide silicone sheet transition membrane at all Curtainwall perimeters to bridge the Air Barrier gap between the Curtainwall frame and the wall Air Vapor Barrier.**

21. **Provide interior aluminum angles at interior perimeter of Translucent Wall Panel System. See detail 18/A6-3-8 and similar details.**

22. **Provide sill/sill closures/sill flashings at Translucent Wall Panel System, Metal Windows, Curtainwall and Storefront Systems.**

23. **Provide fire-rated assemblies, glazing, sealant, and security glass as indicated on the drawings and specification.**

24. **For all glazed systems provided by this bid package (Curtainwall, Storefront, Aluminum Entrances, etc), provide all glazing and glazing accessories (sealant, tape, stops, gaskets, etc) required for a complete system.**

25. **Provide all fasteners, supports, attachments, anchors and shims required to complete the work of this bid package. Include any additional framing, stiffeners, and wood blocking as required for a complete installation. Review contract details to confirm attachment to not interfere with finishes.**

26. **Provide Fire Rated Curtainwall System as indicated on 4/A2-2-8 and similar details.**

27. **This Trade Contractor will be responsible for coordination of box-outs and/or any cutting, coring, and patching of concrete slabs as required to install concealed hardware.**

28. **Coordinate delivery of material into the building with the Construction Manager. Areas for installation will be turned over by elevations. To prevent impacting construction on the interior of the building, it will not be possible to stock entire floors with material. This Contractor shall make provisions to store and secure material onsite for delivery into the building as needed. Provide equipment for the same (i.e. trailers, containers, lull, etc.).**

29. **Note that there are several locations where building leave-outs are required in Curtainwall systems for material loading and will be completed as a comeback operation – see Trash Out Leave Out Plan.**

30. **Note that a section of storefront SF11 and metal panel will be left out to allow lift access into the Courtyard. Work will be completed in a comeback operation. Lift or staging load capacity in Courtyard will be 100psf per RFI Pre-54.**

31. **Note that the following leave-outs for mechanical unit access and will be completed in a comeback operation: (a) 12' x 12' opening in metal panel exterior wall along 19.1 for AHU-9 and AHU-10; (b) added leave-out is required for mechanical unit AHU-2 access at the L7 Louver and below at Mechanical A201 to exterior.**

32. **Adequately distribute stacked loads over elevated floors and roof decks. Provide sufficient dunnage necessary to distribute the loads and remove & dispose of dunnage when no longer needed. Provide adequate roof protection during installation of windows. Adequate protection includes, but is not limited to, planking and plywood at all work and access areas.**

33. **Note that there is a Live Load Capacity of 100psf for the slabs in the Courtyard, Gymnasium and Multipurpose Rooms per RFI Pre-54. Bidders shall make the proper arrangements for lifts and/or staging that adhere to this requirement.**

34. **Include the cost associated with all required testing for the work of this bid package. Include any retesting and modifications as necessary to obtain required approvals.**

35. **Furnish glass samples are to be submitted in conjunction with shop drawings, brochures, and test reports to ensure release of all work in a timely fashion.**

36. **This Trade Contractor is responsible to provide lifts, scaffolding and/or staging necessary for the installation of the Work of this package. Furnish same, with safety harnesses (meeting OSHA requirements), for the Owner, Architect, Construction Manager, and independent testing agencies, for the inspection and testing of this work. Provide suitable access for these inspections.**

37. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.**

38. **The Trade Contractor shall include provisions to accommodate minor variances in line, plumb, and level to the extent that they are within the predecessor trade's tolerances.**

39. **This Trade Contractor shall flag new work to avoid breakage, but without permanently marking glass. This Trade Contractor shall further include removal of flagging materials prior to substantial completion of the project, and as coordinated with the Construction Manager.**

40. **Provide an additional 120 manhours for door adjustments in addition to what is required by the Contract Documents.**

41. **Provide an additional 250 premium time hours in addition to any overtime necessitated by this scope or work or the milestone schedule.**

42. **Field measurements of all openings is required by this Trade Contractor. If material lead times require release prior to field verification of openings, this Trade Contractor shall still be required to field measure as-builts openings and advise the Construction Manager of any discrepancies.**

43. **This Trade Contractor is to protect all window sills below 6' AFF with plastic core board cut to fit tightly between mullions. Removal of protection will be by others.**

44. **Final cleaning shall be performed by others. However, this Trade Contractor shall remove all stickers, adhesives, sealants, and any other residual material remaining as a result of the installation and manufacturing prior to mobilization of the Final Cleaning contractor.**

45. **This Trade Contractor shall return to the project one month subsequent to the Owner's occupancy to adjust hardware as required to ensure proper operation. (This is in addition to initial adjustment at the time of installation and at substantial completion of the project).**

46. **Insect screens shall not be installed until final cleaning has been completed.**

47. **Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.**

48. **Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.**

49. **Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".**

50. **Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"**

51. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

52. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid.**

The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.

53. **Builders Risk Deductible The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

54. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

55. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

56. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.**

57. **Provide temporary generator power, temporary lighting as needed for the Work of this bid package.**

58. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

59. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**

60. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

61. **No trade parking will be allowed within the school property and within the project limits.**

62. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

63. **Working hours of the project are 7:00am to 3:30pm.**

64. **Warranty start dates will be based on Substantial Completion for the Building or Exterior Work.**

65. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

66. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

67. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

68. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

69. **Provide all required documentation to support the LEED program.**

70. **This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.**

71. **Note that there is a Live Load Capacity of 100psf for the slabs in the Courtyard, Gymnasium and Multipurpose Rooms per RFI Pre-54. Bidders shall make the proper arrangements for lifts and/or staging that adhere to this requirement.**

END OF SECTION

EXHIBIT C – Project Schedule

Northeast Metropolitan Technical High School
Specification Section 08 00 01 – Metal Windows

B. GENERAL PROJECT MILESTONE DATES

1. **Submit Shop Drawings, Submittals, Etc.: Within 30 days of Notice of Contract Award (or as necessary to maintain installation schedule)**
2. **Commence Installation at Area B: January 22, 2025**
3. **Complete Installation at Area B (n.i.c. leaveouts and alum door install): May 1, 2025**
4. **Commence Installation at Area C: February 28, 2025**
5. **Complete Installation at Area C (n.i.c. leaveouts and alum door install): May 7, 2025**
6. **Commence Installation at Area D: February 14, 2025**
7. **Complete Installation at Area D (n.i.c. leaveouts and alum door install): April 11, 2025**
8. **Commence Installation at Area A: March 12, 2025**
9. **Complete Installation at Area A (n.i.c. leaveouts and alum door install): May 6, 2025**

B. GENERAL PROJECT MILESTONE DATES

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool**

on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Specification Section 09 00 02 - Tile

1. **Provide all labor, materials, equipment and services required to complete all Tiling work as defined in Specification Sections 090002 – Tile, 093013 Ceramic Tile and 093019 Porcelain Tile and as further defined by this Scope of Work.**

2. **Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".**

3. **Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"**

4. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

5. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.**

6. **The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

7. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not**

signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.

8. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

9. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

~~10.~~ **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use l ocation(s) and protect these systems throughout the course of the work.**

11. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

12. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

13. **No trade parking will be allowed within the school property and within the project limits.**

14. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

15. **Working hours of the project are 7:00am to 3:30pm.**

16. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

17. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

18. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

19. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

20. **Provide all required documentation to support the LEED program.**

21. **This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.**

22. **This Trade Contractor is responsible for inspecting substrates prior to the start of their work and in a timely fashion to allow for any corrective measures. Advise the Construction Manager of any unacceptable conditions, otherwise the job conditions are accepted by this Trade Contractor.**

23. **Provide all joint sealants within your work (i.e. control joints). Sealant between tile and dissimilar material will be this bid package.**

24. **Provide waterproofing and crack prevention membrane at all tile applications noted in specifications and as required by manufacturer's recommendations. Unless noted otherwise, provide vertical return of waterproofing/crack suppression membrane (behind wall tile or base) where membrane is scheduled for floor tile. Provide all prep required to address minor surface cracks and construction joints in slabs.**

25. **Provide grout within and around your work and between your work and the work of others. Include grouting around floor drains for a complete installation.**

26. **This Trade Contractor is responsible for all cutouts & holes required for MEP work including using templates to trim tile around toilets. Coordinate with the appropriate Trade Contractor for this work.**

27. **Provide and maintain all supplemental lighting and ventilation as required to complete your work.**

28. Provide all metal trim and edge strips in accordance with the contract documents.

29. This Trade Contractor is responsible for providing "minor" floor preparation and/or flash patching for a complete and proper installation of your work. Minor floor preparation is considered work necessary to repair deep scratches, chips, holes including filling gaps around all floor drains and cleanouts. Assume 3/8" floor prep is required for all tile installation areas.

30. It is the responsibility of this Trade Contractor to produce smooth and level transitions between various flooring types using either flash-patching and/or any other means necessary.

31. Protect all floor tile after installation with wall-to-wall ramboard or similar (must be non-staining and compatible with finish floor installation). Tape all joints to prevent shifting of sheets. Remove same after final acceptance and at the direction of the construction manager.

32. Provide proper protection of finished materials installed by others to prevent damage during the installation of your work.

33. Deliver materials in quantities to be installed within a two-week period. Do not overstock the project to the point that storage of materials interferes with the work of others. Coordinate all deliveries with the Construction Manager.

34. This Trade Contractor shall scrape and fine-broom sweep floors prior to the start of your work.

35. This Trade Contractor is responsible for all hoisting of materials to the work areas. Elevators will not be available.

36. Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule.

37. Provide mud set at all depressed slab locations as shown for a positive pitch to floor drains.

38. At locations where prefabricated shower bases are specified, extend waterproofing/crack prevention membrane under the shower bases.

39. Refer to flooring transition details on Sheets AF1-3-1 and AF1-3-2 for transition type and contractual responsibilities.

40. This Trade Contractor shall provide an allowance for overtime for off hours work for 500 manhours. This in addition to any premium time required to meet milestone dates.

41. Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.

42. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

END OF SECTION

EXHIBIT C – Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 09 00 02 – Tiling

A. 09B TILING MILESTONE DATES*

1. **Anticipated Date of Contract Award: October 31, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: within 15 days of Contract**
3. **Commence Flooring Install at Area B North Level 4: April 24, 2025**
4. **Complete Flooring Install at Area B North Level 4: May 21, 2025**
5. **Commence Flooring Install at Area B North Level 3: September 5, 2025**
6. **Complete Flooring Install at Area B North Level 3: October 17, 2025**
7. **Commence Flooring Install at Area B North Level 2: September 19, 2025**
8. **Complete Flooring Install at Area B North Level 2: October 17, 2025**
9. **Commence Flooring Install at Area B North Level 1: March 5, 2025**
10. **Complete Flooring Install at Area B North Level 1: March 18, 2025**
11. **Commence Flooring Install at Area B South Level 4: July 7, 2025**
12. **Complete Flooring Install at Area B South Level 4: August 1, 2025**
13. **Commence Flooring Install at Area B South Level 3: August 11, 2025**
14. **Complete Flooring Install at Area B South Level 3: September 8, 2025**
15. **Commence Flooring Install at Area B South Level 2: September 9, 2025**
16. **Complete Flooring Install at Area B South Level 2: October 6, 2025**
17. **Commence Flooring Install at Area B South Level 1: August 19, 2025**
18. **Complete Flooring Install at Area B South Level 1: September 23, 2025**
19. **Commence Flooring Install at Area A Level 3: April 28,2025**
20. **Complete Flooring Install at Area A Level 3: May 12, 2025**
21. **Commence Flooring Install at Area A Level 2: June 26,2025**
22. **Complete Flooring Install at Area A Level 2: July 17, 2025**
23. **Commence Flooring Install at Area A Level 1: September 30,2025**
24. **Complete Flooring Install at Area A Level 1: November 12, 2025**
25. **Commence Flooring Install at Area C/D Level 2: February 18, 2025**
26. **Complete Flooring Install at Area C/D Level 2: March 10, 2025**
27. **Commence Flooring Install at Area C/D Level 1: July 16, 2025**
28. **Complete Flooring Install at Area C/D Level 1: August 5, 2025**
29. **Commence Flooring Install at Area C/D Lower Level: October 30, 2025**
30. **Complete Flooring Install at Area C/D Lower Level: November 13, 2025**

B. GENERAL PROJECT MILESTONE DATES*

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)

Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day

Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Specification Section 090003 – Acoustical Ceilings

1. **Provide all labor, materials, equipment and services required to complete all Acoustical Ceilings as defined by the drawings, in the Specification Sections 090003 – Acoustical Tile, 095100 – Acoustical Ceilings, and as further defined by this Proposal Form (Scope). This includes, but is not limited to: Acoustical ceiling tile, Hangers, Edge Moldings & Trim, Hold down clips and all attachment and suspension systems necessary to support ceilings.**

2. **Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".**

3. **Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"**

4. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

5. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.**

6. **The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

7. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If**

cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.

8. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

9. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

10. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location (s)and protect these systems throughout the course of the work.**

11. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

12. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**

13. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

14. **No trade parking will be allowed within the school property and within the project limits.**

15. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

16. **Working hours of the project are 7:00am to 3:30pm.**

17. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

18. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

19. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

20. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

21. **Provide all required documentation to support the LEED program.**

22. **This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.**

23. **Install and remove mockups for approval as required by specifications.**

24. **This trade contractor shall include providing hold down clips in all vestibules.**

25. **This Trade Contractor is to provide acoustical sealant as identified in the specifications.**

26. **Cut and fit the ceiling systems around all edge conditions and penetrations including but not limited to diffusers, lights, sprinkler heads, access panels, exit signs, smoke detectors, occupancy sensors, tube steel framing, cabinet unit heaters, projection screens, speakers, etc. Provide any additional framing and supports for same as necessary for a proper installation of your work. Every penetration shall occur at the center of a ceiling tile or panel and must be completely hidden once heads are installed by others.**

27. **Coordinate installation of your work with the Mechanical, Electrical, Fire Protection, Drywall and other Trade Contractors who interface with this scope of work. Attend MEP Coordination Meetings and sign-off on coordination drawings. Report all findings of inadequacy to the CM immediately upon discovery.**

28. **As a result of the coordination process, reflected ceiling plans may vary from the original contract documents (i.e. fixtures, diffusers, etc.). This Trade Contractor is responsible to incorporate these modifications at no additional cost.**

29. **Install hangers plumb and free from contact with insulation or other objects within ceiling plenum. Do not attach hanger supports to piping, conduit, ductwork, etc. Provide and install supplemental suspension members and hangers in areas where ductwork widths interfere with the suspension system.**

30. **Provide a level ceiling to within 1/8" (in 12') in all directions. This Trade Contractor shall scribe and cut panels to fit accurately. Provide accurate measurements and layout such that no less than half panel units are installed at the perimeter.**

31. **Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.**

32. **Paint cut edges of panels remaining exposed after installation, match color of exposed panel surface using coating recommended in writing for this purpose by acoustical panel manufacturer.**

33. **This trade contractor shall clean all ceiling components after completion of installation, any components that cannot be cleaned to the Construction Managers satisfaction shall by replaced at the trade contractor's cost.**

34. **At locations where the acoustical ceiling changes height, and not drywall soffit is shown, provide finished metal trim pieces to span gap in ceiling heights.**

35. **This trade contractor is responsible for all interior lifts, staging, hoisting, etc. required to complete this work provided they abide by all Gilbane and OSHA safety requirements. Elevators will not be available for the work of this bid package.**

36. **Provide all acoustical ceilings as shown and or inferable on the reflected ceiling drawings, finish schedules, specifications, and detail drawings. Where conflicts occur, carry the ceilings of greater cost. Upon discovery of a conflict immediately notify the Construction Manager.**

37. **Deliver materials in quantities to be installed within a two-week period. Do not overstock the project to the point that storage of materials interferes with the work of others. Coordinate all deliveries with the Construction Manager.**

38. **Note that there will be separate mobilizations for cut tiles and flooding the ceilings. Each area on each floor will have a separate mobilization. For example, the First Floor will have 4 mobilizations, one for Area A, B, C and D.**

39. **This Trade Contractor shall remove and reinstall on a daily basis all safety systems that are in place, as it relates to the scope of this bid package.**

40. **Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule.**

41. **Provide scope for linear metal ceiling (LMC), phenolic panel ceiling (PHN) and extruded aluminum vertical blade system (EAVB) as shown on drawings.**

42. **Provide wall mounted j-moulding if required at radiant panels.**

43. **In additional to Punch List Work, provide 120 mandays for reinstallation of missing tile, minor repairs to tile and grid. Provide forty (40) cases of ceiling tile and 600LF of grid materials for this work. This is in addition to the attic stock specified which will be turned over to the Owner separately at the end of the project.**

44. Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.

45. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

END OF SECTION

EXHIBIT C – Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 09 00 03 – Acoustical Ceilings

A. 09C ACOUSTICAL CEILINGS MILESTONE DATES*

1. **Anticipated Date of Contract Award: October 31, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: within 15 days of Contract**
3. **Commence Ceiling Grid and Cuts Install at Area B North Level 4: January 17, 2025**
4. **Complete Ceiling Grid and Cuts Install at Area B North Level 4: February 4, 2025**
5. **Commence Ceiling Grid and Cuts Install at Area B North Level 3: January 31, 2025**
6. **Complete Ceiling Grid and Cuts Install at Area B North Level 3: February 21, 2025**
7. **Commence Ceiling Grid and Cuts Install at Area B North Level 2: January 28, 2025**
8. **Complete Ceiling Grid and Cuts Install at Area B North Level 2: February 18, 2025**
9. **Commence Ceiling Grid and Cuts Install at Area B North Level 1: December 18, 2024**
10. **Complete Ceiling Grid and Cuts Install at Area B North Level 1: December 30, 2024**
11. **Flood Ceiling Grid at Area B North Level 4: February 12, 2025**
12. **Flood Ceiling Grid at Area B North Level 3: March 3, 2025**
13. **Flood Ceiling Grid at Area B North Level 2: February 26, 2025**
14. **Above Ceiling Inspections Area B North: February 2025**
15. **Commence Ceiling Grid and Cuts Install at Area B South Level 4: February 3, 2025**
16. **Complete Ceiling Grid and Cuts Install at Area B South Level 4: February 24, 2025**
17. **Commence Ceiling Grid and Cuts Install at Area B South Level 3: January 31, 2025**
18. **Complete Ceiling Grid and Cuts Install at Area B South Level 3: February 21, 2025**
19. **Commence Ceiling Grid and Cuts Install at Area B South Level 2: February 11, 2025**
20. **Complete Ceiling Grid and Cuts Install at Area B South Level 2: March 4, 2025**
21. **Commence Ceiling Grid and Cuts Install at Area B South Level 1: April 22, 2025**
22. **Complete Ceiling Grid and Cuts Install at Area B South Level 1: May 5, 2025**
23. **Flood Ceiling Grid at Area B South Level 4: March 4, 2025**
24. **Flood Ceiling Grid at Area B South Level 3: March 3, 2025**
25. **Flood Ceiling Grid at Area B South Level 2: March 12, 2025**
26. **Flood Ceiling Grid at Area B South Level 2: July 29, 2025**
27. **Above Ceiling Inspections Area B South: February 2025**
28. **Commence Ceiling Grid and Cuts Install at Area A Level 3: February 10, 2025**
29. **Complete Ceiling Grid and Cuts Install at Area A Level 3: February 20, 2025**

30. **Commence Ceiling Grid and Cuts Install at Area A Level 2: March 7, 2025**
31. **Complete Ceiling Grid and Cuts Install at Area A Level 2: March 17, 2025**
32. **Commence Ceiling Grid and Cuts Install at Area A Level 1: April 2, 2025**
33. **Complete Ceiling Grid and Cuts Install at Area A Level 1: April 22, 2025**
34. **Flood Ceiling Grid at Area A Level 3: February 28, 2025**
35. **Flood Ceiling Grid at Area A Level 2: March 25, 2025**
36. **Flood Ceiling Grid at Area A Level 1: September 2, 2025**
37. **Above Ceiling Inspections Area A: February-April 2025**
38. **Commence Ceiling Grid and Cuts Install at Area C/D Level 2 and 3: December 12, 2024**
39. **Complete Ceiling Grid and Cuts Install at Area C/D Level 2 and 3: December 26, 2024**
40. **Commence Ceiling Grid and Cuts Install at Area C/D Level 1: January 9, 2025**
41. **Complete Ceiling Grid and Cuts Install at Area C/D Level 1: January 23, 2025**
42. **Commence Ceiling Grid and Cuts Install at Area C/D Lower Level: December 26, 2024**
43. **Complete Ceiling Grid and Cuts Install at Area C/D Lower Level: January 9, 2025**
44. **Flood Ceiling Grid at Area C/D Level 3: January 10, 2025**
45. **Flood Ceiling Grid at Area C/D Level 2: January 3, 2025**
46. **Flood Ceiling Grid at Area C/D Level 1: January 29, 2025**
47. **Flood Ceiling Grid at Area C/D Lower Level: January 17, 2025**
48. **Above Ceiling Inspections Area C/D: January 2025**

B. <u>GENERAL PROJECT MILESTONE DATES*</u>

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion**

date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)

Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day

Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Specification Section 09 00 05 – Resilient Flooring

1. **Provide all labor, materials, equipment and services required to complete all Resilient Flooring as shown per the Drawings, defined in Specification Sections 090005 – Resilient Floors, 096510 – Resilient Flooring and Accessories, 096516 - Vinyl Sheet Flooring, 096523 – Rubber Stair Tread, Riser, Tile and Base, 096530 – Rubber Wall Base, 096543 – Linoleum Sheet Flooring, 096560 – Resilient Athletic Flooring and as further defined by this Scope of Work (Exhibit B).**

2. **Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".**

3. **Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"**

4. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

5. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.**

6. **The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

7. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction**

Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.

8. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

9. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

10. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location (s)and protect these systems throughout the course of the work.**

11. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

12. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

13. **No trade parking will be allowed within the school property and within the project limits.**

14. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

15. **Working hours of the project are 7:00am to 3:30pm.**

16. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

17. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

18. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

19. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

20. **Provide all required documentation to support the LEED program.**

21. **This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.**

22. **Provide all underlayments, resilient molding accessories (reducer strips), subfloor/substrate preparation for resilient flooring and accessories, transitions where product touches a dissimilar interior material, and cleaning agents, etc. required for a complete installation.**

23. **Provide all adhesives required for the work of this bid package.**

24. **Provide all necessary floor finish as required.**

25. **The installation of flooring includes all necessary adhesives, seam sealers and transition/reducer strips. Assume transition/reducer strips are required at all changes in material type (whether flooring is part of this bid package or not). Refer to flooring transition details on Sheets AF1-3-1 and AF1-3-2 for transition type and contractual responsibilities.**

26. **Provide all resilient base scheduled for the project, including base at flooring installed by others (carpet, etc) and exposed concrete floors.**

27. **It is the responsibility of this Trade Contractor to produce smooth and level transitions between various flooring types using flash-patching, transition/reducer strips, and/or any other means necessary.**

28. **Perform as much concrete substrate testing as required to maintain the schedule.**

29. **This Trade Contractor is responsible for providing "minor" floor preparation and/or flash patching for a complete and proper installation of your work. Minor floor preparation is considered work necessary to repair deep scratches, chips, holes including filling gaps around all floor drains and cleanouts. Assume an average of 3/8" floor prep is required for all tile installation areas. In addition, provide patching at locations where safety cable stanchions have been removed (at locations of resilient flooring only).**

30. In addition to Scope Item 27, at Auditorium/Multipurpose C117, provide ½" floor prep for the entire room. Provide transition flashing at all doors and entrances to room including coordination with swing direction.

31. In addition to Scope Item 27, at all Corridors, provide an average of ½" floor prep over entire hallway. Provide transition flashing at all doors and entrances to rooms off corridor including coordination with swing direction.

32. To facilitate construction activities, portions of work will be done out of sequence. These include, but are not limited to loading docks and trash removal locations (see Trash Out Plan). Also include comeback for an additional two areas per floor.

33. Allow for expansion joint covers, floor drains and/or any other penetration through the floor or walls. This work to be coordinated with field personnel.

34. This Trade Contractor is responsible for inspecting substrates prior to the start of their work and in a timely fashion to allow for any corrective measures. Advise the Construction Manager of any unacceptable conditions, otherwise the job conditions are accepted by this Trade Contractor and will be held responsible to repair.

35. This Trade Contractor shall provide all moisture mitigation (if required) per specifications.

36. Provide proper protection of finished materials installed by other trades to prevent damage or stains during installation of your work.

37. This trade contractor shall scrape and fine-broom sweep floors prior to the start of this work.

38. Provide all necessary ventilation to maintain safe air quality during installation of your work.

39. Refer to flooring transition details on Sheets AF1-3-1 and AF1-3-2 for transition type and responsibilities.

40. Provide protection of your work after installation of resilient flooring. Protection shall be, at a minimum, wall-to-wall Coverguard (or equal, and compatible with flooring materials) at all corridors and heavy traffic areas. Tape all joints continuous to prevent protection from moving due to traffic. Remove and dispose of protection to a designated central location.

41. Deliver flooring materials in quantities to be installed within a two-week period. Do not overstock the project to the point that storage of materials interferes with the work of others. Coordinate all deliveries with the Construction Manager.

42. This Trade Contractor is to provide all flooring in the elevator cars as identified on the Contract Document.

43. This Trade Contractor shall be responsible for floor finishing as defined by specification. This includes buffing, polishing and/or waxing. Final cleaning at the end of the project is by others.

44. Provide resilient base at all casework components. Refer to EQ2 and EQ3 Series Drawings.

45. Unless noted otherwise, provide resilient base on all cabinet millwork toe-kick spaces as denoted on the contract drawings.

46. Provide resilient base at all Locker (non-lab casework) bases.

47. Deliver, unload and properly secure all maintenance stock to an area designated by the Construction Manager, per the contract documents.

48. Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule.

49. Any temporary (task) lighting required by this trade contractor beyond what is spelled out in the General Conditions is the responsibility of this Trade Contractor.

50. Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.

51. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

END OF SECTION

Northeast Metropolitan Regional Vocational High School
Specification Section 09 00 05 – Resilient Flooring

EXHIBIT C: Project Schedule

A. 09D RESILIENT FLOORING MILESTONE DATES*

1. **Anticipated Date of Contract Award: October 31, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: within 15 days of Contract**
3. **Commence Flooring Install at Area B North Level 4: April 24, 2025**
4. **Complete Flooring Install at Area B North Level 4: May 21, 2025**
5. **Commence Flooring Install at Area B North Level 3: September 5, 2025**
6. **Complete Flooring Install at Area B North Level 3: October 17, 2025**
7. **Commence Flooring Install at Area B North Level 2: September 19, 2025**

8. **Complete Flooring Install at Area B North Level 2: October 17, 2025**
9. **Commence Flooring Install at Area B North Level 1: March 5, 2025**
10. **Complete Flooring Install at Area B North Level 1: March 18, 2025**
11. **Commence Flooring Install at Area B South Level 4: July 7, 2025**
12. **Complete Flooring Install at Area B South Level 4: August 1, 2025**
13. **Commence Flooring Install at Area B South Level 3: August 11, 2025**
14. **Complete Flooring Install at Area B South Level 3: September 8, 2025**
15. **Commence Flooring Install at Area B South Level 2: September 9, 2025**
16. **Complete Flooring Install at Area B South Level 2: October 6, 2025**
17. **Commence Flooring Install at Area B South Level 1: August 19, 2025**
18. **Complete Flooring Install at Area B South Level 1: September 23, 2025**
19. **Commence Flooring Install at Area A Level 3: April 28,2025**
20. **Complete Flooring Install at Area A Level 3: May 12, 2025**
21. **Commence Flooring Install at Area A Level 2: June 26,2025**
22. **Complete Flooring Install at Area A Level 2: July 17, 2025**
23. **Commence Flooring Install at Area A Level 1: September 30,2025**
24. **Complete Flooring Install at Area A Level 1: November 12, 2025**
25. **Commence Flooring Install at Area C/D Level 2: February 18, 2025**
26. **Complete Flooring Install at Area C/D Level 2: March 10, 2025**
27. **Commence Flooring Install at Area C/D Level 1: July 16, 2025**
28. **Complete Flooring Install at Area C/D Level 1: August 5, 2025**
29. **Commence Flooring Install at Area C/D Lower Level: October 30, 2025**
30. **Complete Flooring Install at Area C/D Lower Level: November 13, 2025**

B. <u>GENERAL PROJECT MILESTONE DATES*</u>

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)

Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day

Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Section 09 00 05 – Terrazzo

1. **Provide all labor, materials, equipment and services required to complete all Terrazzo Work as shown per the Drawings, defined in Specification Section 090005 – Terrazzo Flooring, and 079200 – Joint Sealants, and as further defined by this Proposal Form (Scope).**

2. **Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".**

3. **Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"**

4. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

5. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.**

6. **The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

7. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on**

a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.

8. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

9. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

10. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use l ocation(s)and protect these systems throughout the course of the work.**

11. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

12. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

13. **No trade parking will be allowed within the school property and within the project limits.**

14. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

15. **Working hours of the project are 7:00am to 3:30pm.**

16. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

17. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

18. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

19. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

20. **Provide all required documentation to support the LEED program.**

21. **Furnish all labor, materials, equipment, and services required to complete all Terrazzo Flooring Work as defined in the Drawings, Specification Section 09 00 06 – Terrazzo Trade Sub Bid & 09 66 00 - Terrazzo Flooring, and as further defined by the following Scope of Work.**

22. **Provide complete the specification sections as identified above and within this Exhibit B and the work that correlates with those specifications in all instances where said scope appears on the contract drawings. Unless specifically noted otherwise below, the trade contract of this Work will be tied to the entire specification section and the scope complete.**

23. **Provide all sustainable design requirements as per Specification Section 018110.**

24. **Provide all Terrazzo Work as shown on the Drawings, including, but not limited to shot blasting of surface, all colors aggregates, epoxy grout, fiberglass scrim, divider strips, precast base, sealer, etc. for a complete scope of work.**

25. **Straight precast terrazzo base is to be provided on all perimeter walls and curved precast base is required at GRG columns. The Specifications call for brass metal toe strip, however there is NO brass metal toe strip required. Reference terrazzo base detail 8/A145.**

26. **Assume the placements will be in (3) separate mobilizations.**

27. **Provide two (2) mobilizations for:**
    a. **Preparation of surface, dividers, pour epoxy, grind, seal, protect**
    b. **Touch up, final clean & polish**

28. **Work area preparation – Prepare work area per Specifications and manufacturer requirements including mechanically abrading surface. Provide all saw-cutting, crack control and crack suppression membrane for <u>entire epoxy substrate area.</u>**

29. **Substrate testing – Provide required testing of floor slabs to ensure that floor has reached acceptable moisture content, per manufacturer's recommendation, prior to installation of flooring materials. This includes all testing required by the**

Specifications and the manufacturer. Provide report results in writing to the Construction Manager prior to beginning work.

