ABBREVIATIONS

(E)	EXISTING ITEM
(ED)	EXISTING ITEM TO BE DEMOLISHED
(ER)	EXISTING ITEM TO BE RELOCATED
(F)	FUTURE
(N)	NEW
(RL)	EXISTING ITEM RELOCATED
A	AMP, AMPERE
A/V, AV	AUDIO VISUAL
AC	AIR CONDITIONING
AF/ AT	AMP FRAME / AMP TRIP
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPS INTERUPPTING CURRENT
AL	ALUMINUM
ARF	ABOVE RAISED FLOOR
ARF	ARC FAULT
AS/ AFU	AMP SWITCH / AMP FUSE
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
C	CONDUIT
CAB	CABINET
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CL	CENTER LINE
CLF	CURRENT LIMITING FUSE
CLG	CEILING
CONTR	CONTRACTOR
CONV	CONVENIENCE
CT	CURRENT TRANSFORMER
CU	COPPER
D.O.	DRAWOUT
DC	DOOR CONTACT
DISC	DISCONNECT
DIST	DISTRIBUTION
DW	DISHWASHER
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ELEC	ELECTRICAL
EM, EMERG	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
FA	FIRE ALARM
FDR	FEEDER
FIXT	FIXTURE
FL	FLOOR
FP	FIRE PROTECTION
G, GND	GROUND
GEN	GENERATOR
GF	GROUND FAULT
GFI	GROUND FAULT INTERRUPTOR
HOA	HAND OFF AUTOMATIC SWITCH
HP	HORSE POWER
HVAC	HEATING VENTILATION AND AIR CONDITIONING
HWH	HOT WATER HEATER
HZ	HERTZ
IG	ISOLATED GROUND
JB	JUNCTION BOX
kAIC	KILO AMPERE INTERRUPTING CURRENT
kCMILS	THOUSAND CIRCULAR MILS
kVA	KILOVOLT AMPS
kW	KILOWATTS
LSIG	LONG, SHORT INSTANTANEOUS AND GROUND FAULT TRIP FUNCTION
LTG	LIGHTING
MAX	MAXIMUM
MB	MOTORIZED BACKBOARD
MC	METAL CLAD
MC	MOTORIZED CURTAIN
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MFG	MANUFACTURER
MH	MOUNTING HEIGHT
MI	MINERAL INSULATED
MLO	MAIN LUGS ONLY
MOD	MOTORIZED OVERHEAD DOOR
MPS	MOTORIZED PROJECTION SCREEN
MS	MOTORIZED SHADES
MTD	MOUNTED
MW	MICROWAVE
N	NEUTRAL
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
No	NUMBER
NTS	NOT TO SCALE
OFE	OWNER FURNISHED EQUIPMENT
P	POLES
PB	PULL BOX
PC	PLUMBING CONTRACTOR
PH	PHASE
PL	OUTLET DEVICE WITH PLATE ONLY
PNL	PANEL
PPE	PRE-PURCHASED EQUIPMENT
PRT	PRINTER
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
QUAD	QUADRAPLEX
REC	RECESSED
RECEPT	RECEPTACLE
REF	REFRIGERATOR
RF	RETURN FAN
RGS	RIGID GALVANIZED STEEL
RM	ROOM
SB	SCORE BOARD
SEC	SECONDARY
SF	SUPPLY FAN
SKRU	SOLENOID KEY RELEASE UNIT
SPD	SURGE PROTECTION DEVICE
SSCAF	SHORT CIRCUIT COORDINATION ARC FLASH
ST	SHUNT TRIP
SW	SWITCH
SWBD	SWITCH BOARD
SWGR	SWITCH GEAR
TC	(TEL/COM) TELECOMMUNICATIONS
TDR	TIME DELAY RELAY
TEL	TELEPHONE
TF	TRANSFER FAN
TP	TAMPER PROOF
TPS	TWISTED PAIR SHIELDED
TYP	TYPICAL
UC	UNDERCOUNTER
UCR	UNDER COUNTER REFRIGERATOR
UF	UNDERFLOOR
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPS
W	WATTS
WP	WEATHER PROOF
XFMR	TRANSFORMER

GENERAL NOTES

1. THE WORK TO BE DONE UNDER THESE SPECIFICATIONS AND THE DRAWINGS CONSISTS OF PROVIDING ALL EQUIPMENT, MATERIALS, LABOR AND SERVICES AND PERFORMING ALL OPERATIONS TO COMPLETE THE CONSTRUCTION WORK FOR THIS PROJECT. ANY WORK NOT SPECIFICALLY COVERED BY THESE SPECIFICATIONS OR INDICATED ON THE CONTRACT DRAWINGS, BUT NECESSARY TO COMPLETE OR PERFECT ANY PART OF THIS INSTALLATION IN A SUBSTANTIAL MANNER, SHALL BE PROVIDED WITHOUT EXTRA COST TO THE OWNER.
2. THE WORK SHALL CONFORM TO THE MORE STRINGENT OF ALL APPLICABLE CODES & REGULATIONS, UL GUIDELINES, MANUFACTURER'S LITERATURE AND RECOMMENDATIONS, AND TO THE REQUIREMENTS OF FEDERAL, STATE AND LOCAL REGULATORY AGENCIES AND AUTHORITIES HAVING JURISDICTION.
3. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE EXTENT, GENERAL CHARACTER, LOCATION AND ARRANGEMENT OF THE WORK UNDER THIS CONTRACT. WHERE JOB CONDITIONS REQUIRE MINOR CHANGES OR ADJUSTMENTS IN THE INDICATED LOCATIONS OR ARRANGEMENT OF THE WORK, SUCH CHANGES SHALL BE PROVIDED WITHOUT EXTRA COST. THE CONTRACTOR SHALL RE-INSTALL EQUIPMENT THAT HAS INADEQUATE OR UNSAFE ACCESSIBILITY.
4. INSTALLATION OF WORK SHALL PROVIDE REASONABLE ACCESSIBILITY FOR OPERATION, INSPECTION AND MAINTENANCE OF EQUIPMENT AND ACCESSORIES. PROVIDE CLEARANCES REQUIRED BY MANUFACTURERS AND APPLICABLE CODES. ALL CEILING MOUNTED EQUIPMENT SHALL BE INSTALLED IN SUCH A MANNER THAT LIGHTS, PIPING, AND DUCTWORK DO NOT BLOCK ACCESS TO EQUIPMENT AND RELATED ACCESSORIES.
5. THE TERM "FURNISH" SHALL MEAN TO OBTAIN AND SUPPLY TO THE JOB SITE. THE TERM "INSTALL" SHALL MEAN TO FIX IN POSITION AND CONNECT FOR USE. THE TERM "PROVIDE" SHALL MEAN TO FURNISH AND INSTALL. THE TERM "MECHANICAL WORK", "ELECTRICAL WORK", "PLUMBING WORK", ETC. SHALL MEAN ALL LABOR, MATERIAL, EQUIPMENT, SCAFFOLDING, RIGGING, TOOLS, SUPERVISION, SERVICES AND OTHER INCIDENTALS NECESSARY FOR COMPLETE AND OPERABLE INSTALLATION.
6. THE CM/GC SHALL MAKE SETS OF THE BID DOCUMENTS CONSISTING OF COMPLETE SETS OF DRAWINGS AND SPECIFICATIONS; AND ISSUE THEM TO EACH OF THE PRIME AND SUB-CONTRACTORS. EVERY PRIME AND SUB-CONTRACTOR ON EACH BIDDING TEAM SHALL RECEIVE COMPLETE SETS OF DRAWINGS AND SPECIFICATIONS. THERE ARE NOTES AND CROSS REFERENCES FOR VARIOUS TRADE CONTRACTORS IN MULTIPLE TRADE OR DISCIPLINE DRAWINGS AND SPECIFICATIONS, THUS, EACH CONTRACTOR IS TO RECEIVE COMPLETE SETS OF THE BID DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE DRAWINGS FROM CM/GC. EACH CONTRACTOR IS RESPONSIBLE FOR THEIR WORK, AS NOTED ON THE OTHER DISCIPLINE DOCUMENTS. BIDDERS ARE RESPONSIBLE FOR ALL COSTS FOR EACH SET OF BID DOCUMENTS REQUESTED.
7. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A FULL COORDINATION EFFORT IN ORDER TO CREATE A FINALIZED COORDINATED LAYOUT OF ALL EQUIPMENT, SYSTEMS, DUCTWORK, PIPING AND ALL OTHER ITEMS WITHIN THEIR RESPECTIVE SCOPE. THE CONTRACTOR'S COORDINATION EFFORT SHALL INCLUDE COORDINATED INFORMATION FROM ALL OTHER TRADE CONTRACTOR'S INVOLVED IN THE PROJECT SCOPE IN ORDER TO PROVIDE COORDINATION BETWEEN TRADES AND ALL CONDITIONS. ALL ERRORS MADE AS A RESULT OF A LACK OF COORDINATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND CORRECTED AT NO ADDITIONAL COST TO THE PROJECT. MINOR RELOCATIONS AND SHIFTS OF EQUIPMENT, DUCTWORK, AND PIPING WHICH DO NOT CHANGE THE DESIGN INTENT INDICATED ON THE CONTRACT DOCUMENTS, REQUIRED TO ACCOMMODATE FIELD CONDITIONS ARE AT THE CONTRACTORS DISCRETION AND DO NOT REQUIRE ENGINEER APPROVAL.
8. CONTRACTOR SHALL ARRANGE AND OBTAIN ALL PERMITS, INSPECTIONS AND APPROVALS, AND PAY ALL RELATED FEES.
9. THE DRAWINGS INDICATE APPROXIMATE LOCATIONS BASED UPON INFORMATION OBTAINED WITHOUT REMOVING CEILING TILES OR WALLS. THEREFORE, THE CONTRACTOR SHALL INCLUDE IN THEIR BID CONTINGENCY COSTS TO ADDRESS CONFLICTS BETWEEN DESIGN AND CONDITIONS. ANY CHANGES AND/OR MODIFICATIONS MUST BE REVIEWED AND APPROVED BY THE ENGINEER AND/OR OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
10. FOR ANY DISCREPANCY BETWEEN DRAWINGS AND/OR SPECIFICATIONS, THE CONTRACTOR SHALL BASE THEIR BID UPON THE MOST STRINGENT REQUIREMENT (QUALITY, QUANTITY, SIZE, ETC.). THE CONTRACTOR SHALL IDENTIFY DISCREPANCIES AS PART OF THEIR BID.
11. THE CONTRACTOR SHALL EFFECTIVELY PROTECT ALL MATERIALS AND EQUIPMENT FROM ENVIRONMENTAL AND PHYSICAL DAMAGE UNTIL FINAL ACCEPTANCE. CLOSE AND PROTECT ALL OPENINGS DURING CONSTRUCTION. PROVIDE NEW MATERIALS AND EQUIPMENT TO REPLACE ITEMS DAMAGED.
12. WHERE BEAMS ARE INDICATED TO BE PENETRATED WITH DUCTWORK AND/OR PIPING, CAREFULLY COORDINATE SIZES AND LOCATIONS OF THE ELEMENTS BEFORE FABRICATION. COORDINATE WITH FINAL LOCATION OF BEAM PENETRATIONS AND SHEAR WALL PENETRATIONS.
13. CONTRACTOR SHALL COORDINATE LOCATION OF ALL WALL, FLOOR AND ROOF OPENINGS WITH STRUCTURAL AND OTHER TRADES.
14. WHEN WORK INVOLVES CONTACT WITH MATERIALS CONTAINING ASBESTOS, PCB, OR OTHER TOXIC MATERIALS, NOTIFY OWNER, WHO WILL ESTABLISH PROCEDURES FOR REMEDIATION AND REMOVAL.
15. CONTRACTOR SHALL SCHEDULE THE WORK UNDER THIS CONTRACT WITH WORK OF OTHER TRADES AS NOT TO DELAY THE OVERALL PROGRESS OF THE PROJECT.
16. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO PURCHASING EQUIPMENT AND PRIOR TO CUTTING OPENINGS.
17. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS PER SPECIFICATIONS PRIOR TO PURCHASING OR INSTALLING EQUIPMENT AND SYSTEMS INDICATED ON CONTRACT DOCUMENTS. PRIOR TO SUBMITTAL, CONTRACTOR SHALL VERIFY THAT ADEQUATE SPACE EXISTS FOR THE SUBMITTED EQUIPMENT. SHOP DRAWINGS MUST BE REVIEWED BY ARCHITECT/ENGINEER.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED BY OTHER TRADES DUE TO SUBSTITUTION OF OTHER THAN SCHEDULED EQUIPMENT. WHEN EQUIPMENT FURNISHED IS DIFFERENT THAN INDICATED, THE COST OF ADDITIONAL ELECTRICAL SERVICE, STRUCTURAL AND RELATED WORK SHALL BE PAID BY THIS CONTRACTOR.
19. ALL WORK SHALL BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER AND SHALL BE DONE IN ACCORDANCE WITH GOOD TRADE PRACTICE AND IN CONFORMANCE WITH APPLICABLE MANUFACTURERS' RECOMMENDATIONS.
20. CONTRACTOR SHALL REMOVE ALL TRASH, DEBRIS AND MATERIAL FROM PREMISES AT THE END OF EACH DAY.
21. RESTORE ALL SURFACES (WALLS, CEILINGS, FLOORS AND ROOFS) THAT ARE DAMAGED BY THE WORK OF THIS CONTRACT TO THEIR ORIGINAL CONDITION AT NO EXTRA COST TO THE OWNER.
22. PRIOR TO EQUIPMENT STARTUP, CONTRACTOR SHALL PERFORM THE SPECIFIED STARTUP AND COMMISSIONING PROCEDURES.
23. IN THE ABSENCE OF OTHER SPECIFIC INSTRUCTIONS, ALL WORK AND MATERIALS SUPPLIED SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF THEIR ACCEPTANCE BY THE OWNER.
24. BALA CONSULTING ENGINEERS, INC. (BALA) WILL PROVIDE CONTRACTOR WITH ELECTRONIC CADD FILES OF THE ENGINEERING DESIGNS FOR THE SOLE USE IN EXPEDITING SHOP DRAWINGS. BALA'S FILES SHALL NOT BE DIRECTLY COPIED AND ISSUED AS SHOP DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD COORDINATION, DIMENSIONING AND ADHERENCE TO THE SHOP DRAWING REQUIREMENTS AS NOTED IN THE SPECIFICATIONS. SHOULD THE SHOP DRAWINGS SUBMITTED PROVE TO BE A DIRECT COPY OF OUR FILES WITHOUT THE NECESSARY FIELD COORDINATION, DIMENSIONING AND ADHERENCE TO THE SHOP DRAWING REQUIREMENTS AS NOTED IN THE SPECIFICATIONS, THESE SHOP DRAWINGS WILL BE RETURNED AS REJECTED. BALA'S ELECTRONIC FILES ARE SAVED IN VERSION REVIT 2021 AND ARE COMPATIBLE WITH ALL VERSIONS AFTER THAT. BALA MAKES NO REPRESENTATION AS TO THE COMPATIBILITY OF THESE FILES WITH THE CONTRACTOR'S HARDWARE OR THEIR SOFTWARE. DATA CONTAINED ON THESE ELECTRONIC FILES ARE PART OF BALA'S "INSTRUMENTS OF SERVICE" AND ARE COPYRIGHTED. CONTRACTOR'S USE OF FILES IS FOR THE SOLE PURPOSE AS A CONVENIENCE IN THE PREPARATION OF DRAWINGS FOR THE REFERENCED PROJECT. ANY OTHER USE OR REUSE BY CONTRACTOR IS UNLAWFUL.

FIRE ALARM GENERAL NOTES

1. PROVIDE ALL EQUIPMENT, MATERIALS, LABOR AND PERFORM ALL OPERATIONS ASSOCIATED WITH THE INSTALLATION OF FIRE ALARM NOTIFICATION DEVICES (AUDIO AND VISUAL), SMOKE DETECTORS, HEAT DETECTORS AND SMOKE DUCT DETECTORS FOR AC UNITS AND OTHER RELATED FIRE ALARM DEVICES AS REQUIRED.
2. PROVIDE FIRE ALARM SYSTEM COVERAGE FOR THE THE NEW TENANT AREA.
3. THE SYSTEM SHALL BE COMPLETELY WIRED, CONNECTED, TESTED AND VERIFIED TO BE IN GOOD OPERATING CONDITION.
4. COORDINATE WITH THE BUILDING'S FIRE ALARM VENDOR FOR CONNECTION OF NEW FIRE ALARM DEVICES TO THE BUILDING FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL PAY ALL CHARGES FOR THE CONNECTION TO, MODIFICATIONS TO THE SYSTEM AND REPROGRAMMING OF THE BUILDING FIRE ALARM SYSTEM. FIRE ALARM VENDORS FEE SHALL BE INCLUDED IN THE BID.
6. ALL EQUIPMENT SHALL BE UL LISTED.
7. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, AMERICANS DISABILITY ACT (ADA), NFPA 72 NATIONAL FIRE ALARM CODE, FIRE DEPARTMENT RULES AND REGULATIONS, APPLICABLE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE WITH AMENDMENTS AND THE LANDLORDS DESIGN CRITERIA REQUIREMENTS FOR TENANT ALTERATIONS.
8. UPON COMPLETION OF ALL FIRE ALARM WORK AND ASSOCIATED TESTS, THE CONTRACTOR SHALL FILE AN APPLICATION WITH THE FIRE DEPARTMENT FOR A CERTIFICATE OF APPROVAL OF THE SYSTEM.
9. SUBMIT CERTIFICATE OF APPROVAL TO THE BUILDING ENGINEER OR OWNERS REPRESENTATIVE BEFORE REQUESTING FINAL PAYMENT AND ACCEPTANCE OF WORK.
10. ALL ITEMS AND EQUIPMENT SHALL BE COMPATIBLE WITH THE BUILDING FIRE ALARM SYSTEM. CONTRACTOR SHALL COORDINATE WITH BUILDINGS FIRE ALARM VENDOR FOR EXACT EQUIPMENT SPECIFICATION.
11. FIRE ALARM SPEAKER, WHETHER IN COMBINATION WITH A STROBE LIGHT UNIT OR AS A STAND ALONE DEVICE SHALL BE COMPATIBLE WITH THE BUILDING FIRE ALARM SYSTEM AND SHALL BE UL/FM LISTED. COLORS AND FINISHES SHALL BE COORDINATED WITH ARCHITECT.
12. FIRE ALARM STROBE LIGHTS, WHETHER IN COMBINATION WITH A SPEAKER UNIT OR AS A STAND ALONE DEVICE, SHALL HAVE A XENON STROBE OR EQUIVALENT. WITH A CLEAR WHITE LENS. MAXIMUM PULSE DURATION OF 0.2 SECONDS (MAX DUTY CYCLE OF 40%), 75 CANDELA MINIMUM, FLASH RATE MINIMUM OF 1 HZ/MAXIMUM 3 HZ AND WITH ADA AND SHALL BE UL/FM LISTED. UNIT SHALL BE MANUFACTURED BY FARADAY, WHEELOCK OR APPROVED EQUAL.
13. AREA AND SMOKE DETECTORS SHALL BE BUILDING STANDARD.
14. CONTROL MODULES SHALL BE BUILDING STANDARD.
15. PROVIDE #14 AWG WIRING (MINIMUM) FOR ALL DEVICES, U.O.N. BY BUILDING'S FIRE ALARM VENDOR. ALL SPEAKER CABLING SHALL BE TWISTED SHIELDED TYPE OR AS SPECIFIED BY BUILDINGS FIRE ALARM VENDOR. FIRE ALARM CABLING SHALL BE UL/FM APPROVED, COLORED FIRE DEPARTMENT RED, PLENUM RATED, CABLE PRINTING AS PER UL1424; MUST BEAR ADDITIONAL DESCRIPTION "ALSO CLASSIFIED CERT. FIRE.
16. WIRING SHALL BE INSTALLED IN HEAVY WALL THREADED RIGID GALVANIZED CONDUIT IN VERTICAL RISERS AND AREA WHERE SUBJECT TO MECHANICAL DAMAGE.
17. ALL WIRING IN EXPOSED CEILING SHALL BE IN HEAVY WALL THREADED RIGID GALVANIZED STEEL CONDUIT.
18. ALL WIRING IN MECHANICAL ROOM AND ELEVATOR ROOM SHALL BE IN HEAVY WALL THREADED RIGID GALVANIZED STEEL CONDUIT.
19. WIRING MAY BE RUN EXPOSED IN HUNG CEILINGS, PROVIDED IT IS UL LISTED AND APPROVED POWER LIMITED/PROTECTIVE SIGNALING CABLE FPL OR EQUAL (TEFLON COATED/PLENUM RATED)
20. ALL LOW VOLTAGE WIRING SHALL COMPLY WITH NFPA 72 AND LOCAL AND STATE BUILDING CODES.
21. THE FIRE ALARM DEVICES SHALL BE INSTALLED IN A WORKMANLIKE MANNER, IN ACCORDANCE WITH APPROVED MANUFACTURER'S WIRING DIAGRAM. THE CONTRACTOR SHALL PROVIDE ALL CONDUIT WIRING, WIRING, OUTLET BOXES, JUNCTION BOXES AND SIMILAR DEVICES NECESSARY FOR THE COMPLETE FIRE ALARM INSTALLATION.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL NEW LIFE SAFETY DEVICES AND ASSOCIATED CABLING AND CONDUIT. THE CONTRACTOR SHALL COORDINATE AND PAY FOR ALL REQUIRED MODIFICATIONS AND CONNECTIONS TO THE FIRE ALARM SYSTEM WHICH INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING;
    a. HARDWARE MODIFICATIONS TO THE FIRE COMMAND STATION PANEL.
    b. MODIFICATIONS/REPROGRAMMING OF FIRE ALARM SYSTEM SOFTWARE
    c. INCORPORATE FIRE ALARM PANELS OR DEVICES TO DATA GATHERING PANELS.
    d. ADDITIONAL POWER FROM NEW FUSE CUT-OUTS TO SERVE ADDITIONAL SYSTEM OR SUB-SYSTEM.
24. STROBE LIGHTS SHALL BE INSTALLED 80" ABOVE FINISHED FLOOR, OR 6" INCHES BELOW THE CEILING, WHICHEVER IS LOWER.
    a. AUDIBLE DEVICES TAPPED AT WATTAGE SETTING WHICH ALLOW FOR SOUND PRESSURE LEVELS OF THE UNIT TO EXCEED THE LEVEL IN THE ROOM BY 15 dBA, WHICHEVER IS HIGHER BUT NOT TO EXCEED 120 dBA.
26. THE CONTRACTOR SHALL SEPARATELY ZONE LIFE SAFETY DEVICES SHOWN ON RISER DIAGRAM AND CONNECT TO THE BUILDING FIRE ALARM SYSTEM.
29. SECURELY FASTEN IN POSITION ALL DEVICES AND WIRES USED IN THE FIRE ALARM SYSTEM. SUPPORT WIRING INDEPENDENTLY FROM BUILDING STRUCTURE, DO NOT USE HVAC DUCT, PIPES. LIGHTS, HUNG CEILING TO SUPPORT FIRE ALARM WIRING.
30. TWO OR MORE VISIBLE APPLIANCE IN THE SAME FIELD OF VIEW SHALL BE SYNCHRONIZED.
31. ALL CABLE AND CONDUIT PENETRATIONS THRU FIRE RATED WALLS AND FLOORS SHALL BE FIRESTOPPED IN ACCORDANCE WITH LOCAL AND STATE BUILDING CODE.
32. WHERE SHIELDED WIRING IS USED, SPLICE AND INSULATE DRAIN WIRE FOR THE FULL LENGTH OF THE WIRE RUN. SHIELDS TO BE GROUNDED ONLY AS INDICATED. ALL SHIELDED CABLE SHALL HAVE INSULATING JACKET.
33. SPLICES IN VERTICAL RISERS ARE PROHIBITED EXCEPT WHEN THE LENGTH OF CONDUCTORS EXCEEDS 150 FT, IN WHICH CASE AN APPROVED TERMINAL CABINET MAY BE USED, SPLICES IN HORIZONTAL RUNS SHALL BE AVOIDED, IF NECESSARY, THEY SHALL BE MADE IN APPROVED JUNCTION BOXES. SPLICES SHALL BE MADE WITH UL LISTED MECHANICAL CONNECTOR OR SOLDERED AND TAPED.
34. IDENTIFY FIRE ALARM SYSTEM TERMINAL AND JUNCTION LOCATIONS IN ACCORDANCE WITH NFPA STANDARD 70, SECTION 760 3. TERMINAL AND JUNCTION BOXES SHALL BE PAINTED RED AND STENCILED IN WHITE LETTERS "FIRE ALARM".
35. A TRAINED MANUFACTURER'S TECHNICAL REPRESENTATIVE SHALL TEST THE COMPLETED SYSTEM FOR PROPER OPERATION IN THE PRESENCE OF THE OWNERS REPRESENTATIVE. ANY SYSTEM, EQUIPMENT, DEVICE OR WIRING FAILURE DISCOVERED DURING THE TEST SHALL BE REPAIRED OR REPLACED BEFORE REQUESTING A SCHEDULE FOR A FINAL ACCEPTANCE TEST.
36. THE CONTRACTOR SHALL FILE FORM APPLICATION FOR ELECTRICAL INSPECTION AND SUMMARY OF CONTRACT EQUIPMENT TO BE INSTALLED) WITH THE DIVISION OF FIRE DEPARTMENT, THIS FORM SHALL BE FILED IN PREPARATION FOR THE FINAL TEST OF THE SYSTEM.
37. PERFORM ANY ADDITIONAL TESTS REQUESTED BY THE FIRE DEPARTMENT.

