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March 12, 2025

## **BID ADDENDUM No. 3**

Re: Bedford UFSD Phase 2 – Bond Improvements at Fox Lane High School, Fox Lane Middle School, Administration Building BBS File No. 23-131a-c

This addendum contains changes to the requirements of the contract drawings and/or project manual. Such changes shall be incorporated into the contract documents and shall apply to the work with the same meaning and force as if they had been included in the original documents. Wherever this addendum modifies a portion of a paragraph of project manual or any portion of the drawing, the remainder of the paragraph or drawing affected shall remain in force.

The conditions of the basic project manual shall govern all work described in this addendum. Wherever the conditions of work and the quality or quantity of materials or workmanship are not fully described in this addendum, the conditions of work, etc. included in the basic project manual for similar items of work shall apply to the work described in this addendum.

The "Conditions of the Contract" apply to all work described in this addendum.

The following changes shall be and are hereby made:

## **PROJECT MANUAL MODIFICATIONS**

- 1. Table of Contents
  - a. The Table of Contents shall be deleted and replaced with the attached.
- 2. Specification Section 002113 Instructions to Bidders AIA Document A701 2018
  - a. The specification section shall be deleted and replaced with the attached.
- 3. Specification Section 004100 Bid Proposal Form
  - a. The specification section shall be deleted and replaced with the attached.
- 4. Specification Section 005000 Standard Form of Agreement AIA Document A132 2019
  - a. The specification section shall be deleted and replaced with the attached.

b. <u>Article 5 Payments</u> - Delete paragraph § 5.1. and replace with § 5.1.3 Provided that an Application for Payment is received by the Construction Manager not later than the «7th» day of the month with all required supporting information and documentation required by the Contract Documents, the Owner shall make payment of the amount certified to the Contractor not later than the 7th day of the subsequent month. If an Application for Payment is received by the Construction Manager after the application date fixed above, the Application for Payment will be deemed late. A late Application for Payment will be considered complete on the 7th day of the subsequent month and the Owner shall make payment of the amount certified to the Contractor not later than the 7th day of the subsequent month and the Owner shall make payment of the amount certified to the Contractor not later than the 7th day of the following month.

## 5. Specification Section 005100 – General Conditions of Contract – AIA Document A232 - 2019

- a. The specification section shall be deleted and replaced with the attached.
- b. <u>Article 5 Subcontractors</u> Add paragraph § **5.2.7** The Contractor shall, prior to any work being performed, obtain and provide to the Owner and Construction Manager, a copy of each Subcontractor's Contractor Certificate of Registration obtained through compliance with Section 220-i of New York Labor Law.
- 6. Specification Section 005200 Supplementary Conditions of the Contract
  - a. The specification section attached shall be removed from the Project Manual.

## 7. Specification Section 011000 – Summary of Work

a. The specification section shall be deleted and replaced with the attached.

## 8. Specification Section 013300 – Electronic Submittal Procedures

- a. The specification section shall be deleted and replaced with the attached.
- 9. Specification Section 014529 Testing Laboratory Services
  - a. The specification section shall be deleted and replaced with the attached.
- 10. Specification Section 015000 Temporary Facilities and Controls
  - a. The specification section shall be deleted and replaced with the attached.

## 11. Specification Section 017000 – Contract Closeout

a. The specification section attached shall be added to the Project Manual.

## 12. Specification Section 017329 – Cutting and Patching

a. The specification section attached shall be added to the Project Manual.

## 13. Specification Section 017423 – Cleaning up - Building

a. The specification section attached shall be added to the Project Manual.

## 14. Specification Section 017700 – Closeout Procedures

a. The specification section attached shall be added to the Project Manual.

## 15. Specification Section 017701 – Checklist for Project Closeout and Processing of Final Payment

a. The specification section attached shall be added to the Project Manual.

## 16. Specification Section 017719 – Project Record Documents

a. The specification section attached shall be added to the Project Manual.

## 17. Specification Section 017823 – Operation and Maintenance Requirements

a. The specification section attached shall be added to the Project Manual.

## 18. Specification Section 017836 – Warranties

a. The specification section attached shall be added to the Project Manual.

## 19. Specification Section 017836.1 – Contractor's Guarantee

a. The specification section attached shall be added to the Project Manual.

## 20. Specification Section 086300 - Metal Framed Skylights

- a. The specification section attached shall be removed from the Project Manual.
- 21. Specification Section 087100 Door Hardware
  - a. The specification section shall be deleted and replaced with the attached.

## 22. Specification Section 098413 – Acoustical Wall Panels

a. The specification section attached shall be removed from the Project Manual.

## 23. Specification Section 098413.11 – Sound Absorbing Wall Panels

a. The specification section attached shall be removed from the Project Manual.

## 24. Specification Section 238239.1 – Hydronic Cabinet Heaters

a. The specification section shall be deleted and replaced with the attached.

## 25. Specification Section 238239.2 – Electrical Cabinet Heaters

a. The specification section shall be deleted and replaced with the attached.

## 26. Specification Section 274116 – Audio Visual Systems

a. The specification section shall be deleted and replaced with the attached.

## **CONSTRUCTION DOCUMENT MODIFICATIONS**

- 1. Title Sheet Bid Package 1 Volume I
  - a. Construction drawing is deleted and replaced with the attached.

## 2. 23-131a Drawing CS2.02 – Site Plan – Field #4 Restroom Building

a. Construction drawing shall be deleted from the Construction Documents.

## 3. 23-131a Drawing CS6.01 – Site Details

a. Construction drawing shall be deleted from the Construction Documents.

## 4. 23-131a Drawing CS6.02 – Site Details

a. Construction drawing shall be deleted from the Construction Documents.

## 5. 23-131a Drawing CS6.03 – Site Details

a. Construction drawing shall be deleted from the Construction Documents.

## 6. 23-131a Drawing CS6.04 – Site Details

a. Construction drawing shall be deleted from the Construction Documents.

## 7. 23-131a Drawing A1.03 – Demolition Plan – Area 'C'

- a. Construction drawing is deleted and replaced with the attached.
- 8. 23-131a Drawing A1.04 Demolition Roof Plan Area 'A' and Area 'B'
  - a. Construction drawing is deleted and replaced with the attached.

## 9. 23-131a Drawing A1.05 – Demolition Roof Plan – Area 'C'

a. Construction drawing is deleted and replaced with the attached.

### 10. 23-131a Drawing A2.01 – Proposed Plan – Area 'A'

a. Construction drawing is deleted and replaced with the attached.

### 11. 23-131a Drawing A2.02 – Proposed Plan – Area 'B'

a. Construction drawing is deleted and replaced with the attached.

#### 12. 23-131a Drawing A2.03 – Proposed Plan – Area 'C'

a. Construction drawing is deleted and replaced with the attached.

#### 13. 23-131a Drawing A3.01 - Roof Plan - Area 'A' and Area 'B'

a. Construction drawing is deleted and replaced with the attached.

#### 14. 23-131a Drawing A3.02 – Roof Plan – Area 'C'

a. Construction drawing is deleted and replaced with the attached.

#### 15. 23-131a Drawing A3.03 – Roof Details

a. Construction drawing is deleted and replaced with the attached.

## 16. 23-131a Drawing A6.04 – Wall Sections and Details

a. Construction drawing is deleted and replaced with the attached.

#### 17. 23-131a Drawing A8.02 – Door Schedule and Storefront Elevations

a. Construction drawing is deleted and replaced with the attached.

#### 18. 23-131a Drawing A9.00 – Finish Schedule

a. Construction drawing is deleted and replaced with the attached.

## 19. 23-131a Drawing A9.01 – Finish Floor Plan – Area 'A'

a. Construction drawing is deleted and replaced with the attached.

## 20. 23-131a Drawing A9.02 - Finish Floor Plan - Area 'B'

a. Construction drawing is deleted and replaced with the attached.

## 21. 23-131a Drawing A9.03 - Finish Floor Plan - Area 'C'

a. Construction drawing is deleted and replaced with the attached.

## 22. 23-131a Drawing A9.04 – Interior Elevations

a. Construction drawing is deleted and replaced with the attached.

## 23. 23-131a Drawing A10.03 – Reflected Ceiling Plan – Area 'C'

a. Construction drawing is deleted and replaced with the attached.

## 24. 23-131a Drawing A10.04 - Ceiling Details

a. Construction drawing is deleted and replaced with the attached.

#### 25. 23-131a Drawing A11.04 – Casework and Furniture Plan

a. The construction drawing A10.04 is duplicated in the bid set. The drawing after A11.03 in the bid set shall be deleted and replaced with the attached.

## 26. 23-131a Drawing S0.02 – General Notes, Schedules and Details

a. Construction drawing is deleted and replaced with the attached.

| 27. 23-131a Drawing M2.03 – First Floor Condensate Piping Plan – Areas 'A' and 'B' |
|--|
| a. Construction drawing is deleted and replaced with the attached.                 |
| 28. 23-131a Drawing M2.06 – First Floor VRF Condensate Piping Plan                 |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 29. 23-131a Drawing M2.07 – First Floor Ductwork Layout Plan – Areas 'A' and 'B'   |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 30. 23-131a Drawing M2.12 – Roof Plan – Area 'C'                                   |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 31. 23-131a Drawing P1.01 – Domestic Water Demolition Plan                         |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 32. 23-131a Drawing P1.02 – Sanitary Waste, Vent and Storm Water Demolition Plan   |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 33. 23-131a Drawing P2.01 – Proposed Domestic Water Piping Plans                   |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 34. 23-131a Drawing P2.02 – Proposed Sanitary, Vent and Stormwater Plans           |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 35. 23-131a Drawing P3.01 – Roof Drain Plan – Roof Plan Areas 'A' and 'B'          |
| a. The attached drawing shall be added to the Construction Documents.              |
| 36. 23-131a Drawing E0.02 – Switchgear, Panels and Riser Diagrams                  |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 37. 23-131a Drawing E1.01 – Demolition Plan – Area 'A'                             |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 38. 23-131a Drawing E2.01 – Site Plan Field #4 Restroom Building                   |
| a. Construction Drawing is deleted and replaced with the attached.                 |
| 39. 23-131a Drawing E9.01 – First Floor Technology Plans                           |
| a. Construction Drawing is hereby deleted and replaced with the attached.          |
| 40. Title Sheet – Bid Package 1 – Volume II  |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 41. 23-131b Drawing A1.01 – Demolition Floor Plans                                 |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 42. 23-131b Drawing A2.01 – Proposed Floor Plans                                   |
| a. Construction drawing is deleted and replaced with the attached.                 |
| 43. 23-131b Drawing A2.02 – Enlarged Addition Proposed Floor Plan and Details      |
| a. Construction drawing is deleted and replaced with the attached.                 |

- 44. 23-131b Drawing A3.01 Roof Plan and Details
  - a. Construction drawing is deleted and replaced with the attached.

### 45. 23-131b Drawing A4.01 – Exterior Elevations

a. Construction drawing is deleted and replaced with the attached.

### 46. 23-131b Drawing A5.01 – Building Sections

a. Construction drawing is deleted and replaced with the attached.

## 47. 23-131b Drawing A7.01 – Enlarged Ramp and Walkway Canopy Plans

a. Construction drawing is deleted and replaced with the attached.

## 48. 23-131b Drawing A9.00 – Finish Schedule and Details

a. Construction drawing is deleted and replaced with the attached.

#### 49. 23-131b Drawing A9.01 – Finish Floor Plans

a. Construction drawing is deleted and replaced with the attached.

#### 50. 23-131b Drawing A10.01 – Reflected Ceiling Plan

a. Construction drawing is deleted and replaced with the attached.

## 51. 23-131b Drawing A11.01 – Enlarged Toilet Room Plans and Details

a. Construction drawing is deleted and replaced with the attached.

## 52. 23-131b Drawing S0.01 – Design Data and General Notes

a. Construction drawing is deleted and replaced with the attached.

#### 53. 23-131b Drawing S1.00 – Foundation Plan

a. Construction drawing is deleted and replaced with the attached.

## 54. 23-131b Drawing S2.00 – High and Low Roof Framing Plans

a. Construction drawing is deleted and replaced with the attached.

### 55. 23-131b Drawing S4.01 – Masonry Elevations, Sections and Details

a. Construction drawing is deleted and replaced with the attached.

#### 56. 23-131b Drawing E1.01 – Demolition Plans

a. Construction Drawing is hereby deleted and replaced with the attached.

## 57. 23-131b Drawing E2.01 – Site Plan Softball Field Restroom Building and Traffic Barrier Gate

a. The attached drawing shall be added to the Construction Documents.

## 58. 23-131b Drawing E3.01 – Proposed Lighting Plans

a. Construction Drawing is hereby deleted and replaced with the attached.

## 59. 23-131b Drawing E4.01 – Proposed Power Plans

a. Construction Drawing is hereby deleted and replaced with the attached.

## 60. 23-131b Drawing E4.02 – Add Alternate No. EC-2 Power Plans Courtyard Amphitheater

a. Construction Drawing is hereby deleted and replaced with the attached.

## 61. 23-131b Drawing E4.03 – Proposed Mechanical Power Plans

a. Construction Drawing is hereby deleted and replaced with the attached.

## 62. 23-131b Drawing E5.01 – Proposed Special Systems Plans

a. Construction Drawing is hereby deleted and replaced with the attached.

## 63. 23-131b Drawing E8.01 – Panel Schedules

a. Construction Drawing is hereby deleted and replaced with the attached.

## 64. 23-131b Drawing E9.01 – Technology Data and Security Plans

a. Construction Drawing is hereby deleted and replaced with the attached.

## 65. 23-131b Drawing E9.02 – Technology Plan Security Gate

a. Construction Drawing is hereby deleted and replaced with the attached.

## 66. 23-131c Drawing M4.01 – Boiler Room Demolition Plan / New Boiler Room Layout

a. The attached drawing shall be added to the Construction Documents.

## 67. 23-131c Drawing M4.02 – Boiler Room Details

a. The attached drawing shall be added to the Construction Documents.

## **RESPONSE to CONTRACTOR'S WRITTEN RFI's**

## Piazza Brothers, dated 3/4/25:

1. The supplementary conditions on page 15 state: "11.1.1.2 The insurance required by Subparagraph 11.1.1 shall be written for not less than the limits indicated in Division 01, Specification Section 010200, or greater as required by law." However, we were unable to locate Section 010200 in the specification book. Could you please provide clarification on this matter

## **BBS Response:**

1. Supplementary Conditions have been removed from the Contract Documents. Refer to General Conditions included in this addendum for insurance requirements.

## Naber Electric, dated 3/11/25:

1. What is the intended path to run the feeders for the 5 panels in Storage Room 103 from switchgear "MSB"?

## BBS Response:

1. The feeder runs are intended to be routed from the 5000A switchgear 'MSB' into the nearby crawl space that runs underneath the existing corridors. Run the feeders through the crawlspace until they are underneath storage room 103, and then up into storage room terminating into each panel.

## END OF ADDENDUM

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## **DIVISION 00 – FRONT END DOCUMENTS**

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## **DIVISION 01 – GENERAL REQUIREMENTS**

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- Section 011000 Summary of Work ARRIS
- Section 011100 Milestone Schedule ARRIS
- Section 012100 Allowances
- Section 012300 Alternates
- Section 012600 Contract Modifications
- Section 012600.1 Request For Information Form
- Section 012900 Payment Procedures ARRIS
- Section 013000 Special Procedures and Provisions
- Section 013000.1 Record of Unacceptable and Non-Conforming Work Document
- Section 013100 Project Management and Coordination ARRIS
- Section 013119 Project Meetings ARRIS
- Section 013216 Construction Progress Schedule ARRIS
- Section 013300 Submittal Procedures ARRIS
- Section 013300.1 Submittal Cover Sheet
- Section 013500 Commissioner Regulations (Part 155.5) and Safety Standards
- Section 014213 Abbreviations and Symbols
- Section 014219 Applicable Standards
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- Section 014523 Special Inspections and Structural Testing
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- Section 015000 Temporary Facilities and Controls ARRIS
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- Section 017423 Cleaning Up ARRIS
- Section 017700 Closeout Procedures ARRIS
- Section 017701 Checklist for Project Closeout and Processing of Final Payment ARRIS
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Section 073113.10 – Asphalt Shingles (Landmark Premium)

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- Section 237406 Packaged Rooftop Ventilators with Energy Recovery
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Section 334100 - Reinforced Concrete Piping

Section 334613 – Subsurface Drainage System (Foundation Walls)

DRAFT AIA Document A701 - 2018

## Instructions to Bidders

for the following Project: (Name, location, and detailed description)

Bedford Central School District - Phase 2 632 South Bedford Rd Bedford, NY 10506

THE OWNER: (Name, legal status, address, and other information)

Bedford Central School District 632 South Bedford Rd Bedford, NY 10506

THE ARCHITECT: (Name, legal status, address, and other information)

BBS Architects, Landscape Architects & Engineers, P.C. 100 Great Oaks Blvd., Suite 115 Albany, New York 12203

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#### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

FEDERAL, STATE, AND LOCAL LAWS MAY IMPOSE REQUIREMENTS ON PUBLIC PROCUREMENT CONTRACTS. CONSULT LOCAL AUTHORITIES OR AN ATTORNEY TO VERIFY REQUIREMENTS APPLICABLE TO THIS PROCUREMENT BEFORE COMPLETING THIS FORM.

It is intended that AIA Document G612<sup>™</sup>-2017, Owner's Instructions to the Architect, Parts A and B will be completed prior to using this document.



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## ARTICLE 1 DEFINITIONS

**§ 1.1** Bidding Documents include the Bidding Requirements and the Proposed Contract Documents. The Bidding Requirements consist of the advertisement or invitation to bid, Instructions to Bidders, supplementary instructions to bidders, the bid form, and any other bidding forms. The Proposed Contract Documents consist of the unexecuted form of Agreement between the Owner and Contractor and that Agreement's Exhibits, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, all Addenda, and all other documents contained in the proposed project manual(s).

**§ 1.2** Definitions set forth in the General Conditions of the Contract for Construction, or in other Proposed Contract Documents, apply to the Bidding Documents.

**§ 1.3** Addenda are written or graphic instruments issued by the Architect, which, by additions, deletions, clarifications, or corrections, modify or interpret the Bidding Documents.

§ 1.4 A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents. Wherever the word "Bid" occurs in the Bidding Documents, it refers to the Bidder's proposal.

**§ 1.5** The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents, to which Work may be added or deleted by sums stated in Alternate Bids.

**§ 1.6** An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from, or that does not change, the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

**§ 1.7** A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, as described in the Bidding Documents.

§ 1.8 A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.

**§ 1.9** A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment, or labor for a portion of the Work.

## ARTICLE 2 BIDDER'S REPRESENTATIONS

§ 2.1 By submitting a Bid, the Bidder represents that:

- .1 the Bidder has read and understands the Bidding Documents;
- .2 the Bidder understands how the Bidding Documents relate to other portions of the Project being bid concurrently or presently under construction;
- .3 the Bid complies with the Bidding Documents;
- .4 The Bidder has visited the site, examined the site and all existing facilities where the Project work is to be done, conducted all tests required to verify Owner-provided information, made all reviews of publicly available documents concerning the Work, reviewed the study results finding asbestos and lead on the Project site, reviewed all available as-built drawings, become familiar with local conditions under which the Work is to be performed, reviewed the Bidding Documents, the proposed Contract Documents, and all Addenda, and has correlated the Bidder's personal observations with the requirements of the foregoing. The Bidder shall inspect accessible concealed areas of existing construction, provided no significant permanent damage is inflicted upon the Owner's property. Lack of knowledge about conditions in accessible concealed areas shall not be a basis for additional cost claims at a later time. By submitting a Bid, the Bidder verifies that all Owner-provided information in the Bidding Documents and proposed Contract Documents is accurate and the Bidder waives any claim based on inaccuracy in the Bidding Documents or proposed Contract Documents that should have been reasonably found in a thorough inspection and testing of the Project site and review of the proposed Contract Documents and publicly available information;
- .5 the Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception; and
- .6 the Bidder has read and understands the provisions for liquidated damages, if any, set forth in the form of Agreement between the Owner and Contractor and the General Conditions of the Contract for Construction.

§ 2.2 It is understood and agreed that the Bidder has, by careful examination, satisfied itself as to the nature and location of the Work, and confirmation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the prosecution of the Work, the general and local conditions, and all other matters which can in any way affect the Work under the proposed Contract Documents.

§ 2.3 No official, officer or agent of the Owner is authorized to make any representations as to the materials or workmanship involved or the conditions to be encountered and the Bidder agrees that no such statement or the evidence of any documents or plans, not a part of the Bidding Documents, shall constitute any grounds for claim as to conditions encountered. No verbal agreement or conversation with any officer, agent or employee of the Owner either before or after the execution of this Contract shall affect or modify any of the terms or obligations herein contained.

§ 2.4 The Bidder acknowledges its understanding and agreement that it has informed itself fully as to the conditions relating to construction and labor under which the Work will be performed and agrees as far as possible to employ such methods and means in the performance of its work so as not to cause interruption or interference with any other contractor.