30. **Substrate Review – Concrete Slabs on Grade will be provided per specified Floor Flatness: FF=35 for Specified Overall Value (SOV) and FF=25 for Minimum Local Value (MLV) and Floor Levelness: FL=25 for Specified Overall Value (SOV) and FL=20 for Minimum Local Value (MLV). Concrete Slabs on Deck will be provided per specified Floor Flatness: FF=30 minimum. Any leveling or preparatory work above and beyond these limits to comply with Specifications and/or manufacturer's requirements shall be included by this Trade Contractor.**

31. **Provide moisture mitigation system at 100% of the terrazzo surface area.**

32. **Sealants - Provide all fillers, sealants, etc. for a complete installation.**

33. **Provide mockups in accordance with Specifications ahead of production installation. Approved mockups may become part of "in-place" completed work. Mockups costs are included in base bid.**

34. **Submittals – Provide a pattern layout in a shop drawing for approval from the Owner, Design Team, and Construction Manager in accordance with the Contract Documents. All applicable base elevations, details, transitions, etc. shall be included in the shop drawings.**

35. **MEP Coordination - Coordinate and protect MEP devices, drains and fixtures during installation.**

36. **ADA / Floor Finish Compliance - Provide transitions that are within the limits of this trade contractor's scope of work in accordance with the contract documents and ADA requirements. Provide all terminations, transition strips, reducer strips, between your flooring and others. Provide any necessary grinding and filler to "feather out" all floor transitions between different flooring systems. Final finish floor transition is to be even and smooth.**

37. **Provide 600 SF of concrete floor grinding (1/2" deep) at doorways as directed by Gilbane's Superintendent.**

38. **Protection & Cleaning – Properly prepare work area including signage, cone markers and tape to prevent other workers from traveling through terrazzo work area, and water dam or other acceptable water protection provisions during installation. Provide protection of all adjacent finishes during installation and provide cleaning of floors upon completion of work. Work area must be clean of all trash and discarded material at the end of every workday. Provide clean- up to a designated central location.**

39. **Provide dustproof partitions & temporary enclosures to limit the dust migration**

throughout the building.

40. **Refer to flooring transition details on Sheets AF1-3-1 and AF1-3-2 for transition type and responsibilities.**

41. **Temporary power and lighting shall be provided by others; however, this TRADE CONTRACTOR shall provide additional task lighting as required to perform his Scope of Work.**

42. **Provide temporary ventilation fans to circulate air to outside of building and to bring fresh air into workspace.**

43. **Provide all means of access to perform this scope of work. Construction Manager will not provide any platforms, scaffolding, or lifts to access any portion of the work. All means of access must comply with Gilbane safety plan and OSHA regulations.**

44. **Any exposed cut ends of precast base shall be polished to match face surface.**

45. **Furnish any necessary electrical "pig tails" to power grinders and polishers for electrical hook up.**

46. **Provide preparation of substrate to include shot blasting and concrete crack preparation prior installation of terrazzo systems.**

47. **Furnish and install all caulking and sealants which are an integral part of this Trade Contractor's work, including sealants required at all interface points between materials provided in other Bid Packages.**

48. **Include a $10,000 allowance in base bid for additional field work as directed by Gilbane.**

49. **Furnish and install temporary floor protection on all terrazzo flooring immediately after installation with Cover Guard (10 mil) floor protection and Masonite on top. (Assume removal is by others.)**

50. **Trade Contractor shall coordinate all deliveries with the Construction Manager and will be responsible for all off-loading and handling of deliveries.**

51. **All submittals for this scope of work shall be submitted no later than 3 weeks after signed Contract Agreement or Construction Manager's notice to proceed.**

52. **Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.**

END OF SECTION

EXHIBIT C – Project Schedule

Northeast Metropolitan Regional Vocational High School
Section 09 00 05 – Terrazzo

A. 09E TERRAZZO MILESTONE DATES*

1. **Anticipated Date of Contract Award: October 31, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: within 15 days of Contract**
3. **Commence Flooring Install at Area B North Level 4: April 24, 2025**
4. **Complete Flooring Install at Area B North Level 4: May 21, 2025**
5. **Commence Flooring Install at Area B North Level 3: September 5, 2025**
6. **Complete Flooring Install at Area B North Level 3: October 17, 2025**
7. **Commence Flooring Install at Area B North Level 2: September 19, 2025**
8. **Complete Flooring Install at Area B North Level 2: October 17, 2025**
9. **Commence Flooring Install at Area B North Level 1: March 5, 2025**
10. **Complete Flooring Install at Area B North Level 1: March 18, 2025**
11. **Commence Flooring Install at Area B South Level 4: July 7, 2025**
12. **Complete Flooring Install at Area B South Level 4: August 1, 2025**
13. **Commence Flooring Install at Area B South Level 3: August 11, 2025**
14. **Complete Flooring Install at Area B South Level 3: September 8, 2025**
15. **Commence Flooring Install at Area B South Level 2: September 9, 2025**
16. **Complete Flooring Install at Area B South Level 2: October 6, 2025**
17. **Commence Flooring Install at Area B South Level 1: August 19, 2025**
18. **Complete Flooring Install at Area B South Level 1: September 23, 2025**
19. **Commence Flooring Install at Area A Level 3: April 28,2025**
20. **Complete Flooring Install at Area A Level 3: May 12, 2025**
21. **Commence Flooring Install at Area A Level 2: June 26,2025**
22. **Complete Flooring Install at Area A Level 2: July 17, 2025**
23. **Commence Flooring Install at Area A Level 1: September 30,2025**
24. **Complete Flooring Install at Area A Level 1: November 12, 2025**
25. **Commence Flooring Install at Area C/D Level 2: February 18, 2025**
26. **Complete Flooring Install at Area C/D Level 2: March 10, 2025**
27. **Commence Flooring Install at Area C/D Level 1: July 16, 2025**
28. **Complete Flooring Install at Area C/D Level 1: August 5, 2025**
29. **Commence Flooring Install at Area C/D Lower Level: October 30, 2025**
30. **Complete Flooring Install at Area C/D Lower Level: November 13, 2025**

B. GENERAL PROJECT MILESTONE DATES*

1. **Start Construction Site Enabling: August 2023**

2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)

Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day

Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Specification Section 090007 - Painting

1. **Provide all labor, materials, equipment and services required to complete all Painting Work as shown per the Drawings, defined in Specification Section 090007 – Painting, 099000 – Painting and Coating, 079200 – Joint Sealants, and as further defined by this Proposal Form (Scope).**

2. **Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".**

3. **Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"**

4. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

5. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.**

6. **The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

7. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others.**

This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.

8. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

9. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

10. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location (s)and protect these systems throughout the course of the work.**

11. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

12. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

13. **No trade parking will be allowed within the school property and within the project limits.**

14. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

15. **Working hours of the project are 7:00am to 3:30pm.**

16. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

17. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

18. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

19. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

20. **Provide all required documentation to support the LEED program.**

21. **This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.**

22. **Include painting of all piping exposed to view as shown on plumbing, mechanical, and electrical drawings. In addition, including painting of the interior of ducts exposed to view through diffusers, grilles, grating and/or louvers.**

23. **Provide sealant joints between all hollow metal frames and adjacent materials (including masonry).**

24. **Exposed interior misc. metals and structural steel will be primed by others. Metal deck will be galvanized (no primer). Take note of finish requirements of structural steel on structural steel framing plans. Note that the top coat provided by this Trade Contractor for steel receiving intumescent paint will need to be compatible with the intumescent paint provided by others. Coordinate with the CM and Fireproofing Contractor for a compatible products list.**

25. **Provide touch-up paint of shop primed items if required.**

26. **Provide scope of epoxy paint as shown in drawings.**

27. **Paint access panels (where required) as installed by the drywall subcontractors and/or other trades.**

28. **Protect all adjacent work and finishes from over-spray. All costs generated by the failure to meet this requirement shall be the responsibility of this Trade Contractor. Protect all adjacent areas of work. Remove protection from area after completion and repair all damaged areas as necessary and/or required.**

29. **The Architect will furnish a schedule of colors for each area and surface. All colors shall be mixed in accordance with manufacturer's instruction.**

30. **This proposal shall also include manpower, material and equipment for paint touch-up. Scope of work to include 240 mandays for this work.**

31. **Notify the Construction Manager upon completion of each coat to verify work completed and inspection. Final coat will be completed after all other work is completed.**

32. **It is the responsibility of this Trade Contractor to store and/or dispose of any hazardous waste(s), as may be generated during the course of their painting activities, in accordance with all applicable federal, state and local regulations and with the Gilbane Building Company Safety Plan.**

33. **Prior to starting work, this Trade Contractor will inspect surfaces to receive painting and report any deficiencies in writing to the CM. No additional costs will be paid to this Trade Contractor resulting from failure to make such notification and the starting of painting work will be construed as acceptance of surfaces and conditions.**

34. **Provide and maintain all supplemental lighting and fans that may be required to complete this work.**

35. **Include painting of all bollards.**

36. **Paint all floor to ceiling plywood at electric rooms.**

37. **Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule.**

38. **This trade contractor is responsible for all interior lifts, staging, hoisting, etc. required to complete this work provided they abide by all Gilbane and OSHA safety requirements. Elevators will not be available for the work of this bid package.**

39. **Include off-hour application of epoxy, dryfall and any other high VOC painting on the project.**

40. **Provide protection of installed finishes. Note that there is a significant amount of exposed concrete on this project that will require protection. All protection (tarps, poly. Etc.) put in place must be removed & disposed of immediately after the completion of the finish paint application.**

41. **Clean and prepare all surfaces to be painted as recommended by the paint manufacturer. Provide finish sanding as required to provide a suitable substrate. De-gloss any factory-applied primers as required to provide a suitable surface for painting.**

42. **Do not paint over any fire rating labels or equipment. If tape is used to protect labels during painting, tape shall be removed immediately after painting. Remove all factory-installed protection or tape over equipment and door/frame labels to expose after finish painting. Protect and remove protection of sprinkler heads, heat detectors, lights, etc. during painting process.**

43. **Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.**

44. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

END OF SECTION

EXHIBIT C – Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 09 90 00 – Painting.

A. 09F PAINTING MILESTONE DATES*

1. **Anticipated Date of Contract Award: October 31, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: within 15 days of Contract**
3. **Commence Painting at Area B North Level 4: February 19, 2025**
4. **Complete Painting at Area B North Level 4: April 23, 2025**
5. **Commence Painting at Area B North Level 3: March 7, 2025**
6. **Complete Painting at Area B North Level 3: September 4, 2025**
7. **Commence Painting at Area B North Level 2: March 4, 2025**
8. **Complete Painting at Area B North Level 2: September 18, 2025**
9. **Commence Painting at Area B North Level 1: February 11, 2025**
10. **Complete Painting at Area B North Level 1: March 4, 2025**
11. **Commence Painting at Area B South Level 4: March 12, 2025**
12. **Complete Painting at Area B South Level 4: July 3, 2025**
13. **Commence Painting at Area B South Level 3: March 11, 2025**
14. **Complete Painting at Area B South Level 3: August 8, 2025**
15. **Commence Painting at Area B South Level 2: March 20, 2025**
16. **Complete Painting at Area B South Level 2: September 8, 2025**
17. **Commence Painting at Area B South Level 1: April 8, 2025**
18. **Complete Painting at Area B South Level 1: August 18, 2025**
19. **Commence Painting at Area A Level 3: February 25, 2025**
20. **Complete Painting at Area A Level 3: April 11, 2025**
21. **Commence Painting at Area A Level 2: February 21,2025**
22. **Complete Painting at Area A Level 2: June 25, 2025**
23. **Commence Painting at Area A Level 1: March 12, 2025**
24. **Complete Painting at Area A Level 1: October 6, 2025**
25. **Commence Painting at Area C/D Level 3: December 27, 2024**
26. **Complete Painting at Area C/D Level 3: January 17, 2025**
27. **Commence Painting at Area C/D Level 2: January 3, 2025**
28. **Complete Painting at Area C/D Level 2: February 10, 2025**
29. **Commence Painting at Area C/D Level 1: February 14, 2025**

30. **Complete Painting at Area C/D Level 1: July 25, 2025**
31. **Commence Painting at Area C/D Lower Level: October 8, 2025**
32. **Complete Painting at Area C/D Lower Level: October 29, 2025**

B. <u>GENERAL PROJECT MILESTONE DATES</u>

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)

Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day

Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational HS
Specification Section 140001 - Elevators

1. **Provide all labor, materials, equipment and services required to complete all exterior and interior masonry work at all locations as defined in Specification Sections 140001 ELEVATORS, 142150 GEARLESS MACHINE ROOM LESS TRACTION ELEVATORS, and as further defined by this Proposal Form.**

2. **This Trade Contractor must provide and maintain protection of the elevator cab until accepted by the Owner/Construction Manager. Provide cab protection pads for all sides of all cabs. Removal is by this Trade Contractor.**

3. **Provide all hoisting, pumping, conveying systems required to complete the work of this bid package.**

4. **Power wiring will be brought to the fused disconnect inside the elevator machine room by others. This Trade Contractor shall make all connections to the disconnect and provide all further wiring on the elevator side of the disconnect.**

5. **This Trade Contractor is to provide a date that the permanent power is required for testing the elevator. Electrical contractor to provide temporary power to all units until such time as permanent power is available.**

6. **Provide all temporary hoistway lighting required during the execution of this bid package.**

7. **Safety barriers at door openings will be installed by others until the permanent doorways are installed. This Trade Contractor shall remove and immediately replace guardrails, edge and opening protection as necessary to complete the work of this Bid Package. These protective systems are to be reinstalled immediately by this Trade Contractor. At no time will the shaft be left unprotected.**

8. **Coordinate the fire alarm, telephone, security and CCTV tie-ins with the Electrical Trade Contractor. Provide cables in the traveling wire harness for telephone, security, and CCTV. Include manpower for testing and inspection of the same.**

9. **This Trade Contractor is to provide any additional steel beams, brackets, clip angles, plates, etc. required for this work which is not shown on the drawings. The Structural Steel Contractor will provide a beam at the top of the elevator for hoisting purposes.**

10. **Furnish items to be embedded in concrete, masonry or drywall to the relevant Trade Contractors. Provide drawings and/or templates showing the layout of embedded items. These items shall be delivered to the site in accordance with the Milestone Schedule. Any missing embedded items will be the responsibility of this Trade Contractor to be submitted and approved by the Architect. The furnishing and installation of remedial work will be by this Trade Contractor.**

11. **This Trade Contractor shall provide all elevator cab construction and finishes. Reference Specification for allowances required for this scope.**

12. **Coordinate with the Masonry and Drywall Trade Contractors for your installation of elevator call boxes, floor indicators, etc.**

13. **Provide any miscellaneous steel, shims or materials necessary to make your units fit within the designed openings.**

14. **This Trade Contractor must provide any additional steel beams, brackets, clip angles, plates, etc. required for this work which is not shown on the drawings. All divider beams, if required, and machine supports are by this Trade Contractor.**

15. **All welding must be performed by certified welders only.**

16. **This Trade Contractor must provide all testing required in the specifications.**

17. **Assume all inspections will be performed after hours. Include premium time costs plus added inspection fees for state inspectors to accommodate this condition.**

18. **Provide premium time costs to assist and test the emergency power.**

19. **Provide an allowance of $15,000 for operator time to support work in elevator shaft by other trades.**

20. **Provide an allowance of $25,000 for operator time for material movement.**

21. **This Trade Contractor shall be responsible for his own daily cleanup to a central location. Failure to adequately cleanup daily will result in the Construction Manager performing the cleanup for this Trade Contractor at this Trade Contractor's expense.**

22. **The warranty start dates will be based on the project substantial completion date.**

23. **Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".**

24. **Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"**

25. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

26. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.**
27. **The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**
28. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**
29. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**
30. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.**
31. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**
32. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**
33. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**
34. **No trade parking will be allowed within the school property and within the project limits.**
35. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.**
36. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**
37. **Working hours of the project are 7:00am to 3:30pm.**
38. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**
39. **This Subcontractor understands that lay down space is limited, must be shared with other**

Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.

40. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**
41. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**
42. **Provide all required documentation to support the LEED program.**
43. **This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.**
44. **Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.**

EXCLUSIONS:

END OF SECTION

Specification Section 14 00 01 - Elevators

A. BP14A ELEVATOR SPECIFIC MILESTONE DATES

1. **Submit Shop Drawings, Submittals, Etc.: Within 14 days of Notice of Contract Award**
2. **Provide Inserts and Embeds: February 1, 2024**
3. **Commence Elevator Work: April 23, 2025**
4. **Complete Elevator Installation: August 27, 2025**
5. **Elevator Initial Inspections/Available for Temp Usage (with operator): October 1, 2025**
6. **Elevator Final Inspections Complete: February 10, 2026**

B. GENERAL PROJECT MILESTONE DATES

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Technical High School
Specification Section 21 00 00 – Fire Protection

1. **Provide all labor, materials, equipment and services required to complete all Fire Suppression work as defined in the Specification Sections 210000 – Fire Protection, Section 078410 - Penetration Firestopping, Section 079200 - Joint Sealant, Section 083110 - Access Doors and Frames210005 Coordination Drawing Requirements Fire Protection, 210517 Sleeves and Sleeve Seals for Fire Suppression Piping, 211313 Fire Protection Piping Systems, 212933 Controllers for Fire Pump Drivers, 213113 Fire Protection Pump Systems and as further defined by this Scope of Work.**

2. **Concrete work associated with housekeeping pads and vibration isolation requirements such as inertia bases, shall be provided by the Cast-in-Place Concrete Subcontractor. Provide dimensions and locations for all pads. Furnish all embedded items. This Trade Contractor owns grouting of all equipment bases.**

3. **Perform all testing, flushing, and cleaning of fire protection work. Coordinate the filling, testing, and flushing of your systems with the Construction Manager. Properly collect and dispose of discharge in accordance with local codes and laws.**

4. **Furnish and install all means of support and attachment to the structure for proper installation whether or not shown. This includes, but is not limited to, any trapeze hangers to clear ductwork, or other interferences. Provide seismic restraints and vibration isolation in accordance with the contract documents. Seismic design calculations shall be stamped by a Professional Engineer registered in the Commonwealth of Massachusetts and must be submitted to the engineer for review and approval.**

5. **Do not hang MEP, FP or architectural components from metal roof deck. This trade contractor to provide engineered supplemental framing to span between allowable structural members for attachment purposes.**

6. **At all Sound Isolator Ceiling locations, pipes shall be supported from bottom of steel beams only, not thru the sound ceiling to the deck. Pipe hangers shall not penetrate the sound ceilings. Reference 1/A9-1-2 for Sound Isolator Ceiling Detail.**

7. **Furnish and install fire protection work to achieve required coverage over and below large ductwork and/or large obstructions.**

8. **Furnish and install all flow and tamper switches where required by code whether shown on the drawings or not. Install such that switches can be easily viewed from eye level. Coordinate location with the Construction Manager. All conduit, wire, and tie-in to the fire alarm system will be completed by the Electrical Trade Contractor.**

9. **Furnish, for installation by others, all access doors/panels (with appropriate labeling) required for future access to your work. Provide layout for said panels. Access panels shall be fire rated as required by the assembly into which they are installed. Coordinate your access doors/panels with the appropriate Trade Contractor.**

10. **This Trade Contractor is responsible for all cutting and patching required for the work of this bid package.**

11. **Coordinate work with reflective ceiling plans. Unless indicated otherwise, center heads in all acoustical ceiling tiles. Align heads in drywall ceilings in both directions.**

12. **This Trade Contractor shall design the sprinkler piping system to satisfy the design criteria in the specification, and all applicable codes and regulations. All design work must be stamped by a Professional Engineer licensed in the State of Massachusetts. This Trade Contractor shall provide proof of the Engineer's professional liability insurance which covers this design work in accordance with the CCIP Manual. The proposal shall include the "head quantity" shown on the drawings plus a maximum of 3% growth for additional coverage (in addition to what is noted in earlier scope item – large obstructions).**

13. **The Owner has retained a Commissioning Agent to review the work performed by this Contractor. This trade contractor shall participate in the development of a Commissioning Plan and schedule of commissioning events. This Contractor shall cooperate, provide access, assistance and required documents to the Commissioning Agent in accordance with Specification Sections 210800 Commissioning of Fire Protection Systems and 01 91 13 – Commissioning Requirements. Include all costs for commissioning, testing, manufacturer's representation on site, test devices, test reports, etc. as it relates to the work of this bid package. Provide sufficient manpower to complete Commissioning activities as it relates to your work. At a minimum, provide a dedicated "competent" person to work along with the Commissioning Agent during all commissioning activities. In addition, this Trade Contractor will be required to attend Commissioning Progress meetings on a regular basis.**

14. **Sample test and report forms are to be submitted for review and approval by the Construction Manager, Engineer, and Owner.**

15. **It is anticipated that several above ceiling inspections will be conducted throughout the project and prior to final ceiling installation. At the very least, each Area by Floor will require separate inspections. Provide valving as required to accomplish this. This Trade Contractor shall assist as required for these inspections and shall perform all repairs resulting from these inspections as soon as possible.**

16. **Provide a qualified person, who has knowledge of the entire fire suppression system, to do interim and final inspection walk-throughs with the Fire Department to test all devices.**

17. **Provide underground fire protection scope as noted on the contract drawings. This Trade Contractor shall connect their work to sitework installed water lines. Final connections are the responsibility of this Trade Contractor. Include link-seals where required.**

18. **Furnish and install all piping and fittings required for the complete installation of the sprinkler systems as required by the coordination drawing process or field conditions, whether or not shown.**

19. **Furnish complete Record Drawings, operating and maintenance manuals; spare parts, attic stock and other required close out information or materials no later than thirty (30) days prior to startup of equipment (note phased occupancy of buildings). As-Built Drawings shall be maintained monthly, stored on-site, and made available for review as necessary. In addition, As-Built Drawings shall be required Substantial Completion at each building (phased occupancy) and shall be completed in sufficient time for review prior to the milestone dates noted. Provide final record drawings in CAD, pdf and hard copy versions for the owner.**

20. **All piping, cabinets, etc. installed by this Trade Contractor in or through fire-rated floor or wall assemblies, shall be firesafed and sealed as required, by this Trade Contractor. Firesafing and sealant shall be provided on both sides of wall penetrations and top and bottom of floor penetrations. Note that the Construction Manager will select one common vendor for all fire stopping products on the project from the vendors listed in the Penetration Fire stopping specification (Spec Section 078410). Trade Contractor bid pricing should allow for this requirement with no change in cost. All fire rated assemblies shall be UL listed/tested. All fire and smoke caulking must be installed by a worker who is certified in the installation of the specific system being used. Provide all certifications and documentation to the Construction Manager.**

21. **All piping installed by this Trade Contractor through non-rated partitions shall be sealed with an approved acoustical sealant by this Trade Contractor.**

22. **Provide all layouts required for recessed cabinets and coordinate with the Trade Contractor constructing the wall and millwork.**

23. **Coordinate with the Drywall Trade Contractor for any required in-wall blocking. This shall occur well in advance of the wall board installation.**

24. **This Trade Contractor is responsible for protecting equipment until final acceptance. Provide touch up painting of all finishes including factory finished equipment installed as part of this bid package. Provide all equipment identification as required.**

25. **Remove and replace guardrails and other safety structures as necessary to complete the work of this bid package. Coordinate with the Construction Manager prior to removal. Closely follow safety procedures while structures are removed.**

26. Furnish and install all sleeves (including layout and sealants) required for this scope of work. Sleeves shall be set at the heights specified prior to concrete slab placement. Any openings missed shall be cored and sealed by this Trade Contractor upon approval of the Structural Engineer at the cost of this Trade Contractor as well as any remedial work required by the Structural Engineer or Architect to permit the installation of the work. Cut all metal deck at sleeves after concrete placement.

27. All shaft bottoms will have concrete infills to maintain floor ratings. Provide sleeves for work included in this bid package to facilitate these concrete infills. Include cutting of metal decking within sleeves after concrete infills.

28. Provide coring at all existing building foundation walls for new fire protection service. Cut all metal decking at sleeve locations in concrete slabs.

29. This Trade Contractor and all their sub-subcontractors shall obtain all permits and provide copies to the Construction Manager, pay all fees, give notice, file plans and licenses, and arrange for testing, inspections and approvals as it relates to your work, such that the work of other trades can progress in a continuous manner. Provide any additional valves or other provisions required to accomplish the above, whether indicated or not. Provide the same for each phase as required.

30. This trade contractor is responsible for all interior lifts, staging, hoisting, etc. required to complete this work provided they abide by all Gilbane and OSHA safety requirements. Elevators will not be available for the work of this bid package. Note that there is a Live Load Capacity of 100psf for the slabs in the Courtyard, Gymnasium and Multipurpose Rooms per RFI Pre-54. Bidders shall make the proper arrangements for lifts and/or staging that adhere to this requirement.

31. This Trade Contractor shall coordinate the layout and placement of their pipes, valves, hook-ups, etc. with the various exterior wall contractors for installation of the exterior skin.

32. Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule. This project is a phased project which will require multiple mobilization and may require multiple crews working on different buildings concurrently.

33. Provide expansion loop piping and couplings at building expansion joint. Provide and coordinate all building expansion locations with other MEP trades and expansion joint chases. Notify the Construction Manager of any conflicts.

34. Note any special material requirements in certain lab spaces (corrosion resistant heads, galvanized pipe, etc).

35. Be advised that some walls will be topped off prior to installation of the MEP work. Layout, coordinate and cut openings in drywall for Fire Protection penetrations.

36. **Provide temporary protection over all sprinkler heads until fire protection and fire alarm system is completed and ready for testing. Remove and dispose of all temporary protection when directed by Construction Manager.**

37. **Furnish, install & temporary standpipe at each stairwell in each Area immediately upon stairwells being opened for trade contractor use. Provide temporary fire department connections for temporary use during construction.**

38. **This Trade Contractor shall be responsible to participate in the requirements stipulated under Section 01 31 00-PROJECT MANAGEMENT AND COORDINATION, paragraph 1.8-COORDINATION DRAWINGS and 210005 COORDINATION DRAWING REQUIREMENTS FOR FIRE PROTECTION.**

39. **This Trade Contractor is responsible to participate in all MEP coordination meetings with the other trades held once every week during active MEP construction. This Bid Package also includes verifying that the electrical, HVAC, and other service requirements shown on the Contract Documents are adequate and proper for the Fire Protection equipment scheduled to be used and installed. Reference the "Trade Contractor BIM Execution Plan" for scope related to MEP coordination.**

40. **Provide all sleeves at slabs, foundation walls and interior walls (including layout) required for this scope of work of this package. Any openings not sleeved shall be cored/cut and sealed by this Trade Contractor upon approval of the Structural Engineer at the cost of this Trade Contractor as well as any remedial work required by the Structural Engineer or Architect to permit the installation of the work. All penetrations thru the precast Mezzanine slabs will be cored by this bid package after the locations have been approved by the precast engineer.**

41. **This Trade Contractor shall install site fire hydrants and water lines associated with site fire protection piping installation as indicated on Fire Protection General Notes, Note 5 on drawing FP0-0-1. Excavation and backfill will be by others.**

42. **This Trade Contractor shall provide all necessary extended warranties to account for the time period from start-up of the equipment through Substantial Completion. This shall apply to manufacturer's warranties as well. Warranties shall not commence on start-up or delivery. The warranty start dates will be based on the substantial completion date for each building.**

43. **Disregard notes on FP0-0-1 indicating that the CM/GC shall make sets of the bid documents for the bidders. All bid documents will be made available electronically thru the ProjectDog website.**

44. **Reference Note 11 on FP1-1-1B regarding restrictions for the work under the Sound Barrier ceilings "in the Metal Fabrication and Auto Collision Shop". Note that this note/restriction applies to all areas that have a Sound Barrier Ceiling. Reference Architectural Reflected Ceiling Plans for extent of Sound Barrier Ceilings.**

45. **All inspections will be performed off-hours. Include all premium time in bid to accommodate this requirement.**

46. Provide overtime costs for oversight during slab placements as required.

47. Provide an additional 500 premium time hours for work as directed by the Construction Manager. This is in addition to any overtime required by the Scope of Work or the Milestone schedule.

48. Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.

49. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

50. Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".

51. Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"

52. All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.

53. Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.

54. The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.

55. Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.

56. Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.

57. City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.

58. All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).

59. This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).

60. Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.

61. All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.

62. No trade parking will be allowed within the school property and within the project limits.

63. Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.

64. Working hours of the project are 7:00am to 3:30pm.

65. This subcontractor shall be responsible for obtaining all field measurements required to complete its work.

66. This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction

Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.

67. Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.

68. Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.

69. Provide all required documentation to support the LEED program.

70. This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.

END OF SECTION

EXHIBIT C – Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 21 00 00 – Fire Protection

A. FIRE PROTECTION MILESTONE DATES*

1. **Anticipated Date of Contract Award: November 27, 2019**
2. **Submit Shop Drawings, Submittals, Etc.: within 30 days of Contract Award**
3. **Underslab Plumbing Area B: 8/5/24 – 9/30/24**
4. **Underslab Plumbing Area A: 10/22/24 – 12/4/24**
5. **Underslab Plumbing Area C/D: 9/13/24 – 10/10/24**
6. **Ready to Install Foundation Sleeving Area C/D: 2/1/24**
7. **Ready to Install Foundation Sleeving Area B: 2/15/24**
8. **Ready to Install Foundation Sleeving Area A: 4/19/24**
9. **Complete Early Coordination for Precast Plank Penetrations: November 15, 2023**
10. **Rough-in at Early CMU Bearing Walls (Areas C/D and A/B): 4/5/24 – 5/16/24**
11. **Complete Slab Opening/Dunnage Coordination: November 1, 2024**
12. **Complete Rigging of Interior AHUs at Precast Plank Mezzanines: December 9, 2024**
13. **MEPFP Rough-in 4th Floor: 12/4/24 – 1/16/25**
14. **MEPFP Rough-in 3rd Floor: 11/27/24 – 1/31/25**
15. **MEPFP Rough-in 2nd Floor: 11/27/24 – 1/29/25**
16. **MEPFP Rough-in 1st Floor: 12/11/24 – 2/18/25**
17. **MEPFP Rough-in Ground Floor: 12/11/24 – 1/9/25**
18. **MEPFP In-Wall Inspections 4th Floor: 1/3/25 – 1/24/25**
19. **MEPFP In-Wall Inspections 3rd Floor: 1/6/25 – 2/7/25**
20. **MEPFP In-Wall Inspections 2nd Floor: 1/13/25 – 2/5/25**
21. **MEPFP In-Wall Inspections 1st Floor: 1/21/25 – 2/25/25**
22. **MEPFP In-Wall Inspections Ground Floor: 1/10/25 – 1/16/25**
23. **MEPFP Overhead Inspections 4th Floor: 2/5/25 – 3/3/25**
24. **MEPFP Overhead Inspections 3rd Floor: 1/6/25 – 2/28/25**
25. **MEPFP Overhead Inspections 2nd Floor: 12/27/24 – 3/24/24**
26. **MEPFP Overhead Inspections 1st Floor: 1/24/25 – 3/10/25**
27. **MEPFP Overhead Inspections Ground Floor: 1/10/25 – 1/16/25**
28. **MEPFP Finishes and Final Connections 4th Floor: 2/12/25 – 6/26/25**
29. **MEPFP Finishes and Final Connections 3rd Floor: 2/28/24 – 8/6/25**
30. **MEPFP Finishes and Final Connections 2nd Floor: 5/21/24 – 9/4/26**
31. **MEPFP Finishes and Final Connections 1st Floor: 6/20/24 – 10/17/24**
32. **MEPFP Finishes and Final Connections Ground Floor: 7/31/24 – 9/11/24**
33. **New Building Commissioning: 12/5/25 – 5/18/26**
34. **Phase 3 Buildings Timeframe (Locker, Concessions, Storage): 1/19/27 – 3/22/27**

B. GENERAL PROJECT MILESTONE DATES*

1. **Start Construction Site Enabling: August 2023**

2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Vocational High School
Specification Section 220000 - Plumbing