MOUNTING HEIGHTS - FIRE ALARM EQUIPMENT

9" BELOW FINISH CEILING	• WALL MOUNTED BELLS AND FIRE ALARM SOUNDING DEVICE OR AS SHOWN ON ARCHITECTURAL DETAILS) • TV MONITOR OUTLET AND SERVICE RECEPTACLE FOR SHELF MOUNTED TV
CENTERED ABOVE DOOR OR WINDOW OPENING	• WARNING AND SIGNALING FIXTURES / SIGNS
6'-8"	• FIRE ALARM STROBES OR COMBINATION DEVICES WITH STROBES SHALL BE MOUNTED SO THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE FINISHED FLOOR. IF CEILING DOES NOT PERMIT A MOUNTING HEIGHT OF AT LEAST 80" ABOVE FINISHED FLOOR, THE LENS OF THE DEVICE SHALL BE 6" OFF THE FINISHED CEILING.

MOUNTING HEIGHT NOTES

1. MOUNTING HEIGHTS SHALL BE ADHERED TO UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE ON THE ARCHITECTURE DRAWING OR SPECIFICATIONS.
2. ALL DEVICES SHOWN ON DRAWINGS ARE DIAGRAMMATIC IN LOCATION AND SHOWN FOR GENERAL WIRING PURPOSES ONLY. ALL DEVICES INDICATED TO BE INSTALLED IN THE SAME LOCATIONS WITH DIFFERENT ELEVATIONS SHALL BE ALIGNED VERTICALLY AND HORIZONTALLY. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE ALARM NOTIFICATION DEVICES AND FIRE ALARM PULL STATIONS.
3. COORDINATE ALL LOCATIONS AND MOUNTING HEIGHTS WITH AHU, ADA REQUIREMENTS AND OTHER TRADES.

FIRE ALARM SYSTEM

FACP	FIRE ALARM CONTROL PANEL.
FAA	REMOTE ANNUNCIATOR
RTS	REMOTE TEST STATION FOR DUCT SMOKE DETECTOR.
DACT	DIGITAL ALARM COMMUNICATOR TRANSMITTER
BP	BOOSTER PANEL
AR	TWO-WAY FIRE DEPARTMENT COMMUNICATION STATION
ARM	TWO-WAY FIRE DEPARTMENT COMMUNICATION MASTER STATION
MH	MAGNETIC DOOR HOLDER
FDS	REMOTE FIRE ALARM DRILL SWITCH - CENTER LINE 4'-0" A.F.F.
FATC	FIRE ALARM TERMINAL CABINET
BDA	BI-DIRECTIONAL AMPLIFLIER
15CD	AUDIO / VISUAL NOTIFICATION APPLIANCE - BOTTOM OF LENS 7'-6" A.F.F. NUMBER INDICATES CANDELLA RATING IF OTHER THAN 75CD.
C 15CD	AUDIO / VISUAL NOTIFICATION APPLIANCE - CEILING MOUNTED NUMBER INDICATES CANDELLA RATING IF OTHER THAN 75CD.
15CD	VISUAL NOTIFICATION APPLIANCE - BOTTOM OF LENS 7'-6" A.F.F. NUMBER INDICATES CANDELLA RATING IF OTHER THAN 75CD.
C 15CD	VISUAL NOTIFICATION APPLIANCE - CEILING MOUNTED NUMBER INDICATES CANDELLA RATING IF OTHER THAN 75CD.
	AUDIO ONLY NOTIFICATION APPLIANCE - WALL MOUNTED.
C	AUDIO ONLY NOTIFICATION APPLIANCE - CEILING MOUNTED.
F	PULL STATION
R	RADIO BOX
F	MASTER BOX
K	KNOX BOX
L	REMOTE INDICATING LIGHT(LED) TO DISPLAY ALARM CONDITION OF REMOTE DETECTOR, CENTERED ABOVE DOOR.
B	EXTERIOR BEACON (LENS COLOR AS REQUIRED BY AHJ)
CO	CARBON MONOXIDE DETECTOR
CS	COMBINATION CARBON MONOXIDE - SMOKE DETECTOR
DS	DUCT SMOKE DETECTOR
R	DUCT SMOKE DETECTOR TEST RESET STATION
H	HEAT DETECTOR FIXED AT 190° FARENHEIT
S	SMOKE DETECTOR
S	BEAM SMOKE DETECTOR (EMITTER)
S	BEAM SMOKE DETECTOR (RECEIVER)
B	ALARM BELL
FS	FLOW SWITCH
PS	PRESSURE SWITCH
FSD	FIRE AND SMOKE DAMPER, PROVIDE CONTROL MODULE FOR INTERFACE TO FIRE ALARM
SD	SMOKE DAMPER
R	REMOTE DUCT SMOKE DETECTOR INDICATOR WITH TEST SWITCH
C	FIRE ALARM RELAY CONTROL
M	FIRE ALARM RELAY MONITOR
TS	TAMPER SWITCH
	FIREFIGHTERS PHONE
J	PHONE JACK FOR FIREFIGHTERS PORTABLE PHONE

AUDIBLE NOTIFICATION DESIGN CRITERIA

AUDIBLE NOTIFICATION DEVICES DESIGN CRITERIA	AMBIENT LEVELS	DESIGN GOALS
OFFICES	55 dBA	70 dBA
CORRIDORS	55 dBA	70 dBA
CLASSROOMS	45 dBA	60 dBA
MECHANICAL ROOMS	85 dBA	100 dBA
PLACES OF ASSEMBLY	55 dBA	70 dBA
INSTITUTIONAL	50 dBA	65 dBA
MERCANTILE	40 dBA	55 dBA

REVISION LEGEND: ❍ NEW ISSUE | ● REVISED ISSUE | ♦ REVISED, NOT ISSUED | ⊠ REMOVED FROM DRAWING SET | ◻ ISSUED, NOT REVISED

DRAWING LIST - FIRE ALARM

DRAWING NUMBER	DRAWING TITLE	05-18-2021 SCHEMATIC DESIGN	06-23-2022 DESIGN DEVELOPMENT COST ESTIMATE SET	08-05-22 MSBA DESIGN DEVELOPMENT SUBMISSION	11-17-2022 60% CD COST ESTIMATE SET	01-13-2023 - MSBA 60% CD SUBMISSION	03-29-2023 - 90% CD COST ESTIMATE	05-12-2023 - MSBA 90% CD CONSTRUCTION DOCUMENT SUBMITTAL			
FA0-1	FIRE ALARM LEGENDS, ABBREVIATIONS, AND GENERAL NOTES		❍	●	●	●	●	●			
FA1-1-0C	FIRE ALARM LOWER LEVEL FLOOR PLAN - AREA C		❍	●	●	●	●	●			
FA1-1-0D	FIRE ALARM LOWER LEVEL FLOOR PLAN - AREA D		❍	●	●	●	●	●			
FA1-1-MC	FIRE ALARM LOWER LEVEL MEZZANINE PLAN - AREA C		❍	●	●	●	●	●			
FA1-1-1A	FIRE ALARM FIRST FLOOR PLAN - AREA A		❍	●	●	●	●	●			
FA1-1-1B	FIRE ALARM FIRST FLOOR PLAN - AREA B		❍	●	●	●	●	●			
FA1-1-1C	FIRE ALARM FIRST FLOOR PLAN - AREA C		❍	●	●	●	●	●			
FA1-1-1D	FIRE ALARM FIRST FLOOR PLAN - AREA D		❍	●	●	●	●	●			
FA1-1-1MA	FIRE ALARM FIRST FLOOR MEZZANINE PLAN - AREA A		❍	●	●	●	●	●			
FA1-1-2A	FIRE ALARM SECOND FLOOR PLAN - AREA A		❍	●	●	●	●	●			
FA1-1-2B	FIRE ALARM SECOND FLOOR PLAN - AREA B		❍	●	●	●	●	●			
FA1-1-2C	FIRE ALARM SECOND FLOOR PLAN - AREA C		❍	●	●	●	●	●			
FA1-1-2D	FIRE ALARM SECOND FLOOR PLAN - AREA D		❍	●	●	●	●	●			
FA1-1-3A	FIRE ALARM THIRD FLOOR PLAN - AREA A		❍	●	●	●	●	●			
FA1-1-3B	FIRE ALARM THIRD FLOOR PLAN - AREA B		❍	●	●	●	●	●			
FA1-1-3C	FIRE ALARM THIRD FLOOR PLAN - AREA C		❍	●	●	●	●	●			
FA1-1-3D	FIRE ALARM THIRD FLOOR PLAN - AREA D		❍	●	●	●	●	●			
FA1-1-4A	FIRE ALARM FOURTH FLOOR PLAN - AREA A		❍	●	●	●	●	●			
FA1-1-4B	FIRE ALARM FOURTH FLOOR PLAN - AREA B		❍	●	●	●	●	●			
FA1-1-4C	FIRE ALARM FOURTH FLOOR PLAN - AREA C		❍	●	●	●	●	●			
FA1-1-4D	FIRE ALARM FOURTH FLOOR PLAN - AREA D		❍	●	●	●	●	●			
FA1-2-1A	FIRE ALARM ROOF PLAN - AREA A		❍	●	●	●	⊠				
FA1-2-1B	FIRE ALARM ROOF PLAN - AREA B		❍	●	●	●	⊠				
FA1-2-1C	FIRE ALARM ROOF PLAN - AREA C		❍	●	●	●	⊠				
FA1-2-1D	FIRE ALARM ROOF PLAN - AREA D		❍	●	●	●	⊠				
FA1-1-CB	FIRE ALARM CONCESSION BUILDING PLAN		❍	●	●	●	●	●			
FA1-1-LB	FIRE ALARM LOCKER BUILDING PLAN		❍	●	●	●	●	●			
FA1-1-MB	FIRE ALARM MAINTENANANCE BUILDING PLAN		❍	●	●	●	●	⊠			
FA4-0-1	SEQUENCE OF OPERATION MATRIX							❍			
FA4-0-2	FIRE ALARM HIGH SCHOOL BUILDING RISER DIAGRAM		❍	●	●	●	●	●			
FA4-0-3	FIRE ALARM RISER DIAGRAMS		❍	●	●	●	●	●			

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

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM

BALA
ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document
Submittal

May 12th, 2023

PROJECT NORTH | MAGNETIC NORTH

N

FIRE ALARM LEGENDS, ABBREVIATIONS, AND GENERAL NOTES

Scale: 12" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA0-1

2 FA1-1-0C **FIRE ALARM LOWER LEVEL FLOOR PLAN - AREA C**
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES:

1 PROVIDE SMOKE DETECTION TO INITIATE ELEVATOR RECALL

2 PROVIDE A NEW ANALOG ADDRESSABLE FIRE ALARM CONTROL PANEL UNIT IN THE FA ROOM. AN ANNUNCIATOR FOR THE FIRE ALARM CONTROL PANEL SHALL BE INSTALLED AT THE MAIN ENTRANCE VESTIBULE, MAIN OFFICE, AND SHOP AREAS.

3 PROVIDE A FIRE ALARM DRILL SWITCH TO ACTUATE A FIRE DRILL.

4 PROVIDE A REMOTE ANNUNCIATOR FOR THE BI-DIRECTIONAL AMPLIFICATION SYSTEM.

5 PROVIDE AN EXPLOSION PROOF COMBINATION SPEAKER/STROBE.

6 PROVIDE MONITOR RELAY MODULES TO MONITOR THE INPUTS OF THE VENTILATION CONTROL PANEL.

7 NOT USED.

8 DETECTOR SHALL BE LOCATED AT THE PIT OF ELEVATOR SHAFT

9 CARBON MONOXIDE DTECTORS IN THE GARAGE/ SHOP AREA SHALL BE COLUMN OR WALL MOLUNTED AT THE HEIGHT OF 60".

10 HEAT DETECTORS LOCAL ANNUNCIATOR PANEL (FAA-HD) WALL MOUNTED. DESIGNATED FOR ALL DETECTORS IN THE AUTO COLISION SHOP, RM C022.

11 CO DETECTOR LOCAL ANNUNCIATOR PANEL (FAA-COD) WALL MOUNTED. DESIOGNATED FOR ALL CARBON MONOXIDE DETECTORS IN AUTO COLISION SHOP, RM C022.

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

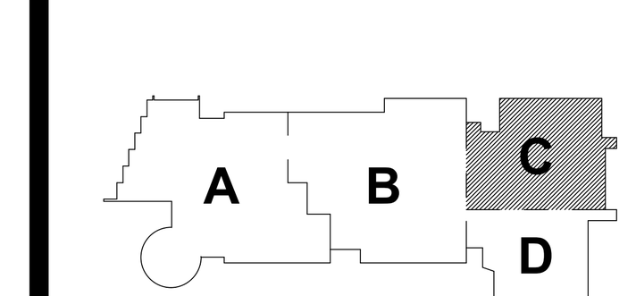
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM
BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document
Submittal

May 12th, 2023



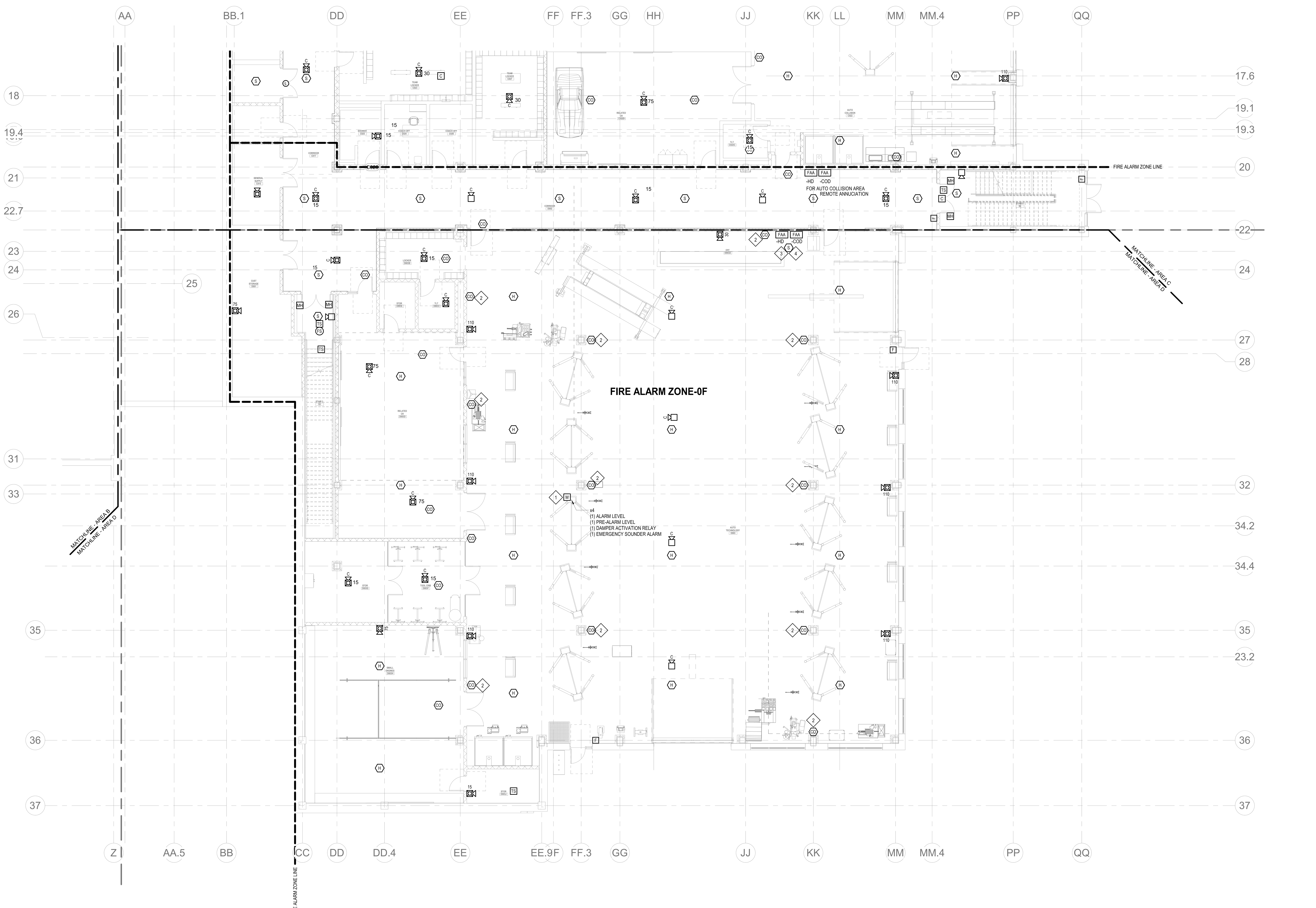
KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM LOWER LEVEL FLOOR PLAN - AREA C

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-0C



FIRE ALARM LOWER LEVEL FLOOR PLAN - AREA D

1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES:

1. PROVIDE MONITOR RELAY MODULES TO MONITOR THE INPUTS OF THE VENTILATION CONTROL PANEL.
2. CARBON MONOXIDE DTECTORS IN THE GARAGE/ SHOP AREA SHALL BE COLUMN OR WALL MOLUNTED AT THE HEIGHT OF 60".
3. HEAT DETECTORS LOCAL ANNUNCIATOR PANEL (FAA-HD) WALL MOUNTED. DESIGNATED FOR ALL DETECTORS IN THE AUTO TECHNOLOGY, RM D003.
4. CO DETECTORS LOCAL ANNUNCIATOR PANEL (FAA-COD) WALL MOUNTED. DESIOGNATED FOR ALL CARBON MONOXIDE DETECTORS IN AUTO TECHNOLOGY, RM D003.

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

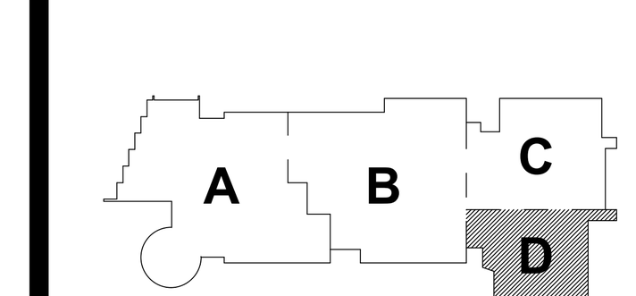
Wakefield, MA 01880

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM

BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document
Submittal

May 12th, 2023

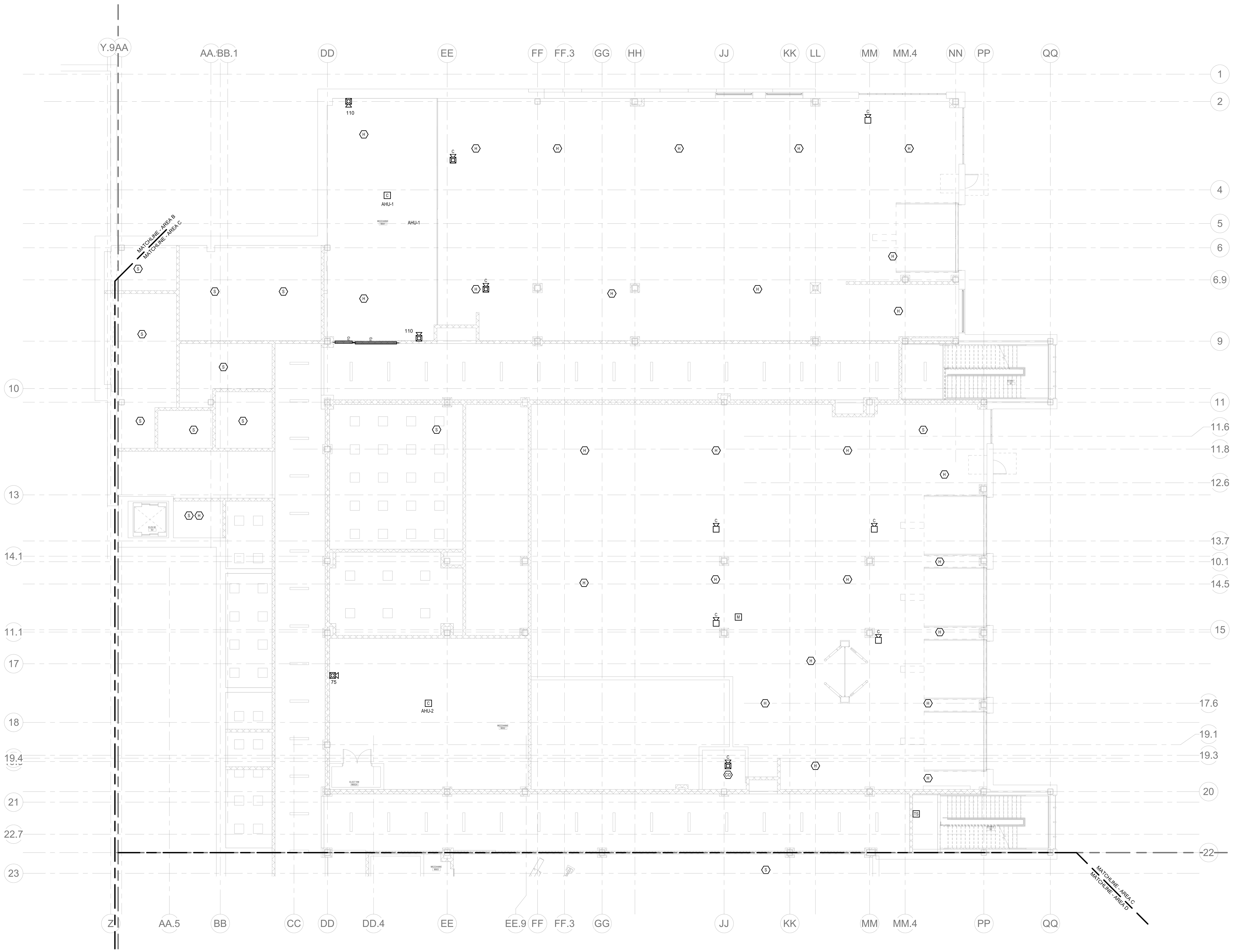


KEY PLAN

PROJECT NORTH	MAGNETIC NORTH
N	

FIRE ALARM LOWER LEVEL FLOOR PLAN - AREA D

Scale: 1/8" = 1'-0"	FA1-1-0D
Job No.: 60-20-409	
Drawn By: WAM	
Date: May 12th, 2023	