§ 2.5 The Bidder's attention has been directed to the fact that all applicable state laws, municipal ordinances, and rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout, and they are deemed to be included in the Contract Documents the same as though herein written out in full. By submitting a Bid, the Bidder acknowledges that if awarded the Contract it shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the Work as drawn and specified in the Contract Documents. By submitting a Bid, the Bidder acknowledges that if awarded the Contract it shall be required to observe all laws and ordinances including, but not limited to, relating to the obstructing of streets, maintaining signals, keeping open passageways and protecting them where exposed to danger, and all general ordinances affecting it, its employees, or its work hereunder in its relations to the Owner or any person. By submitting a Bid, the Bidder acknowledges that if awarded the Contract it shall also obey all laws and ordinances controlling or limiting the Contractor while engaged in the prosecution of the Work under the Contract.

§ 2.6 The Bidder's attention has been directed to the fact that if the Contractor observes that the Drawings and Specifications are at variance with laws and regulations, it shall promptly notify the Architect in writing and any necessary changes shall be adjusted as provided in the Contract Documents for changes in the Work. By submitting a Bid, the Bidder acknowledges that if awarded the Contract and it performs any Work knowing it be contrary to such laws, ordinances, rules, regulations, or specifications, or local, state or federal authorities without such notice to the Architect, it shall bear all costs arising therefrom.

§ 2.7 The Bidder's attention is directed particularly to the Contract Documents provisions whereby the Contractor will be responsible for any loss or damage that may occur to the Work or any part thereof during its progress and whereby the Contractor must make good any defects or faults in the Work that may occur during the progress or within two (2) years after its acceptance. The Contractor shall provide for the continuation of the Performance Bond as a Maintenance Bond for two (2) full years after date of final payment request at the full Contract Sum. The Work is to be performed and completed to the satisfaction of the Owner & Architect and in accordance with the Specifications annexed hereto and the Drawings referred to therein.

§ 2.8 The Bidder's attention is directed to the fact that each Contractor shall pay not less than the minimum hourly wage rates on those contracts as established in accordance with Section 220 of the Labor Law as shown in the schedule included in the Bidding Documents. Article 8, Section 220 of the Labor Law, as amended by Chapter 750 of the Laws of 1956, provides (among other things) that it shall be the duty of the fiscal officer to make a determination of the schedule of wages to be paid to all laborers, workers and mechanics employed on public work projects, including supplements for welfare, pension, vacation and other benefits. These supplements include hospital, surgical or medical insurance, or benefits; life insurance or death benefits; accidental death or dismemberment insurance; and pension or retirement benefits. If the amount of supplements provided by the employer is less than the total supplements shown on the wage schedule, the difference shall be paid in cash to the employee. Article 8, Section 220 of the Labor Law, as amended by Chapter 750 of the Laws of 1956, also provides that the supplements to be provided to laborers, workers and mechanics upon public work, "... shall be in accordance with the prevailing practices in the locality..." The amount for supplements listed on the enclosed schedule does not necessarily include all types of prevailing supplements in the locality, and a future determination of the Industrial Commissioner may require the Contractor to provide additional

supplements. The original payrolls or transcripts shall be preserved for three (3) years from the completion of the Work on the awarded project by the Contractor. The Owner shall receive such payroll record upon completion of the Project.

§ 2.9 To be considered qualified, the Bidder must demonstrate to the Owner's satisfaction the following:

- The corporation, partnership, sole proprietorship of other business entity in whose name the Bid is .1 submitted has been in business, continuously, for no less than the previous five (5) years performing or coordinating the work which it is bidding on;
- .2 The Bidder has satisfactorily completed no less than five (5) projects of comparable size, complexity and type to this Project as a prime contractor to project owner;
- .3 The bidder is not currently involved in bankruptcy proceedings;
- .4 The Bidder is licensed to perform the work it is bidding on in the jurisdiction where the work will take place;
- .5 The Bidder is capable of and intends to perform at least 25% of the Work with its own forces;
- .6 The Bidder is able to perform the Work with the manpower available to it; and
- .7 The Bidder and its subcontractors have a minimum of five (5) years' experience in the Work and applicable trades.

#### **BIDDING DOCUMENTS** ARTICLE 3

## § 3.1 Distribution

§ 3.1.1 Bidders shall obtain complete Bidding Documents, as indicated below, from the issuing office designated in the advertisement or invitation to bid, for the deposit sum, if any, stated therein.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall obtain Bidding Documents.)

## See Advertisement for Bids

§ 3.1.2 Any required deposit shall be refunded to Bidders who submit a bona fide Bid and return the paper Bidding Documents in good condition within ten days after receipt of Bids. The cost to replace missing or damaged paper documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the paper Bidding Documents, and the Bidder's deposit will be refunded.

§ 3.1.3 Bidding Documents will not be issued directly to Sub-bidders unless specifically offered in the advertisement or invitation to bid, or in supplementary instructions to bidders.

§ 3.1.4 Bidders shall use complete Bidding Documents in preparing Bids. Neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete Bidding Documents.

§ 3.1.5 The Bidding Documents will be available for the sole purpose of obtaining Bids on the Work. No license or grant of use is conferred by distribution of the Bidding Documents.

## § 3.2 Modification or Interpretation of Bidding Documents

§ 3.2.1 It is the responsibility of the Bidder before submitting a Bid:

- To examine thoroughly the proposed Contract Documents and other related data identified in the Bidding .1 Documents;
- .2 To visit the site to become familiar with and satisfy Bidder as to the general, local and site conditions that may affect cost, progress, performance or furnishings of the Work;
- .3 To consider federal, state and local laws and regulations that may affect cost, progress, performance or furnishing of the Work;
- .4 To study and carefully correlate Bidder's knowledge and observations with the proposed Contract Documents and such other related data;
- .5 To promptly notify the Architect, in writing, of all conflicts, errors, ambiguities or discrepancies that the Bidder has discovered in or between the proposed Contract Documents and such other related documents; and
- .6 In the absence of an interpretation by the Architect, should the Drawings disagree in themselves or with the Specifications, the better quality, the more costly or the greater quantity of work or materials shall be estimated upon, and unless otherwise determined, shall be furnished.

§ 3.2.2 Requests for clarification or interpretation of the Bidding Documents shall be submitted by the Bidder in writing and shall be received by the Architect at least seven (7) days prior to the date for receipt of Bids.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall submit requests for clarification and interpretation.)

John Prentice AIA Senior Associate, Architecture Email: prentice@bbsarch.com BBS Architects, Landscape Architects & Engineers, P.C. 100 Great Oaks Blvd., Suite 115 Albany, New York 12203

With a copy to: Alexis Smith and Allison Canfield Emails: ASmith@arriscontracting.com and acanfield@arriscontracting.com Arris Contracting Company, Inc. 189 Smith Street Poughkeepsie, NY 12601

§ 3.2.3 Modifications and interpretations of the Bidding Documents shall be made by Addendum. All Addenda so issued shall become part of the Contract Documents. If any Addenda may materially affect the bid, as solely determined by the Owner, the Owner may extend the Bid date. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them. No oral interpretation will be made to any Bidder as to the meaning of the proposed Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to the Architect.

## § 3.3 Equivalents

§ 3.3.1 In the Specifications in the proposed Contract Documents, one or more kinds, types, brands, or manufacturers or materials are regarded as the required standard of quality and are presumed to be equal. The Bidder may select one of these items or, if the Bidder desires to use any kind type, brand, or manufacturer or material other than those named in the specifications, it shall indicate in writing when requested, and prior to the submittal of Bids, what kind, type, brand or manufacturer is included in the Base Bid for the specified item.

## § 3.3.2 Equivalents Process

§ 3.3.2.1 Written requests for equivalents shall be received by the Architect at least ten (10) days prior to the date for receipt of Bids. Requests shall be submitted in the same manner as that established for submitting clarifications and interpretations in Section 3.2.2.

§ 3.3.2.2 Bidders shall submit equivalents requests on a Request for Equivalent Review Form if one is provided in the Bidding Documents.

§ 3.3.2.3 If a Request for Equivalent Review Form is not provided, requests shall include: (1) the name of the material or equipment specified in the Bidding Documents; (2) the reason for the requested substitution; (3) a complete description of the proposed equivalent including the name of the material or equipment proposed as the substitute, performance and test data, and relevant drawings; and (4) any other information necessary for an evaluation. The request shall include a statement setting forth changes in other materials, equipment, or other portions of the Work, including changes in the work of other contracts or the impact on any Project certifications (such as LEED), that will result from incorporation of the proposed equivalent.

§ 3.3.3 The burden of proof of the merit of the proposed equivalent is upon the proposer. The Architect's decision of approval or disapproval of a proposed equivalent shall be final.

§ 3.3.4 If the Architect approves a proposed equivalent prior to receipt of Bids, such approval shall be set forth in an Addendum. Approvals made in any other manner shall not be binding, and Bidders shall not rely upon them.

§ 3.3.5 No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

## § 3.4 Addenda

§ 3.4.1 Addenda will be transmitted to Bidders known by the issuing office to have received complete Bidding Documents.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Addenda will be transmitted.)

All Bid Addenda will be transmitted to registered plan holders via email and will be available at www.revplans.biddyhq.com.

§ 3.4.2 Addenda will be available where Bidding Documents are on file.

§ 3.4.3 – not used

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**§ 3.4.4** Prior to submitting a Bid, the Bidder shall ascertain that the it has received all Addenda issued, and the Bidder shall acknowledge receipt in the Bid. It shall be the Bidder's responsibility to make inquiry as to the existence of Addenda issued. All such Addenda shall become part of the Contract Documents and the Bidder shall be bound by such Addenda whether or not received by the Bidder.

## ARTICLE 4 BIDDING PROCEDURES

## § 4.1 Preparation of Bids

§ 4.1.1 Bids shall be submitted on the forms included with or identified in the Bidding Documents; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents. Failure to use said forms or the inclusion of bids not requested shall result in rejection of the Bid. The Project Manual shall not be submitted or included in the Bidder's Bid package. No Bid will be considered which does not include bids for all items listed in the proposal sheets.

§ 4.1.2 All blanks on the Bid Form shall be legibly executed. Bid Forms shall be executed in a non-erasable medium.

**§ 4.1.3** Sums shall be expressed in both words and numbers, unless noted otherwise on the bid form. In case of discrepancy, the amount entered in words shall govern.

§ 4.1.4 Edits to entries made on the Bid Form must be initialed by the signer of the Bid.

**§ 4.1.5** All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change" or as required by the Bid Form.

## § 4.1.6 Not Used.

**§ 4.1.7** The Bidder must state in the Bid his/her full name and business address, and the full name of every person, firm or corporation interested therein and the address of every person or firm, or president and secretary of every corporation interested with it; if no other person, firm or corporation be so interested, it must affirmatively state such fact. The Bidder must also state that the Bid is made without any connection (directly or indirectly) with any other bidder for the work mentioned in its Bid and is (in all respects) without fraud or collusion; it has inspected the site of the Work and has examined the Bidding Documents; no person acting for or employed by the Owner is directly or indirectly interested therein, or in the supplies or Work to which it relates or in any portion of the prospective profits thereof; it proposes and agrees if its Bid is accepted, to execute a contract with the Owner to perform the work mentioned in the proposed Contract Documents attached; and the amount it will accept in full payment..

§ 4.1.8 A Bidder shall incur all costs associated with the preparation of its Bid.

**§ 4.1.9** The Bidder shall execute, under the penalty of perjury, and submit with its Bid, an Iran Divestment Act of 2012 certification as required by General Municipal Law §103-g.

**§ 4.1.10** As a condition of bidding, the Bidder certifies, warrants and represents that it is not disqualified to contract with municipal corporations or other public bodies as provided by the General Municipal Law of the State of New York, or as provided by any successor statute thereto. The Bidder further certifies that if it becomes a Contractor hereunder, any refusal by it, including the refusal of its officers, employees, servants or agents, when called before a grand jury, head of a state department, temporary state commission or other state agency, the organized crime task force in the department of law, head of a city department or other city agency, which is empowered to compel the attendance

of witnesses and examine them under oath, to testify in an investigation concerning any transaction, or contract had with the state, any political subdivision thereof or of a public authority, to sign a waiver of immunity against subsequent criminal prosecution or to answer any relevant question concerning such transaction or contract, it or any firm, partnership or corporation of which it is a member, partner, director or officer shall be disqualified from selling to or submitting bids or proposals to or receiving awards from or entering into any contract with the Owner for a period of five years after such refusal; and any and all contracts made with the Owner on or after the first day of July, nineteen hundred and fifty nine by it and by any firm, partnership or corporation of which it is a member, partner, director or officer may be cancelled or terminated by the Owner without incurring any penalty or damages on account of such cancellation or termination, but any monies owing by the Owner for goods delivered or work done prior to the cancellation or termination shall be paid.

§ 4.1.11 The Bidder must verify its Bid in writing verifying that the several matters stated therein are in all respects true.

**§ 4.1.12** The Owner may consider as informal any Bid on which there is an alteration of or departure from or additions to or qualification of the Bid Form or from the any of the other Contract Documents. The Owner may reject a Bid, which in the Owner's sole view, is not adequately filled out, or does not contain the requested information.

**§ 4.1.13** It is the Bidder's responsibility to examine carefully the Drawings and Specifications, proposal and the site upon which the Work is to be performed. A proposal submitted shall be prima facie evidence that the Bidder has made such examination and that it is familiar with all of the conditions and requirements.

§ 4.1.14 Pursuant to Section 220-i, each Bidder **must include in their bid** proof of their registration with the Department of Labor of the State of New York, which proof must, at a minimum, include their "Certificate of Contractor Registration". Failure to include proof of their registration will disqualify their bid from consideration for award and will result in rejection of their bid as nonresponsive.

## § 4.2 Bid Security

**§ 4.2.1** Each Bid shall be accompanied by the following bid security: *(Insert the form and amount of bid security.)* 

Either a certified check drawn on a solvent bank with an office in the State of New York, or a bid bond equal to five percent (5%) of the total amount of the Bid, and payable to the "Bedford Central School District." This amount shall be the measure of liquidated damages sustained by the Owner as a result of the failure, negligence or refusal of the Bidder to whom the Contract is awarded to execute and deliver the Contract. The Bid must also be accompanied by a certified statement that the bonding company meets or exceeds the requirements set forth in Article 11 of the General Conditions of the Contract for Construction in the proposed Contract Documents.

**§ 4.2.2** The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder; such bonds shall be in the amount of 100% of the Contract Sum. Should the Bidder refuse to enter into such Contract within 10 days after receipt of the Notice of Award or fail to timely furnish such bonds, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.

**§ 4.2.3** If a surety bond is provided as bid security, it shall be written on AIA Document A310<sup>TM</sup>, Bid Bond, unless otherwise provided in the Bidding Documents. The attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of an acceptable power of attorney. The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

**§ 4.2.4** The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until (a) the Contract has been executed and bonds, if required, have been furnished; (b) the specified time has elapsed so that Bids may be withdrawn; or (c) all Bids have been rejected. However, if no Contract has been awarded or the Bidder has not been notified of the acceptance of its Bid, the Bidder may, **beginning forty-five (45)** days after the opening of Bids, withdraw its Bid and request the return of its bid security.

## § 4.3 Submission of Bids

§ 4.3.1 Each Bid submission shall be enclosed in a sealed opaque envelope. This envelope shall be clearly marked with the name of the Project, Bidder's name, the date of the Bid opening, and marked "BID PROPOSAL" in large lettering on the envelope and shall contain the following items:

- .1 Certified check or Bid Bond in the amount totaling 5% of the Base Bid.
- .2 Certified letter from its bonding company, indicating that they meet the criteria set forth in Article 11 of the General Conditions contained in the proposed Contract Documents.
- .3 Certified letter that the company bidding this Project has been in business under the same name for a period of five years or longer, and is not currently disbarred from bidding or working on public works projects by the New York State Department of Labor.
- .4 One (1) fully executed original and one (1) copy (marked "copy") of the following:
  - .1 Proposal form.
  - .2 Non-collusive form.
  - .3 Hold Harmless Agreement.
  - .4 Certification of Compliance with the Iran Divestment Act or Declaration of Bidder's Inability to Provide Certification of Compliance with the Iran Divestment Act.
  - .5 Insurance Certification - each Bid must be accompanied by the Insurance Certification Form located in the Specifications. Failure to provide may result in the Owner finding the Bidder "nonresponsive" to the Bidding Documents.
  - .6 Sexual Harassment Prevention Certification form.
  - .7 Certificate of Contractor Registration.
- .5 **Bidder Qualifications** 
  - .1 A description of its experience with at least five similar projects of comparative size, complexity and cost together with documentary evidence showing that said projects were completed to the owner's satisfaction and were completed in a timely fashion.
  - .2 Documentation from five projects completed within the past five years, listing type and scope of work, names and addresses of owners and dates of contract completion, as well as the following information:
    - timeliness of performance of the work of the project.
    - evidence that the project was completed to the Owner's satisfaction.
    - whether any extensions of time were requested and if such requests were granted.
    - whether litigation and/or arbitration was commenced by either the Owner or the Bidder as a result of the work of the project completed by the Bidder.
    - whether any liens were filed on the project by subcontractors or material suppliers of the Bidder.
    - whether the Bidder was defaulted on the project by the owner.
    - whether the Bidder made any claims for extra work on the project, including whether said claim resulted in a change order.
  - Documentation evidencing the Bidder's financial responsibility and capability to produce and .3 execute the Work of the Project within the time periods specified, including a certified financial statement.
  - .4 Fully completed Statement of Bidder's Qualifications.
  - .5 Fully completed list of subcontractors.

§ 4.3.2 Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

§ 4.3.3 Oral, telephonic, telegraphic, facsimile or other electronically transmitted bids will not be considered. Bids not exhibiting original signatures or seals will not be accepted as a responsive Bid.

**§ 4.3.4** The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

§ 4.3.5 A Bid submitted by any method other than as provided in this Section 4.3 will not be accepted.

## § 4.4 Modification or Withdrawal of Bid

§ 4.4.1 Prior to the date and time designated for receipt of Bids, a Bidder may submit a new Bid to replace a Bid previously submitted, or withdraw its Bid entirely, by notice to the party designated to receive the Bids. Such notice shall be received and duly recorded by the receiving party on or before the date and time set for receipt of Bids. The receiving party shall verify that replaced or withdrawn Bids are removed from the other submitted Bids and not considered. Notice of submission of a replacement Bid or withdrawal of a Bid shall be worded so as not to reveal the amount of the original Bid.

**§ 4.4.2** Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids in the same format as that established in Section 4.3, provided they fully conform with these Instructions to Bidders. Bid security shall be in an amount sufficient for the Bid as resubmitted.

**§ 4.4.3** A Bid may not be modified, withdrawn or canceled by the Bidder during the forty-five (45) day time period following the time and date designated for the receipt of bids and each Bidder so agrees in submitting a Bid. Beginning 45 days after the day of the opening of Bids, a Bidder may withdraw its Bid and request return of its bid security.

**§** 4.4.4 Negligence on the part of the Bidder in preparing its Bid confers no right for the withdrawal of the Bid after it has been opened. If the Bidder claims to have made a material and substantial mistake in the preparation of its Bid, the Bidder shall deliver to the Owner a written notice describing in detail the nature of the mistake or error with documentary proof (including, but not limited to, bid worksheets, summary sheets and other bid related data requested of it) within twenty-four (24) hours after the opening of the Bids. Failure to deliver said notice and documentary evidence or proof within the specified time shall constitute a waiver of the Bidder's right to claim an error or mistake. Upon receipt of said notice and documentary evidence within the specified time period, the Owner shall determine if an excusable error or mistake has been made; and, if so, the Owner may permit the Bid to be withdrawn. The Owner's determination of whether a Bidder made an excusable error or mistake shall be conclusive on the Bidder, its Surety, and all those claiming rights under the Bidder.

## ARTICLE 5 CONSIDERATION OF BIDS

## § 5.1 Opening of Bids

If stipulated in an advertisement or invitation to bid, or when otherwise required by law, Bids properly identified and received within the specified time limits will be publicly opened and read aloud. A summary of the Bids may be made available to Bidders. The Owner reserves the right to postpone the date and time of the opening of Bids at any time prior to the date and time listed in the Advertisement or Notice to Bidders.

## § 5.2 Rejection of Bids

§ 5.2.1 The Owner reserves the right to reject any or all Bids and to accept the proposal it deems in the best interest of the Owner. A Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete, nonresponsive or irregular is subject to rejection by the Owner.