1. **Provide all labor, materials, equipment and services required to complete all plumbing work as shown on the Drawings, defined in the Specification Sections Section 220000 - General Requirements for Plumbing, Section 078410 - Penetration Firestopping, Section 079200 - Joint Sealants , Section 083110 - Access Doors and Frames, Section 220005 - Coordination Drawing Requirements for Plumbing, Section 220513 - Common Motor Requirements for Plumbing, Section 220517 - Sleeves and Sleeve Seals for Plumbing Piping, Section 220518 - Escutcheons for Plumbing Piping, Section 220519 - Meters and Gages for Plumbing Piping, Section 220523 - Valves and Specialties for Plumbing Piping, Section 220529 - Hangers and Supports for Plumbing Piping and Equipment, Section 220533 - Heat Tracing for Plumbing, Section 220548.13 - Vibration Controls for Plumbing Piping and Equipment, Section 220553 - Identification for Plumbing Piping and Equipment, Section 220719 - Plumbing Piping Insulation, Section 220800 - Plumbing Systems Commissioning, Section 221116 - Domestic Water Piping, Section 221123 - Natural Gas Piping, Section 221123.21 - Inline, Domestic-Water Pumps, Section 221316 - Sanitary Waste and Vent Piping, Section 224100 - Plumbing Fixtures, Section 224500 - Emergency Plumbing Fixtures, Section 226113 - Compressed Air Piping for Laboratory Facilities, Section 226119 - Compressed Air-Equipment for Laboratory Facilities, Section 226213 - Vacuum Piping for Laboratory Facilities, Section 226219 - Vacuum Equipment for Laboratory Facilities, Section 226600 - Chemical Waste Systems for Laboratory Facilities and as further defined by this Proposal Form.**

2. **This Trade Contractor shall furnish, for installation by others, all access doors/panels required for future access to your work. Provide layout for said panels. Access panels shall be fire rated as required by the assembly into which they are installed. All appropriate labels shall be provided by this Trade Contractor.**

3. **Furnish and install all roof drains. Downspouts that have a keynote to a roofing specification shall be provided by the Roofing Trade Contractor. Provide connection between downspouts and underground drainage piping. Furnish the roof drains sump receivers for installation by the Roofing Trade Contractor. This contractor shall coordinate with the roofer for final elevations of the drain. Install all roof drain covers as directed by the CM (this will be done out of sequence).**

4. **This Trade Contractor shall provide temporary PVC fully supported rainleaders to the outside face of building and down to grade. Temporary lines shall extend from each roof drain and daylight outside the building – run lines to locations where underground drainage will exit the building footprint. Include removal of same.**

5. **Provide piping, materials, labor and inspections to pipe and connect the temporary heating system for the 2024-2025 winter season. Work will include installing temporary gas piping from the gas meter to 8 exterior perimeter located Babfar type units located in the center of each Area. Include dismantling of same.**

6. **Provide underslab drainage system indicated on Geotechnical Drawings GT-01 and GT-02. Excavation and backfill is by others. Note that these drawings are diagrammatical – final as-built condition will most likely require some added fittings to coordinate pathways with interior footing locations.**

7. **All equipment supplied shall have a single point of electrical connection. All interconnections after the single point connection will be by this Trade Contractor.**

8. **Provide expansion loop piping and couplings at building expansion joint. Provide and coordinate all building expansion locations with other MEP trades and expansion joint chases. Notify the Construction Manager of any conflicts.**

9. **Provide grease and gas/oil interceptors indicated as plumbing scope per the contract drawings.**

10. **The Electrician will provide any wiring shown on the electrical drawings, any additional wiring required to complete this scope of work will be provided by this trade contractor. All wiring will be done in accordance with Division 26.**

11. **Concrete work associated with housekeeping pads and vibration isolation requirements such as inertia bases, shall be furnish and installed by the Cast-in-Place Concrete Subcontractor. Provide dimensions and locations for all pads. Furnish all embedded items. This Trade Contractor shall grout all equipment bases.**

12. **It is anticipated that several above ceiling and in-wall inspections will be conducted throughout the project and prior to boarding and ceiling installation. At the very least, each Area by Floor will require separate inspections. Provide valving as required to accomplish this. This Trade Contractor shall assist as required for these inspections and shall perform all repairs resulting from these inspections as soon as possible.**

13. **Gas piping will be furnished and installed up to and including the gas meter by the Utility Company. This Trade Contractor shall pick up the system from the gas meter and extend into the buildings as necessary. Include purging of gas systems. Coordinate work with Utility Company.**

14. **The Plumbing Trade Contractor shall provide all final gas connections to all equipment – including, but not limited to, HVAC and Food Service equipment.**

15. **Provide all piping, valves, and fittings required for the complete installation of the plumbing system as required by the coordination drawing process, field conditions, whether shown or not. Include any additional testing valves which are required.**

16. **The Owner has retained a Commissioning Agent to review the work performed by this Contractor. This trade contractor shall participate in the development of a Commissioning Plan and schedule of commissioning events. This Contractor shall cooperate, provide access, assistance and required documents to the Commissioning Agent in accordance with Specification Sections 220800 Commissioning of Plumbing Systems and 01 91 13 – Commissioning**

Requirements. Include all costs for commissioning, testing, manufacturer's representation on site, test devices, test reports, etc. as it relates to the work of this bid package. Provide sufficient manpower to complete Commissioning activities as it relates to your work. At a minimum, provide a dedicated "competent" person to work along with the Commissioning Agent during all commissioning activities. In addition, this Trade Contractor will be required to attend Commissioning Progress meetings on a regular basis.

17. **Provide all sleeves at slabs, foundation walls and interior walls and footings (including layout) required for this scope of work of this package. Any openings not sleeved shall be cored/cut and sealed by this Trade Contractor upon approval of the Structural Engineer at the cost of this Trade Contractor as well as any remedial work required by the Structural Engineer or Architect to permit the installation of the work. Cut all metal deck at sleeves after concrete placement.**

18. **Cut metal deck at all deck penetrations as required for your work. Coordinate work with Roofing Trade Contractor. In cases where roofing is existing to remain, or the new roof is installed at penetrations, provide temporary weather protection in the event the roofer is not on site for flashing the penetration. All penetrations thru the precast Mezzanine slabs will be cored by this bid package after the locations have been approved by the precast engineer.**

19. **All shaft bottoms will have concrete infills to maintain floor ratings. Provide sleeves for work included in this bid package to facilitate these concrete infills. Include cutting of metal decking within sleeves after concrete infills.**

20. **Provide all plumbing systems to the limit of work identified on the contract drawings. Excavation and backfill of all underground utilities is by others.**

21. **No plumbing systems unrelated to stairwells, computer rooms, electrical rooms or elevator machine rooms shall pass through the same.**

22. **The casework subcontractor will furnish & install all integral sinks in casework. Any non-integral sinks furnished by the casework subcontractor will be installed by this Trade Contractor. This trade contractor is responsible for all faucets, fixtures and drains and applicable utility connections associated with these sink locations.**

23. **All piping, etc. installed by this Trade Contractor through all non-rated partitions shall be sealed with an approved acoustical sealant, by this Trade Contractor. Any pipe penetrations thru the Sound Isolator Ceilings shall be acoustically sealed by this Trade Contractor.**

24. **Coordinate with the Drywall Trade Contractor for any required in-wall blocking. This shall occur well in advance of the wall board installation.**

25. **Provide final connection of piping to all appliances and equipment whether furnished by this Trade Contractor or not. This includes, but not limited to refrigerator ice makers, food service equipment, walk-in coolers, etc.**

26. This Trade Contractor is responsible for protecting equipment until final acceptance. Provide touch up painting of all finishes including factory finished equipment installed as part of this bid package.

27. This Trade Contractor and all their subcontractors shall obtain all permits and provide copies to the Construction Manager, pay all fees, give notice, file plans and licenses, and arrange for testing, inspections and approvals as it relates to your work, such that the work of other trades can progress in a continuous manner. Provide any additional valving or other provisions required to accomplish the above, whether indicated or not.

28. This Trade Contractor shall thoroughly test, flush, clean, and chlorinate their work as it is completed. Coordinate the filling, testing, and flushing of your systems with the Construction Manager. Properly collect and dispose of discharge in accordance with local codes and laws.

29. Provide all means of support and attachment to the structure for proper installation whether or not shown. This includes, but is not limited to, any trapeze hangers to clear ductwork or other interferences. Provide seismic restraints and vibration isolation in accordance with the contract documents. Support from the roof deck will not be allowed.

30. Do not hang MEP, FP or architectural components from metal roof deck. This trade contractor to provide engineered supplemental framing to span between structural members for attachment purposes.

31. Sample test and report forms are to be submitted for review and approval by the Construction Manager, Engineer, Commissioning Agent and Owner within 48 hours of completing any test. All test documentation shall include photos of beginning and end of test with 4 ½" calibrated gauge. All tests must be witnessed by Gilbane and the Owner.

32. The water heaters, water circulation pumps, elevator sump pumps and other plumbing systems as identified by the contract documents are to be wired to the BMS through the specified system. This trade contractor is to provide all the information required and work harmoniously with the HVAC/Controls Trade Contractor.

33. At all Sound Isolator Ceiling locations, pipes shall be supported from bottom of steel beams only, not thru the sound ceiling to the deck. Pipe hangers shall not penetrate the sound ceilings. Reference 1/A9-1-2 for Sound Isolator Ceiling Detail. Reference Architectural Reflected Ceiling Plans for extent of Sound Isolator/Barrier Ceilings.

34. Provide all backflow preventers and water meters. Include all necessary permits, testing, and registering of same. Submit backflow testing certificates. All backflow preventer locations shall be coordinated with local jurisdiction to allow for testing equipment. All permits and permit fees is this Trade Contractor's responsibility.

35. Minimal fine grading for pipe installation will be the responsibility of this Trade Contractor.

36. Review specifications and drawings for compliance with all applicable codes and standards including meeting ADA requirements. Report any discrepancies to the Construction Manager and do not proceed with any non-conforming work.

37. This Trade Contractor must submit on any long lead (6 weeks or more) items within twenty (20) days after contract award.

38. Install and verify that all equipment and material is installed so that adequate access for service is provided.

39. Furnish complete Record Drawings, operating and maintenance manuals; spare parts, attic stock and other required close out information or materials no later than thirty (30) days prior to startup of equipment (note phased occupancy of buildings). As-Built Drawings shall be maintained monthly, stored on-site, and made available for review as necessary. In addition, As-Built Drawings shall be required Substantial Completion at each building (phased occupancy) and shall be completed in sufficient time for review prior to the milestone dates noted. Provide final record drawings in CAD, pdf and hard copy versions for the owner.

40. Be advised that some walls will be topped off prior to installation of the MEP work. Layout, coordinate and cut openings in drywall for Plumbing penetrations.

41. All piping, cabinets, etc. installed by this Trade Contractor in or through fire-rated floor or wall assemblies, shall be firesafed and sealed as required, by this Trade Contractor. Firesafing and sealant shall be provided on both sides of wall penetrations and top and bottom of floor penetrations. Note that the Construction Manager will select one common vendor for all fire stopping products on the project from the vendors listed in the Penetration Fire stopping specification (Spec Section 078410). Trade Contractor bid pricing should allow for this requirement with no change in cost. All fire rated assemblies shall be UL listed/tested. All fire and smoke caulking must be installed by a worker who is certified in the installation of the specific system being used. Provide all certifications and documentation to the Construction Manager.

42. Provide Temporary Water Services, including removal, for construction activities. As soon as the building slabs are placed, install one (1) temporary water connection at each floor to be used as a source of temporary water. Provide two (2) hose bibs per floor per building area, and extend & support as required. Provide insulation and heat trace for piping as required. Include costs to distribute water as needed from this point to your operation.

43. This trade contractor is responsible for all interior lifts, staging, hoisting, etc. required to complete this work provided they abide by all Gilbane and OSHA safety requirements. Elevators will not be available for the work of this bid package. Note that there is a Live Load Capacity of 100psf for the slabs in the Courtyard, Gymnasium and Multipurpose Rooms per RFI Pre-54. Bidders shall make the proper arrangements for lifts and/or staging that adhere to this requirement.

44. Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance to the milestone schedule.

45. This Trade Contractor shall be responsible to participate in the requirements stipulated under Section 01 31 00-PROJECT MANAGEMENT AND COORDINATION, paragraph 1.8-COORDINATION DRAWINGS and 220005 Coordination Drawing Requirements for Plumbing.

46. Disregard notes on FP0-0-1 indicating that the CM/GC shall make sets of the bid documents for the bidders. All bid documents will be made available electronically thru the ProjectDog website.

47. This Trade Contractor is responsible to participate in all MEP coordination meetings with the other trades held once every week during active MEP construction. This Bid Package also includes verifying that the electrical, HVAC, and other service requirements shown on the Contract Documents are adequate and proper for the Plumbing equipment scheduled to be used and installed. Reference the "Trade Contractor BIM Execution Plan" for scope related to MEP coordination.

48. This Trade Contractor shall provide all necessary extended warranties to account for the time period from start-up of the equipment through Substantial Completion. This shall apply to manufacturer's warranties as well. Warranties shall not commence on start-up or delivery. The warranty start dates will be based on the substantial completion date for each building.

49. All inspections will be performed off-hours. Include all premium time in bid to accommodate this requirement.

50. Provide overtime costs for oversight during slab placements as required.

51. Provide an additional 500 premium time hours for work as directed by the Construction Manager. This is in addition to any overtime required by the Scope of Work or the Milestone schedule.

52. Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.

53. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

54. Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".

55. Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the

bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"

56. **All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.**

57. **Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.**

58. **The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.**

59. **Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.**

60. **Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.**

61. **City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.**

62. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

63. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**

64. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor,**

material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.

65. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.**

66. **No trade parking will be allowed within the school property and within the project limits.**

67. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

68. **Working hours of the project are 7:00am to 3:30pm.**

69. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

70. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

71. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

72. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

73. **Provide all required documentation to support the LEED program.**

74. **This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.**

END OF SECTION

EXHIBIT C – Project Schedule

Northeast Metropolitan Regional Vocational High School
Specification Section 22 00 00 – Plumbing

A. PLUMBING MILESTONE DATES*

1. **Anticipated Date of Contract Award: November 27, 2019**
2. **Submit Shop Drawings, Submittals, Etc.: within 30 days of Contract Award**
3. **Underslab Plumbing Area B: 8/5/24 – 9/30/24**
4. **Underslab Plumbing Area A: 10/22/24 – 12/4/24**
5. **Underslab Plumbing Area C/D: 9/13/24 – 10/10/24**
6. **Ready to Install Foundation Sleeving Area C/D: 2/1/24**
7. **Ready to Install Foundation Sleeving Area B: 2/15/24**
8. **Ready to Install Foundation Sleeving Area A: 4/19/24**
9. **Complete Early Coordination for Precast Plank Penetrations: November 15, 2023**
10. **Rough-in at Early CMU Bearing Walls (Areas C/D and A/B): 4/5/24 – 5/16/24**
11. **Complete Slab Opening/Dunnage Coordination: November 1, 2024**
12. **Complete Rigging of Interior AHUs at Precast Plank Mezzanines: December 9, 2024**
13. **MEPFP Rough-in 4th Floor: 12/4/24 – 1/16/25**
14. **MEPFP Rough-in 3rd Floor: 11/27/24 – 1/31/25**
15. **MEPFP Rough-in 2nd Floor: 11/27/24 – 1/29/25**
16. **MEPFP Rough-in 1st Floor: 12/11/24 – 2/18/25**
17. **MEPFP Rough-in Ground Floor: 12/11/24 – 1/9/25**
18. **MEPFP In-Wall Inspections 4th Floor: 1/3/25 – 1/24/25**
19. **MEPFP In-Wall Inspections 3rd Floor: 1/6/25 – 2/7/25**
20. **MEPFP In-Wall Inspections 2nd Floor: 1/13/25 – 2/5/25**
21. **MEPFP In-Wall Inspections 1st Floor: 1/21/25 – 2/25/25**
22. **MEPFP In-Wall Inspections Ground Floor: 1/10/25 – 1/16/25**
23. **MEPFP Overhead Inspections 4th Floor: 2/5/25 – 3/3/25**
24. **MEPFP Overhead Inspections 3rd Floor: 1/6/25 – 2/28/25**
25. **MEPFP Overhead Inspections 2nd Floor: 12/27/24 – 3/24/24**
26. **MEPFP Overhead Inspections 1st Floor: 1/24/25 – 3/10/25**
27. **MEPFP Overhead Inspections Ground Floor: 1/10/25 – 1/16/25**
28. **MEPFP Finishes and Final Connections 4th Floor: 2/12/25 – 6/26/25**
29. **MEPFP Finishes and Final Connections 3rd Floor: 2/28/24 – 8/6/25**
30. **MEPFP Finishes and Final Connections 2nd Floor: 5/21/24 – 9/4/26**
31. **MEPFP Finishes and Final Connections 1st Floor: 6/20/24 – 10/17/24**
32. **MEPFP Finishes and Final Connections Ground Floor: 7/31/24 – 9/11/24**
33. **New Building Commissioning: 12/5/25 – 5/18/26**
34. **Phase 3 Buildings Timeframe (Locker, Concessions, Storage): 1/19/27 – 3/22/27**