2 FA1-1-MC **FIRE ALARM LOWER LEVEL MEZZANINE PLAN - AREA C**
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

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

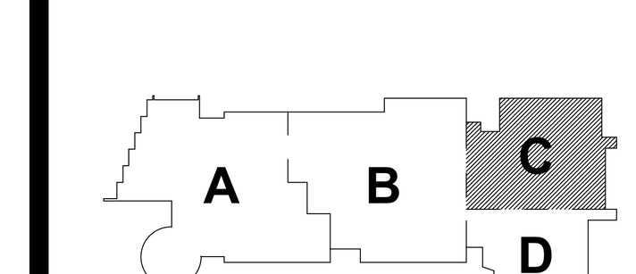
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM
BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document Submittal

May 12th, 2023



KEY PLAN

PROJECT NORTH
MAGNETIC NORTH

FIRE ALARM LOWER LEVEL MEZZANINE PLAN - AREA C

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

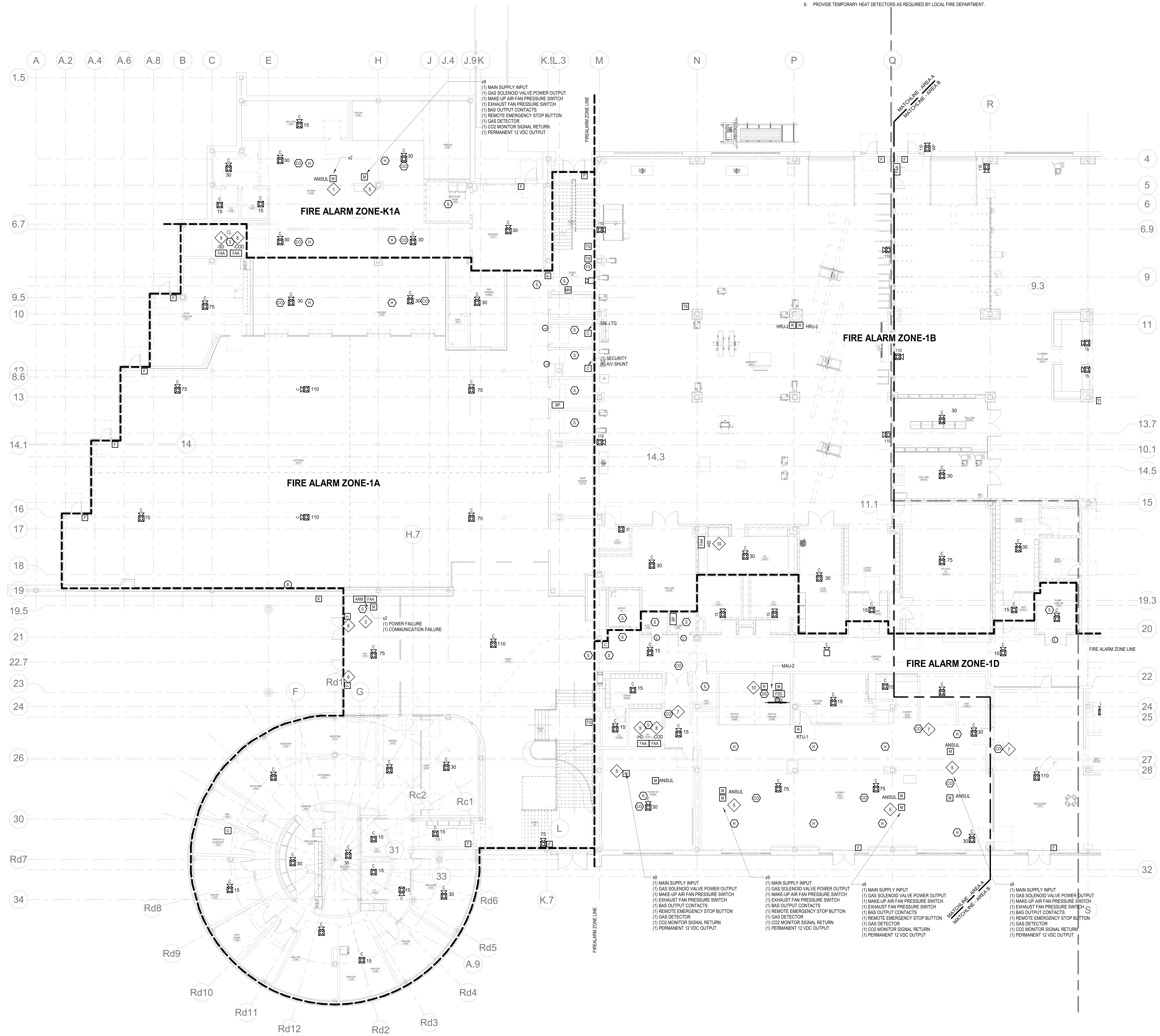
FA1-1-MC

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.
2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.
3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.
4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.
5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.
6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.
7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.
8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.
9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.
10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.
11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.
12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.
13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.
14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.
15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.
16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.
17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

KEYNOTES:

1. MONITOR THE CONTACTS OF THE ANSUL SYSTEM PROVIDED BY OTHERS.
2. PROVIDE A WEATHERPROOF SPEAKER/STROBE.
3. MONITOR THE CONTACTS OF THE TWO WAY FIRE DEPARTMENT COMMUNICATION SYSTEM.
4. PROVIDE WEATHER PROOF DEVICE NOTE.
5. PROVIDE MONITOR RELAY MODULES TO MONITOR THE INPUTS OF THE HOOD GAS SHUT OFF SYSTEM.
6. PULL STATION SHALL BE INSTALLED IN THE MULTION WITH WIRING INSIDE THE MULION CHANNEL
7. WALL MOUNTED CO DETECTOR AT 54"AFF
8. LOCAL ANNUNCITOR PANEL DEDICATD FOR CARBON MONOXICE (CO) DETECTORS
9. LOCAL ANNUNCITOR PANEL DEDICATD FOR SMOKE DETECTORS
9. LOCAL ANNUNCITOR PANEL DEDICATD FOR HEAT DETECTORS
10. REMOTE DUCT SMOKE DTECTOR INDICATOR AND TEST SWITCH SHALL BE INSTALLED ON THE CEILING DIRECTLY BELOW DUCT SMOKE DETECTOR OR ON THE WALL IF THE CEILING INSTALLATION IS NOT POSSIBLE.



1 FIRE ALARM FIRST FLOOR PLAN - AREA A
1" = 10'-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

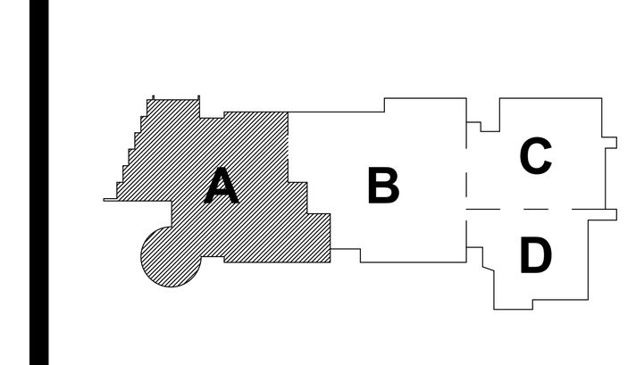
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM
BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document Submittal

May 12th, 2023



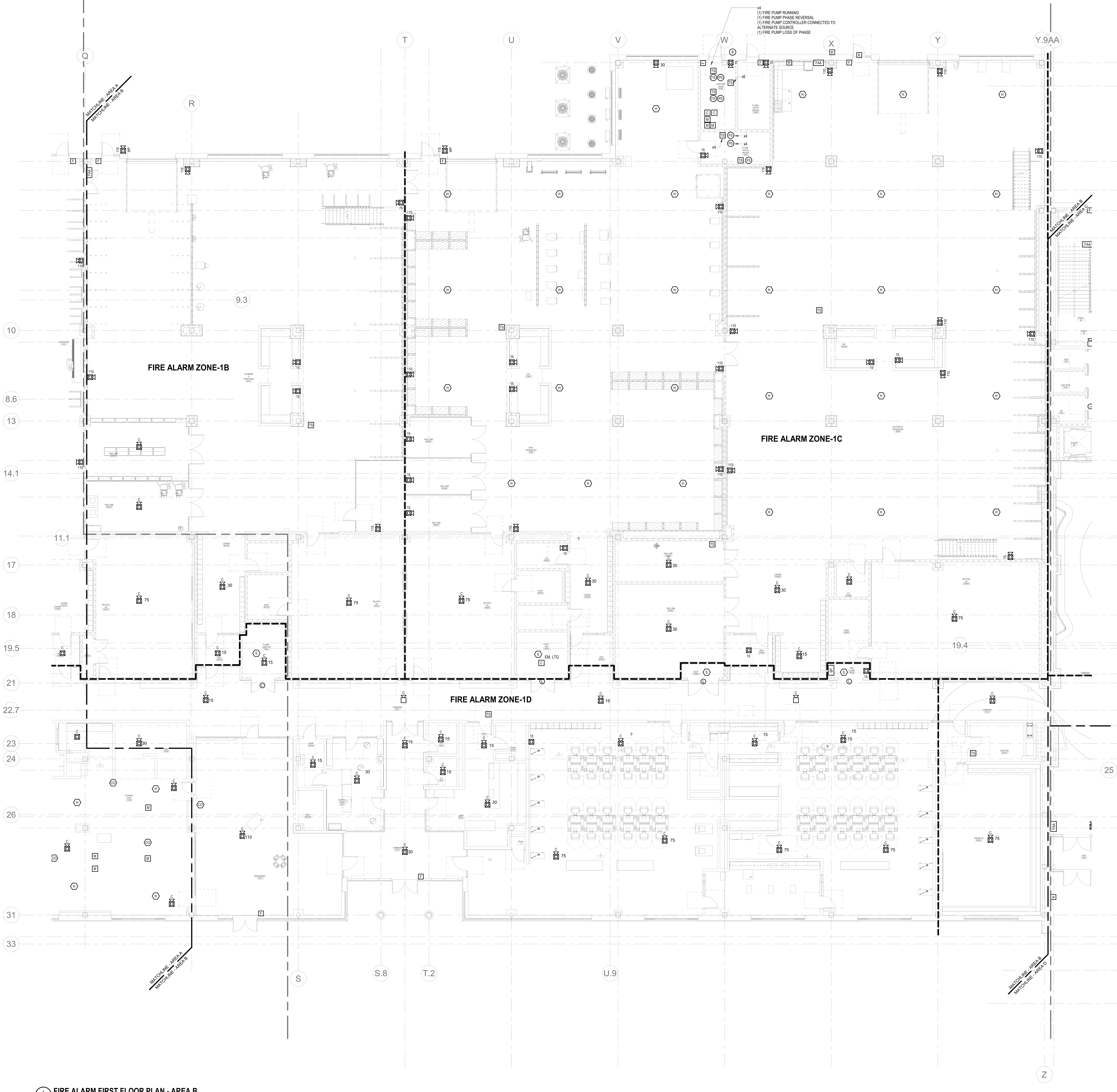
KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM FIRST FLOOR PLAN - AREA A

Scale: 1" = 10'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-1A



FIRE ALARM FIRST FLOOR PLAN - AREA B
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

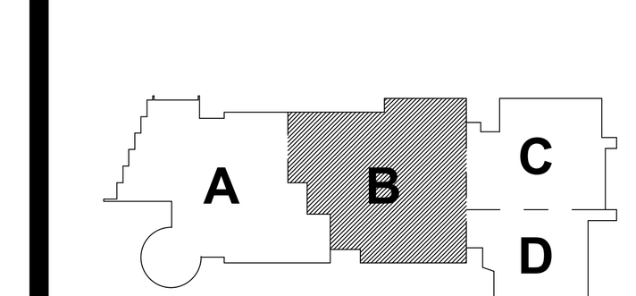
DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA ENGINEERS

MSBA 90% CD
Construction Document Submittal
May 12th, 2023



KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM FIRST FLOOR PLAN - AREA B

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-1B

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

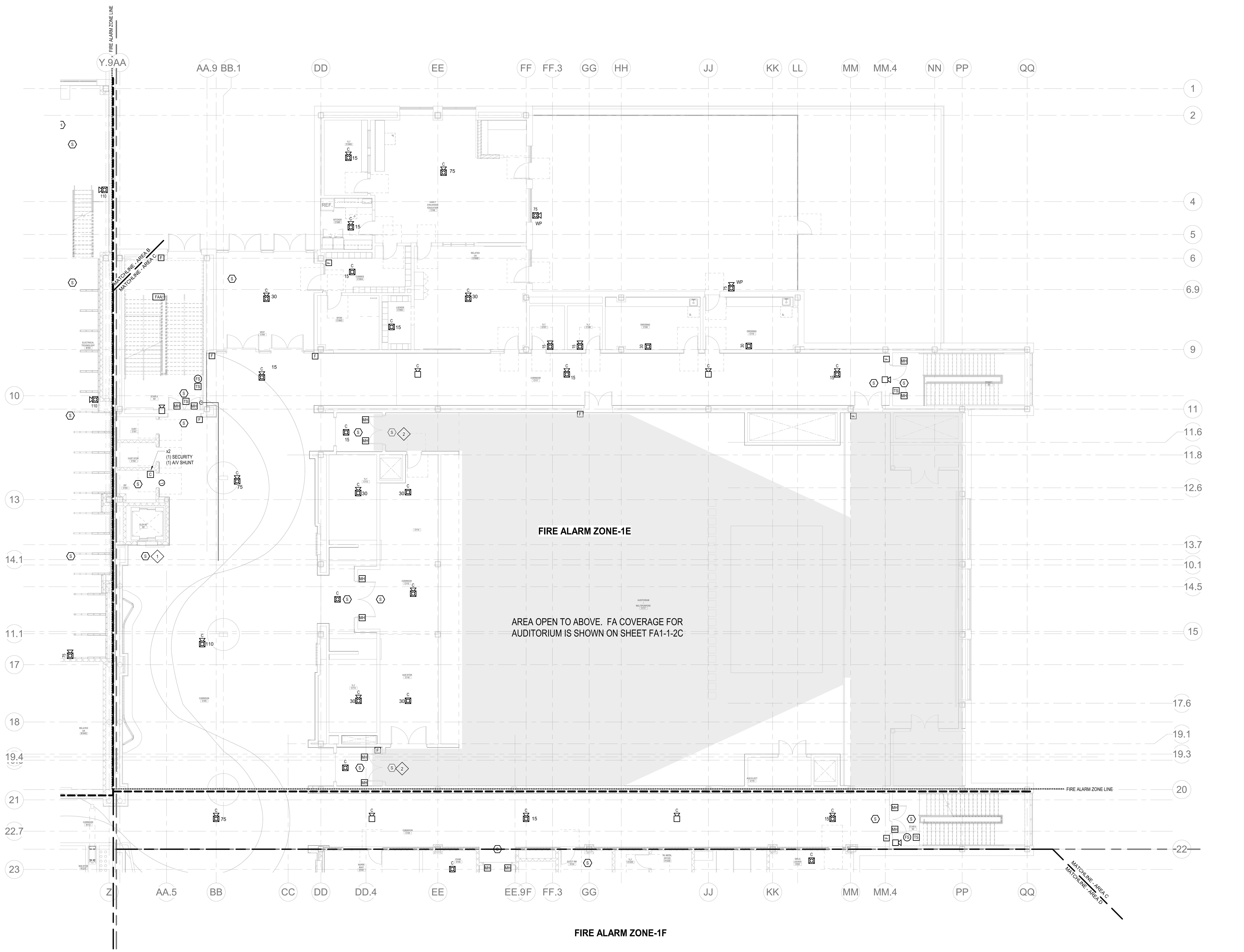
15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES: ◇X

1. PROVIDE SMOKE DETECTION TO INITIATE ELEVATOR RECALL
2. SMOKE DETECTOR TO BE MOUNTED ON THE WALL ABOVE THE DOOR.



FIRE ALARM FIRST FLOOR PLAN - AREA C
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

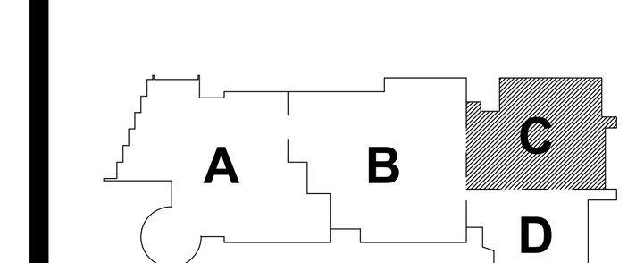
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

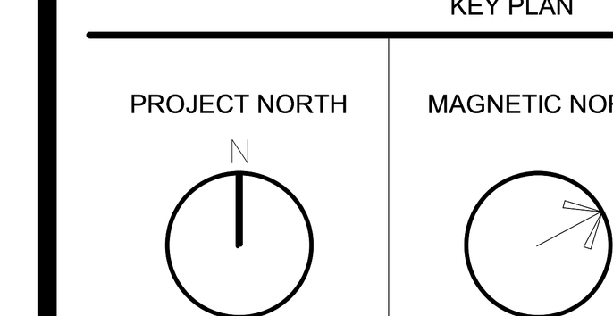
BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM
BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document Submittal

May 12th, 2023



KEY PLAN



FIRE ALARM FIRST FLOOR PLAN - AREA C

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-1C

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

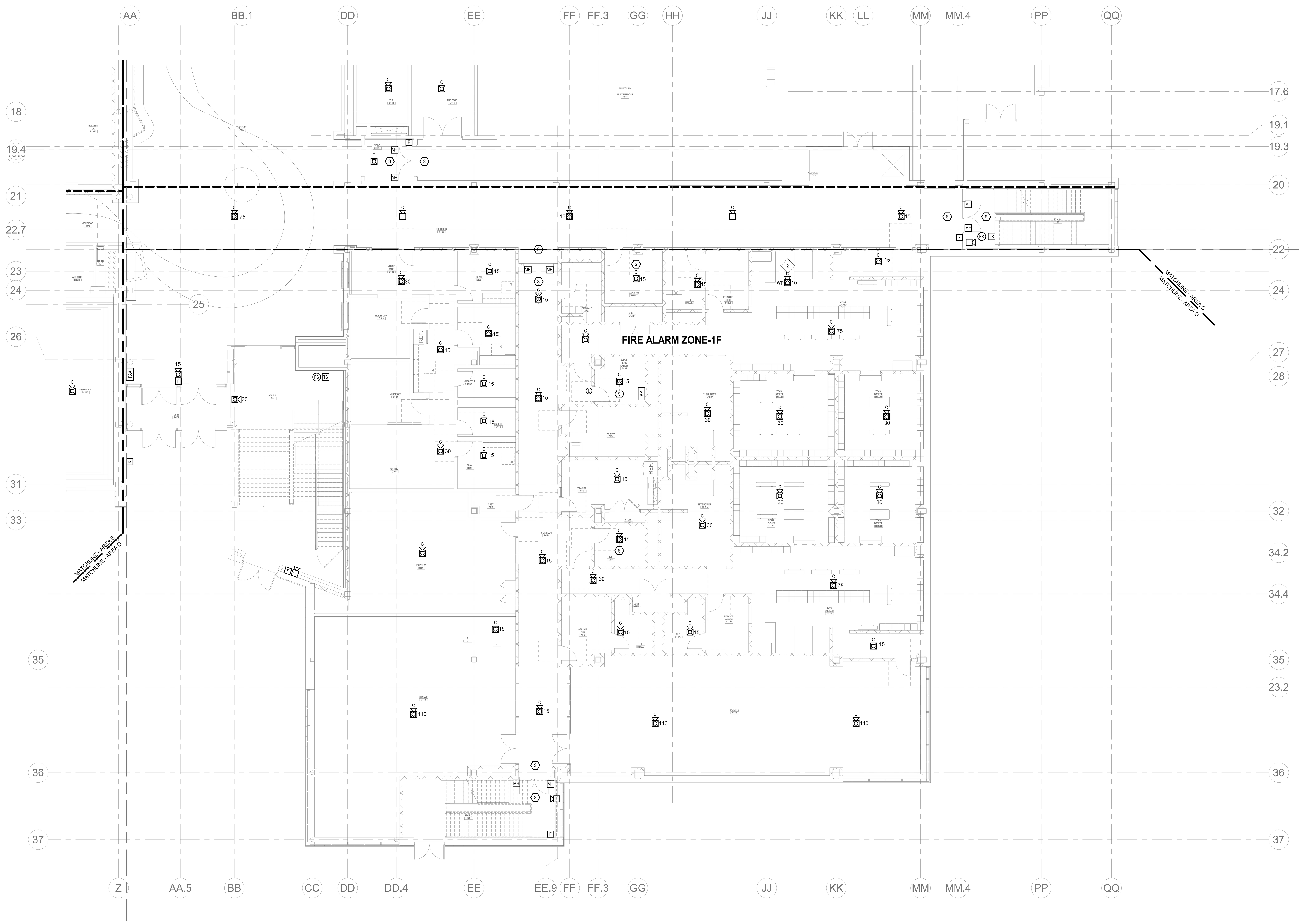
15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES:

1. PROVIDE SMOKE DETECTOR TO INITIATE ELEVATOR RECALL.
2. PROVIDE WEATHER PROOF DEVICE.



1 FA1-1-1D **FIRE ALARM FIRST FLOOR PLAN - AREA D**
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

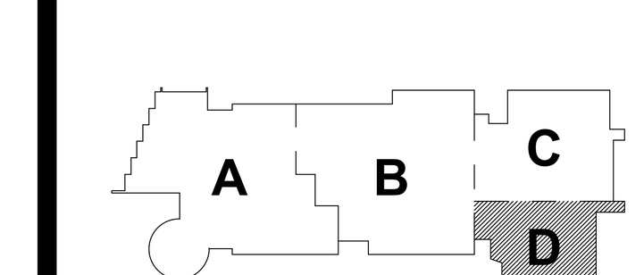
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA ENGINEERS

MSBA 90% CD
Construction Document Submittal

May 12th, 2023



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

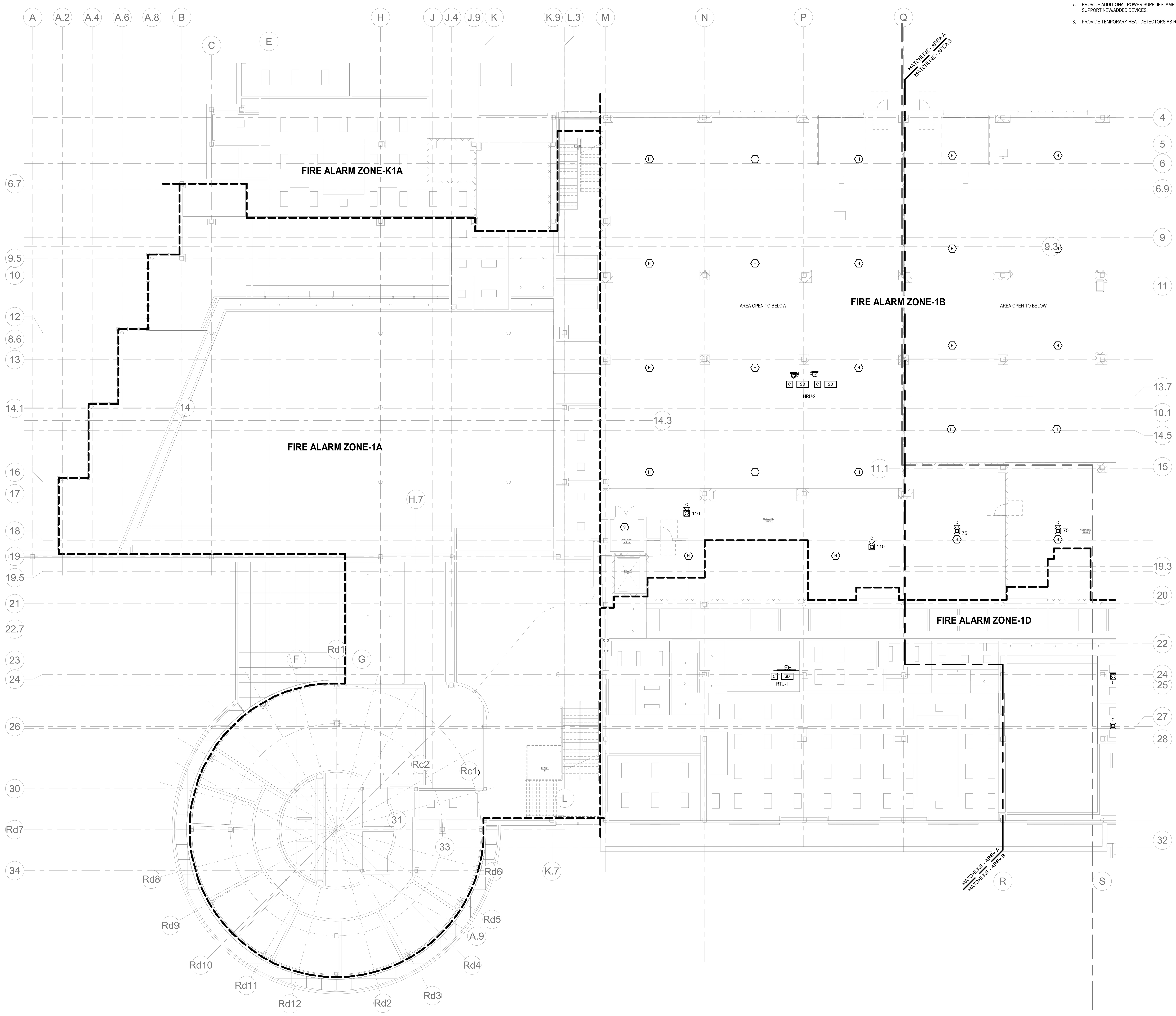
FIRE ALARM FIRST FLOOR PLAN - AREA D

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-1D

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.
2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.
3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.
4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.
5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.
6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.
7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.
8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.
9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.
10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.
11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.
12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.
13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.
14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.
15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.
16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.
17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.