**§ 5.2.2** In order to qualify as a Contractor satisfactory to the Owner, the Bidder shall document to the satisfaction of the Owner that he has the skill and experience as well as the necessary facilities, ample financial resources, experienced staff and technical organization for the Work, and adequate laborers and equipment to do the Work in a satisfactory manner and within the time specified. The Bidder may be judged qualified only for the type of work in which it demonstrates competence. The Bidder must prove to the satisfaction of the Owner that it is reputable, reliable and responsible. The Owner may make any investigation it deems necessary to assure itself of the ability of the Bidder to perform the Work, and the Bidder shall furnish the Owner with all such additional information and data for this purpose as may be requested. In addition to the general reservation of rights to reject any and all bids, the Owner specifically reserves the right to reject any Bid of any Bidder if the evidence submitted by, or investigation of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract Documents and to complete the Work contemplated therein.

**§ 5.2.3** The Owner reserves unto itself the sole right to determine the lowest qualified and responsible Bidder. The Owner may make any investigation necessary to determine the ability of the Bidder to fulfill the Contract and the Bidder shall furnish the Owner with all such information for this purpose as the Owner may request. Without limiting the general rights which the Owner has to reject Bids, as herein before set forth, in determining the lowest responsible bidder, the following considerations in addition to those above mentioned shall be taken into account. In determining the responsibility of a Bidder for a public works contract, the Owner shall consider whether the Bidder:

- .1 Maintains a permanent place of business;
- .2 Has adequate plant and equipment to do the Work properly and expeditiously;
- .3 Has the suitable financial ability to meet obligations required by the Work;
- .4 Has appropriate technical ability and experience in institutional and commercial construction including experience in municipal construction in New York State;
- .5 Has performed Work of the same general type and the same scale called for under this Contract;
- .6 Has previously failed to perform contracts properly or complete them on time;
- .7 Is in a position to perform this Contract;
- .8 Has habitually and without just cause neglected the payment of bills or otherwise disregarded its

obligations to subcontractors, suppliers, or employees;

- .9 Is eligible for full bonding capacity of its Contract;
- .10 Has been in business as the corporation, partnership, sole proprietorship or other business entity, in whose name the bid is submitted, continuously, for no less than the previous five (5) years performing or coordinating the Work which it is bidding on;
- .11 Is not currently involved in bankruptcy proceedings;
- .12 Is licensed to perform the Work it is bidding on in the jurisdiction the work will take place;
- .13 Is able to perform the work with manpower available to it;
- .14 Will employ a field superintendent with at least five (5) years' experience as a working field superintendent and capable of communicating in fluent English;
- .15 Has committed a willful violation of the New York State Prevailing Wage Laws within the last five years;
- .16 Has committed violations of safety and/or training standards as evidenced by a pattern of OSHA violations or the existence of willful OSHA violations;
- .17 Has committed any significant violation of the Worker's Compensation Law, including, but not limited to, the failure of the Bidder to provide proof of worker's compensation or disability benefits coverage;
- .18 Has committed any criminal conduct involving violations of the Environmental Conservation Law or other federal or state environmental statutes of regulations;
- .19 Has committed any criminal conduct concerning formation of, or any business association with, an allegedly false or fraudulent Women's or Minority Business Enterprise (W/MBE), or any denial, decertification, revocation or forfeiture of W/MBE status by New York State;
- .20 Has been debarred by any agency of the U.S. Government; and
- .21 Has engaged in other conduct of so serious or compelling a nature that it raises questions about the responsibility of the Bidder, including, but not limited to submission to the Owner of a false or misleading Statement of Bidder's Qualifications, or in some other form, in connection with a bid for or award of a contract.

§ 5.2.4 No bids will be accepted, and no Contract will be awarded to any employer, contractor, sub-contractor, or its successors, which have been debarred and deemed ineligible to submit a bid on or be awarded any public work contract or subcontract by the New York State Department of Labor – Bureau of Public Work, or the New York City Comptroller's Office.

## § 5.3 Acceptance of Bid (Award)

§ 5.3.1 It is the intent of the Owner to enter into separate Prime Contracts with the lowest responsive and responsible bidder, as those criteria are defined and interpreted under the laws of the State of New York regarding competitive bidding for public improvement projects, provided the Bids are submitted in accordance with the requirements of the Bidding Documents and do not exceed the funds available. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.

§ 5.3.1.1 The Owner may consider informal any Bid not prepared and submitted in accordance with all provisions of the Bidding Documents.

§ 5.3.2 Unless otherwise prohibited by law, the Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the lowest responsive and responsible Bidder on the basis of the sum of the Base Bid and Alternates accepted.

**§ 5.3.3** The acceptance of a Bid will be a notice in writing signed by a duly authorized representative of the Owner by either registered or certified mail sent within forty-five (45) after the Bids have been opened and no other act of the Owner shall constitute the acceptance of a Bid. The acceptance of a Bid shall bind the successful Bidder to execute the Contract as provided hereinafter. The rights and obligations provided for in the Contract shall become effective and binding upon the parties only with its formal execution by the successful Bidder and the Owner.

**§ 5.3.4** Each Bidder to whom a contract is awarded, shall, at the office of the Fire District within ten (10) business days after the date of notification by either registered or certified mail of acceptance of its Bid furnish the required payment and performance bonds in an amount of 100% of the Contract Sum, and the required insurance as set forth in Article 11 of the General Conditions of the Contract for Construction, and sign the Contract for the Work for its performance and maintenance.

## ARTICLE 6 POST-BID INFORMATION

## § 6.1 Contractor's Qualification Statement

§ 6.1.1 The Owner shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform its obligations under the Contract, and the Bidder shall furnish the Owner all such information and data for this purpose as the Owner may request. The right is reserved to reject any Bid where an investigation of the available evidence or information does not satisfy the Owner that the Bidder is qualified and capable to carry out properly the terms of the Contract. The issuing of Bid Documents and acceptance of the Bidder's payment by the Owner shall not be construed as pre-qualification of that Bidder. If the Bidder is later discovered to have misrepresented or provided false or incorrect information regarding experience, debarment, claims, lawsuits, arbitrations, mediations, finances, license, contract termination, the Owner reserves the right to reject the Bid of such Bidder and, if a construction contract has been awarded, it will become automatically voidable at the sole discretion and election of the Owner.

**§ 6.1.2** Within forty-eight (48) hours after the Bids are opened, the three (3) apparent low Bidders for each Prime Contract must submit the required pre-award submittal package described below to the Construction Manager:

- .1 Workforce and Work Plan Provide a detailed written Work Plan which shall demonstrate the Contractor's understanding of overall Project scope and shall include, but not be limited, to the following:
  - .1 Sequential listing of specific Project activities required to successfully complete the Work of the Contract Documents.
    - .1 Include Schedule and list Critical Milestones;
    - .2 Include phasing of the Work, if required.
    - .3 Include listing of long lead items.
    - .4 Statement that the Project can be completed in the established time.
  - .2 Resumes for the Bidder's proposed supervisory staff, including qualifications for specialized expertise or any certification(s) required to perform the Work.
  - .3 Any special coordination requirements with other trades.
  - .4 Any special storage and staging requirements for construction materials.
  - .5 Any other special requirements.
- .2 Detailed Cost Estimate: A copy of a Detailed Cost Estimate outlined in CSI format.
- .3 Copy of most recent financial statements from CPA.
- .4 AIA A305 Qualification Form.

## § 6.2 Owner's Financial Capability – Intentionally omitted

## § 6.3 Submittals

**§ 6.3.1** After notification of selection for the award of the Contract, the Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, submit in writing to the Owner through the Architect:

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the principal products and systems proposed for the Work and the manufacturers and suppliers of each; and
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

**§ 6.3.2** The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

**§ 6.3.3** Prior to the execution of the Contract, the Architect will notify the Bidder in writing if the Owner, Construction Manager or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity. The Owner may accept the substituted person or entity in its sole discretion or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security shall not be forfeited.

§ 6.3.4 Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

## ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND

## § 7.1 Bond Requirements

§ 7.1.1 The Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Refer to Article 11 of the AIA A232-2019 General Conditions of the Contract for Construction for requirements associated with such bonds.

§ 7.1.2 The cost of the performance and payment bonds shall be included in the Bid.

**§ 7.1.3** The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

**§ 7.1.4** Unless otherwise indicated below, the penal sum of the payment and performance bonds shall be the amount of the Contract Sum.

## § 7.2 Time of Delivery and Form of Bonds

§ 7.2.1 The Bidder shall deliver the required bonds to the Owner not later than ten (10) days following the date of notice of award of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section 7.2.1.

**§ 7.2.2** Unless otherwise provided, the bonds shall be written on AIA Document A312-2010, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum. The Bidder shall provide for the continuation of the Performance Bond for two (2) full years after date of final payment request at the full Contract Sum.

§ 7.2.2.1 The performance and payment bonds shall have as surety thereunder such surety company or companies as are acceptable to Treasury Department of the United States on Bonds given to the United States Government, are authorized to do business in the State of New York, and meet or exceed the requirements established in Article 11 of the General Conditions of the Contract for Construction. The premiums on such bonds shall be included in the Bid price.

§ 7.2.3 The bonds shall be dated as of the date of the Contract.

**§ 7.2.4** The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix to the bond a certified and current copy of the power of attorney.

## ARTICLE 8 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on AIA Document A132-2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition, as modified.



# PHASE 2 BOND IMPROVEMENTS – BID PACKAGE No. 1 at FOX LANE HS, FOX LANE MS, and ADMINISTRATION BUILDING

| NAME OF BIDDER:   |              |
|-------------------|--------------|
| BUSINESS ADDRESS: |              |
| TELEPHONE NUMBER: | DATE OF BID: |

The bidder mentioned above declares and certifies:

Addendum No

- **First:** That said bidder is of lawful age and the only one interested in this bid, and that no one other than said bidder has any interest herein.
- **Second:** That this bid is made without any previous understanding, agreement, or connection with any other person, firm, or corporation making a bid for the same purpose, and is in all respects fair and without collusion or fraud.
- Third: That no member of the Board of Education of the **Bedford Central School District**, Town of **Bedford**, **New York**, nor any officer or employee or person whose salary is payable as a whole or in part from the treasury of said Board of Education is directly or indirectly interested in this bid or in the supplies, materials, equipment, work, or services to which it relates, or in any portion of the profits thereof.
- **Fourth:** That said bidder has carefully examined the Instruction to Bidders, schedules, and specifications prepared under the direction of the Board of Education, and will, if successful in this bid, furnish and deliver at the prices bid and within the time stated, all materials, supplies, apparatus, goods, wares, merchandise, services, or labor for which this bid is made.
- Fifth: Single Prime Contracts: Where the project cost does not exceed \$1,500,000 and the Owner has decided to solicit bids from one general contractor, the Bidder shall submit with its bid a separate sealed list that names each subcontractor that the bidder will use to perform work in the contract, and the agreed-upon amount to be paid to each, for: (A) Plumbing and gas fitting; (B) Steam heating, hot water heating, ventilating and air condition apparatus and (C) Electric wiring and standard illuminating fixtures.

After the low bid is announced, the sealed list of subcontractors submitted with such low bid shall be opened and the names of such subcontractors shall be announced, and thereafter any change of subcontractor or agreed-upon amount to be paid to each shall require the approval of the public owner, upon a showing presented to the public owner of legitimate construction need for such change, which shall be open to public inspection.

Dated<sup>.</sup>

- **Sixth:** That the prices quoted are exclusive of all federal, state, and municipal sales and excise taxes.
- **Seventh:** The undersigned further declares that he has received and examined the following addenda:

|              | Batoa. |
|--------------|--------|
| Addendum No. | Dated: |
| Addendum No  | Dated: |

## BEDFORD CENTRAL SCHOOL DISTRICT

## **BID PROPOSAL FORM**

| Addendum No       | Dated: |
|-------------------|--------|
| Addendum No       | Dated: |
| Clarification No. | Dated: |
| Clarification No. | Dated: |

# FOR PROPOSAL FORM TO BE VALID, ALL PAGES OF THE PROPOSAL FORM MUST BE DULY EXECUTED.

- **Eighth:** The Bidder shall check here \_\_\_\_\_ if the bid has been based upon equivalents in lieu of any kind, type, brand, or manufacturer of material other than those named in the specifications. If checked, the Bidder shall submit the Equivalency Form in accordance with Instructions to Bidders, Paragraph 8B. This item in no way prohibits the Bidder from submitting equivalents after the award of contract.
- **Ninth:** The undersigned further understands and agrees that he is to furnish all labor, materials, equipment, supplies, and other facilities and things necessary and required for the execution and completion of:

## PHASE 2 BOND IMPROVEMENTS – BID PACKAGE No. 1 at FOX LANE HS, FOX LANE MS, and ADMINISTRATION BUILDING

in strict accordance with the contract documents:

## **BASE BID GC-1 – GENERAL CONSTRUCTION**

The General Contractor shall state the complete price to perform all work including, but not limited to, all general construction, demolition, and abatement as required at the Fox Lane High School, Fox Lane Middle School and Administration Building as shown on the drawings and as specified herein.

| BASE BID GC-1 BID PRICE =  | \$                                   |
|----------------------------|--------------------------------------|
|                            |                                      |
| Lump Sum Allowance GC-HS1  | \$                                   |
| (See Section 012100)       |                                      |
| Lump Sum Allowance GC-MS1  | \$                                   |
| (See Section 012100)       |                                      |
| TOTAL GENERAL CONSTRUCTION |                                      |
| BASE BID GC-1 BID PRICE =  | \$                                   |
|                            | Total Bid price in dollars and cents |
|                            |                                      |

\$

Bid price written in words

## **ALTERNATES FOR BASE BID GC-1**

## 1. ALTERNATE No. GC-1

The General Contractor shall state the complete price to be **(added to)** the base bid to provide all labor and materials required to **install SVT Flooring throughout HS Corridor "A"** as shown on the drawings, and as specified herein.

#### ADD:

Bid price written in words

\$\_\_\_\_

Bid price in dollars and cents

## 2. ALTERNATE No. GC-2

The General Contractor shall state the complete price to be (added to) the base bid to provide all labor and materials required to install the New Rubber Athletic Wall System at MS Gym Annex Shelter / Pavilion as shown on the drawings, and as specified herein.

## ADD:

Bid price written in words

\$\_

Bid price in dollars and cents

## 3. ALTERNATE No. GC-3

The General Contractor shall state the complete price to be (added to) the base bid to provide all labor and materials required to construct the New MS Outdoor Amphitheater as shown on the drawings, and as specified herein.

## ADD:

Bid price written in words

\$\_\_

Bid price in dollars and cents

## 4. ALTERNATE No. GC-4

The General Contractor shall state the complete price to be (added to) the base bid to provide all labor and materials required to Fur-Out all walls within the Fitness Center No. 243 as shown on the drawings, and as specified herein.

#### ADD:

Bid price written in words

\$\_\_\_\_\_\_\_
Bid price in dollars and cents

## 5. ALTERNATE No. GC-5

The General Contractor shall state the complete price to be (added to) the base bid to provide all labor and materials required to construct New Display Cases and Wall Panel System in HS Corridor "F" as shown on the drawings, and as specified herein.

## ADD:

Bid price written in words

\$

Bid price in dollars and cents

## 6. ALTERNATE No. GC-6

The General Contractor shall state the complete price to be (added to) the base bid to provide all labor and materials required to construct New Access Roadway Improvements to Softball Field as shown on the drawings, and as specified herein.

## ADD: \_

Bid price written in words

\$\_

Bid price in dollars and cents

## **BASE BID MC-1 – MECHANICAL CONSTRUCTION**

The Mechanical Contractor shall state the complete price to perform all work including, but not limited to, all mechanical work required at the Fox Lane High School, Fox Lane Middle School, and Administration Building as shown on the drawings and as specified herein.

| BASE BID MC-1 BID PRICE =                                  | \$   |
|--|--|
| Lump Sum Allowance MC-HS1<br>(See Section 012100)          | \$   |
| Lump Sum Allowance MC-MS1<br>(See Section 012100)          | \$   |
| TOTAL MECHANICAL CONSTRUCTION<br>BASE BID MC-1 BID PRICE = | \$<br>Total Bid price in dollars and cents |

\$ Bid price written in words

## **BASE BID PC-1 – PLUMBING CONSTRUCTION**

The Plumbing Contractor shall state the complete price to perform all work including, but not limited to, all plumbing work required at the Fox Lane High School, Fox Lane Middle School, and Administration Building as shown on the drawings and as specified herein.

| BASE BID PC-1 BID PRICE =   | \$                                   |
|-----------------------------|--------------------------------------|
| Lump Sum Allowance PC-HS1   | \$                                   |
| (See Section 012100)        |                                      |
| Lump Sum Allowance PC-MS1   | \$                                   |
| (See Section 012100)        |                                      |
| TOTAL PLUMBING CONSTRUCTION | <u>^</u>                             |
| BASE BID PC-1 BID PRICE =   | Total Bid price in dollars and cents |
|                             |                                      |
|                             |                                      |

\$

Bid price written in words

## **BASE BID EC-1 – ELECTRICAL CONSTRUCTION**

The Electrical Contractor shall state the complete price to perform all work including, but not limited to, all electrical work required at the Fox Lane High School, Fox Lane Middle School, and Administration Building as shown on the drawings and as specified herein.

| BASE BID EC-1 BID PRICE =     | \$                                   |
|-------------------------------|--------------------------------------|
|                               |                                      |
| Lump Sum Allowance EC-HS1     | \$                                   |
| (See Section 012100)          |                                      |
| Lump Sum Allowance EC-MS1     | \$                                   |
| (See Section 012100)          |                                      |
| TOTAL ELECTRICAL CONSTRUCTION |                                      |
| BASE BID EC-1 BID PRICE =     | \$                                   |
|                               | Total Bid price in dollars and cents |
|                               |                                      |

\$\_\_\_

Bid price written in words

## 7. ALTERNATE No. EC-1

The Electrical Contractor shall state the complete price to be (added to) the base bid to provide all labor and materials required to construct lighting and controls for the New Display Cases and Wall Panel System in HS Corridor "F" as shown on the drawings, and as specified herein.

## ADD:

Bid price written in words

\$\_\_

Bid price in dollars and cents

## 8. ALTERNATE No. EC-2

The Electrical Contractor shall state the complete price to be (added to) the base bid to provide all labor and materials required to construct electrical circuits and field box for the New Amphitheater as shown on the drawings, and as specified herein.

#### ADD:

Bid price written in words

\$\_

Bid price in dollars and cents

The Board of Education hereby reserves the right to accept or reject any item set forth individually in Paragraph Nine above. The Owner may determine the lowest bid by adding one base bid to other base bid(s) and/or by adding to or deducting from those base bid(s), additive or deduct alternates, unit prices, or substitutions, if any, which the Owner elects to accept after the opening of bids.

## Tenth: BID SECURITY

Each bidder shall deposit with his bid a bid bond, bank draft, or certified check in the amount of not less than five percent (5%) of the Base Bid made payable to:

## Board of Education, Bedford Central School District in the amount:

\_\_\_\_\_\$(\_\_\_\_\_)

AND agrees such surety shall be a measure of liquidated damages should he default in delivery of agreement.

Eleventh: <u>COMPLETION</u> (Contractor shall fill in number of days)

It is intended that the work under this contract be completed substantially within \_\_\_\_\_\_ consecutive calendar days after receipt of authorized letter of intent issued by the District.

 Twelfth:
 NON-COLLUSIVE BIDDING CERTIFICATION

 General Municipal Law, Section 103-d
 (Submit with Bid Proposal Form)

- A. By submission of this bid, the bidder and each person signing on behalf of the bidder certifies, and if this is a joint bid each party hereto certifies as to its own organization, under penalty of perjury that to the best of the bidder's knowledge and belief:
  - 1. The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
  - 2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and
  - 3. No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit a bid for the purpose of restricting competition.
- B. A bid shall not be considered for award nor shall award be made where A-1, 2, and 3 above have not been complied with provided, however, that if in any case the bidder shall so state and shall furnish with a bid a signed statement which sets forth in detail the reasons therefore, where A-1, 2, and 3 above have not been complied with, the bid shall not be considered for award nor shall any award be made unless the head of the purchasing unit of the political subdivision, public department agency, or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that the bidder: (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute without more, a disclosure within the meaning of Paragraph A above.

C. If the bidder is a corporation, the corporation shall be deemed to have been authorized by the Board of Directors of the bidder to make the above certification and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

| (Seal of Corporation) |           |                 |       |  |
|-----------------------|-----------|-----------------|-------|--|
|                       | Corporate | or Company Name |       |  |
|                       | Ву:       |                 |       |  |
|                       |           | Signature       | Title |  |
|                       | Date:     |                 |       |  |
|                       |           |                 |       |  |

**Thirteenth:** On acceptance of this proposal for said work, the undersigned hereby binds himself or themselves to enter into written contract with the Board of Education within ten (10) days of date of notice of award, and to comply in all respects with the provisions set forth in "Instructions for Bidders" and "General Conditions of Contract" in relation to security for the faithful performance of the terms of said contract.