B. GENERAL PROJECT MILESTONE DATES*

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Technical High School
Specification Section 23 00 00 - HVAC

1. **Provide all labor, materials, equipment and services required to complete all work as defined in the Specification Sections Section 230000 - General Requirements for HVAC, Section 230005 - Coordinated Drawing Requirements for HVAC, Section 230513 - Common Motor Requirements for HVAC Equipment, Section 230516 - Expansion Fittings and Loops for HVAC Piping, Section 230517 - Sleeves and Sleeve Seals for HVAC Piping, Section 230518 - Escutcheons for HVAC Piping, Section 230519 - Meter and Gauges for HVAC Piping, Section 230523 - Valves for HVAC Piping, Section 230529 - Hangers and Supports for HVAC Piping and Equipment, Section 230533 - Heat Tracing for HVAC Piping, Section 230553 - Identification for HVAC Piping and Equipment, Section 230593 - Testing, Adjusting, and Balancing for HVAC, Section 230713 - Duct Insulation, Section 230719 - HVAC Piping Insulation, Section 230800 - HVAC Systems Commissioning, Section 230910 - Instrumentation and Control Equipment, Section 230923 - Direct Digital Control (DDC) System for HVAC, Section 230993.11 - Sequence of Operations for HVAC DDC, Section 232300 - Refrigerant Piping, Section 232500 - HVAC Water Treatment, Section 231123 - Natural Gas Piping, Section 233113 - Metal Ducts, Section 233114 - Fixed Louvers, Section 233300 - Air Duct Accessories, Section 233423 - HVAC Power Ventilators, Section 233516 - Mechanical Engine Exhaust System, Section 233600 - Air Terminal Units, Section 233713 - Grilles, Registers and Diffusers, Section 237223.19 - Packaged Indoor Fixed Plate Energy Recovery Units, Section 237343.19 - Outdoor, Custom Air-Handling Units, Section 238126 - Split-System Air-Conditioners, Section 238129 - Variable-Refrigerant-Flow HVAC Systems, Section 238216.14 - Electric Resistance Air Coils, Section 238239.13 - Cabinet Unit Heaters, Section 238239.19 - Wall and Ceiling Unit Heaters, 083100 – ACCESS DOORS AND FRAMES (furnish only), and as further defined by the following Scope of Work.**

2. **Provide sufficient quantities of labor, material and equipment to complete the work in this bid package in accordance with the milestone schedule.**

3. **Concrete work associated with housekeeping pads and vibration isolation requirements such as inertia bases, shall be furnish and installed by the Concrete Subcontractor. Provide dimensions and locations for all pads. Furnish all embedded items. This Trade Contractor shall grout all equipment bases.**

4. **The successful bidder will be required to submit a list of proposed manufacturers for all major equipment within 2 weeks of award.**

5. **Provide all sealants/caulking (acoustical, smoke, fire) for any work of this package, for example – piping, ductwork, conduit, wiring, cabinets, panels, etc. It is the responsibility of this Trade**

Contractor to have all "work items" in place, through the wall, prior to any sheathing. This Trade Contractor should assume that post sheathing and sealants/caulking will still be required. All non-rated partitions are to receive acoustical sealant/caulking, typical to all locations.

6. **All piping and ductwork installed by this Trade Contractor through non-rated partitions shall be sealed with an approved acoustical sealant by this Trade Contractor.**

7. **Coordinate with the Drywall Trade Contractor for any required in-wall blocking. This shall occur well in advance of the wall board installation.**

8. **Provide and incorporate into programming, all interlocks to Fire Alarm System required by NFPA and Sequences of Operation. Coordinate with Electrical, Plumbing, and Food Service Trade Contractors.**

9. **This trade contractor is responsible for all interior lifts, staging, hoisting, etc. required to complete this work provided they abide by all Gilbane and OSHA safety requirements. Elevators will not be available for the work of this bid package. Note that there is a Live Load Capacity of 100psf for the slabs in the Courtyard, Gymnasium and Multipurpose Rooms per RFI Pre-54. Bidders shall make the proper arrangements for lifts and/or staging that adhere to this requirement.**

10. **At all Sound Isolator Ceiling locations, pipes and ducts shall be supported from bottom of steel beams only, not thru the sound ceiling to the deck. Pipe/duct hangers shall not penetrate the sound ceilings. Reference 1/A9-1-2 for Sound Isolator Ceiling Detail.**

11. **Reference HVAC General Note 1 on M1-1-1A (and similar note on other drawings) regarding restrictions for the work under the Sound Barrier ceilings "in the Metal Fabrication and Auto Collision Shop". Note that this note/restriction applies to all areas that have a Sound Barrier Ceiling. Reference Architectural Reflected Ceiling Plans for extent of Sound Barrier Ceilings.**

12. **This Trade Contractor shall be responsible to participate in the requirements stipulated under Section 01 31 00-PROJECT MANAGEMENT AND COORDINATION, paragraph 1.8-COORDINATION DRAWINGS and 230005 COORDINATION DRAWING REQUIREMENTS FOR HVAC.**

13. **This Trade Contractor is responsible to participate in all MEP coordination meetings with the other trades held once every week during active MEP construction. This Bid Package also includes verifying that the electrical, HVAC, and other service requirements shown on the Contract Documents are adequate and proper for the HVAC equipment scheduled to be used and installed. Reference the "Trade Contractor BIM Execution Plan" for scope related to MEP coordination. This Trade Contractor is responsible to lead the MEP coordination meetings with the other trades held once every week during active MEP construction.**

14. **Do not hang MEP, FP or architectural components from metal roof deck. This trade contractor to provide engineered supplemental framing to span between structural members for attachment purposes.**

15. **The Owner has retained a Commissioning Agent to review the work performed by this Contractor. This trade contractor shall participate in the development of a Commissioning Plan and schedule of commissioning events. This Contractor shall cooperate, provide access, assistance and required documents to the Commissioning Agent in accordance with Specification Sections 230800 Commissioning of HVAC and 01 91 13 – Commissioning Requirements. Include all costs for commissioning, testing, manufacturer's representation on site, test devices, test reports, etc. as it relates to the work of this bid package. Provide sufficient manpower to complete Commissioning activities as it relates to your work. At a minimum, provide a dedicated "competent" person to work along with the Commissioning Agent during all commissioning activities. In addition, this Trade Contractor will be required to attend Commissioning Progress meetings on a regular basis.**

16. **It is anticipated that several above ceiling inspections will be conducted throughout the project and prior to final ceiling installation. At the very least, each Area by Floor will require separate inspections. Provide valving/closures as required to accomplish this. This Trade Contractor shall assist as required for these inspections and shall perform all repairs resulting from these inspections as soon as possible.**

17. **Furnish and Install construction filters at all equipment. Replace construction filters with new filters prior to balancing/flush out and again immediately prior to occupancy. Vacuum filter area inside equipment when changing filter. Scope of Work includes building flush out (and associated filter replacements) as referenced Section 018119 – Indoor Air Quality Requirements. Filters to be provided as attic stock to the owner should not be utilized for these filter changes.**

18. **Provide and maintain pre-filters on outdoor intakes while mechanical units are operational, maintain through building commissioning.**

19. **Provide dryer vents with exterior caps. Provide final connection to dryers.**

20. **Makesafe, selectively demo, relocate and install existing duct collector system. Include all required re-startup and commissioning required for the system. Include duct cleaning of system prior to turnover in new building.**

21. **All ductwork to be temporarily sealed (plastic wrap) during shipping, storage onsite and after installation. Maintain the same throughout construction so that there is no "unsealed" open end. Reference project Indoor Air Quality Plan for additional requirements.**

22. **This Trade Contractor shall provide a qualified person, who has knowledge of device location, to do interim and final inspection walk-through with the Fire Department to test all devices.**

23. This Trade Contractor shall furnish and install all dampers including, but not limited to: fire, smoke, combination fire/smoke, control, balancing, etc. Fire dampers shall be provided anywhere ductwork penetrates a fire-rated assembly such as walls, floors, and ceilings. Include horizontal fire dampers in all duct risers at each floor slab penetration. It should be assumed that the commissioning effort will require visual verification that all dampers are operational.

24. All dampers, piping, cabinets, etc. installed by this Trade Contractor in or through fire-rated floor or wall assemblies, shall be firesafed and sealed as required, by this Trade Contractor. Firesafing and sealant shall be provided on both sides of wall penetrations and top and bottom of floor penetrations. Note that the Construction Manager will select one common vendor for all fire stopping products on the project from the vendors listed in the Penetration Fire stopping specification (Spec Section 078410). Trade Contractor bid pricing should allow for this requirement with no change in cost. All fire rated assemblies shall be UL listed/tested. All fire and smoke caulking must be installed by a worker who is certified in the installation of the specific system being used. Provide all certifications and documentation to the Construction Manager.

25. All shaft bottoms will have concrete infills to maintain floor ratings. Provide sleeves for work included in this bid package to facilitate these concrete infills. Include cutting of metal decking within sleeves after concrete infills.

26. This Trade Contractor shall make all water connections to their equipment from the water termination indicated on the Plumbing Drawings.

27. Take note of building access and make provisions to ensure that equipment will fit through permanent doorways and/or structure when equipment is available i.e.: boilers, chillers, pumps, heating units and expansion tanks, etc. Advise the Construction Manager of any conflicts that may exist. Note that all interior mechanical units shall be rigged into the building through leaveouts or planned openings (overhead doors, etc) in exterior wall (not through opening in roof). This Trade Contractor shall rig the units into the building and into final location on the floor.

28. Provide expansion loop piping and couplings at building expansion joint. Provide and coordinate all building expansion locations with other MEP trades and expansion joint chases. Notify the Construction Manager of any conflicts.

29. This Trade Contractor is responsible for all insulation for work installed as part of this Bid Package. Coordinate external ductwork insulation with Roofing Contractor. No insulation shall be installed until piping/ductwork has been completely tested. Provide any additional valves and other fittings necessary to allow testing to commence to meet the Milestone Schedule.

30. Be advised that the corridor walls will be topped off prior to installation of the MEP work. Layout, coordinate and cut drywall at penetrations and framed opening locations.

31. All equipment supplied shall have a single point of electrical connection. All interconnections after the single point connection will be by this Trade Contractor.

32. Provide all sleeves at slabs, foundation walls and interior walls (including layout) required for this scope of work of this package. This shall include box-outs for ductwork penetration at slabs.Any openings not sleeved shall be cored/cut and sealed by this Trade Contractor upon approval of the Structural Engineer at the cost of this Trade Contractor as well as any remedial work required by the Structural Engineer or Architect to permit the installation of the work. All penetrations thru the precast Mezzanine slabs will be cored/sawcut by this bid package after the locations have been approved by the precast engineer.

33. Furnish and install all roof curbs associated with your work. The roof and/or RTU concrete pads are sloped/pitched; blocking will be provided at all curbs following the thickness of the roof insulation and matching the roof slope, all curbs must also be tapered to match the roof slope in order to keep the equipment level. Roof flashing will be provided by the Roofing Trade Contractor with counter flashing by this Trade Contractor. Curb heights referenced per HVAC details shall be the minimum allowed, typical to all equipment curbs. If a discrepancy exists between the heights shown on the documents and those in the specifications, the taller curb should be included as part of the base bid.

34. Disconnects at all exterior equipment shall be accessible without requiring a ladder. Confirm mounting heights meet code requirements and satisfy the requirements of local building inspectors.

35. Temp Heating (Winter 2024 – 2025 season): Provide eight 18" round temporary duct risers (full building height) for temporary heating. Each riser shall include three 100 foot run-outs to serve each floor. Connect temporary ducts to Babfar type units (eight total number of units). Dismantle and remove same after temp heating season.

36. Provide thermostats with auto-dialers to notify the team if the building temperature drops below set temperatures during off-hours. Include 20 thermostats per floor.

37. Furnish and install all exterior pipe and ductwork pedestals associated with your work. Provide any blocking requirements to the General Trade subcontractor prior to any roofing.

38. In coordination with the roofer, remove all metal deck at openings, for example, at duct and stack risers/openings. This Trade Contractor shall provide all blocking layout/requirements for installation by General Trade's subcontractor. This Trade contract shall coordinate the installation of the equipment with the Roofing Trade Contractor. This Trade Contractor is responsible for layout at the roof level. Provide layout on all four sides of the opening at the cut

line. If different that the cut line, provide the inside face of blocking on all four sides. It is the responsibility of this Trade Contractor to maintain layout once provided. In cases where roofing is existing to remain, or the new roof is installed at penetrations, provide temporary weather protection in the event the roofer is not on site for flashing the penetration. It is the responsibility of this Trade Contractor to ensure that all penetrations made during the work day are weather tight by close of business or prior to a rain event, including those scheduled to be flashed by the roofer.

39. This Trade Contractor is responsible for all blocking, shimming, miscellaneous iron supports, backing, supports, and attachments associated with your work. Coordinate this work with the General Trades Subcontractor. This shall occur well in advance of the wall board installation.

40. This Trade Contractor is responsible for protecting equipment until final acceptance. Provide touch up painting of all finishes including factory finished equipment installed as part of this bid package. Provide all equipment identification as required.

41. Remove and replace guardrails and other safety structures as necessary to complete the work of this bid package. Coordinate with the Construction Manager prior to removal. Closely follow safety procedures while structures are removed.

42. Furnish complete Record Drawings, operating and maintenance manuals; spare parts, attic stock and other required close out information or materials no later than thirty (30) days prior to startup of equipment (note phased occupancy of buildings). As-Built Drawings shall be maintained monthly, stored on-site, and made available for review as necessary. In addition, As-Built Drawings shall be required Substantial Completion at each building (phased occupancy) and shall be completed in sufficient time for review prior to the milestone dates noted. Provide final record drawings in CAD, pdf and hard copy versions for the owner.

43. This Trade Contractor shall provide all necessary extended warranties to account for the time period from start-up of the equipment through Substantial Completion. This shall apply to manufacturer's warranties as well. Warranties shall not commence on start-up or delivery. Note that there is a phased occupancy for this project. The warranty start dates will be based on the substantial completion date for each building.

44. All fire dampers and smoke dampers shall be installed per the damper manufacturer's installation instructions. These damper installations will be inspected prior to closing walls or ceilings and any that are not installed per the manufacturer's instructions will be rejected and will be reinstalled correctly by this contractor. Submit the manufacturer's installation instructions within two weeks of award so that they can be transmitted to the drywall contractor for proper framing of the openings.

45. This trade contractor is responsible for the layout of all duct and damper openings in all walls. This trade contractor will mark the exact location on the floor along with the height off of the

floor in black permanent marker just outside the wall line so that it is visible after the wall is framed.

46. Provide sleeves for each duct penetration thru a slab on deck. Concrete will be placed up to the top of the sleeve during the slab pour. Include cutting of metal decking within sleeves after concrete infills.

47. Install duct heat and smoke detectors provided by others (Electrical/Fire Alarm Trade Contractor). Provide reinforcing as required to maintain duct stability. Provide verification that detectors function as per manufacturer's specifications. This Trade Contractor shall furnish control wiring for fan shut down.

