BUILDING SYSTEMS NARRATIVES

ARCHITECTURAL NARRATIVE

4.1.2 – 09c

Northeast Metropolitan Regional Vocational High School Project
– Schematic Design Architectural Narrative
The purpose of the narrative is to establish the anticipated quality level of construction.

General Notes:

Building Code:
Occupancy Classification – Non Separated Uses
- Use Group E (Classrooms, Lab Areas, Band and Chorus Spaces)
- Use Group B (Administration and Guidance)
- Use Group A-1 (Auditorium)
- Use Group A-3 (Gymnasium) – for "non-school events"

Assume – Type IB Construction (non-combustible, 2hr rating)

Roofing:

Assume PVC membrane roof with combination of the tapered insulation and sloped steel with tapered insulation crickets as required achieving proper drainage. Roofing system shall be mechanically fastened and include recovery board over rigid insulation. The minimum depth of the rigid insulation shall be 5-1/2". Minimum slope for the roofing surface is 1/4" in 12". Minimum slope for the insulation crickets shall be ½" in 12". Roofing system shall meet the manufacturers' requirements for the 25 year warranty.
Assume aluminum roof edge (8" tall minimum) perimeter of the roof at storefronts, curtain walls and metal panels.
Provide walkway pads as necessary for the rooftop equipment maintenance.
Provide roof expansion joints.
Provide smoke vents/hatches at the Stage.
Provide hatches at roof access interior ladders with safety railing.
Elevator vents, see Mechanical.
Vegetated roofs for the portions of the lower roofs and courtyard as indicated on the drawings. See Landscape Drawings and specifications for information.
Roof patio pavers are required at courtyards and Library balcony.
Assume that PV panels shlal be installed after completion of constraction by a third party.

Exterior Wall Construction Types Fenestration:

Refer to Exterior Elevations and Building Sections, for additional information.
Exterior wall construction (shall be in compliance with NFPA 285) –

- LGMF back-up, 3" insulated metal panels. Paint GWB at the interior face of the exterior wall.
- Aluminum Composite Metal Panels (ACM) over LGMF framing with exterior sheathing, Air Vapor Barrier (AVB) and mineral wool insulation at exterior overhangs and other locations where insulated metal panels would not be an appropriate choice of material.
- Zink tile (or Copper Tile/ "Aged" surface finish) rain screen system over continuous insulation (mineral wool 3"), air water barrier, exterior sheathing (Nailable insulation) at the LGMF back-up walls.
- Large format exterior CMU veneer over mineral wool 3" continuous insulation, air and vapor barrier over CMU back-up walls.
- Stone (Granite) veneer over mineral wool 3" continuous insulation, air and vapor Barrier over exterior sheathing at the LGMF back-up walls.
- Phenolick panel rain screen system over continuous insulation (3" mineral wool), air and vapor barrier, exterior sheathing at the LGMF back-up walls. Same system at the CMU back-up walls.
- Waterrproofing is required at the exterior surface and/or "blind" side of all cast-in-place retaining walls at below grade occulied spaces.
- Waterproofing is required at the elevator pits

Fenestration:

- Thermally broken aluminum frames with insulated glazing panels shall be assumed for the exterior Curtain Walls, Storefront and Windows. U-Value to meet or exceed 0.25 (Winter) / 0.21 (Summer). Note that integrated aluminum projected sunshade is required at the locations as indicated on the exterior elevations.
- High Security glazing required at the main entrance, customer entrance, and events entrance curtain wall and storefronts
- Insulated Translucent Wall Panels with operable insulated glass vision panels is planed for the openings located at the Vocational Shops as indicated on the Exterior Elevations. Exterior Louvers to be integrated into insulated translusent wall panel system.
- Exterior motorized overhead panel doors at the Vocatioonal Shop exterior walls shall have insulated glass to match the rest of the exterior glass on the project. Provide telescoping security gates at interior side of all overhead doors.
- Self Supporting aluminum structural insulated safety glasss skylight system at Library rotunda roof

Interior partitions:

Refer to the floor plans and partition types.

- Corridor walls – assume metal stud 6" (unless indicated as CMU on the drawings) with total of 3 layers of 5/8" GWB (to comply with acoustical performance requirements). Assume ceramic tile wainscoting at the corridor side see wall finish drawings for height AFF. Ceramic tile is not required behind lockers.
- Classroom demising walls - assume metal stud 6" (unless indicated as CMU on the drawings) with total of 3 layers of 5/8" GWB (to comply with acoustical performance requirements). Assume 8' high abuse resistant board at all exposed to view surfaces (at metal stud walls) within educational spaces. Administration Areas - assume GWB
- Toilet cores - assume metal studs with concrete backer board and ceramic tile. Toilets in the high bay shops assume CMU, painted (epoxy paint)
- Gymnasium – assume CMU, painted (epoxy paint)
- Locker Rooms - assume CMU walls, painted (epoxy paint)
- Auditorium - assume GWB and CMU walls as indicated. Metal stud furring, millwork wall paneling and acoustical wall panels as indicated on Interior Elevations.
- Cafeteria - assume metal studs and CMU walls with backer board, acoustical wall panels and Large Format Porcelain Tile in high visibility areas. Also, glazed aluminum storefront with safety glazing.
- Kitchen Areas – assume CMU and 10'- FRP. Painted CMU walls, (epoxy paint)
- Library (Media Center) - assume GWB over metal studs and Paneling as indicated, see interior elevations. Also, glazed aluminum curtain wall and interior storefront with safety glazing.
- High Bay Shop Areas – assume painted CMU (epoxy paint)
- Shop Areas – assume 6" metal studs with GWB, painted. Simmilar to classroom spaces, see above.