## IF A CORPORATION (Seal of corporation):

| NAME            | ADDRESS |
|-----------------|---------|
| President       |         |
| Secretary       |         |
| Treasurer       |         |
| IF A FIRM:      |         |
| NAME OF MEMBERS | ADDRESS |
|                 |         |

## AIA<sub>☉</sub> Document A132<sub>™</sub> - 2019

## Standard Form of Agreement Between Owner and Contractor,

Construction Manager as Adviser Edition

AGREEMENT made as of the \_\_\_\_\_ day of \_\_\_\_\_ in the year Two Thousand Twenty-Two (In words, indicate day, month, and year.)

**BETWEEN** the Owner:

(Name, legal status, address, and other information)

Bedford Central School District 632 South Bedford Road Bedford, NY 10506

and the Contractor: (Name, legal status, address, and other information)

« »« » « » « »

« »

for the following Project: (Name, location, and detailed description)

#### Bedford Central School District 2022 Bond Referendum Capital Project

The Construction Manager: (Name, legal status, address, and other information)

Arris Contracting Co., Inc. **198 Smith Street** Poughkeepsie, New York 12601

The Architect: (Name, legal status, address, and other information)

BBS Architects, Landscape Architects and Engineers P.C. 244E Main Street Patchogue, NY 11772

The Owner and Contractor agree as follows.

#### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with ATA Documents A232m-2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition; B132<sup>m</sup>-2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132<sup>™</sup>-2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser. AIA Document A232™-2019 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

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### **ARTICLE 1** THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, the Bidding Documents, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 9. The Contractor represents that it has fully reviewed the Contract Documents and agrees that the Contract Documents describe, to the best of the Contractor's knowledge, the Work necessary to furnish and provide (and that the Contractor shall furnish and provide) a fully functioning Project consistent with the Contract Documents.

## ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, or reasonably inferable by the Contractor as necessary to produce the results intended by the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. It is the intent of the parties to include within the Work any and all labor, materials, equipment and services that, although not expressly indicated in the Contract Documents, are reasonably inferable therefrom to construct complete and workable systems for the satisfactory performance, execution, final completion and use of the Work and Project.

#### ARTICLE 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be: (Check one of the following boxes.)

- [ « X » ] The date of this Agreement.

[ « » ] A date set forth in a notice to proceed issued by the Owner.

[ « » ] Established as follows: (Insert a date or a means to determine the date of commencement of the Work.)

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work. The provisions of this Contract relating to the time for performance and completion of the Work are of the essence of this Contract. Accordingly, time is of the essence respecting the Contract Documents and all obligations there under.



## § 3.3 Substantial Completion of the Project or Portions Thereof

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the date of Substantial Completion of the Work of all of the Contractors for the Project will be: (Insert the date of Substantial Completion of the Work of all Contractors for the Project.)

The Contractor shall achieve Substantial Completion of the entire Work in accordance with the Milestone Schedule set forth in the Project Manual.

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of all of the Contractors for the Project are to be completed prior to Substantial Completion of the entire Work of all of the Contractors for the Project, the Contractors shall achieve Substantial Completion of such portions by the following dates:

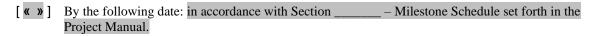
| Portion of Work              | Substantial Completion Date |  |
|------------------------------|-----------------------------|--|
| Refer to Section – Milestone |                             |  |
| Schedule                     |                             |  |

## § 3.4 When the Work of this Contract, or any Portion Thereof, is Substantially Complete

§ 3.4.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall substantially complete the entire Work of this Contract:

(Check one of the following boxes and complete the necessary information.)

[ « »] Not later than « » ( « » ) calendar days from the date of commencement of the Work.



§ 3.4.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of this Contract are to be substantially complete prior to when the entire Work of this Contract shall be substantially complete, the Contractor shall substantially complete such portions by the following dates:

| Portion of Work              | Date to be substantially complete |
|------------------------------|-----------------------------------|
| Refer to Section – Milestone |                                   |
| Schedule                     |                                   |

§ 3.4.3 Time is of the essence in the performance of the Contract Documents, including, without limitation, the Substantial Completion dates established herein. The Contractor shall proceed expeditiously with adequate forces and shall use its best efforts to keep the Project on schedule, and the Contractor shall achieve the completion times established within the Contract Documents.

§ 3.4.4 If the Contractor fails to substantially and finally complete the Work of this Contract, or portions thereof, as provided in Section 3.4 herein and the Milestone Schedule in the Project Manual, liquidated damages shall be assessed as set forth in Section 4.3 herein and Section 8.3.6.1 of the AIA Document A232<sup>TM</sup>-2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, as modified (the "General Conditions" or "AIA Document A232–2019").

## **ARTICLE 4 CONTRACT SUM**

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be one of the following: (Check the appropriate box.)



[ **« X »**] Stipulated Sum, in accordance with Section 4.2 below

- ( « » ] Cost of the Work plus the Contractor's Fee, in accordance with Section 4.3 below
- ( « » ] Cost of the Work plus the Contractor's Fee with a Guaranteed Maximum Price, in accordance with Section 4.4 below

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(Based on the selection above, complete Section 4.2, 4.3 or 4.4 below.)

## § 4.2 Stipulated Sum

§ 4.2.1 The Contract Sum shall be « » (\$ « » ), subject to additions and deductions as provided in the Contract Documents. See Contractor's Form of Proposal, which is attached hereto as **Exhibit A**.

**§ 4.2.1.1** The Stipulated Sum shall not be adjusted for increased labor or material costs, whether foreseen or unforeseen, which may occur between the date of this Agreement and the Commencement Date, or which may occur between the Commencement Date and the Substantial Completion Date or Dates set forth in this Agreement.

#### § 4.2.2 Alternates

§ 4.2.2.1 Alternates, if any, included in the Contract Sum:

| Item | Price |  |
|------|-------|--|
|      |       |  |

**§ 4.2.2.2** Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. (*Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.*)

| Item   | Price                      | <b>Conditions for Acceptance</b> |
|--|----------------------------|----------------------------------|
|  |                            |                                  |
| <b>§ 4.2.3</b> Allowances, if any, inc ( <i>Identify each allowance.</i> ) | luded in the Contract Sum: |                                  |
| ltem   | Price                      |                                  |
|  |                            |                                  |

§ 4.2.4 Unit prices, if any:

(Identify the item and state the unit price, and quantity limitations, if any, to which the unit price will be applicable.)

| Item | Units and Limitations | Price per Unit (\$0.00) |
|------|-----------------------|-------------------------|
|      |                       |                         |

**§ 4.3 Liquidated Damages**. The Contractor recognizes that achieving Substantial Completion of the Work in accordance with the time limits set forth in this Agreement and as further set forth in the Project Manual and/or Bidding Documents is a material condition of this Agreement, and that if the Contractor fails to achieve Substantial Completion of the Work, or designated parts thereof, in accordance with such schedule, the Owner will incur damages as a result. The Owner and Contractor agree that the amount of such damages is difficult to ascertain with any precision. Because of the difficulty of ascertaining all resulting and corresponding damages, it is hereby agreed that the Contractor shall be assessed in the amounts provided in Section 8.3.6.1 of the General Conditions for each day the Project, or a specific Work item, is not substantially complete after expiration of the Contract Time for Substantial Completion, and for each day the Project is not finally complete after the expiration of the Contract Time for final completion.

§ 4.3.1 The Contractor acknowledges that the liquidated damages amounts set forth in Section 8.3.6.1 of the General Conditions represent a fair and reasonable estimate of the Owner's probable losses, damages and/or expenses, and are not a penalty, for late completion of the Work and the phases thereof.

§ 4.3.2 The Owner shall be entitled to offset any liquidated damages owed by the Contractor against any amounts owing by the Owner to the Contractor.

§ 4.3.3 The Owner's right to liquidated damages shall survive abandonment of the Work by the Contractor and the Owner's termination of the Contract.

# ARTICLE 5 PAYMENTS

## § 5.1 Progress Payments

**§ 5.1.1** Based upon Applications for Payment submitted to the Construction Manager by the Contractor, and upon certification of the Project Application and Project Certificate for Payment or Application for Payment and Certificate for Payment by the Construction Manager and Architect and issuance by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.

**§ 5.1.** Provided that an acceptable Application for Payment, including all required lien waivers and certified payroll, is received by the Construction Manager not later than the twenty-first day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the thirtieth day of the next month. If an Application for Payment is received by the Construction Manager after the application date fixed above, payment of the amount certified shall be made by the Owner not later than 60 days after the Construction Manager receives the Application for Payment.

## § 5.1.4 Progress Payments Where the Contract Sum is Based on a Stipulated Sum

§ 5.1.4.1 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work and be prepared in such form and supported by such data to substantiate its accuracy as the Construction Manager and Architect may require. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

**§ 5.1.4.2** Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment. All progress payments made previous to the last and final payment shall be based on estimates and the right is hereby reserved by the Architect for the Owner to make all due and proper corrections in any payment for any previous error.

§ 5.1.4.3 In accordance with AIA Document A232<sup>™</sup>−2019, as modified, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.4.3.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- **.3** That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.4.3.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- **.2** The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232–2019;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Owner, Construction Manager or Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232–2019; and
- .5 Retainage withheld pursuant to Section 5.1.7.

## § 5.1.7 Retainage

**§ 5.1.7.1** For each progress payment made prior to when the Work of this Contract is substantially complete, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

#### Five percent (5%)

§ 5.1.7.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

#### None.

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to when the entire Work of this Contract is substantially complete, including modifications for completion of portions of the Work as provided in Section 3.4.2, insert provisions for such modifications.)

#### No retainage reduction prior to Substantial Completion of the entire Work.

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, when the Work of this Contract is substantially complete, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted when the Work of this Contract is substantially complete shall not include retainage as follows:

(Insert any other conditions for release of retainage when the Work of this Contract is substantially complete, or upon Substantial Completion of the Work of all Contractors on the Project or portions thereof.)

Upon Substantial Completion of the Work, the payment shall be less two times the value of any remaining Work to be completed as the Construction Manager recommends and the Architect determines for incomplete Work and an amount necessary to satisfy any claims, liens or judgments against the Contractor that have not been suitably discharged.

## § 5.2 Final Payment

## § 5.2.1 Final Payment Where the Contract Sum is Based on a Stipulated Sum

§ 5.2.1.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A232-2019, as modified, and to satisfy other requirements, if any, which extend beyond final payment;
- .2 a final Certificate for Payment or Project Certificate for Payment has been issued by the Architect; and
- .3 the Contractor has fully performed and complied with the final payment and closeout provisions of Specifications.

§ 5.2.1.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the final Certificate for Payment or Project Certificate for Payment.

§ 5.3 Payments due and unpaid under the Contract shall bear interest from the date payment is due in accordance with Section 106-b(1)(b) of the New York State General Municipal Law.

# **ARTICLE 6 DISPUTE RESOLUTION**

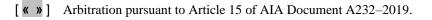
## § 6.1 Initial Decision Maker

The Architect will serve as Initial Decision Maker pursuant to Article 15 of AIA Document A232–2019, as modified.

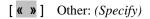
#### § 6.2 Binding Dispute Resolution

For any Claim, dispute or other matter in controversy arising out of or related to the Contract, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)



[ **« X** »] Litigation in a court of competent jurisdiction in Westchester County, NY.



## ARTICLE 7 TERMINATION OR SUSPENSION

#### § 7.1 Where the Contract Sum is a Stipulated Sum

§ 7.1.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232–2019, as modified.

§ 7.1.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232–2019, as modified.

#### ARTICLE 8 MISCELLANEOUS PROVISIONS

**§ 8.1** Where reference is made in this Agreement to a provision of AIA Document A232–2019, as modified, or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

**§ 8.2** The Owner's representative: (*Name, address, email address, and other information*)



Tom Cole Interim Assistant Superintendent for Business and Administrative Services Bedford Central School District 632 South Bedford Road Bedford, New York 10506 tcole0206@bcsdny.org

**§ 8.3** The Contractor's representative: (*Name, address, email address, and other information*)

« » « » « »

« »

« » « »

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

#### § 8.5 Insurance and Bonds

**§ 8.5.1** The Owner and the Contractor shall purchase and maintain insurance as set forth in Article 11 of AIA Document A232–2019, as modified, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in Article 11 of AIA Document A232–2019, as modified, and elsewhere in the Contract Documents.

**§ 8.6** Notice in electronic format, pursuant to Article 1 of AIA Document A232–2019, may be given in accordance with AIA Document E203<sup>TM</sup>–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they will endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

§ 8.7 Intentionally omitted.

#### § 8.8 Other provisions:

§ 8.8.1 The Contractor represents and warrants the following to the Owner (in addition to any other representations and warranties contained in the Contract Documents) as an inducement to the Owner to execute this Agreement, which representations and warranties shall survive the execution and delivery of this Agreement, any termination of this Agreement and the final completion of the Work:

- that it and its Subcontractors are financially solvent, able to pay all debts as they mature and possessed of .1 sufficient working capital to complete the Work and perform all obligations hereunder;
- .2 that it is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform its obligations hereunder;
- .3 that it is authorized to do business in the State of New York and the United States and properly licensed by all necessary governmental and public and quasi-public authorities having jurisdiction over it and over the Work and the Project;
- .4 that its execution of this Agreement and its performance thereof is within its duly authorized powers;
- .5 that its duly authorized representative has visited the site of the Project, is familiar with the local and special conditions under which the Work is to be performed and has correlated on-site observations with the requirements of the Contact Documents; and
- .6 that it possesses a high level of experience and expertise in the business administration, construction, construction management and superintendence or projects of the size, complexity and nature of the particular Project, and that it will perform the Work with the care, skill and diligence of such a contractor.

The foregoing warranties are in addition to, and not in lieu of, any and all other liability imposed upon the Contractor by law with respect to the Contractor's duties, obligations and performance hereunder. The Contractor's liability hereunder shall survive the Owner's final acceptance of and payment for the Work. All representations and warranties set forth in this Agreement, including without limitation, this Section 8.8.1, shall survive the final completion of the Work or the earlier termination of this Agreement. The Contractor acknowledges that the Owner is relying upon the Contractor's skill and experience in connection with the Work called for hereunder.

## ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- AIA Document A132<sup>TM</sup>–2019, Standard Form of Agreement Between Owner and Contractor, .1 Construction Manager as Adviser Edition
- .2 Not used
- AIA Document A232<sup>TM</sup>–2019, General Conditions of the Contract for Construction, Construction .3 Manager as Adviser Edition
- .4 Not used
- .5 Drawings

Refer to the attached Exhibit B, List of Drawings - Project Manual, all of which drawings listed therein are incorporated herein by reference.

.6 Specifications

> Refer to the attached Exhibit C, Table of Contents - Project Manual, all of which sections listed therein are incorporated herein by reference.

.7 Addenda, if any:

| Number | Date | Pages |
|--------|------|-------|
|        |      |       |

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

.8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[ « »] AIA Document A132<sup>TM</sup>–2019, Exhibit B, Determination of the Cost of the Work

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 [ « »] AIA Document E235<sup>TM</sup>-2019, Sustainable Projects Exhibit, Construction Manager as Adviser Edition, dated as indicated below: (Insert the date of the E235-2019 incorporated into this Agreement.)

« »

[

[ « » ] The Sustainability Plan:

| Title |                               | Date                   | Pages |       |
|-------|-------------------------------|------------------------|-------|-------|
| [«»]  | Supplementary and other Condi | tions of the Contract: |       |       |
| Doc   | ument                         | Title                  | Date  | Pages |

.9 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A232–2019 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

| Exhibit A | Contractor's Form of Proposal    |
|-----------|----------------------------------|
| Exhibit B | List of Drawings                 |
| Exhibit C | Specifications Table of Contents |

This Agreement is entered into as of the day and year first written above.

#### **OWNER** (Signature)

Edward Reder, Board of Education President (Printed name and title) **CONTRACTOR** (Signature)

« »« » (Printed name and title)

# DRAFT AIA. Document A232™ - 2019

# General Conditions of the Contract for Construction,

Construction Manager as Adviser Edition

#### for the following PROJECT:

(Name, and location or address)

#### Bedford Central School District 2022 Bond Referendum Capital Project

#### THE CONSTRUCTION MANAGER:

(Name, legal status, and address)

Arris Contracting Co., Inc. 198 Smith Street Poughkeepsie, New York 12601

#### THE OWNER:

(Name, legal status, and address)

Bedford Central School District 632 South Bedford Road Bedford, NY 10506

# **THE ARCHITECT:** (*Name, legal status, and address*)

BBS Architects, Landscape Architects and Engineers P.C. 244E Main Street Patchogue, NY 11772

#### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A132<sup>™</sup>-2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; B132<sup>™</sup>-2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132<sup>™</sup>-2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

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## ARTICLE 1 GENERAL PROVISIONS

## § 1.1 Basic Definitions

§ 1.1.1 The Contract Documents. The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter, the "Agreement"), and consist of the Bidding Documents (including, but not limited to, Invitations to Bid, Instructions to Bidders, sample forms, the Contractor's bid or portions of the addenda relating to bidding requirements), the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect.

**§ 1.1.2 The Contract.** The Contract Documents form the Contract for Construction (hereinafter, the "Contract"). The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and the Construction Manager's consultants, (3) between the Owner and the Construction Manager's consultants, (4) between the Contractor and the Construction Manager or the Construction Manager and the Construction or Sub-subcontractor (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of their duties. Subcontractors shall assume the same obligations set forth in these General Conditions. All relationships and responsibilities of the Contractor to the Owner, Construction Manager or Architect as defined in these General Conditions shall become those of the Subcontractor to the Contractor.

**§ 1.1.2.1** Where the term "Agreement," "Contract" or "Prime Contract" is used in these General Conditions, and other Contract Documents, it shall mean the separate Owner-Contractor Agreement between the Owner and each Multiple Prime Contractor identified in Conditions of the Contract (General, Supplementary and other conditions).

**§ 1.1.2.2** The Contractor acknowledges and warrants that it has closely examined all the Contract Documents, that they are suitable and sufficient to enable the Contractor to complete the Work in a timely manner for the Contract Sum, and that they include all work, whether or not shown or described, which reasonably may be inferred to be required or useful for the completion of the Work in full compliance with all applicable statutes, codes, laws, ordinances and regulations.

**§ 1.1.3 The Work**. The term "Work" means the construction and services required by the Contract Documents, or as reasonably inferable therefrom, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project. The Work includes all of the Contractor's responsibilities as to all labor, parts, supplies, equipment, skill, supervision, transportation services, storage requirements, and other facilities and things necessary, proper or incidental to the carrying out and completion of the terms of the Contractor's Work identified by the Contract Documents.

§ 1.1.4 The Project. The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by other Contractors, and by the Owner's own forces and Separate Contractors.

**§ 1.1.5 Contractors.** Contractors are persons or entities, other than the Contractor or Separate Contractors, who perform Work under contracts with the Owner that are administered by the Architect and Construction Manager.

**§ 1.1.6 Separate Contractors.** Separate Contractors are persons or entities who perform construction under separate contracts with the Owner not administered by the Architect and Construction Manager.

**§ 1.1.7 The Drawings.** The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams. The Drawings are as listed within the "List of Drawings" provided with the drawing set. All Work under

the Contract shall be executed in accordance with the Contract Documents, which are complimentary as described herein. The "List of Drawings" is incorporated in the Standard Form of Agreement Between the Owner and the Contractor.

§ 1.1.8 The Specifications. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services and general requirements for the Project.

§ 1.1.9 Instruments of Service. Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials including those in electronic form.

§ 1.1.10 Initial Decision Maker. The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

## § 1.1.11 Miscellaneous Definitions

§ 1.1.11.1 The terms "knowledge," "recognize" and "discover," their respective derivatives and similar terms in the Contract Documents, as used in reference to the Contractor, shall be interpreted to mean that which the Contractor knows (or should know), recognizes (or should recognize) and discovers (or should discover) in exercising the care, skill, and diligence required by the Contract Documents. The expression "reasonably inferable" and similar terms in the Contract Documents shall be interpreted to mean reasonably inferable by a contractor familiar with the Project and exercising care, skill, and diligence required of the Contractor by the Contract Documents.

§ 1.1.11.2 The term "any" in the Contract Documents shall be interpreted as "any and all" whenever one or more than one item would be applicable for completion of the Work.

§ 1.1.11.3 Except as otherwise explicitly provided, the words "approved" or "approval" shall mean the written approval of the Architect or the Construction Manager, or both.

§ 1.1.11.4 "Accepted," "directed," "permitted," "requested," "required," and "selected" are used herein as term connections and unless specifically noted otherwise are to mean "accepted by the Architect," "directed by the Architect," "permitted by the Architect," "requested by the Architect," "required by the Architect," and "selected by the Architect." However, no such implied meaning will be interpreted to extend the Architect's responsibility into the Contractor's areas of construction supervision.

§ 1.1.11.5 The term "as indicated" or "as shown" shall mean "as indicated in the Contract Documents."

§ 1.1.11.6 The term "include" in any form other than "inclusive" is non-limiting and not intended to mean "all inclusive."

§ 1.1.11.7 The terms "furnish" and "furnish all materials," unless specifically noted otherwise, mean "pay for, supply and deliver to the job site all new materials, systems, equipment, product, and/or other items so specified."