48. This Trade Contractor is responsible for providing all insulation within/integral to roof curbs, flue stacks, etc. for mechanical items at the roof level. All wood blocking shall be provided by others.

49. It is the responsibility of this Trade Contractor to provide a fully functioning controls systems/BMS system as outlined in the specifications. Equipment interface shall be factory installed and/or provided by this Trade Contractor. If additional hardware is required to achieve the requirements of the specification, this Trade Contractor will do so at no additional cost to the project.

50. Furnish all louvers for installation by others. Provide all blank off panels, rigid insulation and plenums required for a complete installation.

51. All mechanical units scheduled to be installed in interior spaces shall be shipped to the site in suitable sizes to allow installation within mechanical spaces.

52. All inspections will be performed off-hours. Include all premium time in bid to accommodate this requirement.

53. Provide overtime costs for oversight during slab placements as required.

54. Provide an additional 500 premium time hours for work as directed by the Construction Manager. This is in addition to any overtime required by the Scope of Work or the Milestone schedule.

55. Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.

56. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

57. Disregard notes on M0-0-2 indicating that the CM/GC shall make sets of the bid documents for the bidders. All bid documents will be made available electronically thru the ProjectDog website.

58. Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".

59. Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"

60. All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.

61. Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.

62. The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.

63. Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.

64. Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.

65. City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems

throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.

66. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

67. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**

68. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

69. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.**

70. **No trade parking will be allowed within the school property and within the project limits.**

71. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

72. **Working hours of the project are 7:00am to 3:30pm.**

73. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

74. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

75. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

76. Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.

77. Provide all required documentation to support the LEED program.

78. This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.

END OF SECTION

EXHIBIT C: Project Schedule

Northeast Metropolitan Regional Technical High School
Specification Section 23 00 00 - HVAC

A. HVAC MILESTONE DATES*

1. **Anticipated Date of Contract Award: October 2, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: within 30 days of Contract Award**
3. **Complete Early Coordination for Precast Plank Penetrations: November 15, 2023**
4. **Rough-in/Layout Openings - Early CMU Bearing Walls (Areas C/D and A/B): 4/5/24 – 5/16/24**
5. **Complete Slab Opening/Dunnage Coordination: November 1, 2024**
6. **Complete Rigging of Interior AHUs at Precast Plank Mezzanines: December 9, 2024**
7. **MEPFP Rough-in 4th Floor: 12/4/24 – 1/16/25**
8. **MEPFP Rough-in 3rd Floor: 11/27/24 – 1/31/25**
9. **MEPFP Rough-in 2nd Floor: 11/27/24 – 1/29/25**
10. **MEPFP Rough-in 1st Floor: 12/11/24 – 2/18/25**
11. **MEPFP Rough-in Ground Floor: 12/11/24 – 1/9/25**
12. **MEPFP In-Wall Inspections 4th Floor: 1/3/25 – 1/24/25**
13. **MEPFP In-Wall Inspections 3rd Floor: 1/6/25 – 2/7/25**
14. **MEPFP In-Wall Inspections 2nd Floor: 1/13/25 – 2/5/25**
15. **MEPFP In-Wall Inspections 1st Floor: 1/21/25 – 2/25/25**
16. **MEPFP In-Wall Inspections Ground Floor: 1/10/25 – 1/16/25**
17. **MEPFP Overhead Inspections 4th Floor: 2/5/25 – 3/3/25**
18. **MEPFP Overhead Inspections 3rd Floor: 1/6/25 – 2/28/25**
19. **MEPFP Overhead Inspections 2nd Floor: 12/27/24 – 3/24/24**
20. **MEPFP Overhead Inspections 1st Floor: 1/24/25 – 3/10/25**
21. **MEPFP Overhead Inspections Ground Floor: 1/10/25 – 1/16/25**
22. **MEPFP Finishes and Final Connections 4th Floor: 2/12/25 – 6/26/25**
23. **MEPFP Finishes and Final Connections 3rd Floor: 2/28/24 – 8/6/25**
24. **MEPFP Finishes and Final Connections 2nd Floor: 5/21/24 – 9/4/26**
25. **MEPFP Finishes and Final Connections 1st Floor: 6/20/24 – 10/17/24**
26. **MEPFP Finishes and Final Connections Ground Floor: 7/31/24 – 9/11/24**
27. **New Building Commissioning: 12/5/25 – 5/18/26**
28. **Phase 3 Buildings Timeframe (Locker, Concessions, Storage): 1/19/27 – 3/22/27**

B. GENERAL PROJECT MILESTONE DATES*

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**

3. **Commence Steel Erection: May 17, 2024**
4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.

EXHIBIT B – Specific Scope of Work

Northeast Metropolitan Regional Technical High School
Specification Section 260000 - Electrical

1. **Furnish all labor, materials, equipment and services required to provide all ELECTRICAL WORK as shown on the Drawings, defined in Specification Section 260000 - General Requirements for Electrical, Section 260005 - Coordination Drawing Requirements for Electrical, Section 260005_ - Access Doors in General Construction, Section 260270 - Temporary Lighting and Power, Section 260280 - Equipment Connections and Coordination, Section 260519 - Low-Voltage Electrical Power Conductors and Cables, Section 260526 - Grounding and Bonding for Electrical Systems, Section 260529 - Hangers and Supports for Electrical Systems, Section 260533 - Raceways and Boxes for Electrical Systems, Section 260543 - Underground Ducts and Raceways for Electrical Systems, Section 260544 - Sleeves and Sleeve Seals for Electrical Raceways and Cabling, Section 260553 - Identification for Electrical Systems, Section 260573.13 - Short-Circuit Studies, Section 260573.16 - Coordination Studies, Section 260573.19 - Arc-Flash Hazard Analysis, Section 260800 - Commissioning of Electrical Systems, Section 260943.16 – Digital and Wireless Network Lighting Controls, Section 260963 - Stage Dimming Installation, Section 262213 - Low-Voltage Distribution Transformers, Section 262413 – Switchboards, Section 262416 – Panelboards, Section 262713 - Electrical Metering, Section 262726 - Wiring Devices, Section 262816 - Enclosed Switches and Circuit Breakers, Section 263600 - Transfer Switches, Section 264113 - Lighting Protection System, Section 264313 - Surge Protection Device, Section 264621 - Addressable Fire Alarm Systems, Section 265000 - Luminaries and Accessories, Section 270800 - Communications Systems Commissioning, Section 271000 – Communications, Section 274100 - IPTV and Video On Demand System, Section 274101 - Large Venue Audiovisual Systems, Section 274120 - Classroom Speech Reinforcement Systems, Section 275115 - Public Address System, Section 275313 - Clock System, Section 280800 – Commissioning of Electronic Safety and Security Systems, Section 281600 - Integrated Electronic Security Systems, Section 284621 - Addressable Fire Alarm Systems, 078410 Penetration Firestopping, and as further defined by the following scope of work.**

2. **This work includes, but not limited to, grounding, exterior building conduit/lighting/wire, raceways, cable tray, lighting and controls, low-voltage transformers, panel board and switchboards, fuses, transfer switches, communications, fire alarm, etc. Provide this work at all locations indicated on the drawings.**

3. **The successful/awarded Trade bidder shall submit a list of proposed manufacturers for all major equipment within two (2) weeks of award.**

4. **Any work referenced on the electrical, telecommunications, audio-visual, security and/or fire alarm Drawings that are noted to be provided by the General Contractor shall be provided by the Electrical Trade Contractor.**

5. **Per Owner-CM Agreement in Project Manual, note the following pricing qualification regarding electrical change pricing (Article VII: Changes in the Work, Section 2.E): "In the event that a**

Subcontractor attempts to use NECA pricing, NECA-1 pricing is to be used as "worst-case" and is only allowed for cost proposals less than $35,000. For cost proposals exceeding $35,000, the Owner or Project Manager may not allow the Subcontractor to use NECA pricing."

6. **Provide all underground site electrical and within the building footprint. Provide all electrical, telecom and communications manholes and handholes. Provide all underground conduit and ductbank conduits (and associated spacers). Excavation, backfill and concrete for ductbanks are by others.**

7. **All piping, cabinets, etc. installed by this Trade Contractor in or through fire-rated floor or wall assemblies, shall be firesafed and sealed as required, by this Trade Contractor. Firesafing and sealant shall be provided on both sides of wall penetrations and top and bottom of floor penetrations. Note that the Construction Manager will select one common vendor for all fire stopping products on the project from the vendors listed in the Penetration Fire stopping specification (Spec Section 078410). Trade Contractor bid pricing should allow for this requirement with no change in cost. All fire rated assemblies shall be UL listed/tested. All fire and smoke caulking must be installed by a worker who is certified in the installation of the specific system being used. Provide all certifications and documentation to the Construction Manager.**

8. **All piping installed by this Trade Contractor through non-rated partitions shall be sealed with an approved acoustical sealant by this Trade Contractor.**

9. **Coordinate with the Drywall Trade Contractor for any required in-wall blocking. This shall occur well in advance of the wall board installation.**

10. **This Trade Contractor shall provide light fixtures as shown on the architectural and electric drawings. If there is a discrepancy between the drawings, the greater quantity and/or expensive light fixture should be carried in this scope of work.**

11. **This Trade Contractor shall bag smoke detectors at installation, then remove bag and clean smoke detectors prior to inspection and testing as directed by the Construction Manager.**

12. **Electrical Trade Contractor is responsible for coordinating this work with the utility company requirements, prior to the installation of any related work.**

13. **Whether specifically shown or not, provide ALL low voltage wiring to (including within doors & door frames), power supplies, transformers, boxes, etc. as required for a complete installation of the work within the scope as outlined in this package. This Trade Contractor shall coordinate the operations of electrified door hardware, security, fire alarm, etc. within each assembly. Door hardware and associated power supplies/transformers shall be furnished by door hardware vendor by installation by electrician.**

14. **This Trade Contractor shall provide all necessary extended warranties to account for the time period from start-up of the equipment through Substantial Completion. This shall apply to manufacturer's warranties as well. Warranties shall not commence on start-up or delivery. The warranty start dates will be based on the substantial completion date for each building.**

15. **This Trade Contractor shall furnish, for installation by others, all access doors/panels (with appropriate labeling) required for future access to your work. Provide layout for said panels. Access panels shall be fire rated as required by the assembly into which they are installed. All access panels shall be the same type and keyed alike.**

16. **All interior and exterior excavations/trenching/ backfill required to complete the work of this Trade package shall be performed by the Site Subcontractor AS INDICATED ON THE CONTRACT DRAWINGS ONLY. It is assumed (per notes on the contract drawings) that distribution from the main switchgear out will be routed overhead (above grade) and will not require additional excavation and backfill. The costs for any trenching beyond what is indicated above will be the responsibility of the Electrical Trade Contractor.**

17. **Provide all sleeves at slabs, foundation walls and interior walls (including layout) required for this scope of work of this package. The openings for the ductbanks thru the foundation wall will be boxed out as identified. Provide infill between piping and boxouts for these openings. Any openings not sleeved shall be cored/cut and sealed by this Trade Contractor upon approval of the Structural Engineer at the cost of this Trade Contractor as well as any remedial work required by the Structural Engineer or Architect to permit the installation of the work. All penetrations thru the Precast Mezzanine slabs will be cored by this bid package after the locations have been approved by the precast engineer.**

18. **Light pole bases shall be furnished and installed by the Electrical Trade Contractor (excavation and backfill by the Site Subcontractor).**

19. **This Trade Contractor shall provide all sleeves/conduits through exterior assemblies to allow for flashing by others. All penetrations must be completed prior AVB installation. It is the responsibility of this trade contractor to have all conduits in place, through the wall, prior to any sheathing.**

20. **All shaft bottoms will have concrete infills to maintain floor ratings. Provide sleeves for work included in this bid package to facilitate these concrete infills. Include cutting of metal decking within sleeves after concrete infills.**

21. **Be advised that some walls will be topped off prior to installation of the MEP work. Layout, coordinate and cut openings in drywall for Electrical penetrations.**

22. **This trade contractor shall assume any and all temporary measures required to test by Area on each Floor. Assume partial signoffs will be required on each floor.**

23. Emergency generator to be provided by utility company as noted. Electrical Trade Contractor responsible for coordinating this work and the utility company requirements as it relates to the work of others, prior to the installation of any related work.

24. Electrical Trade Contractor is responsible for penetrating the roofing system and associated decking to provide sleeves. In cases where roofing is existing to remain, or the new roof is installed at penetrations, provide temporary weather protection in the event the roofer is not on site for flashing the penetration. It is the responsibility of this Trade Contractor to ensure that all penetrations made during the work day are weather tight by close of business or prior to a rain event, including those scheduled to be flashed by the roofer.

25. This Trade Contractor shall cut all metal deck at sleeved openings after concrete placement.

26. This Trade Contractor shall be responsible to participate in the requirements stipulated under Section 01 31 00-PROJECT MANAGEMENT AND COORDINATION, paragraph 1.8-COORDINATION DRAWINGS and 260005 COORDINATION DRAWING REQUIREMENTS FOR ELECTRICAL.

27. This Trade Contractor is responsible to participate in all MEP coordination meetings with the other trades held once every week during active MEP construction. This Bid Package also includes verifying that the electrical, HVAC, and other service requirements shown on the Contract Documents are adequate and proper for the Electrical equipment scheduled to be used and installed. Reference the "Trade Contractor BIM Execution Plan" for scope related to MEP coordination. This Trade Contractor is responsible to lead the MEP coordination meetings with the other trades held once every week during active MEP construction.

28. This trade contractor is responsible for all interior lifts, staging, hoisting, etc. required to complete this work provided they abide by all Gilbane and OSHA safety requirements. Elevators will not be available for the work of this bid package. Note that there is a Live Load Capacity of 100psf for the slabs in the Courtyard, Gymnasium and Multipurpose Rooms per RFI Pre-54. Bidders shall make the proper arrangements for lifts and/or staging that adhere to this requirement.

29. Do not hang MEP, FP or architectural components from metal roof deck. This trade contractor to provide engineered supplemental framing to span between structural members for attachment purposes.

30. At all Sound Isolator Ceiling locations, pipes shall be supported from bottom of steel beams only, not thru the sound ceiling to the deck. Pipe hangers shall not penetrate the sound ceilings. Reference 1/A9-1-2 for Sound Isolator Ceiling Detail and Reflected Ceiling Plans for extent of Sound Isolator Ceilings.

31. Provide all Electrical work as mentioned in the Elevator Specification Section 14 00 01 / 14 21 50 and coordinate with the Elevator Trade Contractor.

32. Per the safety plan, extension cords may not be run on the floors at traffic areas (corridors, lobbies, etc.). This Trade Contractor to provide "hooks" (i.e. Stiffy Hangers) to be utilized by all trades to elevate cords between the power outlet to the work area (i.e. classroom). Provide additional quantity of 200 Stiffy Hangers for use by the CM. Remove when directed by CM.

33. The Owner has retained a Commissioning Agent to review the work performed by this Contractor. This trade contractor shall participate in the development of a Commissioning Plan and schedule of commissioning events. This Contractor shall cooperate, provide access, assistance and required documents to the Commissioning Agent in accordance with Specification Sections 260800 Commissioning of Electrical Systems and 01 91 13 – Commissioning Requirements. Include all costs for commissioning, testing, manufacturer's representation on site, test devices, test reports, etc. as it relates to the work of this bid package. Provide sufficient manpower to complete Commissioning activities as it relates to your work. At a minimum, provide a dedicated "competent" person to work along with the Commissioning Agent during all commissioning activities. In addition, this Trade Contractor will be required to attend Commissioning Progress meetings on a regular basis.

34. It is anticipated that several above ceiling inspections will be conducted throughout the project and prior to final ceiling installation. At the very least, each Area by Floor will require separate inspections. This Trade Contractor shall assist as required for these inspections and shall perform all repairs resulting from these inspections as soon as possible.