FIRE ALARM FIRST FLOOR MEZZANINE PLAN - AREA A
1" = 10'-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

BALA ENGINEERS

MSBA 90% CD Construction Document Submittal

May 12th, 2023

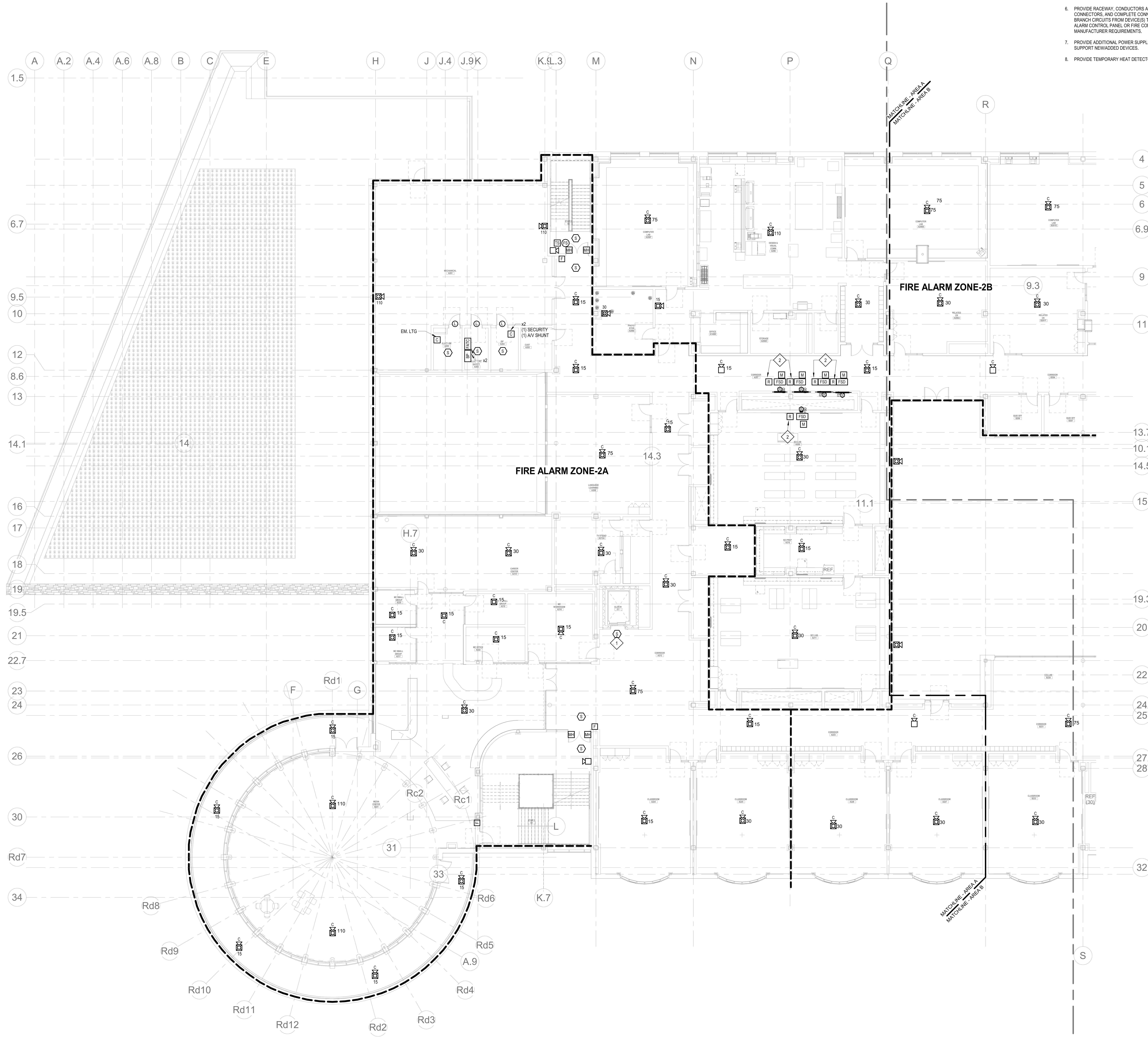
KEY PLAN: A B C D

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM FIRST FLOOR MEZZANINE PLAN - AREA A

Scale: 1" = 10'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-1MA



FIRE ALARM SECOND FLOOR PLAN - AREA A
1" = 10'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.
2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.
3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.
4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.
5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.
6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.
7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.
8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.
9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.
10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.
11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.
12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.
13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.
14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.
15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.
16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.
17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES: X

1. PROVIDE SMOKE DETECTION TO INITIATE ELEVATOR RECALL
2. REMOTE DUCT SMOKE DETECTOR INDICATOR SAND TEST SWITCH SHALL BE INSTALLED ON THE CEILING DIRECTLY BELOW DUCT SMOKE DTECTOR

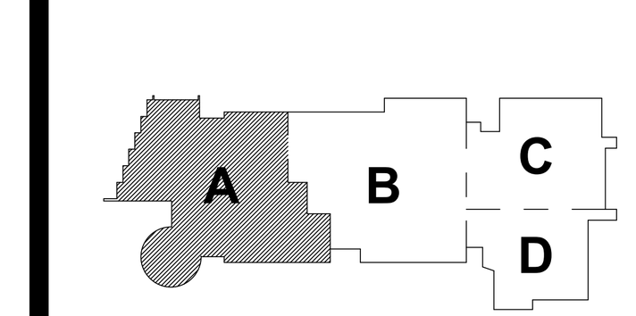
DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA ENGINEERS

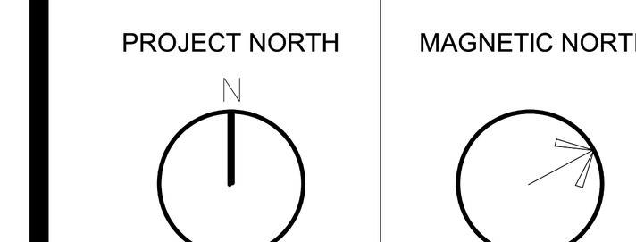
MSBA 90% CD
Construction Document Submittal
May 12th, 2023



KEY PLAN

PROJECT NORTH

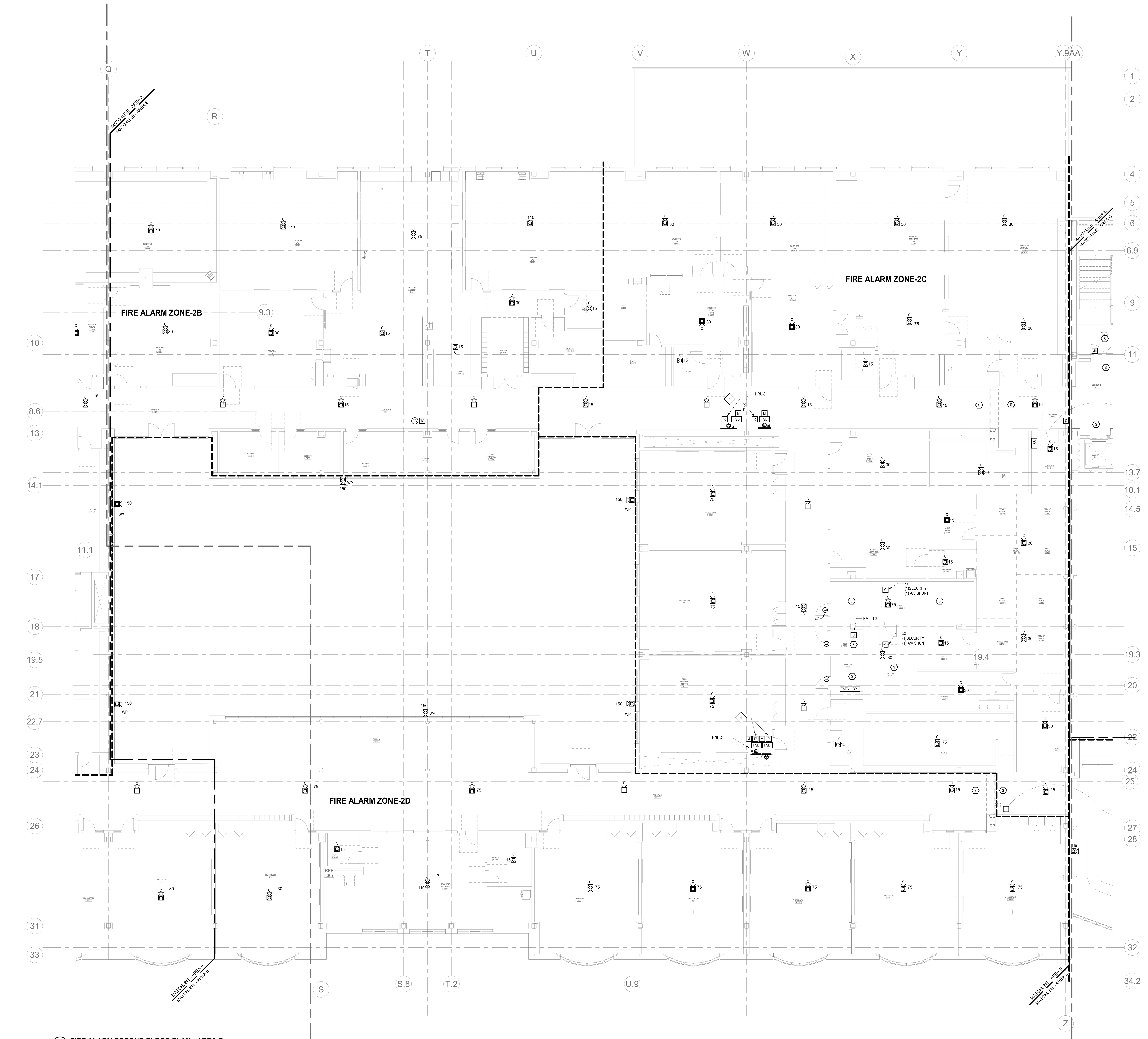
MAGNETIC NORTH



FIRE ALARM SECOND FLOOR PLAN - AREA A

Scale: 1" = 10'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-2A



FIRE ALARM SECOND FLOOR PLAN - AREA B
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES: ⟨1⟩

1. REMOTE DUCT SMOKE DETECTOR MONITORING AND RESET SWITCH. MOUNTED ON THE CEILING DIRECTLY BELOW DUCT SMOKE DETECTOR.

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

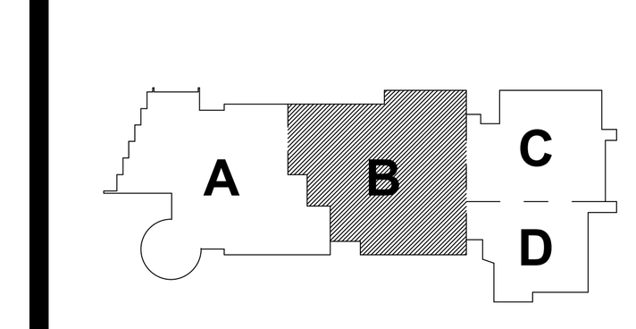
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM
BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document
Submittal

May 12th, 2023



KEY PLAN

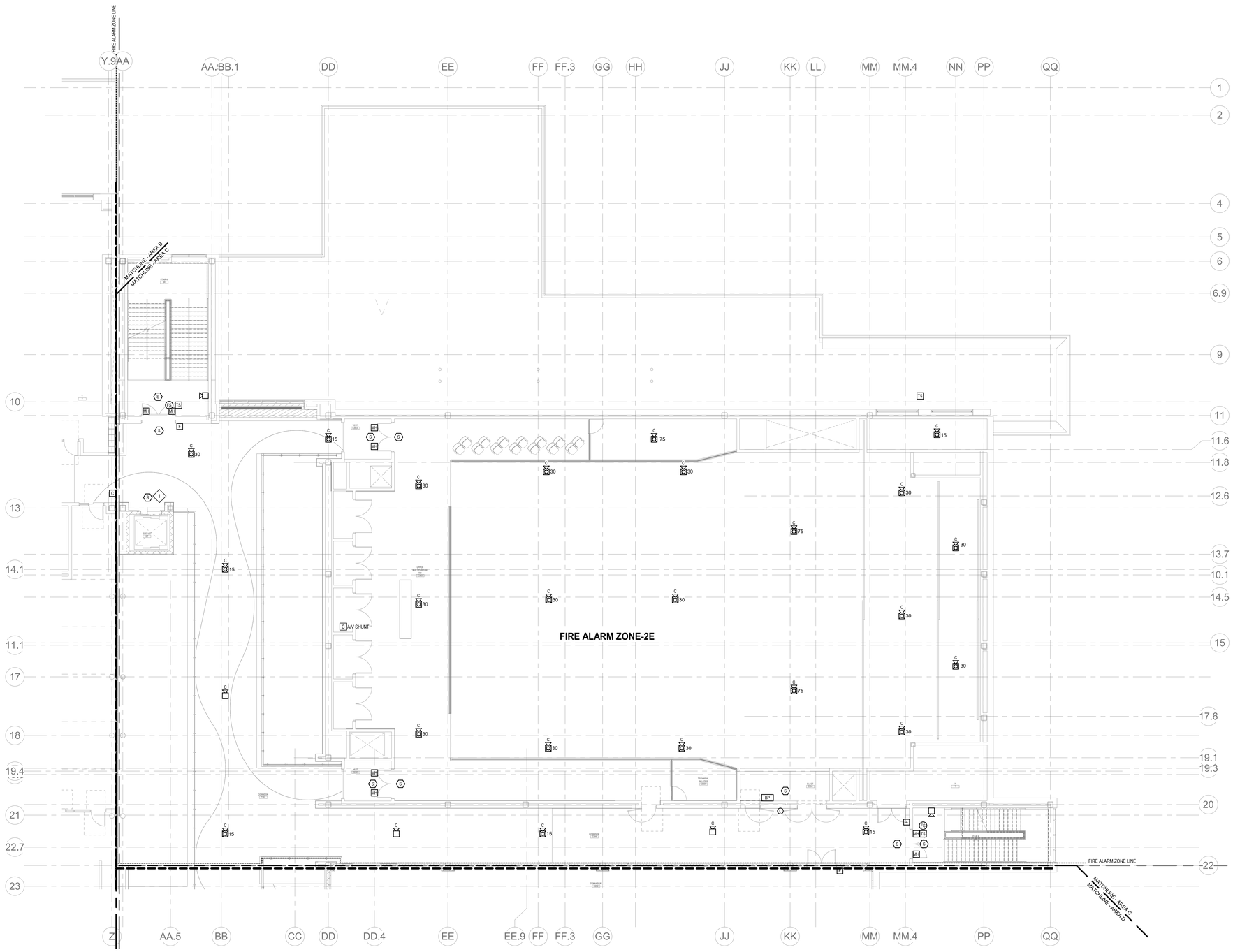
PROJECT NORTH

MAGNETIC NORTH

FIRE ALARM SECOND FLOOR PLAN - AREA B

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-2B



1 FA1-1-2C **FIRE ALARM SECOND FLOOR PLAN - AREA C**
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK. APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES: (X)

1. PROVIDE SMOKE DETECTION TO INITIATE ELEVATOR RECALL

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

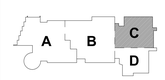
Wakefield, MA 01880

BALA CONSULTING ENGINEERS, INC.
57 TEMPLE PLACE
BOSTON, MA 02111
TEL 617.357.6555 FAX 617.357.5180
WWW.BALA.COM

BALA ENGINEERS
MECHANICAL · ELECTRICAL · PLUMBING · FIRE PROTECTION
STRUCTURAL · TECHNOLOGY · COMMISSIONING

MSBA 90% CD
Construction Document
Submittal

May 12th, 2023



KEY PLAN

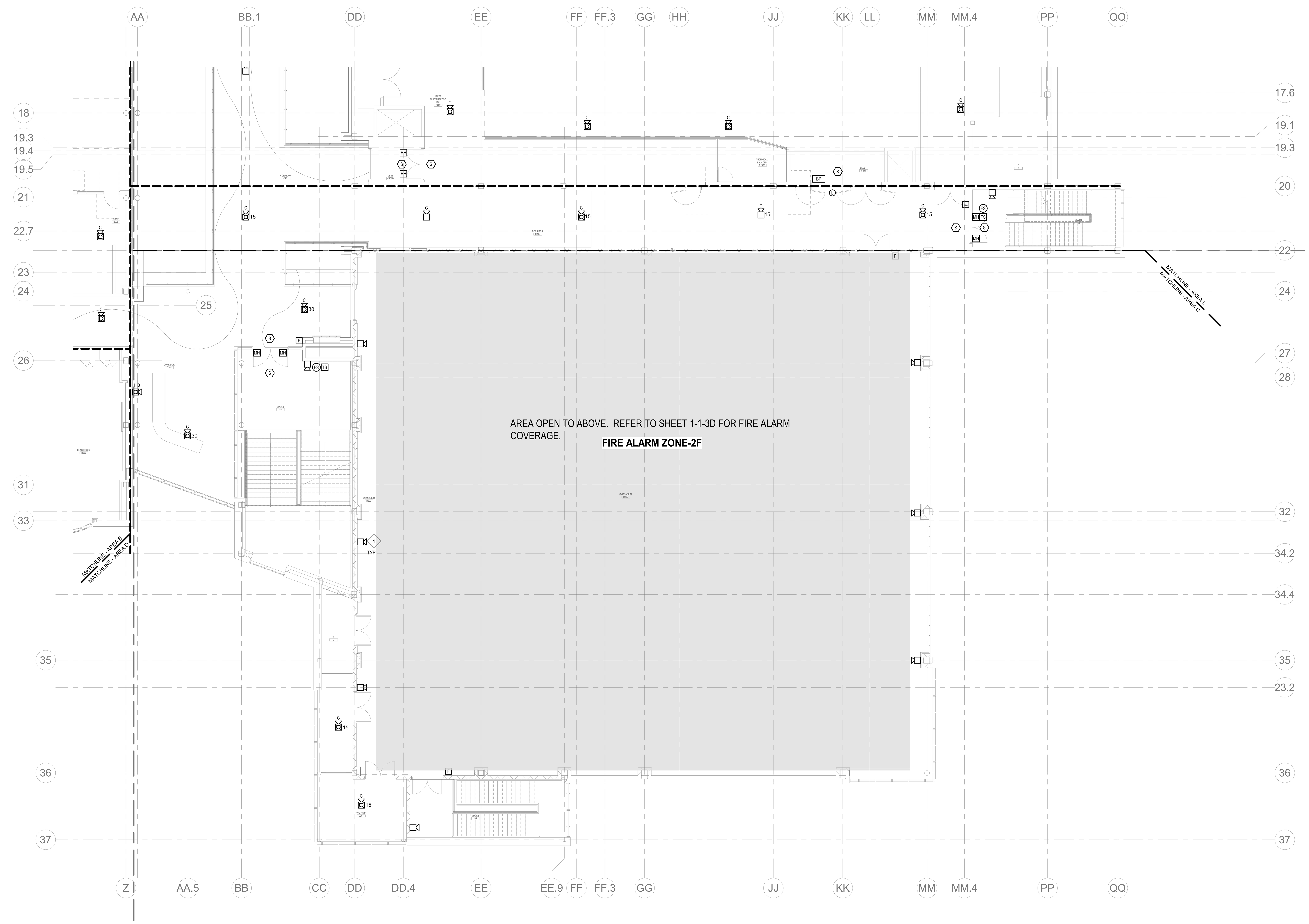
PROJECT NORTH

MAGNETIC NORTH

FIRE ALARM SECOND FLOOR PLAN - AREA C

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-2C



1 FA1-1-2D **FIRE ALARM SECOND FLOOR PLAN - AREA D**
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES: 1

1. PROVIDE TCPA-10 SINGLE COIL HYPERSPIKE MEDIUM POWERED SIGNALING AND NOTIFICATION SPEAKER. COORDINATE WITH MANUFACTURER HYPERSPIKE. CONTRACTOR SHALL COORDINATE THE MOUNTING HEIGHTS OF THE HYPERSPIKE SPEAKER WITH THE ARCHITECT.