§ 1.1.11.8 The terms "install" and "furnish all labor," unless specifically noted otherwise, mean "pay for, perform all operations connected with installation of Work including unloading new product to be installed, supplying all necessary equipment and rigs to do the Work, test, place in operation and service, and remove all packing material."

§ 1.1.11.9 The term "product" includes materials, systems, equipment, and other items to be incorporated into the Work.

§ 1.1.11.10 The term "provide," unless specifically noted otherwise, means "furnish new, install, connect up, complete, test and place in operation and service."

§ 1.1.11.11 The term "replace" or similar term shall mean "restore," "renew," "make good," "reconstruct," or "as applicable using new product."

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**§ 1.1.11.12** The term "concealed" as used herein shall mean items hidden from sight in such locations as trenches, chases, shafts, furred spaces, walls, slabs, above ceilings and where in sight in crawl spaces or service tunnels.

**§1.1.11.13** The term "exposed" as used herein shall mean not "concealed" as defined herein and the spaces behind normally closed doors such as interiors of cabinets.

**§ 1.1.11.14** The terms "manufacturer" or "supplier" mean any person or entity which contracts to furnish materials to a Contractor, Subcontractor, or any Sub-subcontractor for use at the site of the Project.

**§ 1.1.11.15** "Wiring" shall be understood to mean wires or cables with conduit, fittings, boxes, etc., installed complete.

**§ 1.1.11.16** "Piping" shall be understood to mean all pipes, fittings, nipples, valves and all accessories connected thereto.

**§ 1.1.11.17** The Contract Time is the period of time specified in Article 3 of the Agreement for completion of the Work.

**§ 1.1.11.18** "Project Manual" is a volume assembled for the Work that includes the Instructions to Bidders, General Conditions, Supplementary General Conditions, the Specifications, and all Addenda issued prior to execution of the Contract. The Project Manual will additionally include bidding requirements and documents and sample forms.

**§ 1.1.11.19** Terms not otherwise defined herein shall have the meanings set forth elsewhere in the Contract Documents.

## § 1.2 Correlation and Intent of the Contract Documents

**§ 1.2.1** The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results. It is intended that all plumbing, mechanical, electrical, and other systems will be complete and in proper operation, and that all construction practice upon completion of the Work. Even if items are missing from the Drawings or Specifications, but are normally required for proper operation of plumbing, mechanical, electrical, and other systems, or to complete otherwise incomplete construction, or to meet governing code requirements, they shall be included by the Contractor, unless he sought and received contradictory interpretation or clarification from the Architect.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

**§ 1.2.1.2** The Contractor and its Subcontractors shall evaluate and satisfy themselves as to the conditions and limitations under which the Work is to be performed, including without limitation (1) location, layout, and nature of the Project site and surrounding areas, including generally prevailing climatic conditions, (2) existing building and site conditions, (3) anticipated labor supply and costs, (4) availability and cost of materials, tools, equipment, (5) Owner occupancy requirements and constraints, (6) site safety logistics plan and any phased construction plan and (7) other similar issues. The Owner assumes no responsibility or liability for the physical condition or safety of the Project site or any improvements located on the Project site. The Contractor shall be solely responsible for providing a safe place for the performance of the Work. No adjustments will be made in either the Contract Sum or Contract Time for any failure by the Contractor or any Subcontractor to comply with the requirements of this Section 1.2.1.2.

**§ 1.2.2** Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade. Instructions and other information furnished in the Specifications including without limitation, items in connection with prefabricated or prefinished items, are not intended to supersede work agreements between employees and employees. Should the Specifications conflict with such work agreements, the

work agreements shall be followed, provided such items are provided and finished as specified. If necessary, such work shall be performed on the project Site, instead of at the shop, by appropriate labor and in accordance with the requirements of the Drawings and Specifications. It shall be the Contractor's responsibility, when subcontracting any portion of his Work, to arrange or group items of work under particular trades to conform with the then prevailing customs of the trade, regardless of the particular Divisions and Sections of the Specifications in which the work is described.

§ 1.2.2.1 The Work on the Project will be separated into individual and separate contracts. It is the intent of these requirements to include all items of Work for a complete Project in the separate contracts. The Contractor shall be responsible for understanding and knowing under which contract each item of Work is included.

§ 1.2.2 Each section or division of the Specifications has been assigned to one of the contract scopes. Where a section of the Specification is referenced in the contract scope, then any and all items necessary for the proper and normal installation of the item referenced in the Specification section shall be included whether specifically indicated in the Contract Documents or not.

**§ 1.2.3** The reference of the "Specifications" regarding the division or separation of the work among types of trades or occupations is only for the suggested purpose of coordinating the work of the different trades, etc. but it shall be the Contractor's entire responsibility for the proper coordination and completion of all the Work described in the "Specifications" whether performed by the Contractor or its Subcontractors, if any. It shall be the Contractor's responsibility to settle definitely with each of its Subcontractors the portions of the Work, which each will be required to do and the Owner and Architect assume no responsibility whatever for any jurisdiction claimed by any of the trades involved in the Work. The Contractor shall provide each item listed, of quality noted and subject to the qualifications noted, and shall perform operations prescribed according to the conditions stated, including specified operations, processes or methods, furnishing all necessary labor, materials, equipment and incidentals required to complete the Work.

**§ 1.2.2.4** The Contractor acknowledges that the coordination requirements and the construction schedule of this Project will require close cooperation and coordination between all Contractors on the Project site.

**§ 1.2.3** Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

**§ 1.2.4** In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities:

- .1 Change Orders;
- .2 The Agreement between Owner and Contractor;
- .3 Addenda, with those of later date having precedence over those of earlier date;
- .4 The Supplementary, Special, or other Conditions as may be part of the Contract Documents;
- .5 The General Conditions of the Contract for Construction;
- .6 Drawings and Specifications. In the case of an inconsistency between Drawings and Specifications or within either document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Architect's interpretation. If a work item or component is present in the Drawings but not the Specifications, or vice versa, that work or component shall be provided.

**§ 1.2.5** Notwithstanding Section 1.2.4, in the event of inconsistencies within or between parts of the Contract Documents or between the Contract Documents and applicable standards, codes and ordinances, the Contractor shall (1) provide the better quality or greater quantity of work or (2) comply with the more stringent requirements; either or both in accordance with the Architect's interpretation. Where the Contractor perceives a conflict, it shall inform the Architect and Owner thereof and request a decision from the Architect, which shall be promptly communicated by the Architect to the Contractor so as not to cause any delay in the performance of the Work. Any Work performed after perceiving the conflict and prior to resolution by the Architect shall be at the Contractor's risk. The terms and provisions of this Section 1.2.5, however, shall not relieve the Contractor of any of the obligations set forth elsewhere herein.

- .1 The Contractor shall not scale Drawings. Dimensions on large scale drawings take precedence over dimensions on small scale drawings. The Contractor shall notify the Architect if additional dimensions are needed. The Contractor shall field verify all dimensions.
- .2 Before ordering any materials or doing any work, the Contractor and each Subcontractor shall verify measurements at the Project Site and shall be responsible for the correctness of such measurements.

The Contractor shall confirm all dimensions by field measuring. No extra charge or compensation will be allowed on account of differences between actual dimensions and the dimensions indicated on the Drawings. Any difference that may be found shall be submitted to the Architect for resolution before proceeding with the Work.

- .3 If a minor change in the Work is found necessary due to actual field conditions, the Contractor shall submit detailed drawings of such departure for the approval by the Architect before making the change.
- .4 Certain portions of the Specifications are written in condensed outline form and omitted words are to be supplied by inference. Naming of an article or operations shall have the effect of stating "Contractor shall furnish, install and complete" said operation or article unless it is further qualified in the context in which it appears.
- .5 When reference is made to specifications of a manufacturer, trade association, governmental agency, reference standard or similar source (such as ASTM, ASA, AISC, ACI, etc.) such is made part of the Drawings and Specifications, having the force and effect as though reproduced therein, and upon entering into the Contract the Contractor acknowledges his familiarity with those pertaining to its Work. Furthermore, all Work mentioned or indicated in the Contract Documents shall be performed by the Contractor as part of the Contract unless it is specifically indicated in the Contract Documents that such work is to be done by others. All Work shall conform to the National Electric Code, New York State Uniform Fire Prevention and Building Code, and amendments thereto, New York State Energy Conservation Construction Code, State Education Department Manual of Planning Standards, New York State Department of Transportation, Office of Engineering, Standard Specification, Construction and Materials, latest edition, Life Safety Code NFPA, and applicable City and State Building Codes and Authorities having jurisdiction. The date of the reference standard shall be the latest edition at the time of signing the Contract except as specifically indicated otherwise.
- .6 The Contract Drawings are intended to show the general arrangement, design, and extent of the Work and are partly diagrammatic. They are not intended to be scaled for any purpose, or to serve as shop drawings. The Contractor and its Subcontractors will cooperate with all other contractors and their respective subcontractors in determining the construction of systems, running of pipe, and locating equipment. The Contractor agrees that the failure to repeat typical details, figures, or notes on all Contract Drawings or other Contract Documents will not be a basis for claims for additional cost or time.
- .7 Any necessary variations in routing or installation shall be made to conform to the intent of the Contract Documents without additional costs. Where there are intersections or obstructions involving ducts, piping, or any other equipment requiring offset of materials, the Contractor acknowledges that it gave particular consideration to clearances in advance of submitting its bid, and that no additional costs for these issues will be considered by the Owner.
- .8 If conflicting conditions or interferences develop, the Contractor and its Subcontractors will confer with the other contractors and their respective subcontractors whose work is affected to determine a solution acceptable to all interested parties. The suggested solution shall be submitted to the Architect for comment and, if necessary, written approval.
- .9 The Contract Documents intend a first class finished product of such character and quality as described in and reasonably inferred from the Contract Documents. The Contractor will perform its Work to be complete and operable, fitting with the work of other contractors and the Owner, and in compliance with best construction practices and the ordinances, codes, and regulations of all bodies or persons having governmental or regulatory authority over the Contractor and its Work.

**§ 1.2.6** Execution of the Contract by the Contractor is a representation that the Contractor has carefully examined the Contract Documents and the Project site, and represents that the Contractor is thoroughly familiar with the nature and location of the Work, the Project site, the specific conditions under which the Work is to be performed, and all matters which may in any way affect the Work or its performance. The Contractor further represents that as a result of such examinations and investigations, the Contractor thoroughly understands the Contract Documents and their intent and purpose, and is familiar with all applicable codes, ordinances, laws, regulations, and rules as they apply to the Work, and that the Contractor will abide by same. Claims for additional time or additional compensation as a result of the Contractor's failure to follow the foregoing procedure and to familiarize itself with all conditions and the Contract Documents will not be permitted.

§ 1.2.6.1 The Contractor certifies that it is experienced and familiar with the requirements and conditions imposed during the construction of similar work in the area. This includes, but is not limited to, "out of sequence" or "come back" work for the removal of plant, equipment, temporary wiring or plumbing, etc. This "out of sequence" work

may also include phasing of construction activities to accommodate the installation of the Work at various locations and orderly fashion and the completion of Work at various locations or levels at various times. This "phasing," "out of sequence," or "come back" work shall be done at no cost to other Contractors, the Owner or Architect.

# § 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

## § 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

# § 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, subsubcontractors, and suppliers do not own and cannot claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants. Nothing in this Section 1.5 shall be construed to alter the rights of the Owner toward the Instruments of Service and other documents prepared by the Architect and the Architect's consultants as set forth in the agreement between the Owner and the Architect.

§ 1.5.3 The Contractor may not reproduce the Contract Documents in whole or in part for use as shop drawing backgrounds without the prior written consent of the Architect. If consent is given, the Architect shall determine the extent that the Contract Documents may be used in the preparation of shop drawings, as well as the fee that the Architect will be paid, if any and in the Architect's sole discretion, by the Contractor for such use of copyrighted documents.

## § 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement. Notices given pursuant to this Section which are given by the attorney for the Owner shall have the same force and effect as notices given by the Owner.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

## § 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203<sup>TM</sup>–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

## § 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203<sup>TM</sup>–2013, Building Information Modeling and Digital Data Exhibit, and the requisite

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AIA Document G202<sup>TM</sup>–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

# ARTICLE 2 OWNER

# § 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights.

§ 2.1.3 The Owner, Architect or Construction Manager shall not supervise, direct or have control or authority over, nor be responsible for, the Contractor's means, methods, techniques, sequences or procedures of construction or the safety precautions and programs incident thereto, or for any failure of the Contractor to comply with laws and regulations applicable to the furnishing or performance of the Work. The Owner, Architect and Construction Manager shall not be responsible for the Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.

# § 2.2 Evidence of the Owner's Financial Arrangements – Intentionally Omitted.

# § 2.3 Information and Services Required of the Owner

**§ 2.3.1** All permits and fees, approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities are the responsibility of the Contractor under the Contract Documents with the exception of the building permit, which the Owner will obtain from the New York State Education Department. The Contractor shall furnish the Construction Manager with original copies of all permits prior to the commencement of the work, and shall prominently display a copy of all permits at a location approved by the Construction Manager.

**§ 2.3.2** The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

**§ 2.3.3** The Owner shall retain a construction manager adviser lawfully practicing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.4 If the employment of the Construction Manager or Architect terminates, the Owner shall employ a successor construction manager or architect whose status under the Contract Documents shall be that of the Construction Manager or Architect, respectively.

**§ 2.3.5** The Owner shall make available for inspection, upon request, field survey or testing information of existing conditions that is known to be available and that is held by the Owner at its offices. Such records and documents are not Contract Documents, and the Owner makes no representation as to their accuracy or completeness. Notwithstanding the foregoing, information furnished by the Owner in the form of surveys, subsurface investigation reports, soil borings, and other material of a similar nature, is for general information only and is not a guarantee of the completeness or accuracy of such information, unless specifically noted otherwise herein. The Contractor shall verify all existing grades, conditions, and dimensions of existing physical conditions and structures and shall report any inconsistencies in writing to the Architect. The Contractor shall establish all lines and levels required to execute the Work and shall bear all costs involved, and shall be responsible for their accuracy and maintenance. The Contractor represents that it is familiar with the Project site and has received all information it needs concerning the conditions of the Project site.

## § 2.3.6 Intentionally omitted.

**§ 2.3.7** Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor five (5) sets of Contract Drawings, three (3) sets of Project Manuals, and three (3) sets of all Addenda materials for use during construction for their own use and for purposes of making reproductions pursuant to Section 1.5.2. The Owner shall furnish additional sets upon a Contractor's written request. Such additional sets will be provided at the cost of printing, postage and handling. Payment is due upon receipt of the additional documents. Partial sets will not be provided. Subcontractors and other entities desiring copies of Drawings will be provided sets at the cost of printing, postage and handling. For expediency, at the discretion of the Architect, the Contract may be directed to pick up documents at the Project-designated printing facility. This practice will not be permitted without authorization of/and coordination by the Architect.

**§ 2.3.7.1** Electronic drawing files, AutoCAD format, may be available, at the discretion of the Architect, for a cost of \$25.00 per drawing. Contractors requesting this service will be required to sign a disclaimer. Request for electronic files must be made in writing to the Architects office. This request must include a specific list of drawings required in this format. In response, the architect will verify the drawings requested and will forward the disclaimer for signature. Electronic files will be released upon receipt of payment and a fully executed disclaimer form.

**§ 2.3.8** The Owner shall forward all communications to the Contractor through the Construction Manager. Other communication shall be made as set forth in Section 4.2.6.

#### § 2.4 Owner's Right to Stop the Work

If the Contractor (1) fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2, or (2) fails to carry out Work in accordance with the Contract Documents as determined by the Owner, Architect or Construction Manager, or (3) fails or refuses to provide a sufficient amount of properly supervised and coordinated labor, materials, or equipment so as to be able to complete the Work within the Contract Time, or (4) fails to remove and discharge (within seven (7) days) any lien filed upon Owner's property by anyone claiming by, through, or under the Contractor, or (5) fails to perform the Work in a safe manner and in compliance with all applicable health and safety requirements and the Contractor's site specific health and safety plan or (6) disregards the instructions of the Architect, Owner or Construction Manager, as determined by the Owner, Architect or Construction Manager, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity. Such order or stoppage by the Owner shall not constitute grounds for termination by the Contractor under Article 14 and shall not be a basis for an extension of the Contract Time under Section 8.3 or Article 15.

#### § 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents (including but not limited to all applicable health and safety requirements) and fails within a three (3) work day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may after such three (3) work day period, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order or Construction Change Directive shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including the Owner's expenses and compensation for the Construction Manager's and Architect's and their respective consultants' additional services and other expenses made necessary by such default, neglect or failure. Such Change Order or Construction Change Directive shall be deemed to have been executed by the Contractor, whether or not actually signed by the Contractor. Such action by the Owner and amounts charged to the Contractor shall be equally binding upon the Contractor's performance and payment bond surety. If payments then or thereafter due the Contractor shall pay the difference to the Owner.

**§ 2.5.1** Where the Contractor's default and/or neglect to carry out its Work in accordance with the Contract Documents threatens the health, safety and/or welfare of the occupants of the Owner's facilities and/or threatens the structural integrity and/or preservation of the Owner's facilities, the Owner may proceed to carry out the Contractor's Work upon twenty-four (24) hours' notice of its intention to do so to the Contractor. In such case an appropriate Change Order or Construction Change Directive shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies and defaults, including the Owner's expenses and compensation for the Architect's and its respective consultants' additional services and other expenses made necessary by such default, neglect or failure.

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# § 2.6 Extent of Owner's Rights

**§ 2.6.1** The rights stated in this Article 2 and elsewhere in the Contract Documents are cumulative and not in limitation of any rights of the Owner (1) granted in the Contract Documents, (2) at law or (3) in equity.

**§ 2.6.2** In no event shall the Owner, Architect or Construction Manager have any responsibility for the Contractor's construction means, methods, techniques, sequences or procedures or for safety precautions and programs in connection with the Work notwithstanding any of the rights and authority granted the Owner in the Contract Documents.

# ARTICLE 3 CONTRACTOR

## § 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The plural term "Multiple Prime Contractors" when used herein refers to persons or entities who perform construction under contracts with the Owner that are administered by the Construction Manager. The term does not include the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager.

§ 3.1.3 The Contractor shall perform the Work in accordance with the Contract Documents.

**§ 3.1.4** The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in their administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor. The Contractor shall maintain complete inspection records and test date to ensure the quality of the Work is in strict compliance with the requirements of the Contract Documents.

# § 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

**§ 3.2.1.1** Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the Contract Documents relative to that portion of the Work, as well as with information furnished by the Owner pursuant to Section 2.3.5, shall take field measurements of any existing conditions related to that portion of the Work, shall observe any conditions at the site affecting it, and shall at once report in writing to the Construction Manager and the Architect errors, inconsistencies or omissions discovered. The Contractor shall not be liable to the Owner, the Construction Manager or the Architect for damage resulting from errors, inconsistencies or omissions in the Contract Documents unless the Contractor knew or reasonably should have known of such error, inconsistency or omission and failed to report it as required by this section to the Construction Manager and the Architect performs any construction activity knowing it involves, or reasonably should have known it involves, a recognized error, inconsistency or omission in the Contract Documents without such notice to the Construction Manager and the Architect, the Contractor shall assume full responsibility for such performance and shall bear sole responsibility for the costs for correction.

**§ 3.2.1.2** The obligations of the Contractor under Section 3.2.1.1 and this Section 3.2.1.2 are for the purpose of facilitating construction by the Contractor and are not for the purpose of imposing an affirmative obligation on the Contractor to discover errors, omissions, or inconsistencies in the design information in the Contract Documents. The Contractor's review of the Contract Documents is made in the Contractor's capacity as a contractor and not as a licensed design professional unless otherwise specifically so provided in the Contract Documents.

§ 3.2.1.3 Failure by the Contractor to promptly report any errors, inconsistencies, or omissions in the Contract Documents discovered by the Contractor, or which the Contractor reasonably should have known or discovered, shall constitute a waiver by the Contractor of any claim that otherwise might result in a change in the Contract Sum or Contract Time.

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§ 3.2.1.4 The representations of the Contractor as set forth in these General Conditions shall survive expiration or termination of the Agreement.