35. Provide all heat trace requirements for this Trade Contractor's work and all HVAC and Plumbing items as indicated.

36. Provide and maintain a complete temporary power and lighting system in each building. Include costs to disconnect, remove and dispose of the entire temporary power and lighting system. The cost of energy consumed by the temporary power and lighting system shall be paid for by others. Provide all associated panels, breakers, and transformers as required to support the temporary power and lighting.
- Provide the following scope for temporary power service: Wakefield Municipal Gas & Light (WMGL) shall provide a temporary transformer adjacent to the Northeast corner of the building – see plans. WMGL shall provide wiring up to the temporary transformer. The Electrical Trade Contractor shall provide all temporary power ductbanks required to complete the WMGL work as well as work performed by this trades. Wiring from temp transformer into the building and the temporary service inside the building is by the Electrical Trade Contractor. Provide temp power service equipment sized to accommodate temp receptacle requirements (see scope items below), temp lighting requirements (see scope item below) as well as two spray fireproofing pumps, 2 floor grinding machine, 8 temp heating units and temporary feeds for elevators. Disconnect and remove same.

- Temporary Outlets: Provide every floor with dedicated 20A GFCI, 120-V circuits. Locate 120v GFCI Quad convenience outlet locations spaced to use less than 50' of extension cord. Each Quad should be powered from a single breaker. At each location provide a prefabricated metal stand with at least 20 ft of "slack" in the line at the stand. In addition to these outlet locations, provide 4 charging stations per floor for trades to charge portable tools.
- This Trade Contractor shall include bringing temporary equipment power to the various operations/equipment through-out the project including disconnect upon completion. Some activities may overlap so it should be assumed that multiple set ups will be required. Operations requiring power will provide a whip of 30 ft or less. It will be the responsibility of this Trade Contractor to provide power to within 30ft. Assume 15 pieces of equipment will require temporary power whips/power – assume some variation of 480volt or 208volt.
- Elevators: Provide temporary power to the elevator control rooms at a capacity required to support all elevator functions/testing/work.
- Temporary Heat (Winter 2024 – 2025 Season): Provide temporary power to 8 Babfar type units (one in each Area). Assume units will require 480V 3-phase power. Include removal of same after heating season.
- Temporary Lighting: Provide and maintain all temporary construction lighting per OSHA standards until such time that permanent lighting can be provided. Include as part of base bid relocating OSHA/Construction lighting below ceiling grid systems once the grid is installed. Reference Project Specific Safety Plan for additional information regarding temporary lighting. Installation of temporary lighting will be prior to concrete slab placement. Disconnect and remove same. At each stair entrance on each floor, provide a red bulb temporary light to highlight exit locations during construction.

37. Provide fifteen (15) exterior flood lights at building perimeter to be activated by photocell. Relocate as required to allow for the work of others at no additional cost to the project.

38. Provide expansion loop piping and couplings at building expansion joint. Provide and coordinate all building expansion locations with other MEP trades and expansion joint chases. Notify the Construction Manager of any conflicts.

39. This Trade Contractor shall leave packaging plastic on all ceiling lay in light fixtures. Remove and dispose of plastic and clean lights prior to inspection as directed by the Construction Manager.

40. Provide all electrical outlet boxes, devices, and covers in millwork. Coordinate all cutouts and holes required in millwork with the Millwork Subcontractor. Coordinate depth of outlet boxes required with millwork and wall finishes.

41. Take note of building access and make provisions to ensure that equipment will fit through permanent doorways and/or structure when equipment is available. Advise the Construction Manager of any conflicts that may exist.

42. Provide a complete fire alarm system. Include the following to make modifications requested by the fire department: Relocate ten (10) exit signs and ten (10) detection devices. Assume ten (10) additional exit signs and fire detection devices to be provided and located in the field per AHJ.

43. This Trade Contractor shall coordinate the location of all wall mounted electrical equipment with the Architectural Drawings and equipment/furniture provided by others.

44. Vacuum all equipment installed by this Trade Contractor prior to startup and after Commissioning. This includes, but is not limited to, all panel boards, switchgear, generator, fire alarm detection devices, etc.

45. All shutdowns and cutovers from temp to perm power will be performed off-hours for each building to minimize disruption to construction work. Include premium time costs for these activities.

46. This bidder will include the following:

- **a. Include the premium for 500 hours of base contract work to be done on an Overtime Basis when and if directed by the Construction Manager (weekdays after 8 regular hours and/or Saturdays).**
- **b. Provide overtime costs for oversight during slab placements as required.**
- **c. Include the temporary hookup and disconnect if 20 different pieces of specialty construction equipment (e.g. floor sanders, grinders, welders, etc.)**
- **d. Include 400 regular electrician hours to perform additional work as directed by the Construction Manager.**
- **e. For the period covering August 2024 thru December 2025, one electrician will be required to work every Saturday on site to insure we have working power and lighting for the trades working that day. The premium time costs for this electrician shall be included in the base bid. If there are no temp power/lighting issues to address, the electrician can work on Contract Work during this Saturday requirement.**

47. Furnish complete Record Drawings, operating and maintenance manuals; spare parts, attic stock and other required close out information or materials no later than thirty (30) days prior to startup of equipment (note phased occupancy of buildings). As-Built Drawings shall be maintained monthly, stored on-site, and made available for review as necessary. In addition, As-Built Drawings shall be required Substantial Completion at each building (phased occupancy) and shall be completed in sufficient time for review prior to the milestone dates noted. Provide final record drawings in CAD, pdf and hard copy versions for the owner.

48. Provide all requirements as indicated in DRA Specifications Division 00 and Division 01.

49. Reference RFI Log dated 8.24.2023 (with associated RFI responses) included in the Project Manual. These RFIs shall be part of the bidding documents for this Trade Contract.

50. Disregard notes on E0-0-1 indicating that the CM/GC shall make sets of the bid documents for the bidders. All bid documents will be made available electronically thru the ProjectDog website.

51. Please note that the Project Manual contains Site Logistics and Utilizations plans that are part of the bid documents. Project Manual attachment for these plans is titled "Site Logistics and Site Utilization Plans".

52. Reference Owner-CM Agreement with General Conditions in the Project Manual, Article VII Changes in the Work, Section 2 Methods of Computing Equitable Adjustments. Note that since the CCIP Program will provide Workers Compensation and General/Excess Liability for the Project (subjection to limitations in CCIP Manual), sub-section A(3)(b) shall be revised as follows for the bidding documents: "plus (or minus) the cost of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative, with the Owner's approval, the CM may elect to use a flat 18.4% of the total labor rate computed in accordance with subparagraph (a) above;"

53. All Trade and Subcontractors will be required to report and verify contract payments for all tiers and report workforce numbers in B2G.

54. Refer to Exhibit C Milestone Dates for the sequence of work on which this bidder shall base their bid. If a bidder proposes a variation to this plan, it must be submitted with the bid as a Voluntary Alternate that includes changes to Schedule and Cost in the base bid. The sequence of work is supported by the contract documents and those Site Utilization Drawings noted above. Any conflicts between the Site Utilization Drawings and the Contract Documents found should be noted and submitted with your bid. Assume the more expensive option as part of your bid.

55. The Construction Manager shall provide the Builders Risk Insurance. This coverage carries deductibles of $100,000 per occurrence for Flood, Earthquake, Named Storm and Other Perils; $150,000 per occurrence for Construction defects during construction; and $200,000 per occurrence for Water Damage, which will be paid by the Subcontractor/Trade Contractor responsible for each loss.

56. Procure all permits, as required to complete the work of this bid package and shall furnish copies of all permits to the Construction Manager (CM) as required. The on-site project permitting process shall be coordinated through the CM. Include all hot work permits, fire details, police details, traffic control, etc. required to complete this work.

57. Gilbane is requiring that all contractors track and report their fuel usage during this project. Reporting will be monthly and required as part of the requisition submission process. Refer to the Project Manual for the tracking spreadsheet to be used.

58. City hydrants are available on either side of the site. It is this contractor's responsibility to secure water source in compliance with local regulations. It is this Subcontractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect these systems

throughout the course of the work. Include costs for backflow preventers and meters as required by local authorities.

59. **All truck traffic will use Farm Street as the primary route. Hemlock Road trucking will not be allowed during busing times (7:00am – 8:00am and 2pm to 3pm).**

60. **This project will utilize BIM for the MEP/Subcontractor coordination process. This Subcontractor shall provide the model for the structural steel (see BIM Scopes of Work document for all/additional requirements).**

61. **Any fuel spillage must be immediately reported to the Construction Manager. If the spill is the responsibility of another Subcontractor, this Subcontractor shall be reimbursed for the cost of labor, material, and disposal costs. A replacement clean-up kit must be obtained within 24 hours and again stored on site.**

62. **All Subcontractors/Trade Contractors that are signatory to the Laborers' Union shall clean up their own construction debris and deposit it in the dumpsters that will be supplied by the Construction Manager. All Subcontractors/Trade Contractor that are not signatory to Laborers' Union shall deposit their construction debris in a central location, designated by the Construction Manager's project superintendent, and the material will be picked up on a daily basis by others. This cleanup will be done on a daily basis, trash and debris will not be allowed to accumulate. If cleanup is not being performed on a daily basis to the satisfaction of the Construction Manager, cleanup will be performed by others at this Trade Contractor's expense.**

63. **No trade parking will be allowed within the school property and within the project limits.**

64. **Union stewards will be carried by the subcontractor who has the largest number of union members employed at any current time.**

65. **Working hours of the project are 7:00am to 3:30pm.**

66. **This subcontractor shall be responsible for obtaining all field measurements required to complete its work.**

67. **This Subcontractor understands that lay down space is limited, must be shared with other Subcontractors, and the allocation of lay down areas shall be determined by the Construction Manager, as preliminarily described on the Site Logistics Plan included with the Bid Documents. It is understood that these areas may change as the work progresses around the site.**

68. **Subcontractor is to ensure proper fit of all work, and ensure a complete and finished installation. Any required trim pieces, fittings, or accessories required for a finish product are included.**

69. **Provide/submit a Project Specific Safety Plan and Project Specific Fall Protection Plan. These plans must be submitted and approved no later than 10 (ten) days prior to start of field work.**

70. Provide all required documentation to support the LEED program.

71. This Subcontractor shall include any, and all, tariffs that are in effect as of the date of bid. For clarity, it is understood that any new tariffs imposed by a government body after the date of award will be treated as a force majeure. Furthermore, if this Subcontractor procures material from a foreign country affected by the tariff after the new tariff is in effect, then this Subcontractor will be entitled to an equitable change order. However, if this Subcontractor procures materials from a foreign or domestic source not subject to a new tariff and that source has issued a price increase, this Subcontractor is not entitled to a change order.

END OF SECTION

EXHIBIT C: Project Schedule

Northeast Metropolitan Regional Technical High School
Specification Section 26 00 00 - Electrical

A. ELECTRICAL MILESTONE DATES*

1. **Anticipated Date of Contract Award: October 2, 2023**
2. **Submit Shop Drawings, Submittals, Etc.: within 30 days of Contract Award**
3. **Complete Early Coordination for Precast Plank Penetrations: November 15, 2023**
4. **Rough-in at Early CMU Bearing Walls (Areas C/D and A/B): 4/5/24 – 5/16/24**
5. **Complete Slab Opening/Dunnage Coordination: November 1, 2024**
6. **Complete Rigging of Interior AHUs at Precast Plank Mezzanines: December 9, 2024**
7. **MEPFP Rough-in 4th Floor: 12/4/24 – 1/16/25**
8. **MEPFP Rough-in 3rd Floor: 11/27/24 – 1/31/25**
9. **MEPFP Rough-in 2nd Floor: 11/27/24 – 1/29/25**
10. **MEPFP Rough-in 1st Floor: 12/11/24 – 2/18/25**
11. **MEPFP Rough-in Ground Floor: 12/11/24 – 1/9/25**
12. **MEPFP In-Wall Inspections 4th Floor: 1/3/25 – 1/24/25**
13. **MEPFP In-Wall Inspections 3rd Floor: 1/6/25 – 2/7/25**
14. **MEPFP In-Wall Inspections 2nd Floor: 1/13/25 – 2/5/25**
15. **MEPFP In-Wall Inspections 1st Floor: 1/21/25 – 2/25/25**
16. **MEPFP In-Wall Inspections Ground Floor: 1/10/25 – 1/16/25**
17. **MEPFP Overhead Inspections 4th Floor: 2/5/25 – 3/3/25**
18. **MEPFP Overhead Inspections 3rd Floor: 1/6/25 – 2/28/25**
19. **MEPFP Overhead Inspections 2nd Floor: 12/27/24 – 3/24/24**
20. **MEPFP Overhead Inspections 1st Floor: 1/24/25 – 3/10/25**
21. **MEPFP Overhead Inspections Ground Floor: 1/10/25 – 1/16/25**
22. **MEPFP Finishes and Final Connections 4th Floor: 2/12/25 – 6/26/25**
23. **MEPFP Finishes and Final Connections 3rd Floor: 2/28/24 – 8/6/25**
24. **MEPFP Finishes and Final Connections 2nd Floor: 5/21/24 – 9/4/26**
25. **MEPFP Finishes and Final Connections 1st Floor: 6/20/24 – 10/17/24**
26. **MEPFP Finishes and Final Connections Ground Floor: 7/31/24 – 9/11/24**
27. **New Building Commissioning: 12/5/25 – 5/18/26**
28. **Phase 3 Buildings Timeframe (Locker, Concessions, Storage): 1/19/27 – 3/22/27**

B. GENERAL PROJECT MILESTONE DATES*

1. **Start Construction Site Enabling: August 2023**
2. **Commence Concrete Foundations: January 18, 2024**
3. **Commence Steel Erection: May 17, 2024**

4. **Commence Exterior Envelope Construction: August 5, 2024**
5. **Building Roof and Substantially Weather-Tight Area B: December 17, 2024**
6. **Building Roof and Substantially Weather-Tight Area C: December 23, 2024**
7. **Building Roof and Substantially Weather-Tight Area D: January 9, 2025**
8. **Building Roof and Substantially Weather-Tight Area A: January 16, 2025**
9. **Complete Exterior Envelope: September 23, 2025**
10. **Commence Interior: August 5, 2024**
11. **Energize Permanent Power: September 17, 2025**
12. **New School Building Substantial Completion/TCO: May 4, 2026**
13. **New School Building Certificate of Occupancy: July 16, 2026**
14. **Commence Demolition of Existing School Phase 3: July 2026**
15. **Commence Landscaping and Site Improvements Work Phase 3: May 27, 2026**
16. **Substantial Completion Phase 3: July 16, 2027**

*** Liquidated Damages: The Contractor shall pay the Construction Manager, as Liquidated Damages for delay and not as a penalty, the sum listed in the table below per calendar day that the Trade Contractor fails to meet the completion of its work, in part or in its entirety, by the milestone dates. Any Liquidated Damages due under the terms of this Paragraph shall be subtracted from the Contract Sum and made available to the Construction Manager as a pool to expedite, accelerate, or otherwise utilize in meeting the Project Substantial Completion date for each phase. Any funds collected on account of Liquidated Damages and remaining in the pool on the Project Substantial Completion date may be used to pay Liquidated Damages, if any, owed to the Owner by the Construction Manager. In the event the Construction Manager is not liable for Liquidated Damages, any such sums remaining in the pool shall be returned to the Trade Contractor on a pro rata basis with other affected subcontractors.**

The liquidated damages amounts that maybe assessed for not achieving Substantial Completion for the Work of the designated project phases are as follows:

Phase 1 (Early Site Enabling): $0.00 per calendar day (if Phase 2 is impacted, use Phase 2 amount)
Phase 2A & 2B (2A: Early Superstructure Work/ 2B: Construct New High School): $10,110.00 per calendar day
Phase 3 (Abate/Demo Existing School, Construct Athletic Complex/Parking): $4,781.00 per calendar day plus costs for student bussing for each missed home football game minimum assumed to be $750/game.