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

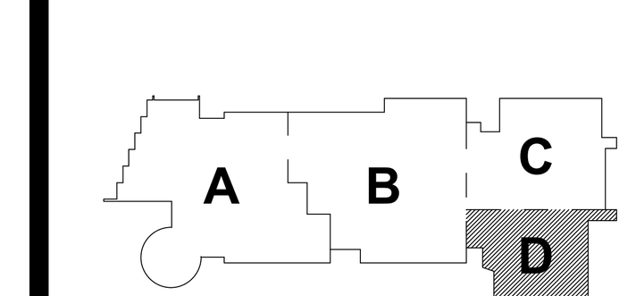
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA ENGINEERS

MSBA 90% CD Construction Document Submittal

May 12th, 2023



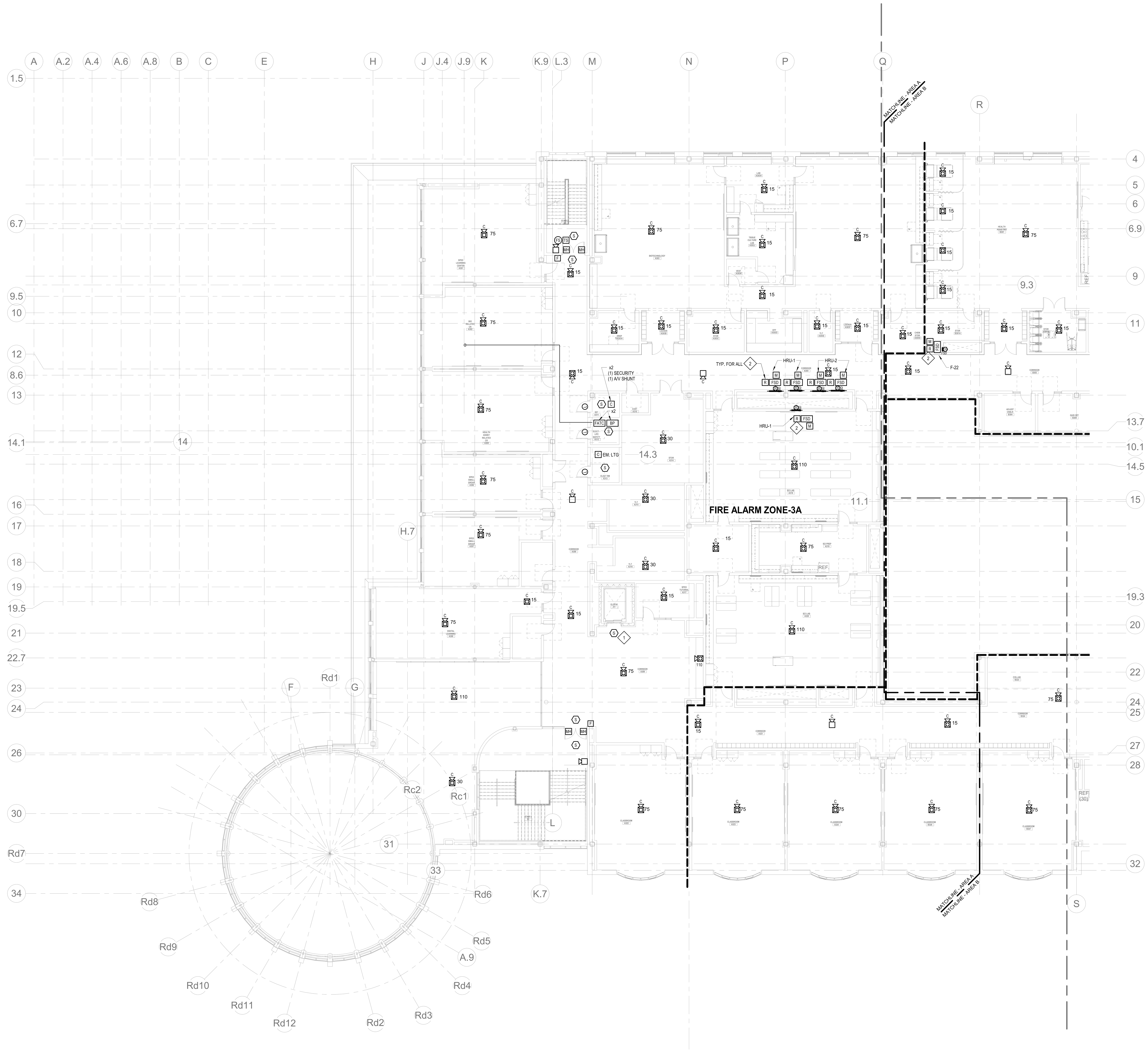
KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM SECOND FLOOR PLAN - AREA D

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-2D



1 FA1-1-3A FIRE ALARM THIRD FLOOR PLAN - AREA A
1" = 10'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES:

1. PROVIDE SMOKE DETECTION TO INITIATE ELEVATOR RECALL
2. REMOTE DUCT SMOKE DETECTOR INDICATOR WITH TEST SWITCH, SHALL BE INSTALLED ON THE CEILING DIRECTLY BELOW DUCT SMOKE DETECTOR.

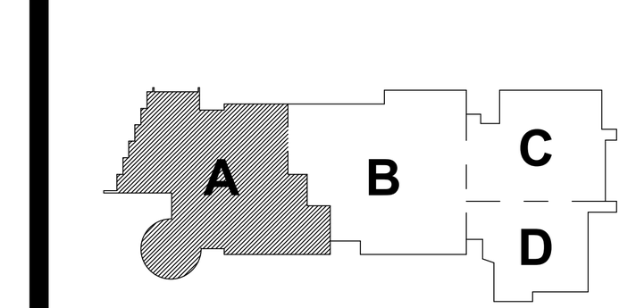
DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

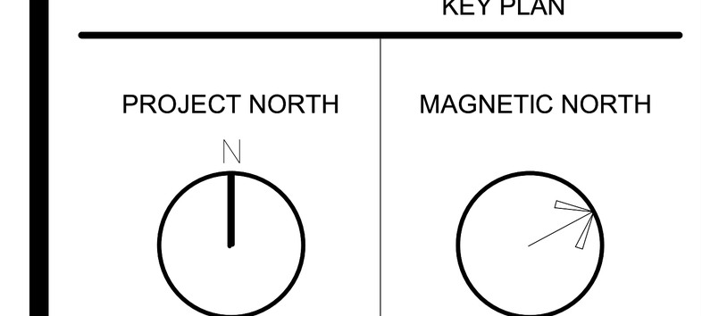
Wakefield, MA 01880

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM
BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document
Submittal
May 12th, 2023



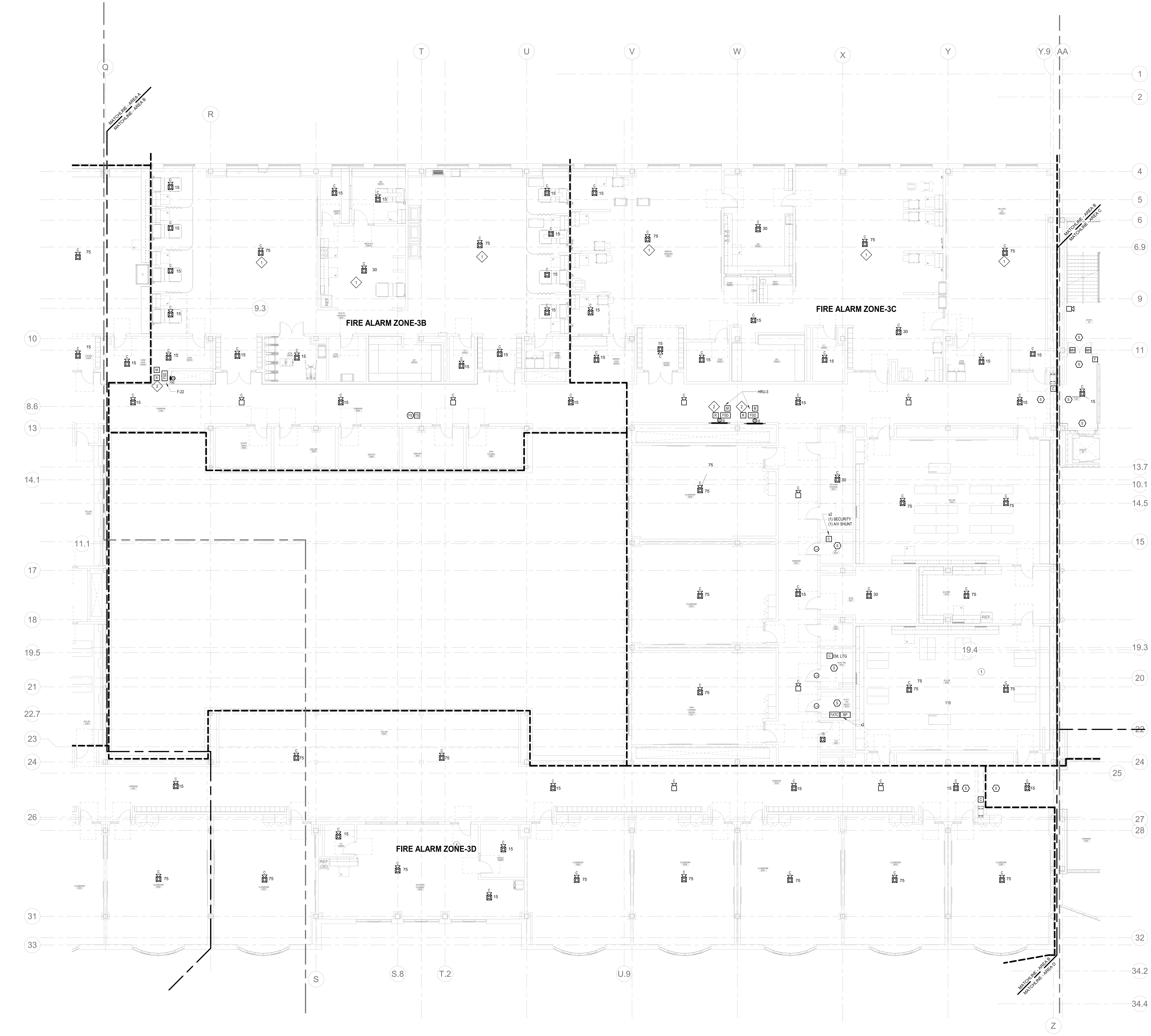
KEY PLAN



FIRE ALARM THIRD FLOOR PLAN - AREA A

Scale: 1" = 10'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-3A



FIRE ALARM THIRD FLOOR PLAN - AREA B

1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES: X

1. CONTRACTOR SHALL PROVIDE CIELING MOUNTED NOTIFICATION APPLIANCES NOT TO EXCEED THE HEIGHT OF THE FLOATING CEILING. COORIDNATE WITH ARCHITECT ABOUT THE FINAL MOUNTING HEIGHTS.

2. REMOTE DUCT SMOKE DETECTOR INDICATOR WITH TEST SWITCH, SHALL BE INSTALLED ON THE CEILING DIRECTLY BELOW DUCT SMOKE DETECTOR.

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

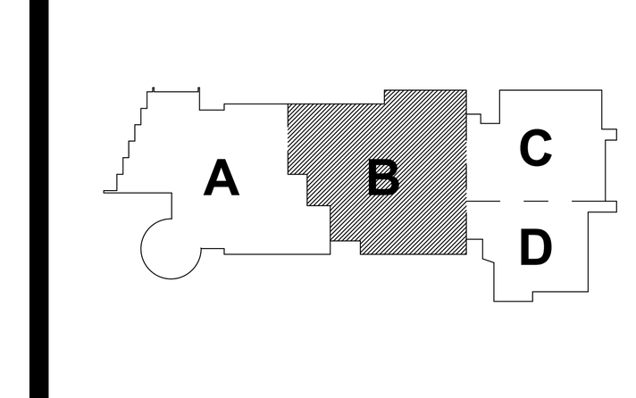
Wakefield, MA 01880

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM

BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document
Submittal

May 12th, 2023



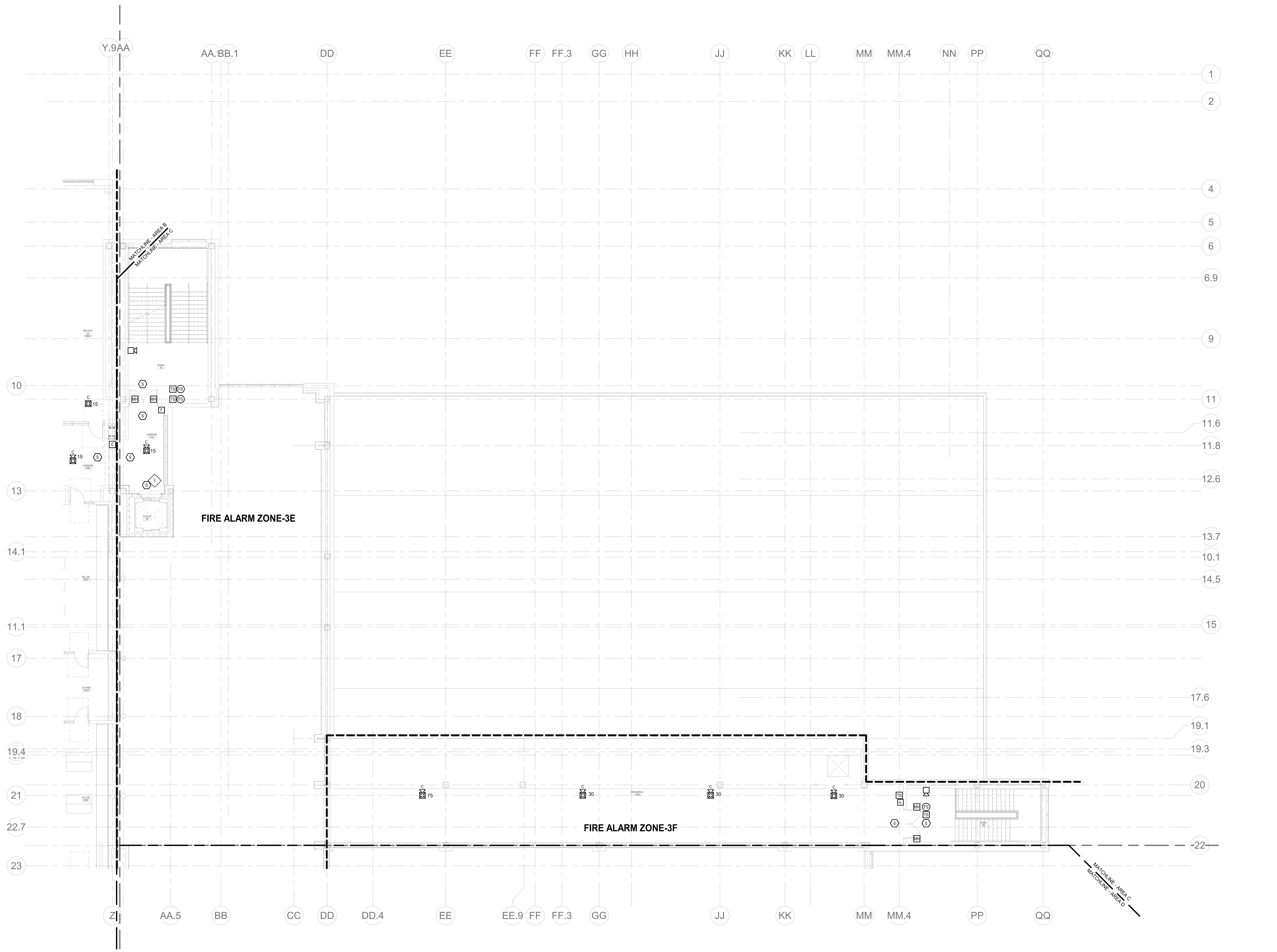
KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM THIRD FLOOR PLAN - AREA B

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-3B



1 FA1-1-3C **FIRE ALARM THIRD FLOOR PLAN - AREA C**
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES:

1 PROVIDE SMOKE DETECTION TO INITIATE ELEVATOR RECALL.

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

BALA ENGINEERS

MSBA 90% CD
Construction Document Submittal
May 12th, 2023

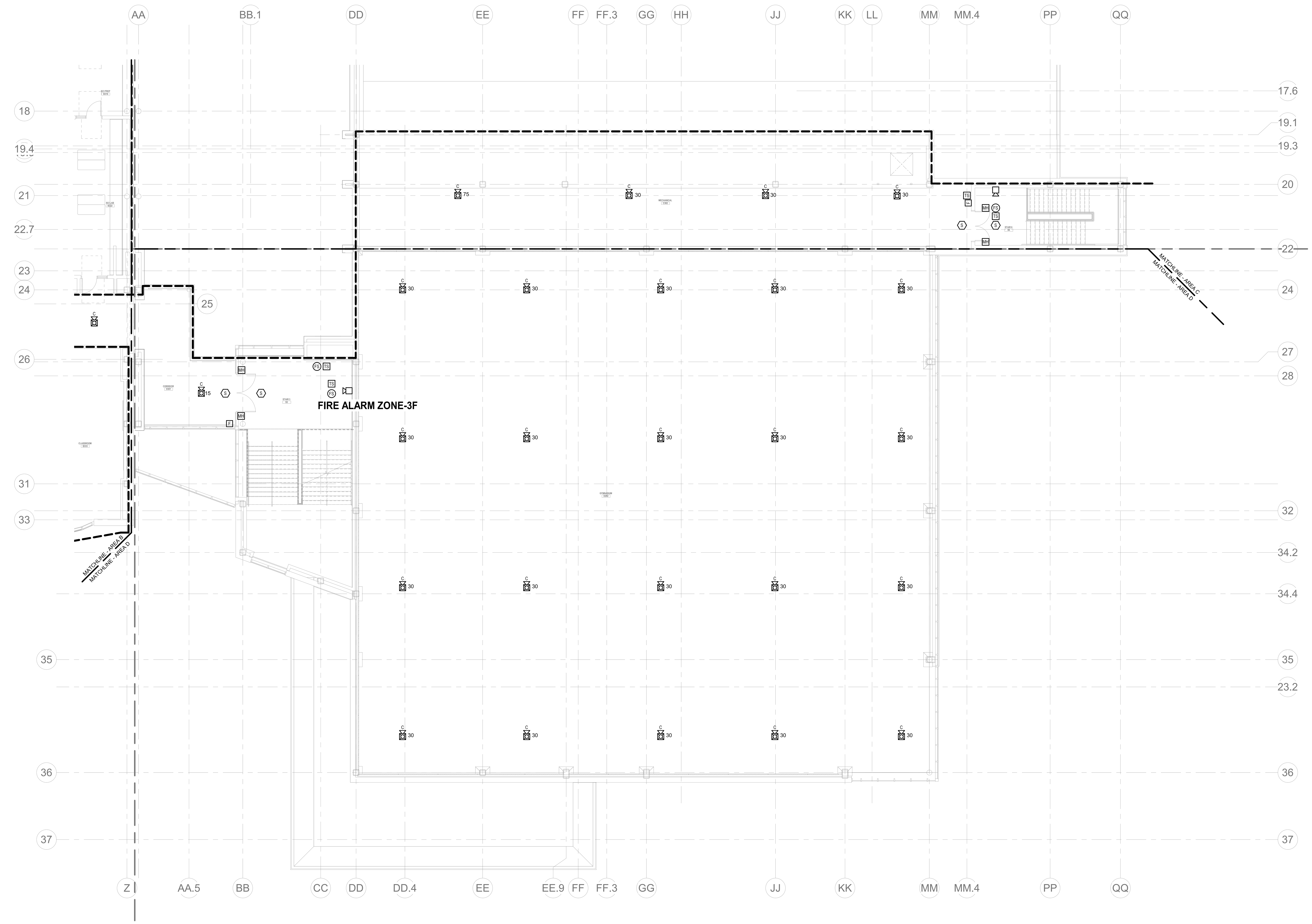
KEY PLAN: A B C D

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM THIRD FLOOR PLAN - AREA C

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-3C



1 FA1-1-3D **FIRE ALARM THIRD FLOOR PLAN - AREA D**
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

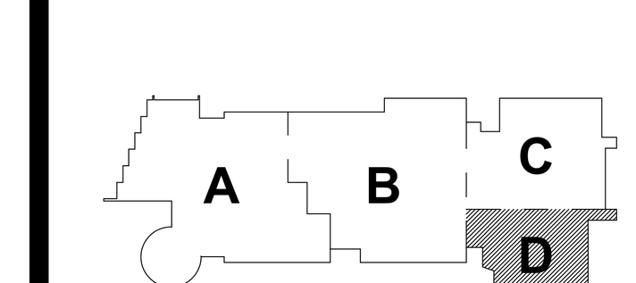
DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA ENGINEERS

MSBA 90% CD
Construction Document Submittal
May 12th, 2023



KEY PLAN

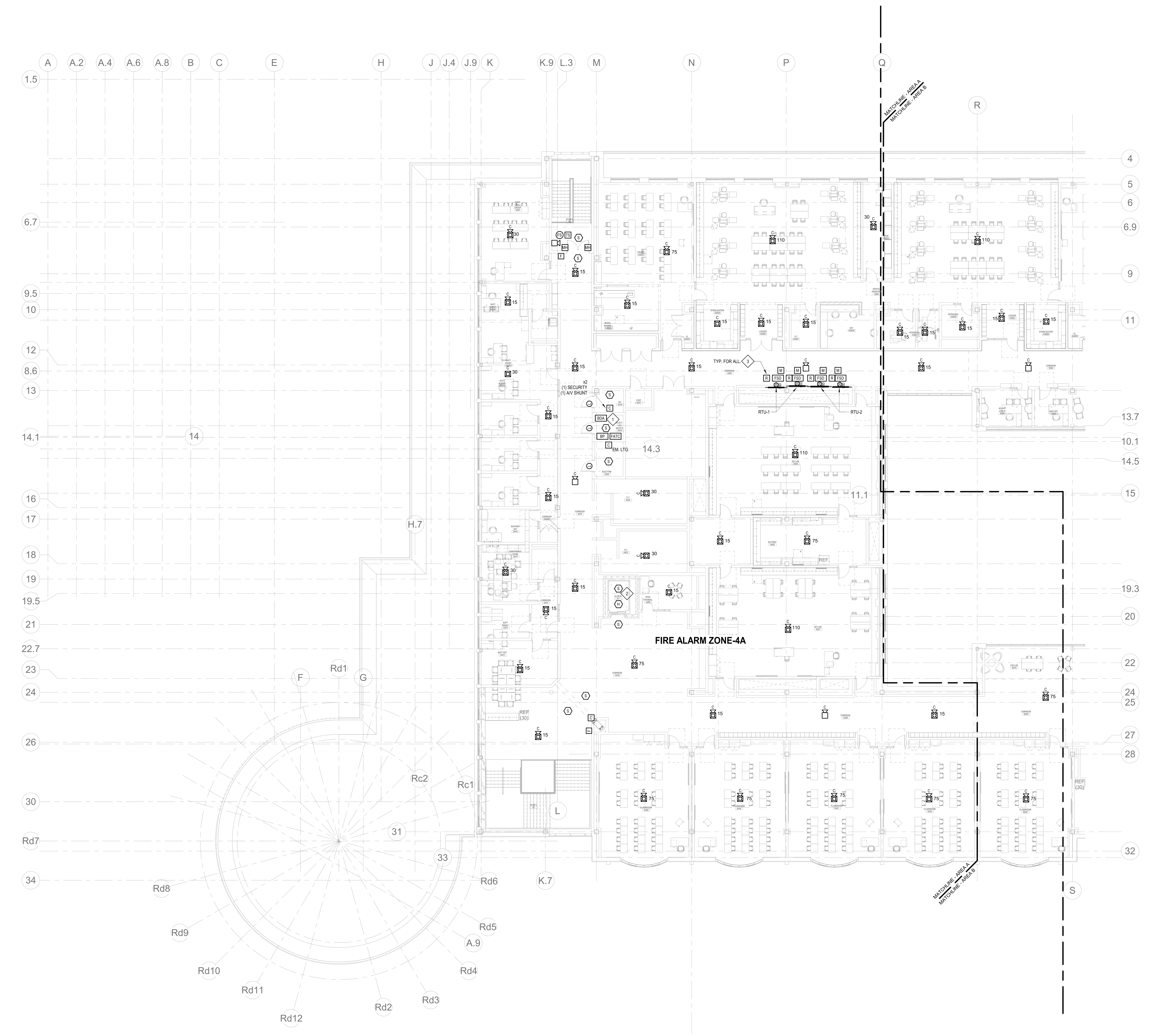
PROJECT NORTH

MAGNETIC NORTH

FIRE ALARM THIRD FLOOR PLAN - AREA D

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-3D



FIRE ALARM FOURTH FLOOR PLAN - AREA A
1" = 10'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES:

1. PROVIDE A BI-DRECTIONAL AMPLIFIER PANEL FOR POLICE AND FIRE DEPARTMENT RADIO COMMUNICATION.
2. SMOKE DETECTOR ON TOP OF THE ELEVATOR SHAFT.
3. REMOTE DUCT SMOKE DETECTOR MONITORING AND RESET SWITCH. MOUNTED ON THE CEILING DIRECTLY BELOW DUCT SMOKE DETECTOR.