§ 3.2.2 The Contractor shall be presumed to have examined the Project site(s) to consider fully all conditions that may have a bearing on the Work and to have accounted for these conditions its proposal. The Contractor is deemed to be a qualified expert in the systems and construction requirements of the Work of its Contract. The Contractor hereby specifically acknowledges and declares that the Contract Documents are full and complete, are sufficient to have enabled it to determine the cost of the Work, and that the Drawings, the Specifications, and all Addenda are sufficient to enable the Contractor to construct the Work outlined therein in accordance with applicable laws, statutes, building codes, and regulations, and otherwise to fulfill all of its obligations under the Contract Documents. The Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the Construction Manager and the Architect at once. The exactness of grades, elevations, dimensions, or locations given on any Drawings issued by the Architect, or the work installed by other Contractors, is not guaranteed by the Architect, Construction Manager or the Owner. The Contractor shall, therefore, satisfy itself as to the accuracy of all grades, elevations, dimensions, and locations. In all cases of interconnection of its Work with existing or other work, the Contractor shall verify at the site all dimensions relating to such existing or other work. Any errors due to the Contractor's failure to so verify all such grades, elevations, dimensions, or locations shall be promptly rectified by the Contractor without any additional cost to the Owner. Except as to any reported errors, inconsistencies or omissions, and except as to concealed or unknown conditions, by executing the Agreement, the Contractor represents to the Owner, Construction Manager, and the Architect:

- .1 The Contract Documents are sufficiently complete and detailed for the Contractor to perform the Work required and to comply with all the requirements of the Contract Documents.
- .2 The Work required by the Contract Documents, including, without limitation, all construction details, construction means, methods, procedure and techniques necessary to perform the Work, use of materials, selection of equipment and requirements of product manufacturers are consistent with: (1) good and sound practices within the construction industry; (2) generally prevailing and accepted industry standards applicable to Work; (3) the requirements of any warranties applicable to the Work; and (4) all laws, ordinances, regulations, rules and orders which bear upon the Contractor's performance of the Work.

§ 3.2.3 The Contractor shall perform the Work in accordance with the Contract Documents and submittals approved pursuant to Section 3.12.

§ 3.2.4 The Contractor may submit Requests for Information ("RFI") to the Architect to help facilitate the Contractor's performance of the Work. Prior to submitting each RFI, the Contractor shall first carefully study and compare the Contract Documents, field conditions, other Owner provided information, Contractor-prepared Coordination Drawings, and prior Project correspondence and documentation to determine that the information to be requested is not reasonably obtainable from such sources. The Contractor shall submit each RFI sufficiently in advance of the date by which such information is required in order to allow the Architect sufficient time to permit adequate review and response and to permit Contractor compliance with the latest construction schedule. The Contractor shall reimburse the Owner amounts charged by the Architect for RFI responses that in the opinion of the Architect were available from a careful review of the Contract Documents, field conditions, other Owner provided information, Contractor-prepared Coordination Drawings, and prior Project correspondence and documents.

**§ 3.2.4.1** RFIs are for requests on clarifications or questions on Drawings and Specifications, not Contract terms, scheduling items, or general correspondence, nor, as a means to describe or request approval of alternate construction means, methods or concepts or substitution or materials, systems means and methods. The Contractor shall fill all RFIs out in accordance with the provisions of the Project Manual. Neither the Architect nor the Construction Manager shall fill said forms out on the Contractor's behalf.

**§ 3.2.5** If the Contractor, during the progress of the Work, discovers any discrepancies between the Drawings and the Specifications, errors and/or omissions on the Drawings, or any discrepancies between physical conditions of the Work and the Drawings, and has notified the Architect and Construction Manager in writing under Section 3.2.1, no deviations from the Contract Documents shall be performed by the Contractor until it receives approval in writing from the Architect through the Construction Manager. Any Work performed after such discovery without the approval of the Architect shall be at the Contractor's sole risk and expense.

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§ 3.2.6 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Construction Manager and the Architect any nonconformity discovered by or made known to the Contractor as a RFI submitted to the Architect.

§ 3.2.7 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or RFIs pursuant to Sections 3.2.1, 3.2.2, 3.2.4, 3.2.5 or 3.2.6, the Contractor shall make a Claim as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.1, 3.2.2, 3.2.4, 3.2.5 or 3.2.6, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or the Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.2.8 The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architect for evaluating and responding to the Contractor's requests for information that are not prepared in accordance with the Contract Documents or where the requested information is available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, other Owner-provided information, Contractor-prepared coordination drawings, or prior Project correspondence or documentation.

**§ 3.2.9** The Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of Owner. The Contractor shall report to the Construction Manager and Architect whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.

**§ 3.2.9.1** The Contractor shall be required to establish centerlines, elevations and location of his work when it is required for the benefit of other Contractors needing the information to coordinate location of their work.

**§ 3.2.10** Whenever the Drawings show existing or other construction not required as part of the Contract Work, it is understood that it is so shown as a matter of information and that the Owner, while believing such information to be substantially correct, assumes no responsibility thereof. The Contractor shall make itself familiar with all conditions affecting the nature and manner of conducting the Work.

**§ 3.2.11** The Architect or Construction Manager may require that the Work be suspended at any time when location and limit marks established by the Contractor are not reasonably adequate to permit checking completed Work or the Work in progress.

**§ 3.2.12** Notwithstanding any other provision herein, the Owner, Construction Manager and the Architect assume no responsibility or liability for the physical condition or safety of the Project site or any improvements located on the Project site. The Contractor shall be solely responsible for safety and providing a safe place for the performance of the Work. The Owner assumes no responsibility for any erroneous conclusions or interpretations made by the Contractor based on information made available by the Owner. No adjustments will be made in either the Contract Sum or Contract Time for any failure by the Contractor or any Subcontractor to comply with the requirements of this Section.

**§ 3.2.13** Claims for additional compensation or extension of time due to the Contractor's failure to familiarize itself with the conditions at the Project site will not be allowed.

## § 3.3 Supervision and Construction Procedures

**§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention, and shall complete the Work in a good and workmanlike manner in accordance with the Contract Documents. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work subject to the coordination of the Construction Manager. Where the Drawings or Project Manual make reference to particular construction means, methods, techniques, sequences or procedures or indicate or imply that such are to be used in connection with the Contractor's Work, such reference is intended only to indicate that the Contractor's Work is to produce at least the quality of the work implied by the operations described, but the actual determination as to whether or not the described operations may

be safely or suitably employed in the performance of the Contractor's Work shall be the sole responsibility of the Contractor. All loss, damage, liability, or cost of correcting defective Work arising from the employment of a specific construction means, method, technique, sequence, or procedure shall be borne solely by the Contractor.

**§ 3.3.2** The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors, Suppliers, and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors, Suppliers or Sub-subcontractors, and for any damages, losses, costs and expenses resulting from such acts or omissions, including but not limited to reasonable attorneys' fees.

**§ 3.3.3** The Contractor shall be responsible for coordinating the work of its own forces and the work of Subcontractors engaged by it to perform the Work of the Project on its behalf. The Contractor shall supply to its own work forces, and Subcontractors engaged by it to perform portions of its Work, copies of the Drawings and Project Manuals for the work to be performed by such individuals/entities on its behalf. The Contractor shall be responsible to the Owner for the acts or omissions of the Contractor's employees, the Contractor's Subcontractors, the Contractor's material suppliers, their respective agents and employees, and any other persons performing portions of the Work on behalf of the Contractor.

**§ 3.3.1** The Contractor shall coordinate its operations and cooperate with those of other Contractors performing work on the Project or site thereof to ensure efficient and orderly installation of each part of the Work. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the Work. The Contractor shall remain informed of the progress and the detail work of other Contractors and shall notify the Construction Manager immediately of lack of progress or defective workmanship on the part of other Contractors, where such delay or such defective workmanship will interfere with the Contractor's own operations. Failure of the Contractor to keep informed of the work progressing on the site or to give notice of lack of progress or defective workmanship by others shall be construed as acceptance of the progress of work and coordination with the Contractor's own Work.

§ 3.3.3.2 The Contractor's obligations under the Contract Documents shall include, without limitation, the following:

- .1 Review of all specified construction and installation procedures with its employees and/or Subcontractors, including, without limitation, those recommended by manufacturers, prior to the commencement of the relevant portion of the Work to be performed.
- .2 Advising the Construction Manager and the Architect:
  - .1 if a specified procedure deviates from best construction practice;
  - .2 if following a procedure will affect any warranties, including the Contractor's general warranty; or
  - .3 of any objections the Contractor may have to a procedure.
- .3 Proposing alternative procedures, as appropriate, which procedures shall be covered by the Contractor's warranty as described in Section 3.5 hereof.
- .4 The Contractor shall be responsible for organizing and conducting pre-installation conferences and must coordinate such conferences with the Architect and the Construction Manager.

§ 3.3.3 The Contractor and its Subcontractors working on the Project shall attend a preconstruction conference(s) or meeting(s) as deemed necessary by the Construction Manager to coordinate all Work (e.g., demolition, installation, etc.), and as required by the Project Manual.

**§ 3.3.4** The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or the Architect in their administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor. The Contractor shall maintain complete inspection records and test date to ensure the quality of the Work is in strict compliance with the requirements of the Contract Documents.

**§ 3.3.5** Where equipment lines, piping, ductwork, and/or conduit are shown diagrammatically, the Contractor shall be responsible for the coordination and orderly arrangement of the various lines of piping and conduit included in the Work of its Contract. The Contractor shall coordinate the work of its Subcontractors and prevent all interferences between or among equipment, lines of piping, and architectural features, and avoid any unsightly arrangements in exposed areas. This Section shall not be construed as limiting any obligation of the Contractor under any other provision of the Contract Documents.

**§ 3.3.6** The Contractor shall be responsible for inspection of portions of the Project already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.3.7 The Contractor, its employees and Subcontractors, shall be subject to such rules and regulations for the conduct of Work as the Owner may establish, including but not limited to, the Construction Rules and Regulations set forth in Section 3.13.4. The Contractor shall be responsible for the enforcement among its employees and Subcontractors of the Owner's instructions.

**§ 3.3.8** The Contractor shall inspect all materials as delivered to the Project site and shall reject any materials that will not conform with the requirements of the Contract Documents when properly installed.

**§ 3.3.9** The Contractor shall be responsible for and coordinate any and all inspections required by any governmental authority having jurisdiction over the Project. Failure to obtain any permits, licenses or other approvals because of the failure of the Contractor to conform to this requirement shall not extend the Contract time, and the Contractor shall not be entitled to any increase in the Contract Sum therefore. In addition, any additional costs and expenses of any nature incurred by the Owner as a result of the Contractor's failure to conform to this requirement shall constitute a charge against the Contractor's Contract.

**§ 3.3.10 Shutdowns**: Such work as connections to existing sewers, plumbing, heating, and electrical systems shall be coordinated at a time agreeable to the Owner, the Architect, and the Construction Manager, and shall be determined and agreed to well in advance of the actual performance of such work so as to interfere as little as possible with the operation and use of the Owner's existing facilities. Shutdowns must be coordinated through the Construction Manager. The continued uninterrupted operation of all facilities of the Owner's buildings is essential. If any existing facilities must be interrupted, the Contractor for the Work shall provide all necessary temporary facilities and connections necessary for maintaining these existing facilities at no increase in the Contract Sum except as otherwise specified. No mechanical, heating, plumbing, sprinkler, or electric service shall be interrupted at any time except as approved in advance by the Owner or when the buildings are not occupied and shall be coordinated with the Owner, as well as the Construction Manager. All communication systems must be maintained without interruption. As much related work as possible shall be performed prior to shutdowns, so as to minimize the period of shut down. All material, equipment, and manpower necessary in the performance of a shutdown shall be on site prior to interruption of service.

§ 3.3.11 The Contractor represents that it is familiar with and shall adhere to the "Uniform Standards for School Construction and Maintenance Projects" set forth at 8 New York Code of Rules and Regulations §155.5 (8 NYCRR 155).

## § 3.4 Labor and Materials

**§ 3.4.1** Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor (at applicable prevailing wage rates), materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. The Contractor shall work continuously and expeditiously through completion of the Work. Time is of the essence.

§ 3.4.1.1 A shortage of labor in the industry shall not be accepted as an excuse for not properly manning the Project at each site.

§ 3.4.1.2 The Contractor shall be responsible for the care and protection of all equipment and materials for its Work on the Project, including equipment and material furnished by the Owner.

**§ 3.4.2** Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect, in consultation with the Construction Manager, and in accordance with a resulting Change Order or Construction Change Directive.

**§ 3.4.3** The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them, or persons who within the last two weeks (a) having been exposed to someone having been diagnosed with a COVID-19 infection; or (b) having had a persistent cough, shortness of breath, or a

fever of 100.4 or higher. The Owner reserves the right to have any persons removed from the Project upon reasonable objection.

**§ 3.4.3.1** In addition to all other safety requirements, the Contractor shall provide suitable and a sufficient number of safety related facilities and personal protective equipment (PPE) at the site related to protection against the spread of COVID-19, including but not limited to handwashing stations, hand sanitizer, gloves, masks, faceshields, and other equipment as the Owner may reasonably request. Notwithstanding the foregoing, nothing herein shall be construed to delegate or relieve the Contractor from having sole and exclusive responsibility for all worksite safety.

**§ 3.4.4** All mechanics employed on the Project shall be persons skilled in that work which they are to perform. Work will not be approved if it does not meet the quality of workmanship as called for in the Contract Documents. If this quality of workmanship is not exactly defined herein, it shall be assumed to be the best standards of workmanship for the trade. The Contractor shall check all materials and labor entering into the Work site and shall keep full detailed accounts thereof.

§ 3.4.5 Employees of the Contractor or its Subcontractors whose work is unsatisfactory to the Owner, Construction Manager or Architect, or considered by them to be unskilled or otherwise objectionable, will be immediately dismissed from the Project upon notice from the Construction Manager. Those dismissed employees shall be immediately replaced by the Contractor so as not to delay progress of the Work and at no additional cost to the Owner.

**§ 3.4.6** On receipt of the signed Contract, the Contractor will be expected to place firm orders with vendors for needed materials, including Subcontractors and major material suppliers. If deemed necessary to assure delivery of materials at times needed, the Contractor may accept delivery of such materials at any time, and may include the cost of such materials in its next monthly Application for Payment, provided such materials have actually been delivered to Contractor and properly stored by it with approval or under direction of the Architect and the Construction Manager either at the Project site or in an approved storage shed or warehouse, as provided elsewhere in these General Conditions.

**§ 3.4.6.1** To the fullest extent possible, the Contractor shall provide products of the same kind, from a single source. When two or more items of same material or equipment are required (pumps, valves, air conditioning units, etc.) they shall be of the same manufacturer. Product manufacturer uniformity does not apply to raw materials, bulk materials, pipe, tube, fittings (except flanged and grooved types), sheet metal, wire, steel bar stock, welding rods, solder, fasteners, motors for dissimilar equipment units, and similar items used in the work, except as otherwise indicated. The Contractor shall provide products which are compatible within systems and other connected items. If the Contractor is given option of selecting between two or more products for use on the Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

**§ 3.4.6.2** The Contractor is responsible for providing products and construction methods compatible with products and construction methods of other Contractors. If a dispute arises between the Contractor and other Contractors over concurrently selectable but incompatible products, the Architect will determine which products shall be used.

§ 3.4.6.3 With respect to sitework materials, all products submitted for use and incorporated into the Project shall be on the Approved List of Materials and Equipment published by the NYSDOT Materials Bureau, most recent edition.

**§ 3.4.6.4** When required, off-site storage shall be the responsibility of the Contractor. If materials are stored off site, the Contractor shall furnish proof of title by Owner and provide a certificate of insurance demonstrating adequate insurance coverage.

**§ 3.4.6.5** The Contractor shall deliver all materials at such times as will ensure speedy and uninterrupted progress of the Work.

**§ 3.4.6.6** The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them The Owner reserves the right to object to the Contractor's use of persons who appear unfit or not skilled in the tasks assigned to them. Should any disorderly, incompetent, unfit, unskilled or objectionable person be hired or employed by the Contractor or its Subcontractors, upon or about the premises of the Owner, for any purpose or in any capacity, they shall, upon request of the Owner, be removed from the Project and not again be assigned thereon without the written permission of the Owner.

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**§ 3.4.8** The Contractor shall only employ labor on the Project or in connection with its Work capable of working harmoniously with all trades, crafts and other individuals associated with the capital improvement work to be performed. The Contractor shall make every reasonable effort to avoid labor disputes and to insulate the Owner, Architect and Construction Manager from the effects of labor disputes should any arise. There shall be no strikes, picketing, work stoppages, slowdowns, or other disruptive activity at the Project for any reason by anyone employed or engaged by the Contractor to perform its portion of the Work. There shall be no lockout at the Project by the Contractor. The Contractor shall be responsible for providing the manpower required to proceed with the Work under any circumstance. For the purposes of this Section, every reasonable effort shall include, but not necessarily be limited to:

- .1 make all necessary arrangements to reconcile, without delay, damage or cost to the Owner and without recourse to the Architect, the Construction Manager or the Owner, any conflict between its Agreement with the Owner and any agreements or regulations of any kind at any time in force among members or councils which regulate or distinguish what activities shall not be included in the work of any particular trade;
- .2 requiring employees, Subcontractors, suppliers and others to use reserve gates which shall be established for the Project;
- .3 rearranging work schedules for the Contractor's Work or the work of its Subcontractors; and
- .4 including in the Contractor's agreements with its Subcontractors the right to fully implement all provisions of this Section.

**§ 3.4.8.5** In case the progress of the Work is effected by any undue delay in furnishing or installing any items or materials or equipment required pursuant to the Contract because of a conflict involving any such labor agreement or regulation, the Owner may require that other material or equipment of equal kind and quality be provided pursuant to a Change Order or Construction Change Directive but in no case shall the amount of such change be charged by the Contractor to the Owner as an additional cost to perform the Work.

§ 3.4.8.5.1 No extension of the Contract Time shall be granted for delays caused by labor or material disputes.

**§ 3.4.8.5.2** Should it become necessary to create a separate entrance for a Contractor involved in a dispute, all costs associated with creating that entrance shall be borne by the Contractor involved in the dispute. Such costs shall include, but not limited to signage, fencing, temporary roads and security personnel as deemed necessary by the Owner for the safety of the occupants of the site.

§ 3.4.8.6 The Contractor shall ensure that its Work continues uninterrupted during the pendency of a labor dispute.

**§ 3.4.8.7** The Contractor shall be liable to the Owner for all damages suffered by the Owner occurring as a result of work stoppages, slowdowns, disputes or strikes arising from the labor practices of the Contractor or its Subcontractors, Suppliers or Sub-subcontractors.

**§ 3.4.9** The Contractor and its Subcontractors employed upon the Work shall abide by and conform with all labor laws and to all other laws, ordinances, and legal requirements now or hereafter applicable to the Work and the construction area.

**§ 3.4.10** The Contractor and its Subcontractors shall be responsible for protection of the Work, the work of Separate or other Contractors, and existing construction, both on and off the site, and in the event of damage, shall restore the same to the original condition at no additional cost to the Owner.

**§ 3.4.11** If the Work is to be performed by trade unions, the Contractor shall, with the consent of the Owner and the Architect, which shall not be unreasonably withheld, make all necessary arrangements to reconcile, without delay, damage, or cost to the Owner, any conflict between the Contract Documents and any agreements or regulations of any kind, at any time in force among members or councils that regulate or distinguish what activities are included in the work of any particular trade.

§ 3.4.12 No new asbestos containing building materials shall be used in construction. No materials containing asbestos in any form shall be used in, on, or around the Owner's buildings.

§ 3.4.13 All Work shall be executed in complete accordance with the manufacturer's most recent recommendations unless otherwise specified or permitted by the Architect. A sufficient force of competent workmen, foremen, and superintendents shall be employed at all times to permit the Work to be pursued with diligence until completion and within the Contract Time.

§ 3.4.14 The Contractor shall provide the labor necessary to install his work within the terms of this Contract and the Contract Time.

§ 3.4.15 The Contractor shall be responsible for the care and protection of all equipment and materials for the Contractor's Work including equipment and material furnished by the Owner and installed by the Contractor.

§ 3.4.16 All articles, materials and equipment shall be applied, installed, connected, used, cleaned, and conditioned in accord with directions of manufacturer unless otherwise specified herein.

#### § 3.4.17 Equivalents and Substitutions

§ 3.4.17.1 Equivalents. In the Specifications, one or more kinds, types, brands, or manufacturers or materials are regarded as the required standard of quality and are presumed to be equal. The Contractor may select one of these items or, if the Contractor desires to use any kind type, brand, or manufacturer or material other than those named in the Specifications, it shall indicate in writing, and prior to award of the Contract, what kind, type, brand or manufacturer is included in the base bid for the specified item. The Contractor shall follow the submission requirements for equivalents as provided in the Project Manual. Any proposed equivalent shall not be purchased or installed by the Contractor without the Architect's review process having been completed and the product accepted by written notification.

§ 3.4.17.2 Substitutions. After the Contract has been executed, the Owner, Construction Manager and Architect will consider a formal request for the substitution of products in place of those specified only under conditions set forth in the Specifications.