Ceilings:

Refer to RCP's

- Corridors - assume ACT 2x2 with GWB soffits at classroom entrances and key intersections.
- Classrooms, Science Labs - assume ACT 2x2 High NRC in order to comply with acoustical performance requirements.
- Administration areas - assume ACT 2x2 High NRC.
- Toilet cores - assume Moisture resistant GWB
- Mechanical Areas - assume exposed structure painted;
- Gymnasium - assume painted exposed structure with structural metal cellular acoustical deck.
- Locker Rooms - assume moisture resistant GWB, painted
- Auditorium Performance Space - assume combination of exposed structure painted and suspended acoustical specialty ceiling "clouds" to achieve acoustical performance goals.

- Auditorium Stage – assume exposed structure painted.
- Cafeteria - assume specialty metal ceiling system “clouds” to achieve acoustical performance as well as be visually appropriate for this highly visibility space.
- Kitchen - assume ACT 2x2 washable as appropriate for the Foodservice Areas
- Library/Media Center – large format ACT with high NRC and GWB soffits, and specialty fiberglass “clouds”, Acoustical Preformed Ceiling Panels (ACPCP) at the rotunda space.
- Common Spaces – Lobby’s etc. – assume specialty ceilings as appropriate for high profile spaces
- Vocational Shops (High Bay) – Special acoustical separation ceiling shall be required to acoustically separate the Shop areas from the learning spaces above – assume system consisting of two layers of GWB on hat channelks, on metal stud suspended from the floor structure above on the Spring Isolation hangers, Acoustical insulation (6”) above GWB. The MEP and FP systems shall not be supported or penetrate this system. All MEP and FP systems in the areas of the acoustical separation ceilings shall be supported by the supplemental steel, unistrat etc., attached to the steel beams not deck. All exposed to viewe ceiling areas shall be painted.
- Vocatioal Shops – assume ACT 2x2 high NRC
- Vocational Shops spaces located below the mezzanines – assme ACT 2x2 high NRC
- Cullinary Arts Restaurant – assume specialty ceiling as appropriate for the high profile spaces
- Cosmetology – assume specialty ceilings as appropriate for the high profile spaces

Floors:

Refer to the Finish Floor Diagram drawings

- Corridors - linoleum with resilient base. (unless noted othervise)
- Lobby at Main, and Lobby at the Events entrance - assume thin-set poured epoxy terrazzo and base over moisture mitigation system.
- Classrooms - assume linoleum sheet flooring with resilient base.
- Science Labs - assume sheet vinyl with integral base
- Administration Areas - assume carpet with resilient base
- Toilet cores - assume Ceramic Mosaic Tile (CMT) and Ceramic Tile (CT) base
- Gymnasium - assume Athletic Performance Wood Floor and vented rubber base
- Locker Rooms - assume combination of poured epoxy floor and base and Ceramic Mosaic Tile (CMT)
- Auditorium - assume sheet carpet and resilient base at Isles and cross isles. Sealed concrete at the fixed audience seating areas.
- Auditorium Stage – Wood “sprung” stage floor
- Kitchen - assume pured epoxy floor and base
- Library/Media Center - assume carpet and resilient base

- Stairs - assume Rubber Treads and Risers
- Lockers and Toilet Areas located within the Shops – assume pured epoxy floor and base
- Shops High Bay – Assume sealed concrete
- Shops – assume linoleum tile and resilient base
- Cullinary Arts Kitchen Space – assume poured epoxy floor and base
- Cullinary Arts restaurant – assume thin-set pored terrazzo floor and base
- Cosmetology – assume sheet vinyl with integral base

Special treatment for high visibility spaces:

- Lobby / Cafeteria - assume phenolic paneling/large format porcelain tile at lower portion of walls. Glass guardrails at the second-floor openings
- Gymnasium - assume 6' tall gym pads at the exposed wall areas and 4' tall acoustical fiber panels full perimeter of the gym space.
- Library/Media Center – Wood trim and paneling.
- Auditorium – phenolic panels, decorative fabric metal panels and fabric wrapped acoustical panels.