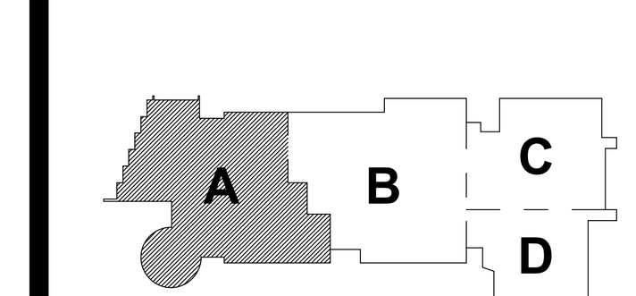
DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA ENGINEERS

MSBA 90% CD
Construction Document Submittal
May 12th, 2023



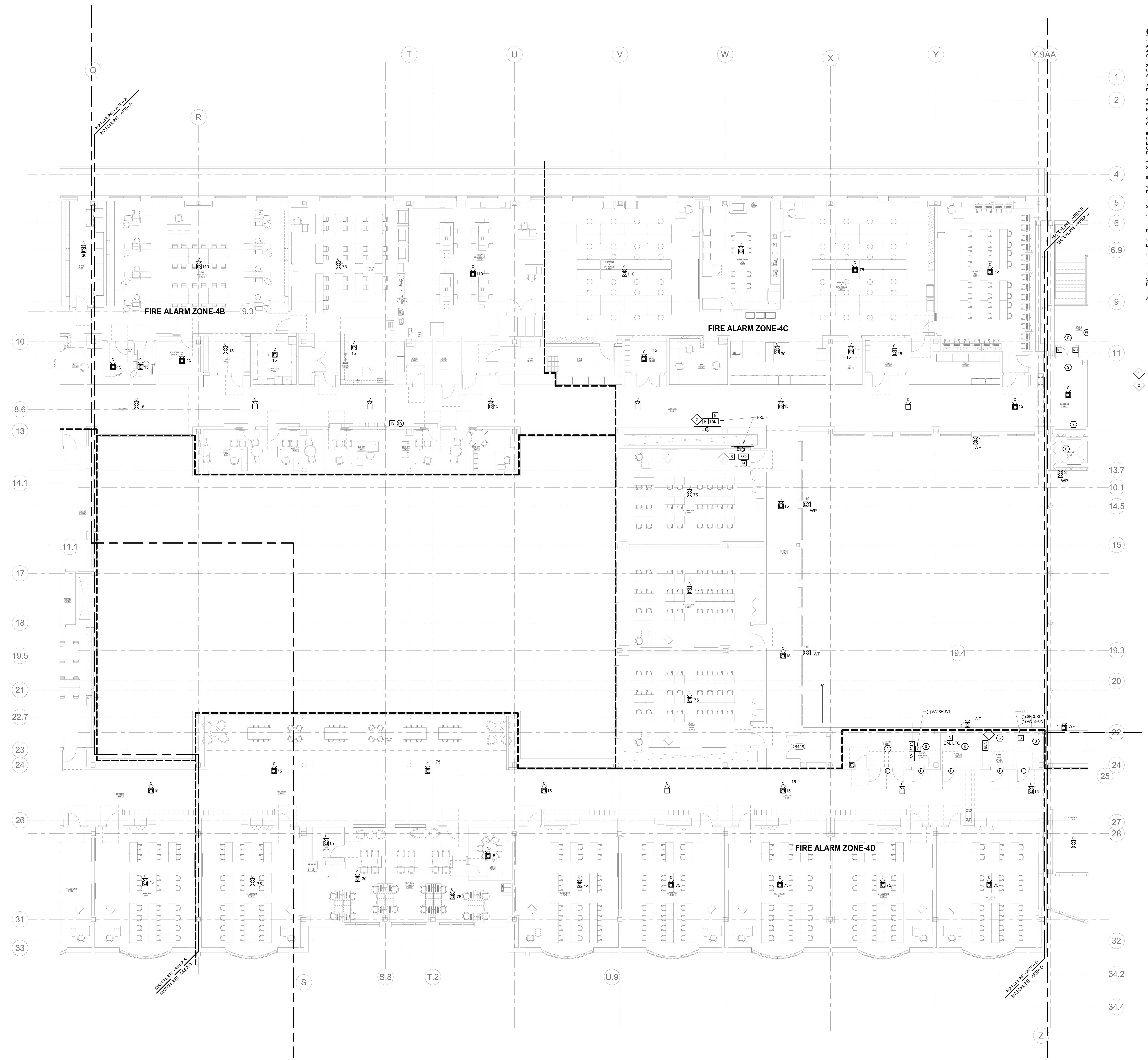
KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM FOURTH FLOOR PLAN - AREA A

Scale: 1" = 10'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-4A



1 FA1-1-4B FIRE ALARM FOURTH FLOOR PLAN - AREA B
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES:

1. PROVIDE A BI-DIRECTIONAL AMPLIFIER PANEL FOR POLICE AND FIRE DEPARTMENT RADIO COMMUNICATION.
2. REMOTE DUCT DETECTOR MONITORING AND TEST SWITCH. REMOTE MONITORING AND TEST SWITCH SHALL BE INSTALLED ON THE CEILING DIRECTLY BELOW DUCT SMOKE DETECTOR.

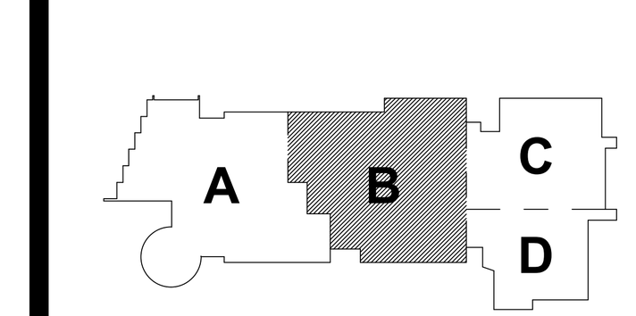
DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road, Studio 205, South Windsor, CT 06074
260 Charles Street, Studio 300, Waltham, MA 02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA ENGINEERS

MSBA 90% CD
Construction Document Submittal
May 12th, 2023



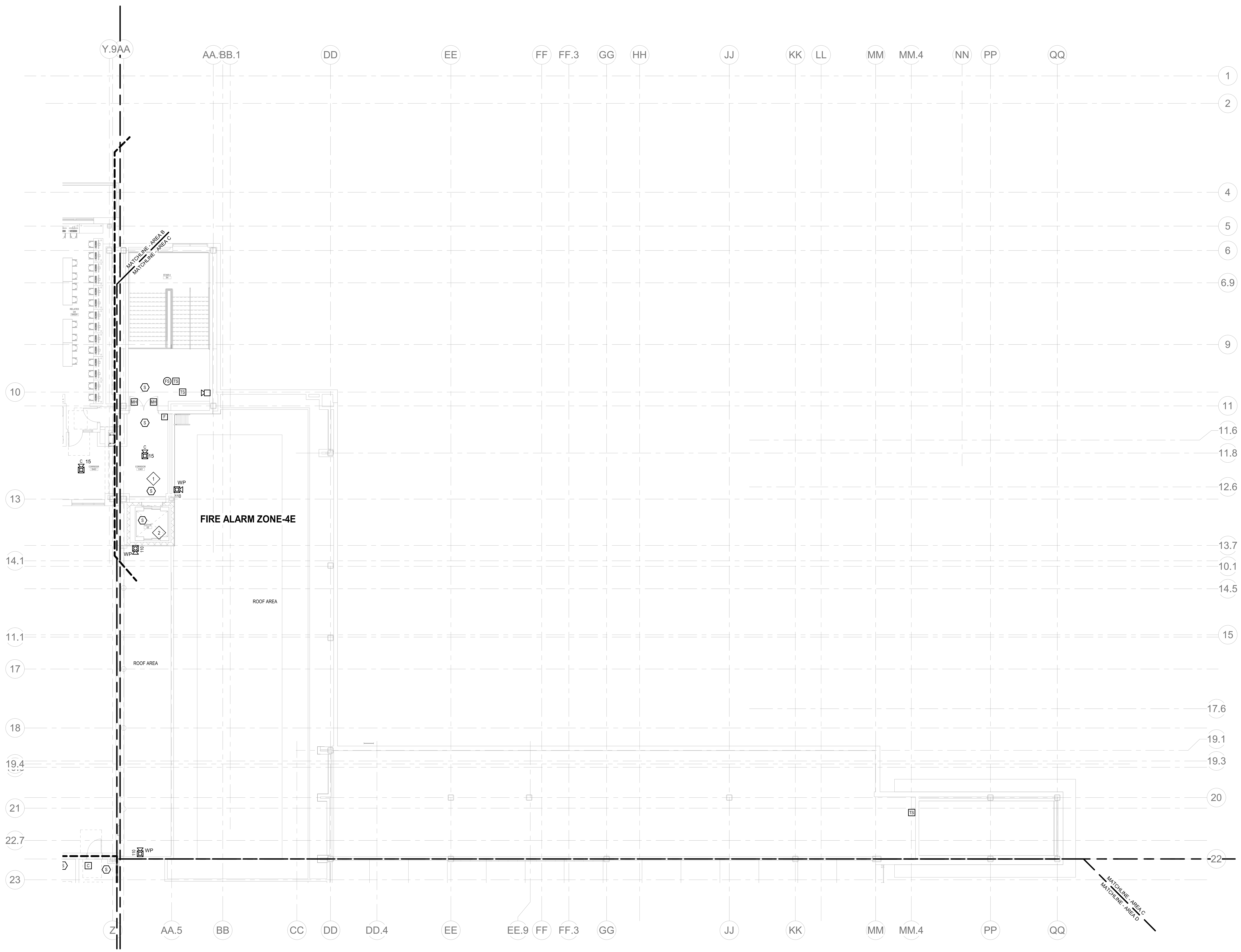
KEY PLAN

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM FOURTH FLOOR PLAN - AREA B

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-4B



1 FA1-1-4C FIRE ALARM FOURTH FLOOR PLAN - AREA C
1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

FIRE ALARM KEYNOTES:

1 PROVIDE SMOKE DETECTION TO INITIATE ELEVATOR RECALL.

2 SMOKE DETECTOR AT THE TOP OF ELEVATOR SHAFT

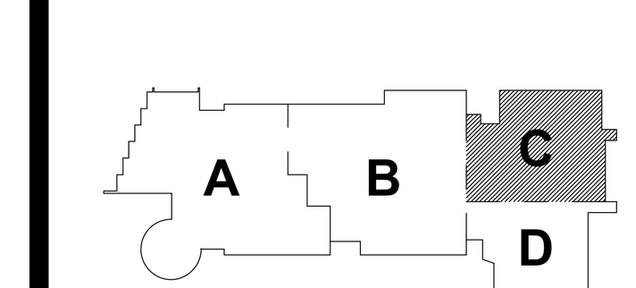
DRA
Drummey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
Tel: 617.964.1700
www.draws.com

Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA ENGINEERS

MSBA 90% CD
Construction Document Submittal
May 12th, 2023



KEY PLAN

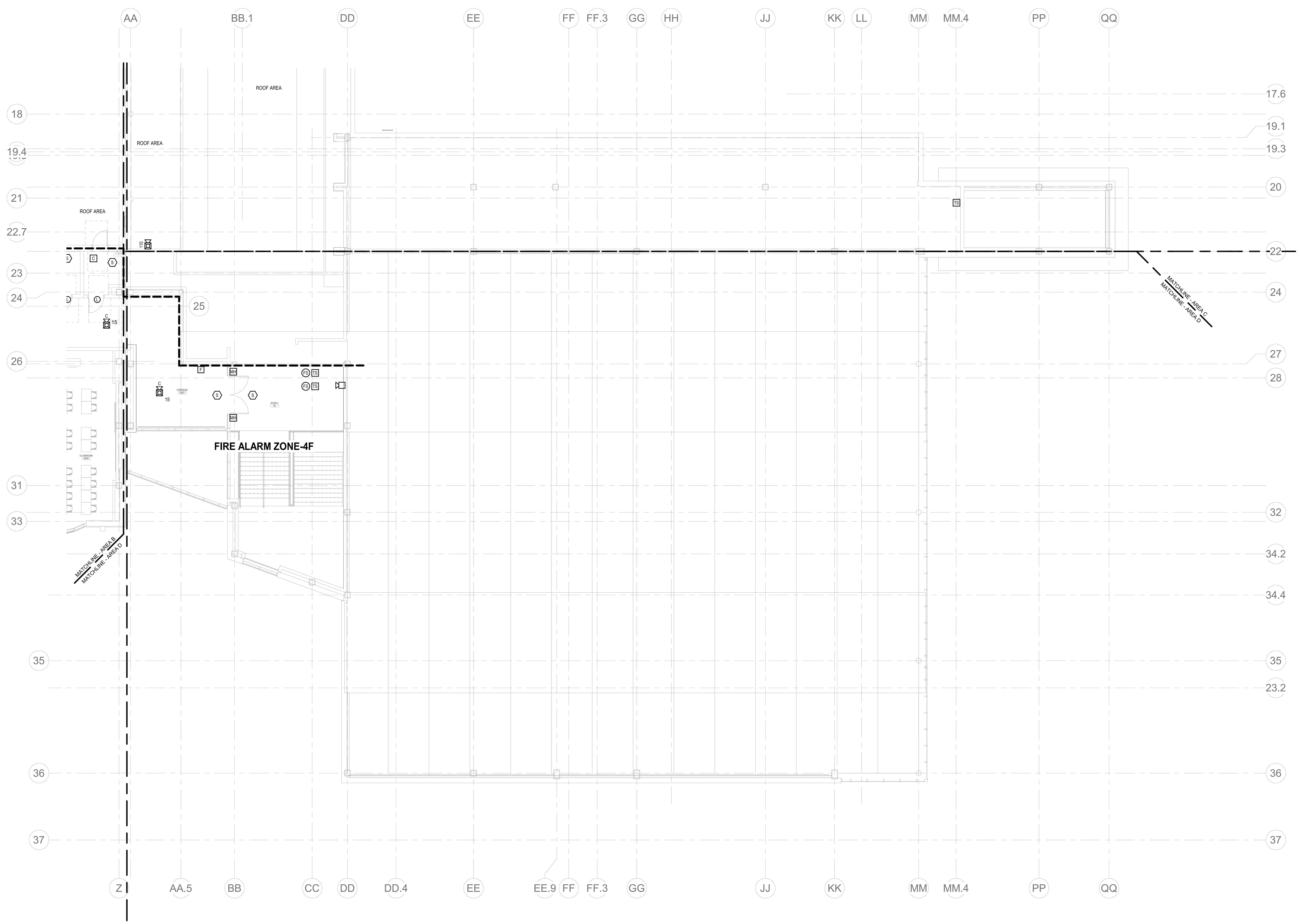
PROJECT NORTH

MAGNETIC NORTH

FIRE ALARM FOURTH FLOOR PLAN - AREA C

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-4C



FIRE ALARM FOURTH FLOOR PLAN - AREA D

1/8" = 1'-0"

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

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

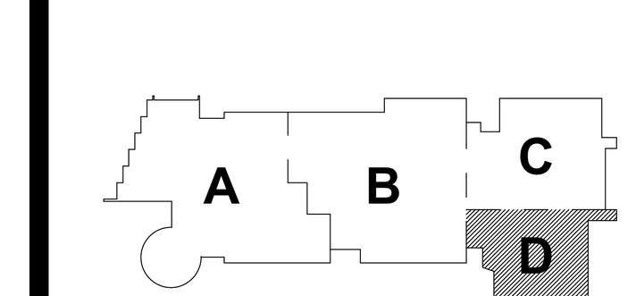
Northeast Metropolitan Regional Vocational High School

Wakefield, MA 01880

BALA ENGINEERS

MSBA 90% CD Construction Document Submittal

May 12th, 2023



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

FIRE ALARM FOURTH FLOOR PLAN - AREA D

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-4D

FIRE ALARM KEYNOTES:

1. PROVIDE A SMOKE DETECTOR TO INITIATE ELEVATOR RECALL.
2. PROVIDE A NEW ANALOG ADDRESSABLE FIRE ALARM CONTROL PANEL UNIT. A DIGITAL ALARM COMMUNICATION TRASMITTER SHALL BE PROVIDED TO TRASMIT SIGNALS OFF-SITE.
3. PROVIDE HEAT DETECTORS RATED AT A FIXTED TEMPERATURE OF 155 F.

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

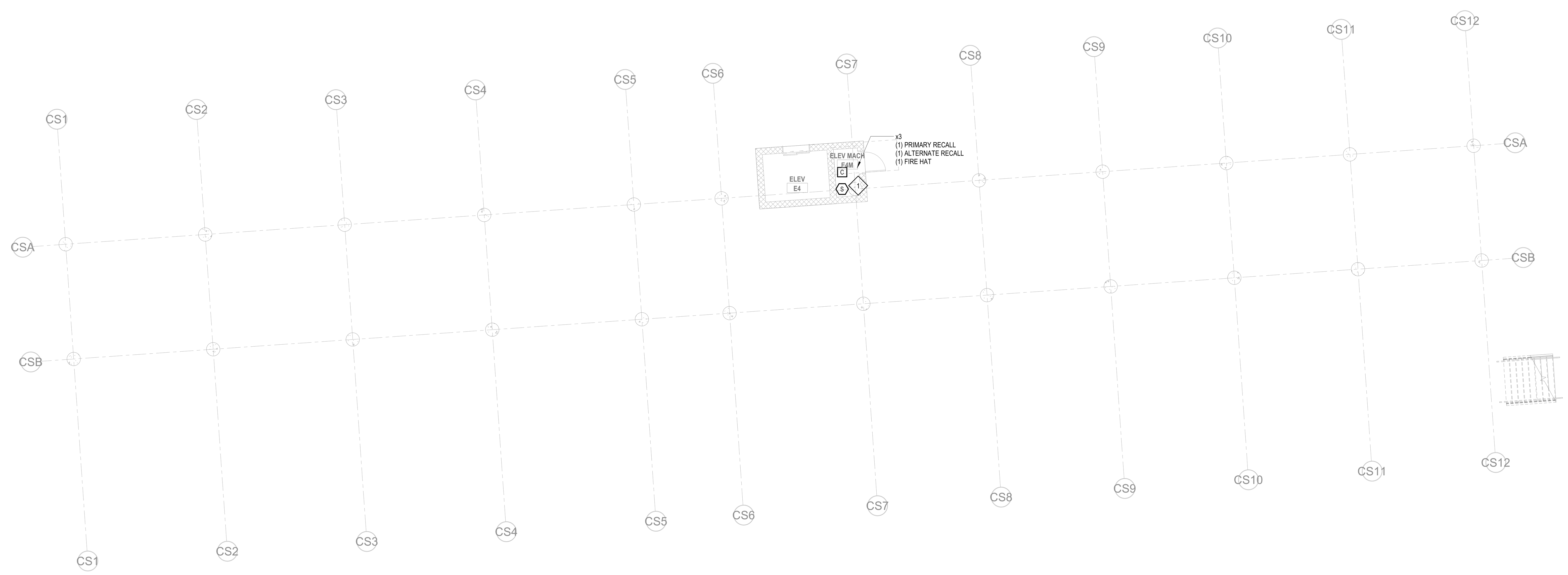
13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

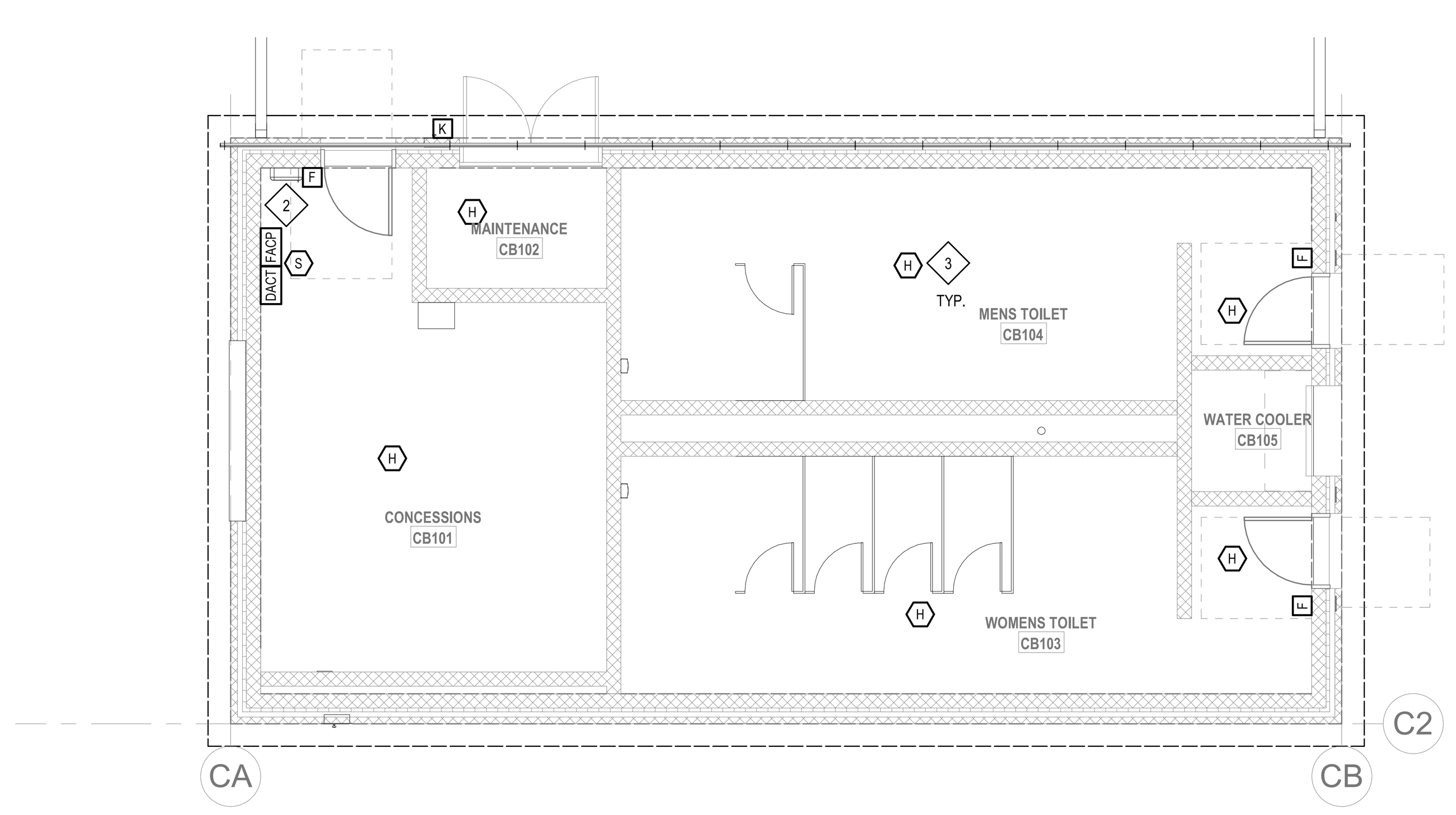
15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.



2 FA1-1-CB FIRE ALARM CONCESSION BUILDING PLAN
1/8" = 1'-0"



1 FIRE ALARM - CONCESSIONS FLOOR LEVELPLAN
3/16" = 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

BALA ENGINEERS

MSBA 90% CD
Construction Document Submittal
May 12th, 2023

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM CONCESSION BUILDING PLAN

Scale: As indicated
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-CB

FIRE ALARM KEYNOTES:

1. PROVIDE A SMOKE DETECTOR TO INITIATE ELEVATOR RECALL.
2. PROVIDE WEATHERPROOF SPEAKER/STROBE.
3. PROVIDE A NEW ANALOG ADDRESSABLE FIRE ALARM CONTROL PANEL UNIT. A DIGITAL ALARM COMMUNICATION TRASMITTER SHALL BE PROVIDED TO TRASMIT SIGNALS OFF-SITE.

GENERAL FIRE ALARM NOTES:

1. PROVIDE A FULLY OPERATIONAL TEMPORARY FIRE ALARM SYSTEM DURING ALL WORK, APPROVED BY LOCAL FIRE DEPARTMENT. PROVIDE FIRE ALARM SYSTEM PROGRAMMING AND TESTING ACCORDING TO LOCAL FIRE DEPARTMENT REQUESTS. TEMPORARY SYSTEM SHALL REMAIN UNTIL NEW SYSTEM HAS BEEN APPROVED FOR OPERATION.

2. COORDINATE LOCATION OF FIRE ALARM APPLIANCES AND DEVICES IN AREAS WITH CEILING SYSTEM, DUCTWORK, FIXTURES, FURNITURE, AND OTHER EQUIPMENT PRIOR TO ALL WORK.

3. FINAL LOCATIONS AND ARRANGEMENTS OF FIRE ALARM DEVICES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION VIEWS.

4. FOR EXACT LOCATIONS OF SMOKE/FIRE DAMPERS, DUCT-MOUNTED SMOKE DETECTORS, WATER FLOW SWITCHES AND VALVE TAMPER SWITCHES, REFER TO FIRE PROTECTION, PLUMBING AND MECHANICAL/HVAC DRAWINGS.