§ 3.4.17.3 By making said requests in conformance with procedures established herein and elsewhere in the Project Manual, the Contractor: (1) represents that it has personally investigated the proposed substitute product and has determined that it is equal to or superior in all respects to that specified; (2) represents that the warranty for the substitution will be the same, or greater than, that applicable to the specified product; (3) certifies that the cost data is complete and includes all related costs under the Contract, including professional services necessary and/or required for the Architect or its consultants to implement said substitution and waives any and all claims for additional costs related to the substitution that subsequently become apparent; (4) represents that it will coordinate the installation of the accepted substitute, making all such changes to the Drawings effected by the change, including but not limited to the electrical, plumbing, site work and heating and ventilating Specifications as may be required for the Work to be complete in all respects; and (5) represents that it will reimburse the Owner for all additional costs billed by the Architect or its consultants for the review of the substitution request(s), any redesign of the Work of this Contractor or associated contractors, additional site visits related to the substitution request and for the work to prepare Change Orders or Construction Change Directives.

§ 3.4.18 The Contractor shall prepare and maintain daily inspection records to document the progress of the Work on a daily basis. Such daily records shall include a daily accounting of all labor and all equipment on the site for the Contractor and all Subcontractors, at any tier. Such daily records shall make a clear distinction between Work being performed under Change Order, base scope work, and/or disputed work.

§ 3.4.18.1 In the event that any labor or equipment is idled, solely as a result of the Owner's actions or inactions, the daily records shall record which laborers and equipment were idled and for how long. In the event that specific work activities were stopped, solely as a result of the Owner's actions or inactions, and labor and equipment was reassigned to perform work on other activities, the daily records shall make a clear record of which activities were stopped and where labor and equipment were redirected.

§ 3.4.18.2 All such daily records shall be copied and provided to the Owner at the end of every week.

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## § 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner, Construction Manager and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements, including substitutions not properly approved and authorized, shall be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. All warranties and guarantees specifically called for by the Contract Documents shall expressly run to the benefit of the Owner. If required by the Architect, the Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with instructions of the applicable supplier, except as otherwise provided in the Contract Documents. The Contractor shall perform the Work in strict accordance with the Contract Documents and best industry practices. The Contractor, at its expense, shall upon demand by the Owner, Construction Manager or Architect remove and replace materials not meeting specifications or materials failing to perform as represented or warranted by the manufacturer, regardless of whether incorporated into the Work. The Contractor shall promptly replace or correct any Work or materials that the Owner, Construction Manager or Architect rejects as failing to conform to the requirements of the Contract Documents. The foregoing warranty obligations shall survive completion or termination of the Contract, are not limited by the provisions of Article 12, and are in addition to and not in limitation of any other warranty, right or remedy set forth in the Contract Documents or otherwise prescribed by law.

**§ 3.5.2** All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4. The Contractor shall assign to the Owner at the time of final completion of the Work any and all manufacturer's warranties relating to materials and labor used in the Work and further agrees to perform the Work in such manner so as to preserve any and all such manufacturer's warranties. The Contractor shall fully cooperate with the Owner in the event the Owner pursues remedies under any warranties assigned to the Owner. The Contractor acknowledges that its obligations to the Owner under Section 3.5 are joint and several with its Subcontractors, suppliers, and material or equipment manufacturers of all materials and equipment supplied on account of the Work.

**§ 3.5.3** No warranties or guarantees by the Contractor will deprive the Owner of any cause of action, right, or remedy otherwise available for breach of any of the provisions of the Contract Documents. Neither final payment nor provision in the Contract Documents nor partial or entire occupancy of premises by Owner shall constitute acceptance of Work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibilities for faulty or defective materials or workmanship.

**§ 3.5.3.1** The Contractor shall deliver to the Owner upon completion of all work under its Contract, its written guarantee made out to the Owner in a form acceptable to the Owner, guaranteeing (and it does so guarantee) all of the Work under the Contract to be free from faulty materials, and free from improper workmanship, and guarantees against injury from proper and usual wear and aging.

**§ 3.5.4** All required maintenance shall be the Contractor's responsibility until the Owner has accepted the Project as complete, all required maintenance and user's manuals have been turned over to the Owner, and the Owner's designated personnel have been instructed in the maintenance and operation of all applicable materials. This maintenance shall include a complete turnover procedure at the time of completion, including complete cleaning, testing and adjustment. The Contractor shall keep records of all such maintenance performed as required by this Section, including work performed and times and dates on which it was performed. These records shall be turned over to the Owner at closeout.

§ 3.5.5 The Contractor shall in case of work performed by its Subcontractors, and where guarantees are required, secure warranties from Subcontractors and deliver copies of same to the Construction Manager countersigned by the Contractor.

## § 3.6 Taxes

Except as otherwise specified, the Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

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**§ 3.6.1.1** The Contractor's attention is called to fact that materials not actually incorporated into Work will not be exempt from payment of sales or compensating use taxes, and the Contractor and its Subcontractor shall be responsible for and shall pay any and all applicable taxes. This will apply to such things as:

- .1 construction machinery and equipment including rentals or repair parts;
- .2 The Contractor's office supplies;
- .3 The Contractor's supplies, tools and miscellaneous equipment including forms, materials, and scaffolding (whether purchased or rented);
- .4 temporary heat;
- .5 telephone or electric services; and
- .6 any other items purchased or rented by the Contractor for the Contractor's use in performing its Work and not incorporated into realty.

**§ 3.6.2** The Contractor accepts full and exclusive liability for payment of any and all contributions, assessments or taxes for unemployment insurance or old age insurance, or annuities now or hereafter imposed by the government of the United States, or by the government of any city, county or state of United States, which are measured by salaries or other remuneration paid to persons employed by the Contractor or any Subcontractor for Work performed under this Contract.

# § 3.7 Permits, Fees, Notices, and Compliance with Laws

§ 3.7.1 The Owner shall secure a building permit from the State Education Department as required for the Project. The Contractor shall secure and pay for all other permits and governmental fees, licenses, and inspections necessary for proper execution of and completion of the Contract that are legally required when bids are received. The Contractor shall procure and obtain all bonds required of the Owner or the Contractor by the municipality in which the Project is located or by any other public or private body with jurisdiction over the Project. In connection with such bonds, the Contractor shall prepare all applications, supply all necessary back-up material and furnish the surety with any required personal undertakings.

**§ 3.7.1.1** The Contractor shall, as soon as practicable, furnish the Owner and Architect with copies or certificates of all permits, fees, licenses, and inspections necessary for the proper execution and completion of the Work, including, without limitation, all applicable building permits other than those required of the Owner under the Contract Documents. All inspection fees and other costs of such permits and licenses required to be obtained by the Contractor as may be imposed by any municipal or other entity shall be paid by the Contractor and shall not serve as the basis for any increase in the Contract Sum.

**§ 3.7.2** The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work. If the Contractor fails to give such notices, it shall be liable for and shall indemnify and hold harmless (a) the Owner, its consultants, employees, officers and agents and (b) the Architect and its consultants, employees, officers and agents against any resulting fines, penalties, judgments, or damages, including reasonable attorney's fees, imposed on or incurred by the parties indemnified hereunder.

**§ 3.7.2.1** In accordance with New York State Labor Law Article 8, Section 220, subd. 3-a(a), the Contractor shall submit to the Owner within 30 days after issuance of Contractor's first payroll, and every 30 days thereafter, a transcript of the original payroll record, subscribed and affirmed as true under the penalties of perjury.

§ 3.7.2.2 The Contractor shall comply with all applicable New York State Department of Labor requirements, including the provision that every worker employed in performance of a public work contract shall be certified as having completed an OSHA 10-hour safety training course. The Contractor and its Subcontractors shall be solely responsible for compliance with this requirement with respect to their employees. The Contractor's or its

Subcontractor's failure to comply with this requirement shall not transfer or in any way impose the responsibility for worker safety upon the Owner, Construction Manager or the Architect.

**§ 3.7.3** If the Contractor performs Work that it knows or should know (in the exercise of good construction practice) is contrary applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear all costs attributable to the correction thereof or related thereto, including reimbursement to the Owner for any additional services required of the Architect and Construction Manager, as well as all fines and penalties, if any.

§ 3.7.4 Concealed or Unknown Conditions. If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall give prompt written notice to the Owner, Construction Manager, and the Architect of such conditions before they are disturbed or affected work is performed and in no event later than five (5) business days after first observance of the conditions; provided that, in the case of a condition at the site that involves hazardous or toxic substances, as those terms are defined by OSHA or AHERA, notice to the Owner, Construction Manager and Architect shall be given immediately upon discovery of such hazardous or toxic substance. The Architect or Construction Manager will promptly investigate such conditions and, if the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner, Construction Manager, and Contractor in writing, stating the reasons. If the Contractor disputes the Architect's determination or recommendation, it may proceed as provided in Article 15. No adjustment in the Contract Time or Contract Sum will be permitted, however, in connection with a concealed or unknown condition that does not differ materially from those conditions disclosed or that reasonably should have been disclosed by the Contractor's (1) prior inspections, tests, and reviews, or (2) inspections, tests, and reviews the Contractor had the opportunity to make or should have performed in connection with the Project.

**§ 3.7.5** If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner, Construction Manager, and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

## § 3.8 Allowances

**§ 3.8.1** The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents:

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Lump Sum Allowances, Unit Cost Allowances and Quantity Allowances: the Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances;
- .3 Contingency Allowances: the Contractor's costs, including all such subcontractor costs, for receiving and handling at Project site, labor, installation, and similar costs related to products and materials under allowance shall be included as part of the allowance. The Contractor, and its Subcontractors, overhead and profit related to the allowance shall be included as part of the Contract Sum and not part of the allowance; and

whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly .4 by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2. The Contractor is not entitled to overhead and profit on unexpended allowance amounts or any portions thereof.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness. Allowances shall be used only upon written authorization of the Architect and Owner.

# § 3.9 Superintendent

§ 3.9.1 Prior to starting the Work, the Contractor shall designate the Project Manager, a full-time Superintendent and other key individuals who shall be assigned to the Project through and including Final Completion. Such designations shall be in writing and provided to the Construction Manager, Architect and Owner and shall include the qualifications of such individuals. The Superintendent shall be in attendance at the Project site throughout the Work, remain on the Project site not less than eight hours per day, five days per week, until termination of the Contract, unless the job is suspended, Work is stopped by the Owner, or no Work is scheduled. The Superintendent shall be approved by the Owner in its sole discretion. Said representatives shall be qualified in the type of work to be undertaken and shall not be changed during the course of construction without the prior written consent of the Owner. Should a representative leave the Contractor's employ, the Contractor shall promptly designate a new representative. The Owner shall have the right, at any time and in its sole discretion, to direct a change in the Contractor's representatives if their performance is unsatisfactory. In the event of such a demand, the Contractor shall within seven (7) days after notification thereof, replace said individual(s) with an individual(s) satisfactory to the Owner, in the Owner's sole discretion. If said replacement is disapproved, the Contractor may, at the Owner's option, be terminated for cause. The Superintendent shall represent the Contractor, and communications given to the Superintendent shall be as binding as if given to the Contractor. The Owner shall have no obligation to direct or monitor the Contractor's employees. All references herein to the Superintendent shall be taken to mean the Contractor's superintending staff. Each Subcontractor shall designate the Project Manager, Superintendent and other key individuals who shall be assigned to the Project. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each case. The Contractor's Superintendent shall attend all Project meetings, regardless of whether held prior to or following Substantial Completion of the Work.

§ 3.9.2 The Contractor shall provide, or otherwise see that, the Project Manager, or Superintendents or responsible workers of the Contractor and its major Subcontractors are equipped with cellular phones and radios. The Contractor shall provide the Owner, the Construction Manager, and the Architect with the number for each phone and worker.

§ 3.9.3 The Contractor's supervisory personnel, including Superintendents and their assistants, shall be versed in the English language. In the event the Contractor's supervisory personnel, Superintendents and their assistants are not versed in the English language, the Contractor shall employ the services of a full-time on-site interpreter to facilitate communications with such supervisory personnel.

§3.9.4 The Contractor shall not reduce or terminate supervision of the Work, nor change the Superintendent without the prior written approval of the Owner.

**§3.9.5** If, for any reason, the Contractor takes an action resulting in any of the changes noted in Subsection 3.9.4, the Owner may take remedial action to ensure continued progress of the Work, including the hiring of suitable supervisory personnel, and charge the Contractor all costs associated with these remedial actions including the costs of legal and additional construction management and architectural services.

§ 3.9.6 The Contractor recognizes and acknowledges that job meetings will be held at the job site weekly as set forth in the Project Manual, unless otherwise designated by the Owner, Construction Manager or the Architect. The Contractor shall have responsible representation at the mandatory weekly job progress meetings held at the Construction Manager's job office. These progress meetings will be held to arrange for satisfactory coordination of all trades on the Project so as not to impede job progress. If the Contractor or its Subcontractors fail to attend job meetings, the Contractor shall be responsible for delays and expenses incurred due to coordination difficulty.

§ 3.9.7 The Contractor shall provide copies of its daily construction reports to the Construction Manager's Field Superintendent. These reports shall be submitted no later than 10:00 am the following workday. The daily reports shall provide detailed information concerning the Contractor's activities and operations, including Work activities on site and manpower.

## § 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly, but in no event later than 14 days, after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information and the Construction Manager's approval a Contractor's construction schedule for the Work in electronic format with predecessor logic. The construction schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The Contractor's construction schedule shall provide for the orderly progression of the Work to completion, and shall not exceed time limits current under the Contract Documents. The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Multiple Prime Contractors or the construction or operations of the Owner's own forces. The Contractor's construction schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project but the Contract Time and any applicable Milestone Date shall not be changed except by fully executed Change Order.

**§ 3.10.1.1** Time is of the essence for this Project. The Work shall be performed continuously and without interruption, so that all Work can be completed in the time set forth in the Contract Documents.

**§ 3.10.1.2** The sequence of the Work shall be scheduled with the Owner so as to minimize interference with the Owner's use of existing structures, and the Owner's approval shall be obtained prior to starting of the Work.

**§ 3.10.1.3** The Contractor's construction schedule shall be in a detailed precedence style critical path management ("CPM") or Primavera-type format satisfactory to the Owner and Construction Manager that shall also: (i) provide a graphic representation of all activities and events that will occur during the performance of the Work; (ii) identify each phase of construction and occupancy; and (iii) set forth dates that are critical in ensuring the timely and orderly completion of the Work in accordance with the requirements of the Contract Documents. Submission of an accepted construction schedule shall be a prerequisite to initial payment.

**§ 3.10.2** The Construction Manager shall prepare, publish, and, from time-to-time, revise a master integrated Project Schedule based upon the construction schedules submitted by the Contractor and other Contractors. Failure by the Contractor to furnish any required schedule or schedule revision in a timely manner shall entitle the Construction Manager to prepare a schedule for the Contractor's Work, to which the Contractor shall be bound.

**§ 3.10.2.1** The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict, delay in or interference with the Work of other Contractors or the construction or operations of the Owner's own forces. The Owner shall have the right, without penalty, to direct the Contractor to delay, postpone or reschedule any portion of the Work that may interfere with or disrupt the operations of the Owner.

**§ 3.10.3** The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Construction Manager so that all Work can be completed in the time set forth in the Contract Documents. The accepted construction schedule shall be dated to reflect actual conditions (sometimes referred to as progress reports) as set forth in Section 3.10.1 or if requested by the Owner, Construction Manager or Architect. In the event any progress report indicates any delays, the Contractor shall propose an affirmative plan to correct the delay, including overtime and/or additional labor, if necessary. In no event shall any progress report constitute an adjustment in the Contract Time, or any milestone date, or the Contract Sum unless any such adjustment is agreed to by the Owner and authorized pursuant to a Change Order.

**§ 3.10.4** In the event the Owner determines that the performance of the Work has not progressed to the level of completion required of the Contract Documents or that the Contractor has failed to maintain its construction schedule or the Project Schedule, the Owner shall have the right to order the Contractor to take corrective measures necessary to expedite the progress of construction including without limitations, additional shifts, overtime, additional manpower or equipment as well as other similar measures (hereinafter referred to collectively as "extraordinary measures"). Such extraordinary measures shall continue until the progress of Work complies with milestone and critical path dates set forth in the Contract Documents and the Project Schedule. The Contractor shall not be entitled to an adjustment in Contract Sum or Contract Time in connection with extraordinary measures required by the Owner.

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**§ 3.10.6** The Contractor shall participate with other Contractors, the Construction Manager and Owner in reviewing and coordinating all schedules for incorporation into the Project Schedule that is prepared by the Construction Manager. The Contractor shall revise the construction schedule and submittal schedule as deemed necessary by the Construction Manager to conform to the Project Schedule and the Contract Documents.

§ 3.10.7 The Contractor shall perform the Work in general accordance with the most recent construction schedules submitted to the Owner, Construction Manager and Architect and incorporated into the approved Project Schedule. The Contractor shall monitor the progress of the Work for conformance with the requirements of its construction schedule and Project Schedule and shall promptly advise the Owner of any delays or potential delays affecting the critical path.

§ 3.10.8 If the Contractor fails to maintain the approved construction schedule or Project Schedule and meet all critical path dates for the Work, the Owner may request a recovery plan from the Contractor and reserves the right to withhold payment until such time as the Contractor submits a recovery plan. The recovery plan must show how the Work may plausibly be brought on schedule, including, as necessary, acceleration of the Work by means of overtime, additional crews, additional shifts, additional equipment or re-sequencing of the Work to achieve completion of the remaining critical path dates in the construction schedule or Project Schedule. The Contractor shall submit as part of its recovery plan: (i) a "resource loaded" schedule showing the Contractor's plan to deploy manpower per trade, per work area, per day, together with essential materials and equipment, and other resources necessary to timely accomplish the Work; and (ii) a two-week "look ahead" schedule identifying tasks to be accomplished within the coming two week period, the work areas and categories of work, and necessary manpower resources, together with other data necessary to demonstrate to the Owner the viability of the Contractor's recovery plan ("2 Week Plans"). The Contractor shall continue to submit 2 Week Plans until either the Contractor demonstrates that the Project Schedule has recovered from the unexcused delay, or the Owner notifies the Contractor in writing that further 2 Week Plans are no longer required. The cost of preparing and performing the recovery plan shall be borne solely by the Contractor. No approval or consent by the Owner of any plan for resequencing or acceleration of the Work submitted by Contractor shall constitute a waiver by Owner of any damages or losses which the Owner may suffer by reason of such resequencing or the failure of the Contractor to meet the Substantial Completion Date or the final completion date.

**§ 3.10.9** The Contractor specifically represents and warrants to the Owner that that the Contract Sum and the Contract Time contemplate compliance with all current, and reasonably foreseeable future, federal, state and local "Stay at Home," "Social Distancing" and related orders, regulations and guidance related to limiting the spread of COVID-19 disease (the "COVID Requirements"). Accordingly, the Contractor hereby waives any claim for an increase in the Contract Sum or an extension of the Contract Time on account of the COVID Requirements. The Contractor shall promptly notify the Owner of any COVID Requirements that would impact the Project.

**§ 3.10.10** Due to the ongoing COVID-19 pandemic and the resulting uncertainty with regard to, among other things, (a) what restrictions, if any, will be applicable to construction activities due to federal, state or local orders, laws, regulations or rules related to the COVID-19 pandemic (including, without limitation, social distancing, PPE, cleaning and disinfection requirements) and (b) the duration of any restrictions imposed on construction activities, the Owner may modify the schedule set forth in the Contract Documents and the Project Schedule. Similarly, restrictions, if any, that will be or are applicable to construction activities due to federal, state or local orders, laws, regulations or rules related to the COVID-19 pandemic (including, without limitation, social distancing, PPE, cleaning and disinfection requirements) may cause the Owner to have the Work or the Project commence later than the date specified in the Contract Documents. The Contractor acknowledges and agrees that there should be no additional compensation paid for schedule modifications caused directly or indirectly by the COVID-19 pandemic. The Contractor further acknowledges and agrees that its sole remedy for any schedule modifications or delays caused directly or indirectly by the COVID-19 pandemic shall be an extension of the Contract Time, if warranted. The Contractor further acknowledges and agrees that it shall have on file and provide a copy to the Owner of its written COVID-19 business reopening plan, and it shall comply in all respects with such plan for the duration of the

Project. The Contractor, not the Owner, shall be responsible for compliance with its COVID-19 business reopening plan and all safety requirements associated with COVID-19 protections for workers and the general public.