Specialty Wall Treatment:

- Kitchens - assume FRP (height as noted above)
- Custodial Closets - assume FRP
- Shower stalls - assume Ceramic Tile
- Toilets in Admin Areas - assume Ceramic Tile (4' high)

Lockers:

- Corridor lockers - assume two tier 15 x 15 (on wood base). Assume 800 units (to accommodate 1600 students)
- Athletic Locker Room lockers - assume combination of multi-tier and single tier lockers on concrete base for PE; welded locker construction with antimicrobial treatment – see plans
- Team lockers - assume single tier appropriate size; welded locker construction with antimicrobial treatment (on concrete base) - see plans
- Shop lockers – assume 15" x 15" two tier locker on concrete base at the High Bay shops and on wood base elsewhere.

Doors and frames:

- Exterior doors – assume thermally broken aluminum glazed storefront in aluminum frame at highly visible entrances and hollow metal insulated doors and frames elsewhere. Note that all exterior hollow metal frames shall be galvanized.
- Athletic areas and Mechanical (back of the house areas) - assume hollow metal doors and frames
- High Bay Shops – assume hollow metal doors and frames
- Shops – assume wood doors in hollow metal frames
- Kitchen Areas – assume hollow metal doors and frames; doors between the kitchen and the servery assume stainless steel doors in s.s. frames. Same for Cullinary Arts Kitchen and Restaurant areas.
- Everywhere else - assume wood veneer doors (5 ply) s in hollow metal frames
- There also are several spaces that require borrowed lights with safety glass.
- Overhead exterior insulated door at the High Bay Vocatioal Shops shall be fully glazed with insulated safety glass
- Assume rolling grills at the foodservice server area
- Assume Stainless Steel rolling door at the dish returns

Manufactured Casework:

Refer to the Equipment Drawings and Outline Specifications:

- High Quality plastic laminate casework shall be assumed for the project.
- All Science Labs and Prep Rooms shall have standardized approach to the design, to make these spaces interchangeable. Assume chemical resistance countertops for the science spaces.
- Each Classroom space shall have a teacher's wardrobe and storage casework.
- Office Work Rooms and conference rooms shall have storage casework with base and wall cabinets and plastic laminate countertop assemblies

Gymnasium Equipment:

Refer to Equipment Drawings and Outline Specification

- Provide foldable basketball backstops for the main court and the practice courts.
- Provide motorized ceiling mounted Gymnasium Divider curtain
- Provide two scoreboards and shot clocks for the main court
- Provide volleyball standards inserts
- Provide ceiling mounted motorized batting cage
- Provide electrically operated Gym Bleachers on both sides of the Gym.

Auditorium Room:

- Provide Theatrical Seating as indicated on the drawings – 750 seats.

Window Treatments:

- Classrooms, Science Labs, Art rooms - assume manual operated roller shades
- Administration Areas - assume manual operated vertical blinds
- Library / Media Center – assume electrically operated roller shades (exterior). Manual operated vertical blinds at interior storefronts. Tension motorized shade required at the "dome" skylight.
- Provide manual roller shades at all classroom sidelights for security

Displays:

- Each educational space shall contain at least 20' of Tack Board surface (4' tall) and 8' of Marker Board surface. (Refer to drawings)
- Each Educational space shall contain an Interactive wall mounted Display wall mounted
- Auditorium - assume 20' x 14' motorized Projection Screen
- Gymnasium - motorized Projection Screen
- Cafeteria Commons - assume large format digital information displays

Elevators:

- Elevator - assume traction elevator (two required for the main school building). One shall be oversized and have high load capacity for large equipment delivery to the upper shops. Athletic Locker Room Building assume two stop elevator.

Fireproofing:

- All structural steel columns to receive spray fireproofing 2 hour rated.
- At highly visible locations where structural steel componenets are exposed to view (i.e. in front of exterior or interior glass etc.) assume intumescent paint. Visual quality of the steel surface preparation shall be increased for all areas to recive intumescent paint.
- Beams and kickers supporting elevated/structured floor to receive spray fireproofing 2 hour rated
- Beams, kickers and metal deck supporting roof to receive spray fireproofing 1 hour rated
- Spray fireproofing is not required at the structural members located more than 25' above the floor surface below, measured to the bottom of the structural component

Food Service Equipment:

Refer to the Equipment Drawings and Outline Specifications:

- New Equipment for Kitchen and Cullinary Arts Program
- Cooking equipment with convections ovens, combi ovens, 6 burner ranges.
- Storage will include dry storage for food and paper good and cooler and freezers.
- Two dishrooms, one for the main kitchen and another one for the Cullinary arts kitchen.

- The main kitchen will include a food court style servers.
- Prep stations and tray slides shall conform to the ADA code.

Furniture and Equipment:

Refer to the Equipment Drawings and Outline Specifications:

- Movable Furniture shall include student desks, chairs, teacher desks, media center furniture, cafeteria furniture, café tables, stack seating, lounge seating. These items shall be procured by the District and are not part of the Construction CM-R's scope of work.
- Furniture shall conform to ADA code.
- Specific Vocational Equipment for the shop spaces to be part of the FF&E scope of work (potentially may be included in the CM-R's scope to simplify coordination and constraction logistics – Refer to Equipment Drawings, Schedules and Outline Specifications.
- CM-R shall coordinate ALL equipment (provided by the Owner and the CM-R), and provide all MEP & FP services and connections as part of the Construction scope of work.