5. MOUNTING HEIGHTS SHALL BE TO CENTER OF DEVICE OR EQUIPMENT, UNLESS OTHERWISE NOTED.

6. PROVIDE RACEWAY, CONDUCTORS AND CABLE, ASSOCIATED FITTINGS AND CONNECTORS, AND COMPLETE CONNECTIONS REQUIRED FOR DESIGNATED FIRE ALARM BRANCH CIRCUITS FROM DEVICE(S) TO FIRE ALARM TERMINAL CABINET(S) OR FIRE ALARM CONTROL PANEL OR FIRE COMMAND CENTER PER FIRE ALARM PRODUCT MANUFACTURER REQUIREMENTS.

7. PROVIDE ADDITIONAL POWER SUPPLIES, AMPLIFICATION AND BATTERY BACKUP TO SUPPORT NEW/ADDED DEVICES.

8. PROVIDE TEMPORARY HEAT DETECTORS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

9. PROVIDE NEW A/V DEVICES WITH INTEGRAL SYNCHRONIZATION CAPABILITIES AND/OR PROVIDE SYNCHRONIZATION MODULES FOR SYNCHRONIZATION OF ALL VISUAL DEVICES.

10. THE SCOPE OF THIS PROJECT SHALL IN NO WAY IMPACT THE DAILY OPERATION OR THE SEQUENCE OF OPERATION OF THE EXISTING FIRE ALARM SYSTEM.

11. PROVIDE ALL PROGRAMMING/RE-PROGRAMMING PER REVISED SPACE DESIGNATIONS.

12. PROVIDE ALL PRETESTS AND FINAL TESTS PER TOWN OF STONEHAM FIRE DEPARTMENT.

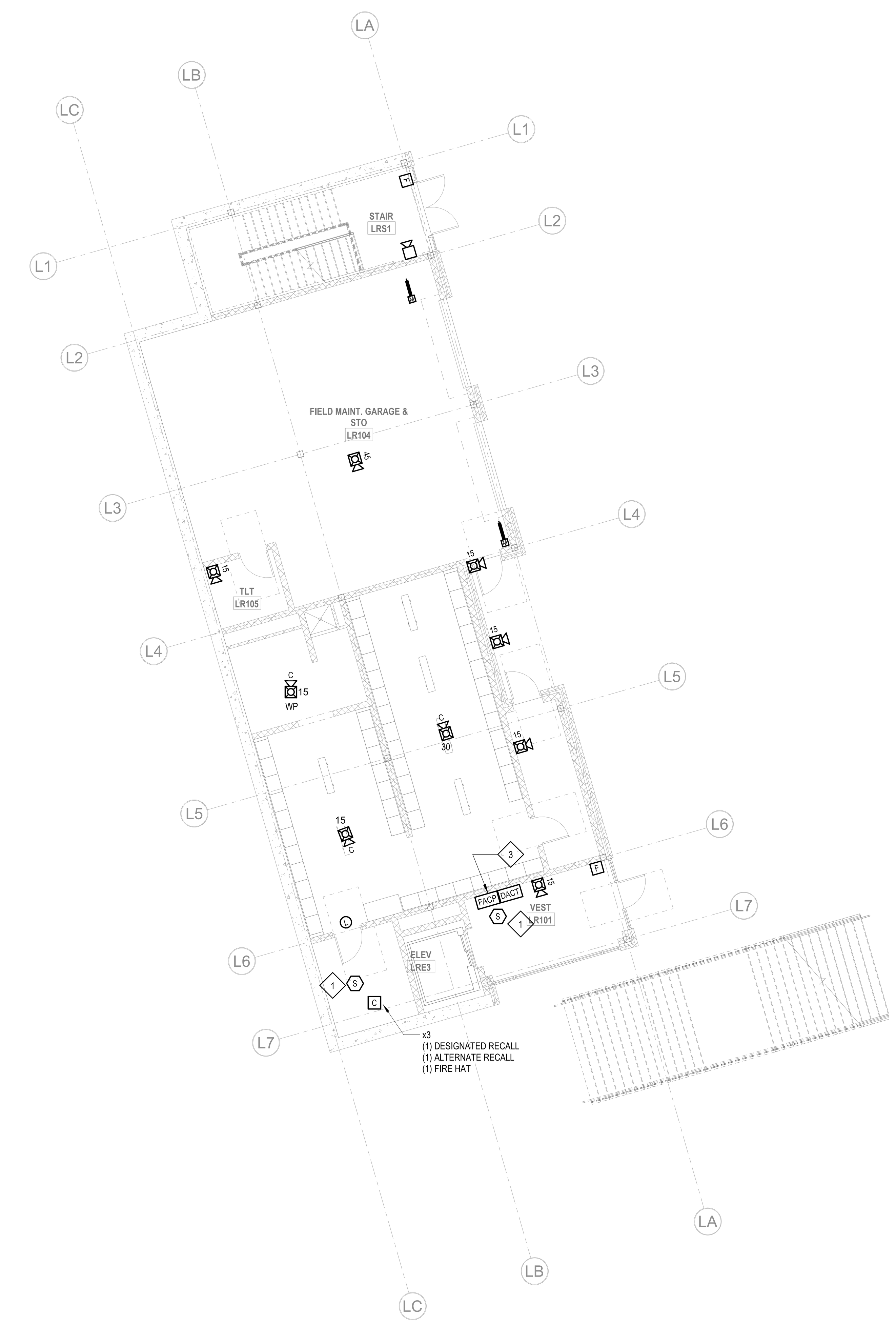
13. PROVIDE FIRE ALARM INTERFACE TO BRING ALL DIMMED LUMINAIRES TO FULL BRIGHTNESS UPON ALARM.

14. PROVIDE FIRE ALARM INTERFACE TO SHUNT ALL A/V AND/OR SOUND EQUIPMENT.

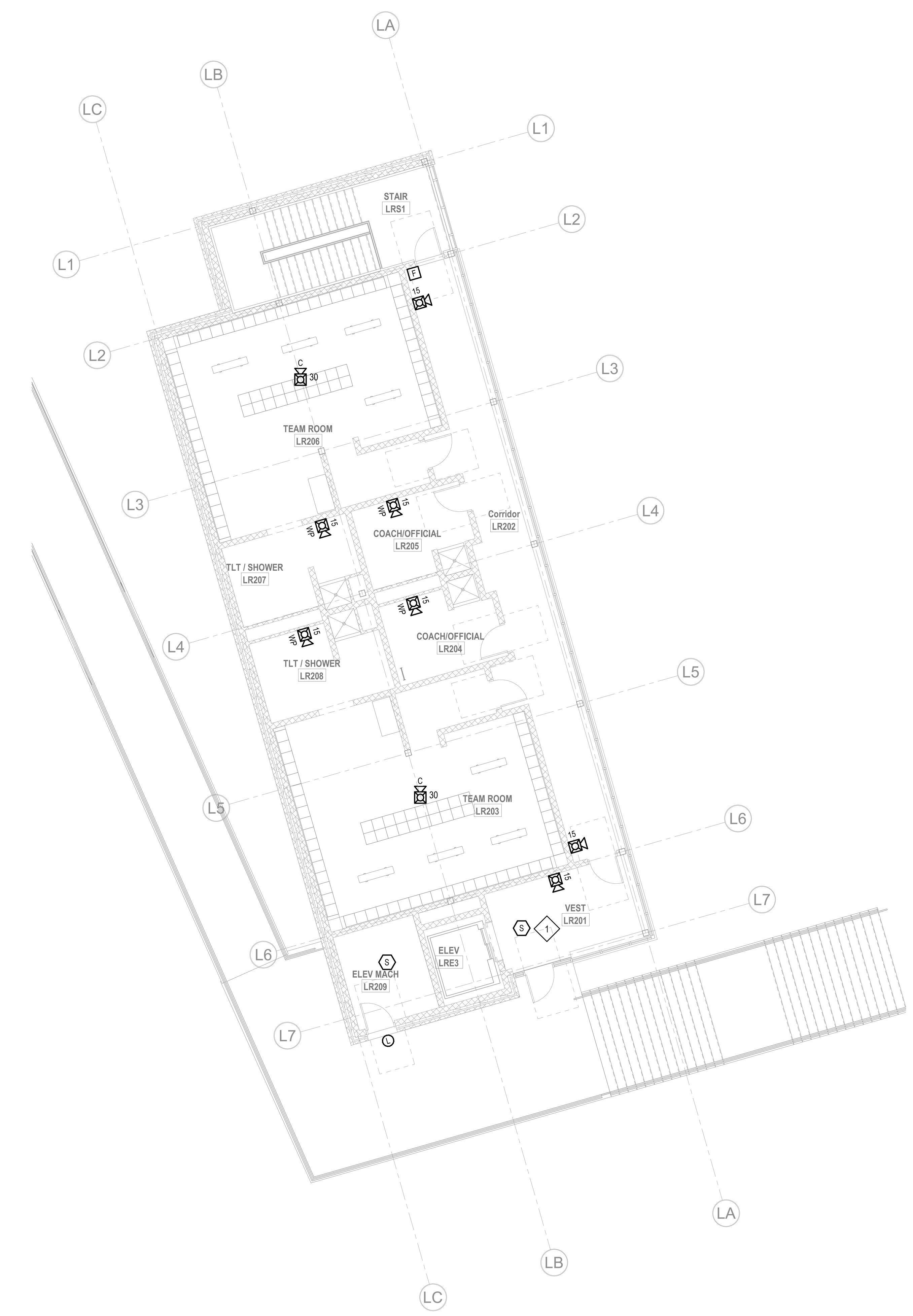
15. PROVIDE FIRE ALARM INTERFACE TO RELEASE ALL SECURITY DEVICES.

16. A TAMPER SWITCH SHALL BE PROVIDED AT EACH ISOLATION CONTROL VALVE SERVING THE COMBINATION STANDPIPE/SPRINKLER SYSTEM. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.

17. A FLOW AND SUPERVISORY SWITCH SHALL BE PROVIDED FOR EACH CONTROL VALVE ASSEMBLY. FOR MORE INFORMATION REFER TO THE FIRE PROTECTION DRAWINGS.



1 FA1-1-LB **FIRE ALARM LOCKER BUILDING FIRST FLOOR**
1/8" = 1'-0"



2 FA1-1-LB **FIRE ALARM LOCKER BUILDING SECOND LEVEL**
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

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM
BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document Submittal

May 12th, 2023

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM LOCKER BUILDING PLAN

Scale: 1/8" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA1-1-LB

NORTH-EAST METROPOLITAN REGIONAL VACATIONAL SCHOOL

NORTH-EAST METROPOLITAN REGIONAL VACATIONAL SCHOOL	ACTUATE COMMON ALARM INDICATOR	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE COMMON SUPERVISORY SIGNAL INDICTOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE AUDIBLE TROUBLE SIGNAL	ACTIVATE NOTIFACTION APPLIANCES STROBES	ACTUATE AUDIO EVACUATION SIGNALS	DISPLAY CHANGE OF STATUS	TRANSMIT FIRE ALARM SIGNAL TO SUPERVISING STATION	TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION	EM LIGHTING TO FULL OUTPUT	RECALL ELEVATOR #1 TO PRIMARY RECALL FLOOR	RECALL ELEVATOR #1 TO ALTERNATE RECALL FLOOR	RECALL ELEVATOR #2 TO PRIMARY RECALL FLOOR	RECALL ELEVATOR #2 TO ALTERNATE RECALL FLOOR	ACTIVATE HIGH SCHOOL BUILDING FF FLASHING HAT	CLOSE SMOKE DAMPER	ACTIVATE REMOTE INDICATOR LIGHT	ACTIVATE FF FLASHING HAT - STADIUM BUILDING	RELEASE SMOKE DOORS TO CLOSE	UNLOCK EXITS	ACTIVATE EXTERIOR STROBE	ACTIVATE TEMPORAL-4 SOUNDER BASE LOCAL ALARM	ACTIVATE MASTER BOX	ACTIVATE KITCHEN HOOD INDICATOR	ACTIVATE SPRINKLER BELL ON EXTERIOR OF THE BUILDING	ACTUATE REMOTE ANNUNCIATORS	ACTUATE HIGH SCHOOL MAIN BUILDING INDICATOR	ACTIVATE CONCESSIONS BUILDING INDICATOR	ACTUATE LOCKER ROOM BUILDING INDICATOR	ACTUATE MAINTENANCE BUILDING INDICATOR
	SYSTEM 0UTPUT																																
	CONTROL UNIT ANNUNCIATION						NOTIFICATION						REQUIRED FIRE SAFETY CONTROL												SUPPLEMENTARY								
SYSTEM INPUTS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	BB	CC	DD	EE	FF	GG	HH	II
HSMB (HIGH SCHOOL MAIN BUILDING) MANUAL PULL STATIONS	X	X	X	X	X	X	X	X	X	X			X										X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING AREA SMOKE DETECTOR	X	X					X	X	X	X			X										X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING SMOKE DETECTOR AT THE LOACTION OF FA EQUIPMENT	X	X					X	X	X	X			X							X			X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING ELEVATOR LOBBY SMOKE DETECTOR - PRIMARY LEVEL	X	X					X	X	X	X			X		X		X						X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING ELEVATOR LOBBY SMOKE DETECTOR - NON-PRIMARY LEVEL	X	X					X	X	X	X			X	X		X							X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING ELEVATOR MACHINE ROOM SMOKE DETECTOR	X	X					X	X	X	X			X	X				X		X			X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING ELEVATOR SHAFT SMOKE DETECTOR - TOP/ BOTTOM	X	X					X	X	X	X			X	X						X			X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING ELECTRICAL RM. & IT/ TEL RM. SMOKE DETECTORS	X	X					X	X	X	X			X							X			X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING SMOKE DOOR SMOKE DETECTOR	X	X					X	X	X	X			X									X	X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING DUCT SMOKE DETECTOR			X	X	X	X			X		X	X	X						X	X									X	X			
HIGH SCHOOL MAIN BUILDING SMOKE DAMPER STATUS			X	X	X	X			X		X	X																	X	X			
HIGH SCHOOL MAIN BUILDING AREA HEAT DETECTORS	X	X	X	X	X	X	X	X	X	X			X										X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING CARBON MONOXIDE DETECTOR	X	X					X		X	X			X												X				X	X			
HIGH SCHOOL MAIN BUILDING MAIN WATER FLOW SWITCH	X	X					X	X	X	X			X										X	X		X		X	X	X			
HIGH SCHOOL MAIN BUILDING ZONE WATER FLOW SWITCH	X	X					X	X	X	X			X										X	X		X		X	X	X			
HIGH SCHOOL MAIN BUILDING TAMPER SWITCH			X	X					X		X		X																X	X			
HIGH SCHOOL MAIN BUILDING JOCKEY PUMP HIGH/ LOW PREASSURE SWITCH			X	X	X	X			X		X	X																	X	X			
HIGH SCHOOL MAIN BUILDING KITCHEN HOOD SUPPRESSIONS SYSTEM	X	X					X	X	X	X			X										X	X		X			X	X			
HIGH SCHOOL MAIN BUILDING NOTOFICATION APPLIANCES SHORT CIRCUIT FAULT/ OPEN CIRCUIT					X	X			X			X																	X	X			
HIGH SCHOOL MAIN BUILDING SLC SHORT CIRCUIT FAULT/ OPEN CIRCUIT					X	X			X			X																	X	X			
HIGH SCHOOL MAIN BUILING FIRE DEPARTMENT 2-WAY COMMUNICATION SYSTEM STATUS			X	X					X		X		X																X	X			
HSMB FIRE DEPARTMENT 2-WAY COMMUNICATION SYSTEM - LOSS OF AC POWER					X	X			X			X																	X	X			
HSMB FIRE DEPARTMENT 2-WAY COMMUNICATION SYSTEM -LOW BATTERY/CHARGER FAILURE					X	X			X			X																	X	X			
HSMB EMERGENCY RADIO SYSTEM ERRSC 2-WAY COMMUNICATION			X	X					X		X		X																X	X			
HSMB EMERGENCY RADIO SYSTEM ERRSC ANTENA MALFUNCTION					X	X			X			X																	X	X			
HSMB EMERGENCY RADIO SYSTEM ERRSC SIGNAL BOOSTER FAILURE					X	X			X			X																	X	X			
HSMB EMERGENCY RADIO SYSTEM ERRSC LOW BATTERY/ BATTERY CHARGE FAILURE					X	X			X			X																	X	X			
HSMB EMERGENCY RADIO SYSTEM ERRSC LOSS OF AC POWER					X	X			X			X																	X	X			
HIGH SCHOOL MAIN BUILDING FACP LOSS OF AC POWER					X	X			X			X																	X	X			
HIGH SCHOOL MAIN BUILDING FACP OPEN POWER CIRCUIT					X	X			X			X																	X	X			
HIGH SCHOOL MAIN BUILDING FACP POWER CIRCUIT GROUND FAULT					X	X			X			X																	X	X			
HIGH SCHOOL MAIN BUILDING FACP LOW BATTERIES/ CHARGER FAILURE					X	X			X			X																	X	X			
FIRE PUMP RUNNING	X	X					X	X	X	X		X											X	X					X	X			
FIRE PUMP PHASE REVERSAL					X	X			X			X																	X	X			
FIRE PUMP FAILURE TO START	X	X	X	X	X	X	X	X	X	X		X	X										X	X					X	X			
GENERATOR RRUNNING (RUTINE EXERCISE IS NOT INCLUDED)			X	X					X		X		X																X	X			
GENERATOR FAULT					X	X			X		X	X	X																X	X			
FIRE ALARM SYSTEM TROUBLE					X	X			X		X	X	X																X	X			
CONCESSIONS BUILDING MANUAL PULL STATIONS	X	X	X	X	X	X	X	X	X	X			X										X	X		X			X		X		
CONCESSIONS BUILDING AREA HEAT DETECTOR	X	X					X	X	X	X			X										X	X		X			X		X		
CONCESSIONS BUILDING NOTIFICATION APPLIANCES OPEN CIRCUIT/ GROUD FAULT					X	X			X			X																	X		X		
CONCESSIONS BUILDING INITIATING DEVICES OPEN CIRCUIT/ GROUD FAULT					X	X			X			X																	X		X		
CONCESSIONS BUILDING FACP LOSS OF AC POWER					X	X			X			X																	X		X		
CONCESSIONS BUILDING FACP OPEN POWER CIRCUIT					X	X			X			X																	X		X		
CONCESSIONS BUILDING FACP POWER CIRCUIT GROUD FAULT					X	X			X			X																	X		X		
CONCESSIONS BUILDING FACP LOW BATTERY/ CHARGER FAILURE					X	X			X			X																	X		X		
LOCKER BUILDING MANUAL PULL STATIONS	X	X	X	X	X	X	X	X	X	X			X										X	X		X			X			X	
LOCKER BUILDING AREA SMOKE DETECTOR	X	X					X	X	X	X			X										X	X		X			X			X	
LOCKER BUILDING FIRST FLOOR ELEVATOR LOBBY SMOKE DETECTOR	X	X					X	X	X	X			X		X								X	X		X			X			X	
LOCKER BUILDING SECOND FLOOR ELEVATOR LOBBY SMOKE DETECTOR	X	X					X	X	X	X			X	X									X	X		X			X			X	
LOCKER BUILDING ELEVATOR MACHINE ROOM SMOKE DETECTOR 2ND FLOOR	X	X					X	X	X	X			X	X						X									X			X	
LOCKER BUILDING ELEVATOR SHAFT SMOKE DETECTOR	X	X					X	X	X	X			X	X						X									X			X	
LOCKER BUILDING NOTIFICATION APPLIANCES OPEN CIRCUIT/ GROUD FAULT					X	X			X			X	X																X			X	
LOCKER BUILDING INITIATING DEVICES OPEN CIRCUIT/ GROUD FAULT					X	X			X			X	X																X			X	
LOCKER BUILDING FACP LOSS OF AC POWER					X	X			X			X	X																X			X	
LOCKER BUILDING FACP OPEN POWER CIRCUIT					X	X			X			X	X																X			X	
LOCKER BUILDING FACP POWER CIRCUIT GROUD FAULT					X	X			X			X	X																X			X	
LOCKER BUILDING FACP LOW BATTERY/ CHARGER FAILURE					X	X			X			X	X																X			X	
MAINTENANCE BUILDING MANUAL PULL STATIONS	X	X	X	X	X	X	X	X	X	X			X										X	X		X			X				X
MAINTENANCE BUILDING AREA HEAT DETECTOR	X	X					X	X	X	X			X										X	X		X			X				X
MAINTENANCE BUILDING NOTIFICATION APPLIANCES OPEN CIRCUIT/ GROUD FAULT					X	X			X			X	X																X				X
MAINTENANCE BUILDING INITIATING DEVICES OPEN CIRCUIT/ GROUD FAULT					X	X			X			X	X																X				X
MAINTENANCE BUILDING FACP LOSS OF AC POWER					X	X			X			X	X																X				X
MAINTENANCE BUILDING FACP OPEN POWER CIRCUIT					X	X			X			X	X																X				X
MAINTENANCE BUILDING FACP POWER CIRCUIT GROUD FAULT					X	X			X			X	X																X				X
MAINTENANCE BUILDING FACP LOW BATTERY/ CHARGER FAILURE					X	X			X			X	X																X				X

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

BALA ENGINEERS

MSBA 90% CD Construction Document Submittal

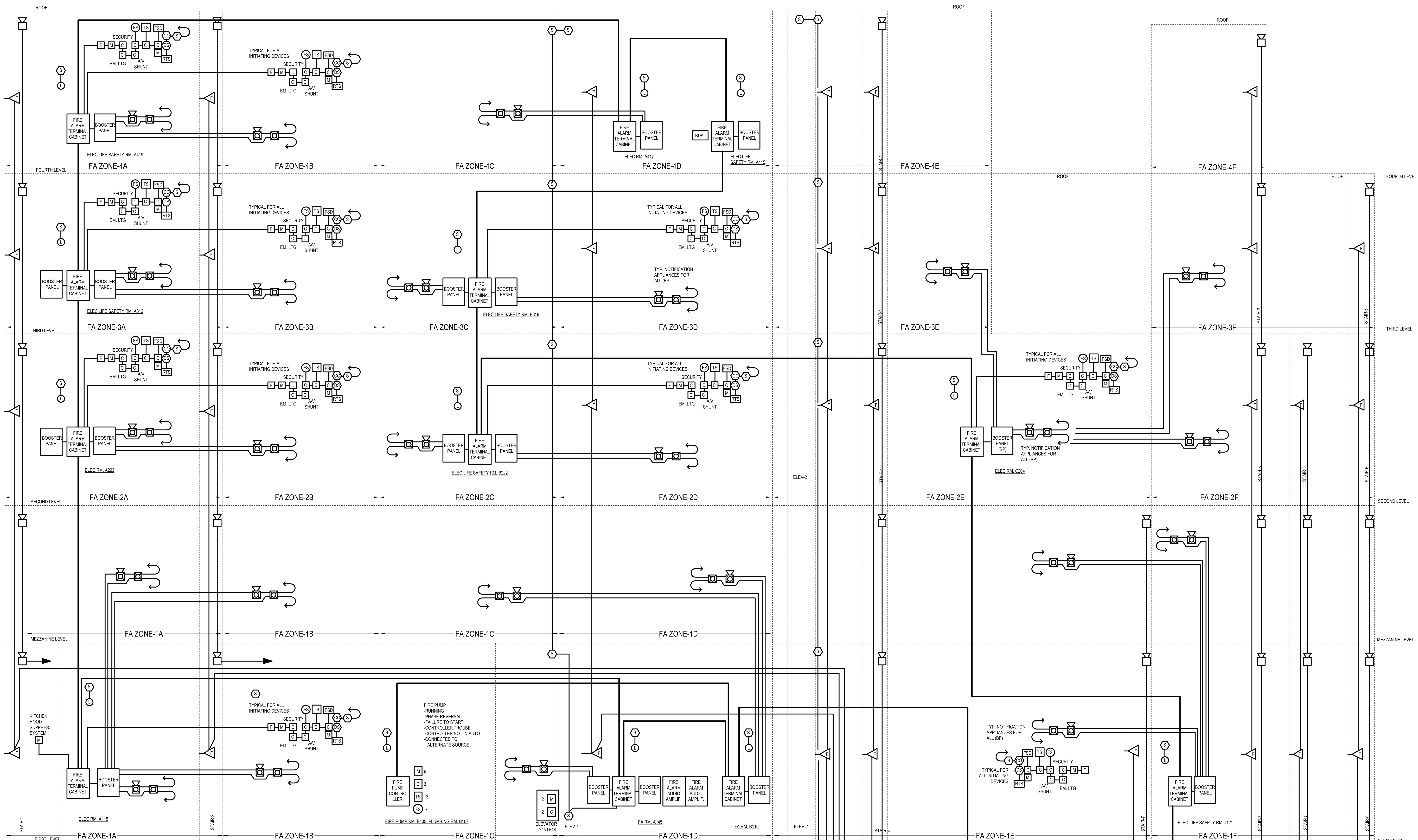
May 12th, 2023

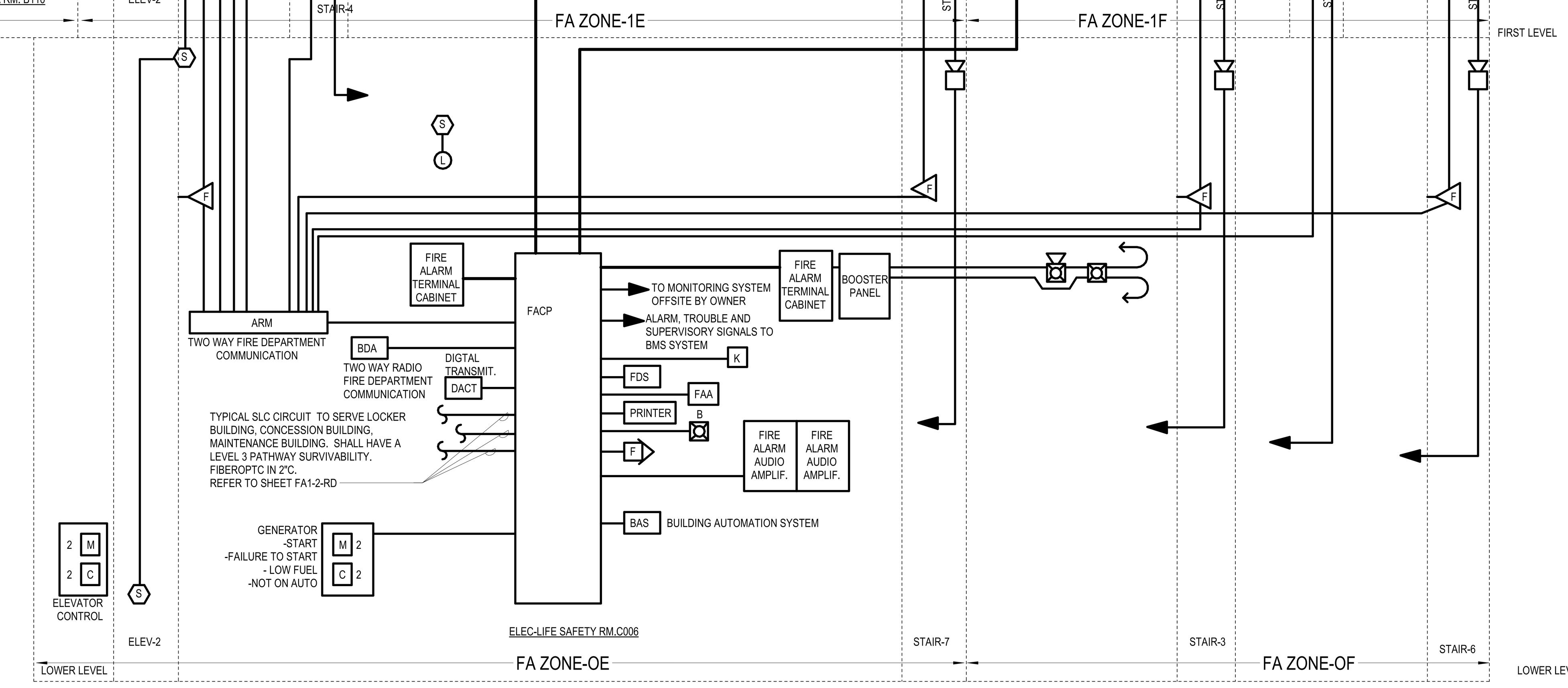
PROJECT NORTH | MAGNETIC NORTH

SEQUENCE OF OPERATION MATRIX

Scale: N.T.S.
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA4-0-1





GENERAL FIRE ALARM NOTES:

1. ALL DEVICES AND WIRING SHALL BE COMPATIBLE WITH FACP AND SHALL BE U.L. AND FM CERTIFIED AS A COMPLETE AND OPERABLE SYSTEM. THE FIRE ALARM SYSTEM SHALL BE INSTALLED AND OPERATIONAL IN ACCORDANCE WITH NEC ARTICLE 725, ARTICLE 760, NFPA 72 AND ADA. WIRING SHALL BE CLASS `A' TYPE.
2. WIRING BETWEEN THE FIRE ALARM CONTROL PANEL AND THE FIRE ALARM TERMINAL CABINETS AND THE WIRING BETWEEN TWO FIRE ALARM TERMINAL CABINETS SHALL HAVE A LEVEL 2 SURVIVABILITY.
3. THIS DIAGRAM DOES NOT DUPLICATE INFORMATION ABOUT ALL FIRE ALARM DEVICES OR PHYSICAL LOCATION OF EQUIPMENT, WHICH IS ALREADY SHOWN ON THE FLOOR PLANS. THIS DIAGRAM SHOWS SOME PIECES OF TYPICAL EQUIPMENT FOR THE OPERATION OF THE FIRE ALARM SYSTEM, BUT WHICH ARE TYPICALLY OMITTED FROM THE RISER FOR THE SAKE OF CLARITY. THIS DIAGRAM IS INTENDED TO SHOW THE PREFERRED ARCHITECTURE OF THE PROPOSED FIRE ALARM SYSTEM.
4. TYPICALLY DUCT SMOKE TYPE DETECTORS SHALL BE PROVIDED AND WIRED FOR AHU'S AND RTU'S BACK TO FACP PER NFPA 90A. COORDINATE WITH MECH. CONTRACTOR ON DETECTOR INSTALLATION AND SHUTDOWN WIRING. USE PHOTOELECTRIC TYPE DETECTORS FOR MECHANICAL ROOM, ELECTRICAL ROOM, IDF ROOM, MDF ROOM, TEL/DATA ROOM.
5. PROVIDE CONTROL MODULES FOR HVAC CONTROL (AHU AND RTU SHUTDOWN) VIA DUCT SMOKE DETECTORS WITH RELAYS WIRED TO SLC PER NFPA 90A. COORDINATE WITH MECHANICAL CONTRACTOR ON LOCATIONS OF DUCT DETECTORS, ETC. DUCT DETECTORS SHALL BE SYSTEM TYPE COMPATIBLE WITH FACP AND FURNISHED AND WIRED BY EC.
6. FIRE ALARM SYSTEM SHALL COMMUNICATE VIA COMMON GENERIC PROTOCOL WITH THE MECHANICAL BAS SYSTEM, AND DATA CENTER CFMS SYSTEM AS REQUIRED FOR SUPERVISORY, TROUBLE AND ALARM CONDITIONS. FIRE ALARM SYSTEM AND BAS SYSTEM SHALL BE MONITORED IN THE BUILDING ENGINEER'S OFFICE. PROVIDE REQUIRED HARDWARE, SOFTWARE AND WIRING.
7. PROVIDE, INSTALL AND WIRE SMOKE DAMPERS TO THE FIRE ALARM SYSTEM AS APPLICABLE. COORDINATE WITH MECHANICAL CONTRACTOR.
8. DESIGN INTENT IS TO INSTALL A NEW NOTIFICATION APPLIANCES AND INITIATING DEVICES TO THE NEW NOTIFICATION APPLIANCE CIRCUIT (NAC) AND SIGNALING DEVICES CIRCUIT RESPECTIVELY SERVING THE RENOVATION AREA.
9. CONTRACTOR TO PERFORM VOLTAGE DROP AND BATTERY CALCULATIONS TO DETERMINE IF THE BATTERY NEEDS TO BE UPSIZED OR IF ANOTHER NAC BOOSTER PANEL IS NEEDED.
10. COORDINATE WITH ELEVATOR CONTRACTOR ON FIRE ALARM INTERFACE WIRING FOR, ELEVATOR CAB PHONE JACKS, ELEVATOR SPEAKERS, ELEVATOR PIT AND TOP OF SHAFT SMOKE DETECTORS, ETC. AS PER LOCAL ELEVATOR CODES. PROVIDE REQUIRED FIRE ALARM SYSTEM HARDWARE.
11. ISOLATION MODULES SHALL BE INSTALLED EACH 25 ADDRESSABLE DEVICES.
12. PROVIDE MONITOR MODULES AND WIRING FOR SPRINKLER WATER FLOW SWITCHES, PRESSURE SWITCHES AND TAMPER SWITCHES FOR MAIN VALVES. PRESSURE, FLOW AND TAMPER SWITCHES TO BE PROVIDED AND INSTALLED BY THE FIRE PROTECTION MECHANICAL CONTRACTOR.
13. FIRE ALARM SYSTEM DESIGN AND INSTALLATION SHALL MEET THE REQUIREMENTS OF ALL LOCAL CODES AND ORDINANCES AND OF THE LOCAL FIRE SAFETY DEPARTMENT.
14. FIRE ALARM CONTROL PANEL SHALL BE DUAL LISTED FOR MASS NOTIFICATION.
15. SEE DIVISION 28 SPECIFICATION FOR ADDITIONAL DETAILS OF FIRE ALARM SYSTEM. ALL SYSTEM WIRING SHALL BE 2H (TWO HOURS) RATED.
16. FIRE ALARM SYSTEM SHALL COMMUNICATE VIA COMMON GENERIC PROTOCOL WITH THE MECHANICAL BAS SYSTEM, AS REQUIRED. IN ADDITION, FIRE ALARM SYSTEM SHALL COMMUNICATE ON A CAMPUS-WIDE BASIS TO THE MAIN FIRE ALARM CONTROL PANEL..
17. FIRE ALARM SYSTEM SHALL BE ARRANGED FOR ZONED EVACUATION WITH OPTION FOR TOTAL EVACUATION. THERE WILL BE ONE EVACUATION ZONE FOR EACH AUXILIARY BUILDING. INITIATING DEVICES THAT ARE ACTUATED WITHIN THE HIGH SCHOOL BUILDING WILL ONLY NOTIFY OCCUPANTS WITHIN THE HIGH SCHOOL BUILDING AND NOT IN AUXILIARY BUILDINGS. THE CORRESPONDING FIRE ALARM SIGNALS SHALL BE DISTINGUISH IF IT IS ORIGINATED FROM THE FIRE/ SMOKE SENSING DETECTORS OR CARBON MONOXIDE DETECTORS.
18. PROVIDE 3/4" CONDUIT TO GENERATOR CONTROLLER, FIRE PUMP CONTROLLER, ELEVATOR CONTROLLERS FOR FIRE ALARM SYSTEM WIRING.

1 FA4-0-2 **FIRE ALARM HIGH SCHOOL BUILDING RISER DIAGRAM**
12" = 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

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM
BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document Submittal

May 12th, 2023

PROJECT NORTH | MAGNETIC NORTH

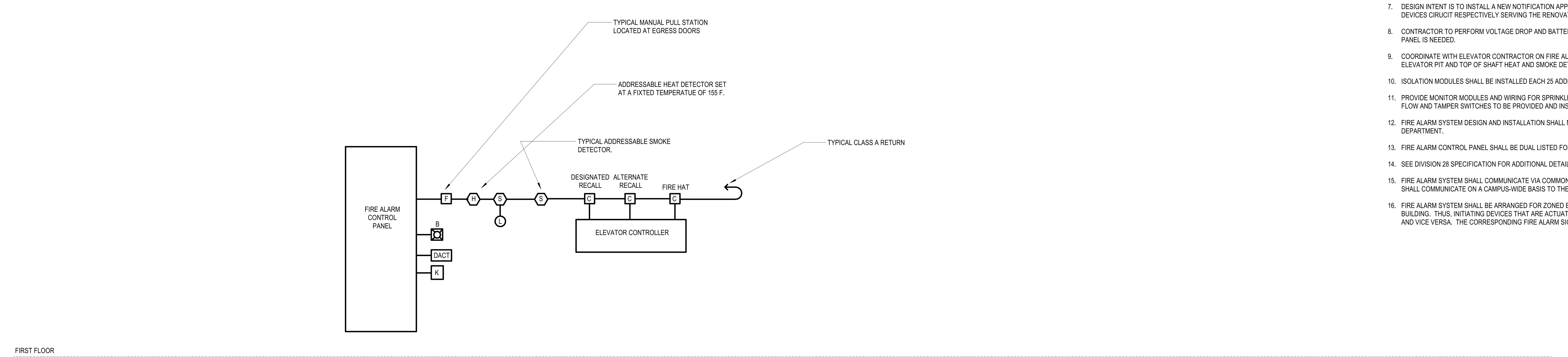
FIRE ALARM HIGH SCHOOL BUILDING RISER DIAGRAM

Scale: 12" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

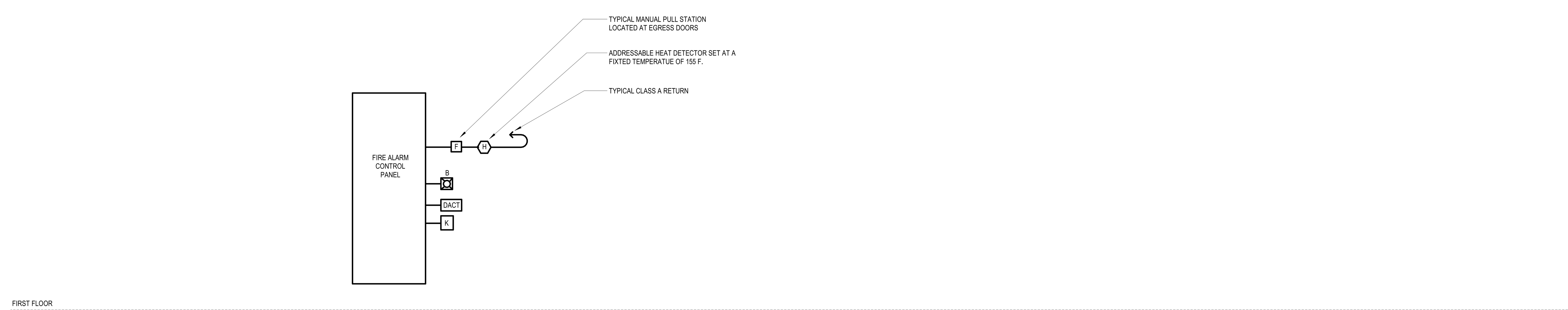
FA4-0-2

GENERAL FIRE ALARM NOTES:

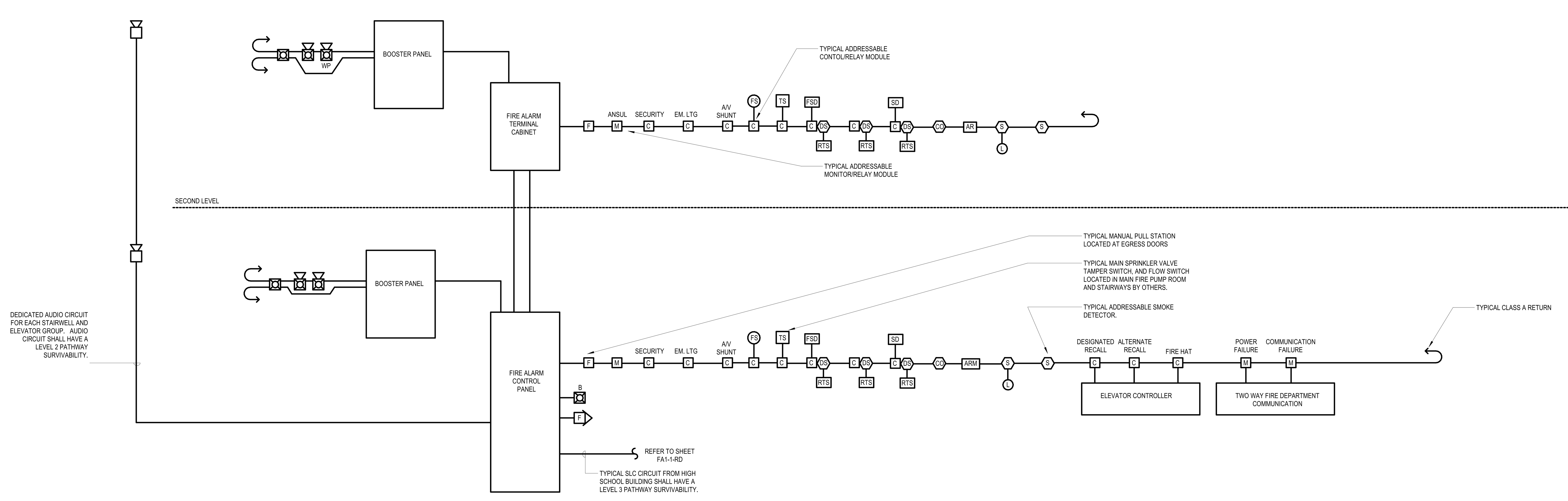
1. ALL DEVICES AND WIRING SHALL BE COMPATIBLE WITH FACP AND SHALL BE U.L. AND FM CERTIFIED AS A COMPLETE AND OPERABLE SYSTEM. THE FIRE ALARM SYSTEM SHALL BE INSTALLED AND OPERATIONAL IN ACCORDANCE WITH NEC ARTICLE 725, ARTICLE 760, NFPA 72 AND ADA. WIRING SHALL BE CLASS `A' TYPE.
2. THIS DIAGRAM DOES NOT DUPLICATE INFORMATION ABOUT PHYSICAL LOCATION OF EQUIPMENT, WHICH IS ALREADY SHOWN ON THE PLANS. THIS DIAGRAM SHOWS SOME PIECES OF EQUIPMENT NECESSARY FOR THE OPERATION OF THE FIRE ALARM SYSTEM, BUT WHICH ARE TYPICALLY OMITTED FROM THE PLANS FOR THE SAKE OF CLARITY.
3. TYPICALLY IONIZATION TYPE SMOKE DETECTORS SHALL BE PROVIDED AND WIRED FOR AHU'S AND RTU'S BACK TO FACP PER NFPA 90A. COORDINATE WITH MECH. CONTRACTOR ON DETECTOR INSTALLATION AND SHUTDOWN WIRING. USE PHOTOELECTRIC TYPE DETECTORS FOR MECHANICAL ROOM, ELECTRICAL ROOM, IDF ROOM, MDF ROOM, TEL/DATA ROOM.
4. PROVIDE CONTROL MODULES FOR HVAC CONTROL (AHU AND RTU SHUTDOWN) VIA DUCT SMOKE DETECTORS WITH RELAYS WIRED TO SLC PER NFPA 90A. COORDINATE WITH MECHANICAL CONTRACTOR ON LOCATIONS OF DUCT DETECTORS, ETC. DUCT DETECTORS SHALL BE SYSTEM TYPE COMPATIBLE WITH FACP AND FURNISHED AND WIRED BY EC.
5. FIRE ALARM SYSTEM SHALL COMMUNICATE VIA COMMON GENERIC PROTOCOL WITH THE MECHANICAL BAS SYSTEM, AND DATA CENTER CFMS SYSTEM AS REQUIRED FOR SUPERVISORY, TROUBLE AND ALARM CONDITIONS. FIRE ALARM SYSTEM AND BAS SYSTEM SHALL BE MONITORED IN THE BUILDING ENGINEER'S OFFICE. PROVIDE REQUIRED HARDWARE, SOFTWARE AND WIRING.
6. PROVIDE, INSTALL AND WIRE SMOKE DAMPERS TO THE FIRE ALARM SYSTEM AS APPLICABLE. COORDINATE WITH MECHANICAL CONTRACTOR.
7. DESIGN INTENT IS TO INSTALL A NEW NOTIFICATION APPLIANCES AND INITIATING DEVICES TO THE NEW NOTIFICATION APPLIANCE CIRCUIT (NAC) AND SIGNALING DEVICES CIRUCIT RESPECTIVELY SERVING THE RENOVATION AREA.
8. CONTRACTOR TO PERFORM VOLTAGE DROP AND BATTERY CALCULATIONS TO DETERMINE IF THE BATTERY NEEDS TO BE UPSIZED OR IF ANOTHER NAC BOOSTER PANEL IS NEEDED.
9. COORDINATE WITH ELEVATOR CONTRACTOR ON FIRE ALARM INTERFACE WIRING FOR SHUNT TRIP OF ELEVATOR MAIN DISCONNECT, ELEVATOR CAB PHONE JACKS, ELEVATOR PIT AND TOP OF SHAFT HEAT AND SMOKE DETECTORS, ETC. AS PER LOCAL ELEVATOR CODES. PROVIDE REQUIRED FIRE ALARM SYSTEM HARDWARE.
10. ISOLATION MODULES SHALL BE INSTALLED EACH 25 ADDRESSABLE DEVICES.
11. PROVIDE MONITOR MODULES AND WIRING FOR SPRINKLER WATER FLOW SWITCHES, PRESSURE SWITCHES AND TAMPER SWITCHES FOR MAIN VALVES. PRESSURE, FLOW AND TAMPER SWITCHES TO BE PROVIDED AND INSTALLED BY THE FIRE PROTECTION MECHANICAL CONTRACTOR.
12. FIRE ALARM SYSTEM DESIGN AND INSTALLATION SHALL MEET THE REQUIREMENTS OF ALL LOCAL CODES AND ORDINANCES AND OF THE LOCAL STONEHAM SAFETY DEPARTMENT.
13. FIRE ALARM CONTROL PANEL SHALL BE DUAL LISTED FOR MASS NOTIFICATION.
14. SEE DIVISION 28 SPECIFICATION FOR ADDITIONAL DETAILS OF FIRE ALARM SYSTEM.
15. FIRE ALARM SYSTEM SHALL COMMUNICATE VIA COMMON GENERIC PROTOCOL WITH THE MECHANICAL BAS SYSTEM, AS REQUIRED. IN ADDITION, FIRE ALARM SYSTEM SHALL COMMUNICATE ON A CAMPUS-WIDE BASIS TO THE MAIN FIRE ALARM CONTROL PANEL..
16. FIRE ALARM SYSTEM SHALL BE ARRANGED FOR ZONED EVACUATION. THERE WILL BE ONE ZONE FOR THE STADIUM BUILDING AND ONE ZONE FOR THE HIGH SCHOOL BUILDING. THUS, INITIATING DEVICES THAT ARE ACTUATED WITHIN THE HIGH SCHOOL BUILDING WILL ONLY NOTIFY OCCUPANTS WITHIN THE HIGH SCHOOL BUILIDNG AND VICE VERSA. THE CORRESPONDING FIRE ALARM SIGNALS WILL DISTINGUISH IF IT IS FROM THE STADIUM BUILDING OR FROM THE HIGH SCHOOL BUILDING.



3 FA4-0-3 **FIRE ALARM CONCESSION BUILDING RISER DIAGRAM**
12" = 1'-0"



2 FA4-0-3 **FIRE ALARM MAINTENANCE BUILDING RISER DIAGRAM**
12" = 1'-0"



1 FA4-0-3 **FIRE ALARM LOCKER BUILDING RISER DIAGRAM**
12" = 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

BALA CONSULTING ENGINEERS, INC.
52 TEMPLE PLACE
BOSTON, MA 02111-1306
TEL: 617 357 6060 FAX: 617 357 5188
WWW.BALA.COM
BALA ENGINEERS
PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON, DC
MECHANICAL | ELECTRICAL | PLUMBING | FIRE PROTECTION
STRUCTURAL | TECHNOLOGY | COMMISSIONING

MSBA 90% CD
Construction Document Submittal

May 12th, 2023

PROJECT NORTH | MAGNETIC NORTH

FIRE ALARM RISER DIAGRAMS

Scale: 12" = 1'-0"
Job No.: 60-20-409
Drawn By: WAM
Date: May 12th, 2023

FA4-0-3