# § 3.11 Documents and Samples at the Site

**§ 3.11.1** The Contractor shall maintain at the site for the Owner one copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These documents shall be available to the Architect and delivered to the Construction Manager for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.11.2 The Contractor shall maintain at the site, and shall make available to the Owner, Construction Manager and Architect, one record copy of the Drawings (the "Record Drawings") in good order. The Record Drawings shall be prepared and updated during the prosecution of the Contractor's Work. The prints for Record Drawing use will be a set of black line prints provided by the Architect to the Contractor at the start of construction. The Contractor shall maintain said set in good condition and shall use colored pencils to mark up said set with "record information" in alegible manner to show: (i) deviations from the Drawings made during construction; (ii) details in the Work not previously shown; (iii) changes to existing conditions or existing conditions found to differ from those shown on any existing drawings; (iv) the actual installed position of equipment, piping, conduits, light switches, electric fixtures, circuiting, ducts, dampers, access panels, control valves, drains, openings, and stub-outs, etc.; (v) architectural and structural changes in the design; and (vi) such other information as either the Owner or Architect may reasonably request. At the completion of the work and before a final Certificate of Payment is issued, the Contractor shall prepare a final set of reproducible "As-Built" mylar drawings with the Contractor's title block bearing the Contractor's name, date and signature attesting that the Work was installed as shown. Such drawings shall be titled "AS-BUILT" in the lower righthand corner. Submit two paper prints to the Architect for initial review. After the prints are reviewed and returned to the Contractor, the Contractor shall deliver to the Architect the colored Record drawing and the As-Built reproducible drawings. Final payment and any retainage shall not be due and owing to Contractor until the Record and As-Built drawings receive the approval from the Architect and the Owner (and all other closeout requirements are met). The Architect shall be the sole judge of the acceptability of any and all drawings.

**§ 3.11.3** The Contractor shall maintain all approved permit drawings in a manner so as to make them accessible to government inspectors and other authorized agencies having jurisdiction over the Project. All approved drawings shall be wrapped, marked and delivered to the Owner within 60 days of final completion of the Contractor's Work.

## § 3.12 Shop Drawings, Product Data, and Samples

**§ 3.12.1** Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work. Each submittal shall bear written confirmation that the Contractor has satisfied its obligations under the Contract Documents with respect to the Contractor's review and approval of the submittal. The Contractor shall comply with the provisions and procedures for Shop Drawings, Product Data, and Samples set forth in the Project Manual. The Shop Drawings shall include fabrication, erection, layout, and setting drawings and schedules, wiring and piping diagrams; and any other information required for proper approval of or installation of all parts of the Work specified. If any modifications are required to a standard item, such modifications shall be clearly shown or noted at the time of submission of Shop Drawings.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, operating and maintenance procedures, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

**§ 3.12.3** Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to (1) demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents, and (2) show a system or product's ability to meet applicable criteria for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Sections 4.2.10 through 4.2.12. Informational submittals upon which the Construction Manager and Architect are not expected to take responsive action may be so identified in the

Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

**§ 3.12.4.1** Shop drawings and product submittals for all site improvement, architectural, structural, mechanical, electrical and signal work shall be submitted to the Architect for its review.

**§ 3.12.4.2** The Contractor represents and warrants that all Shop Drawings shall be prepared by a person or entity possessing expertise and experience in the trade for which the Shop Drawing has been prepared and, if required by the Contract Documents or law, by a licensed professional engineer.

**§ 3.12.5** The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, with copies to the Construction Manager, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the Project submittal schedule approved by the Construction Manager and Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of other Contractors, Separate Contractors, or the Owner's own forces. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor's Shop Drawings, Product Data, Samples, and similar submittals with related documents submitted by other Contractors. All submissions shall be in accordance with Section 01300 Submissions.

§ 3.12.5.1 No extension of time will be granted to the Contractor because of failure to have Shop Drawings, Product Data, and Samples submitted in ample time to allow for review by the Architect or its consultants.

**§ 3.12.6** By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner, Construction Manager, and Architect, that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. The Contractor shall be responsible for verification of field dimensions and conditions and shall furnish such information to the Architect when requested. Before the Contractor proceeds with the Work in question, the Contractor should field verify all dimensions. In case of doubt about dimensions, the Contractor should notify the Architect immediately for instructions.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been reviewed and approved by the Architect. Resubmission of rejected documents shall be performed within 10 calendar days, or sooner if required by the progress of construction as determined by the Architect or Construction Manager. No claim for delay or cost shall be accepted as a result of rejected submittal documents. If the Architect is required to review the Contractor's submittal more than twice, the Contractor shall bear the cost and expense associated with such additional review as set forth in the Project Manual.

**§ 3.12.8** The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Construction Manager and Architect in writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.

**§ 3.12.9** The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the absence of such written notice, the Architect's approval of a resubmission shall not apply to such revisions. Resubmission of rejected documents shall be performed within 10 calendar days or sooner if required by the progress of construction as determined by the Architect or Construction Manager. No claim for delay or cost shall be accepted as a result of rejected documents.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's

responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

**§ 3.12.10.1** If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall be entitled to rely upon the adequacy and accuracy of the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Construction Manager and Architect at the time and in the form specified by the Architect.

**§ 3.12.11** The Contractor shall approve all Shop Drawings, Product Data, and Samples prior to submitting them to the Architect. Samples shall be properly labeled, giving the following information as applicable:

- .1 Project name and location.
- .2 Name, finish, and composition of material.
- .3 Location where material is to be used.
- .4 When approved, samples shall be so indicated.
- .5 Labels shall be large enough for approval stamp.

§ 3.12.12 The Contractor is required to provide all submittals for the Architect's review; all submittals to be provided to the Architect by the submittal deadlines noted in the Contract Documents.

§ 3.12.13 The Architect's review of Contractor's submittals will be limited to examination of an initial submittal and one resubmittal. The Owner is entitled to obtain reimbursement from the Contractor for amounts paid to the Architect for evaluation of additional resubmittals, and for evaluation of submittals for which the initial submission is received after the submittal deadlines noted in the Contract Documents.

## § 3.13 Use of Site

**§ 3.13.1** The Owner shall not be liable to the Contractor, Subcontractors of any tier, suppliers, their employees or anyone else with respect to the condition of the Project site. The Owner shall have the right to refuse admittance to the site to any agent or employee of the Contractor, its Subcontractors of any tier, or its suppliers whose presence the Owner reasonably deems hostile to the Owner's interests. The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities and the Contract Documents and shall not unreasonably encumber the site with materials or equipment. The use of the Owner's assets and property are extremely limited. The Contractor shall fully comprehend the intent of the Contract Documents pertaining to site and building limitations including, without limitation, Division 1 Specifications sections, the phased construction plan, and the site safety and logistics plan(s).

§ 3.13.2 The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the site.

**§ 3.13.3** The Contractor shall perform and shall ensure that all Subcontractors and suppliers perform all Work in a manner that permits reasonable access to the Project site and to all adjacent premises. The Contractor shall not, and shall not permit any Subcontractor or supplier to, conduct the Work in a manner that disturbs or that could be reasonably anticipated to disturb operations and persons located in or on portions of the site not affected by the Work. The occupied portion of any of the Owner's buildings shall always comply with the minimum requirements necessary to maintain a certificate of occupancy.

**§ 3.13.4** Construction Rules and Regulations. The following rules and regulations shall be observed and enforced by the Contractor and its Subcontractors and suppliers in connection with all phases of the Work:

- .1 In accordance with New York State law, smoking is prohibited anywhere on school property. Violators will be subject to arrest and/or fine of \$1,000 per occurrence. No alcoholic beverages or controlled substances are permitted on school property, and persons under the influence of alcoholic beverages or controlled substances may not enter in or remain on school property.
- .2 In accordance with the United States Gun-Free School Zones Act of 1994, no firearms are permitted within 1,000 feet of any school building, with certain limited exceptions as set forth therein. In addition to such limitations, no firearms shall be brought on school property without the Owner's express prior consent.
- .3 Appropriate protective gear (hard hats, safety shoes, goggles, etc.) are to be worn as required by OSHA standards, the New York State Department of Labor, and prudent practice. Shirts are to be worn at all times. No short pants are permitted.
- 4 Any person who uses inappropriate language, or who is disruptive to the school environment, will be banned from the site.
- .5 The Contractor's and its Subcontractors' personnel shall not converse with school employees, students and or local residents.
- .6 All persons on the Project site will comply with all reasonable instructions regarding conduct and safety which are given by the Architect, the Construction Manager or the Owner's school administrators.
- .7 All construction materials shall be stored in a safe and secure manner. No deliveries will be allowed during school bus drop off or pick up hours as determined by the Owner. All deliveries shall be scheduled and coordinated with the Construction Manager and the Owner's security department. Unexpected or uncoordinated deliveries may be turned away by the Owner or the Construction Manager at the discretion or necessity of the Owner. The Owner's enforcement of this provision shall not be construed by the Contractor or Subcontractor as the basis for a claim of delay in time or monetary damages alleged to have been incurred as a result of refusal of delivery.
- .8 Use of the existing building facilities during construction is prohibited, specifically including toilet rooms, telephones and water fountains.
- .9 The Contractor's schedule shall allow for blackout dates during which no noisy Work will be allowed, as determined by the Construction Manager. The Contractor may consult the Owner's school calendar for all test and examination dates, but these dates are subject to change.
- .10 To gain access to the Work, entrances and parking areas will be designated by the Owner for the Contractor's use. Any vehicles or trucks in non-designated areas may be towed at the Contractor's expense. Gates shall always be locked unless a worker is in attendance to prevent unauthorized entry.
- .11 Should it become necessary to obtain access to the existing building during construction hours for measurements or other non-disruptive work, the Contractor shall be escorted by the Construction Manager.
- .12 All persons must wear photo identification badges at all times while working at the site. Identification badges must be provided by the Contractor for its personnel, including subcontractors, consultants, visitors and others.
- .13 No asbestos containing products are to be used anywhere on this Project.
- .14 No lead containing products are to be used anywhere on this Project.
- .15 Asbestos manifests showing the locations of all known asbestos bearing materials are available in each building, and should be consulted prior to the commencement of any work, including but not limited to demolition.
- .16 Demolition is to occur only when the building is unoccupied. Dust partitions and negative air are to be installed prior to commencing demolition. The Contractor must obtain Construction Manager approval on dust partitions and negative air prior to commencing demolition work. Debris shall be removed by using an enclosed chute or similar sealed system.
- .17 (a) Prior to the commencement of Work, the Contractor must submit construction plans, which show the location of dust particles, exhaust & fresh air fans and describe in detail the operation procedures during demolition and construction which may generate dust.

(b)All entrances to classrooms shall be sealed with at least 6 mil. polyethylene sheeting to prevent dust created by demolition and construction work from entering the classrooms. Entrances and egress to the work zone shall be covered with a triple flap 6 mil. polyethylene doorway to allow access to the area without the release of dust. The Contractor is, additionally, responsible for all debris and dust infiltrating adjacent and undisturbed areas of the building.

(c) Shut down and lock out all electrical and HVAC in the work area. Cut, cap, and seal all duct work where it enters the work area from another space. All duct work and conduit within the space shall be removed during demolition work.

(d)The Contractor shall install dust protection barriers and poly sheeting. There shall be no or minimum damage to adjacent surfaces. The Contractor is responsible to repair any damage to existing surfaces.

- .18 Painting or other chemical applications shall be done in the Owner's existing building only when it is unoccupied. Storage of chemicals and painting shall be outside the Owner's existing or new structures, and shall follow manufacturer's storage guidelines.
- .19 Oxygen or other gas containers shall be properly stored and secured per OSHA requirements, to the satisfaction of the Construction Manager. Failure to do so will result in a \$250 back-charge, per occurrence.
- .20 The Contractor is responsible for cleaning its own materials and debris. Failure to maintain a clean work site daily will result in others performing the work at the Owner's request, and the Contractor will be backcharged for the cleaning cost plus construction administration fees. This may be done without the typical 3-day notice to the Contractor.
- .21 The Contractor must send a qualified representative, knowledgeable in the Project and authorized to make decisions on behalf of the Contractor, to every Project meeting.
- .22 The Contractor shall cooperate with the Owner's school principal and custodial staff; however, if any additional work is requested the Contractor shall not proceed unless written approval is received from the Owner. The Contractor will not be compensated for any additional work performed without the Owner's prior written approval.
- .23 Deliveries sent to the Project site will not be signed for or unloaded by the Owner. They will be directed to the construction site and if no employee is on site, the delivery will be rejected, at the Contractor's expense.
- .24 The General Construction Contractor shall be responsible for managing dust and dirt. On the exterior, site shall be watered down frequently to prevent dust clouds from rising. Streets shall be maintained clean per the Construction Manager's request.
- .25 All hot tar roofing shall be installed after school hours or on weekends/holidays only. Kettles shall not be lit until all students have left the Owner's building.
- .26 The Contractor shall submit a weekly work schedule indicating workdays, work hours and manpower allocation.
- .27 No storage of materials will be permitted within the Owner's buildings at any time during construction. The Contractor must provide exterior storage containers when required. The Contractor shall be responsible for securing appropriate space for its material with the Construction Manager prior to delivery. Final location of storage containers shall be determined by the Owner and/or Construction Manager. If insufficient space is available on the site, the Contractor shall provide local off-site storage, storage containers, etc. at its own cost and expense. Should any of the material stored on-site obstruct the progress of any portion of the Work or the Project, this material shall be removed by the Contractor without reimbursement of cost, from place to place or from the premises, as the Construction Manager may direct.
- .28 The General Construction Contractor shall be responsible for maintaining all appropriate site safety signage.
- .29 The Contractor shall be responsible for protecting the Owner's property. All existing shrubs, trees, lawn fixtures, sculptures and miscellaneous equipment shall be protected at all times. Any removals or relocation of said objects, if allowed shall be as directed by the Owner in writing.
- .30 The General Construction Contractor shall provide and service portable lavatories for the duration of construction as provided in the Contract Documents. Lavatories shall be serviced by the General Construction Contractor on a regular basis to maintain sanitary conditions.
- .31 The General Construction Contractor shall protect all existing roofs during construction and shall be responsible for any damage to roofs during construction. The General Construction Contractor shall make all repairs to any damaged areas, as required by the manufacturer of the roof system.
- .32 The General Construction Contractor shall be responsible for providing weather-proof protection over all rough openings, including windows.
- .33 The Contractor shall be responsible for conducting pre-construction walk-throughs and videotaping existing conditions. The Contractor shall schedule a representative of both the Owner and the Construction Manager to be present at this taping. In the absence of this record, the Contractor shall be responsible for paying the costs associated with any and all repairs in an area where the Contractor is working or has worked, as may be deemed necessary by the Owner or the Construction Manager.

- .34 Manufacturers Material Safety Data Sheets (MSDS) shall be available at the site for all products used in the Project.
- .35 No weapons are permitted on the Owner's property by law.
- .36 Neither the Contractor nor any person on its behalf shall, in any manner, engage in discrimination, intimidation or harassment of any person on the Project site.
- .37 Proper attire is required for personal safety and clothing must not sexually explicit or contain messages of a vulgar nature, disrespectful of ethnic or religious groups, or which promote the use of tobacco, alcohol or drugs.
- .38 Only materials and equipment that are to be used directly in the Work shall be brought to and stored on the Project site by the Contractor. After equipment is no longer required for the Work, it shall be promptly removed from the Project site. Protection of construction materials and equipment stored at the Project site from weather, theft, damage, and all other adversity is solely the responsibility of the Contractor.
- **.39** The Contractor will ensure that the Work, at all times, is performed in a manner that affords reasonable access, both vehicular and pedestrian, to the site of the Work and all adjacent areas. The Work will be performed in such a manner that public areas adjacent to the site of the Work will be free from all debris, building materials and equipment likely to cause hazardous conditions. Without limitation of any other provision of the Contract Documents, the Contractor will use its best efforts to minimize any interference with the occupancy or beneficial use of (1) any areas and buildings adjacent to the site of the Work; or (2) the Owner's building in the event of partial occupancy, as more specifically described in Section 9.9.
- .40 The Contractor is required to protect its own Work and work areas, preconstruction, during construction and post construction.
- .41 During exterior renovation work, overhead protection shall be provided for any sidewalks or areas immediately beneath the work site or such areas shall be fenced off and provided with warning signs to prevent entry.
- .42 The Contractor shall exert utmost care and diligence when working in or near any existing buildings or site work. The absence of protection around such items shall not excuse the Contractor from its liability to provide protection. Any damage to existing buildings, sitework or facilities due to the actions or inactions of the Contractor shall be repaired by and charged to the Contractor.
- .43 The Contractor shall be responsible for the removal and replacement of existing ceiling tiles and grid in areas of the existing building where its Work is required and new ceilings are not scheduled for installation. In the event that the existing ceilings are damaged and cannot be replaced to the satisfaction of the Owner, the responsible contractor shall be liable for the costs of replacing in kind, the existing ceilings with new tile and grid.
- .44 The General Construction Contractor shall provide necessary and required security measures to adequately safeguard the construction site from vandalism and intrusion of unauthorized persons. The General Construction Contractor shall submit its means and methods of security to the Construction Manager for review and comment. The Project site must be secured 24 hours a day, 7 days a week including holidays. The General Construction Contractor's failure to secure the site as required by this paragraph will result in the Owner engaging the services of such necessary personnel so as to provide such security. No notice will be given the General Construction Contractor of the Owner's intention to engage such security services and all costs and expenses associated with the Owner's security of the site in this regard will be back charged to the General Construction Contractor. While the Owner may have security guards patrolling the project areas, the function of such security guards is not for the purpose of specifically guarding the Contractor's property or operations of work.
- .45 The Contractor and any entity for which the Contractor is responsible shall not erect any sign on the Project site without the written consent of the Owner, which may be withheld in the sole discretion of the Owner.
- .46 Without limitation of any other provision of the Contract Documents, the Contractor will comply with all reasonable rules and regulations promulgated by the Owner or Construction Manager in connection with the use and occupancy of the Project site and the buildings, as amended from time to time by the Owner or the Construction Manager.

**§ 3.13.5** Only materials and equipment that are to be used directly in the Work shall be brought to and stored on the Project site by the Contractor. After equipment is no longer required for the Work, it shall be promptly removed from the Project site. Protection of construction materials and equipment stored at the Project site from weather, theft, damage, and all other adversity is solely the responsibility of the Contractor.

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**§ 3.13.6** The Contractor shall ensure that the Work, at all times, is performed in a manner that affords reasonable access, both vehicular and pedestrian, to the site of the Work and all adjacent areas. The Work will be performed in such a manner that public areas adjacent to the site of the Work will be free from all debris, building materials and equipment likely to cause hazardous conditions. Without limitation of any other provision of the Contract Documents, the Contractor shall use its best efforts to minimize any interference with the occupancy or beneficial use of (1) any areas and buildings adjacent to the site of the Work; or (2) the building in the event of partial occupancy, as more specifically described in Section 9.9.

**§ 3.13.7** The Contractor shall not permit any workers to use any existing facilities at the Project site, including without limitation, lavatories and toilets. To gain access to the Work, entrances and parking areas will be designated by the Owner for the Contractor's use. Without limitation of any other provision of the Contract Documents, the Contractor will comply with all reasonable rules and regulations promulgated by the Owner in connection with the use and occupancy of the Project site and the Owner's building(s), as amended from time to time by the Owner.

§ 3.13.8 Construction areas that are under the control of the Contractor and therefore not occupied by the Owner's staff or students shall be separated from occupied areas. Provisions shall be made to prevent the passage of dust and contaminants into occupied parts of the Owner's building(s). Periodic inspection and repairs of the containment barriers must be made to prevent exposure to dust or contaminants. Gypsum board must be used in exit ways or other areas that require fire rated separation. Heavy duty plastic sheeting may be used only for a vapor, fine dust or air infiltration barrier, and shall not be used to separate occupied spaces from construction areas.

**§ 3.13.9** Prior to starting Work, the Contractor shall submit a written report to the Owner, Construction Manager and Architect identifying existing damage to roads, walks, lawns, buildings and other property to be affected by this Contract. Failure to submit the report shall render the Contractor responsible for existing damage. The Contractor may request and schedule an inspection with the Owner, Construction Manager and Architect prior to submittal of the report. The Contractor shall obtain the consent of adjoining property owners regarding temporary easements of any other manner of physical encroachment.

# § 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

**§ 3.14.2** The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner, Separate Contractors, or of other Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner, Separate Contractors, or by other Contractors except with written consent of the Construction Manager, Owner, and such other Contractors or Separate Contractors. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Separate Contractors, other Contractors, or the Owner, its consent to cutting or otherwise altering the Work.

**§ 3.14.3** The word "new" used herein shall mean Work which has been or is to be installed under the terms of the Contract for this Project. The word "existing" used herein shall mean existing conditions previous to the award of a Contract for this Project. In order to eliminate cutting and patching as much as possible, the Contractor shall, during the progress of its Work, provide and set proper sleeves, inserts, and other fixtures as required for its new Work and shall give proper and detailed instructions to others where the Work may be affected by their work, with adequate notice prior to the erection of new Work. Cutting and patching work as required to install new Work or remove existing work shall be done carefully and neatly with as little damage as possible. The Contractor shall refer to the Specifications for proper cutting and patching requirements. Any costs caused by defective or ill-timed Work of the Contractor shall be borne by the Contractor. Cutting and patching of any Work shall be made in such a manner as to not breach any provisions of any guaranty or warranty on existing work left in place or any guaranty or warranty required for the Contractor's new Work. Patching of work shall match existing adjacent surfaces and patchwork shall be disguised completely to hide any trace of patching. All new Work on existing roofs must be provided by a company specializing in performing the Work and approved by the existing roofing material manufacturer. It shall be the responsibility of the Contractor performing the cutting and patching to maintain any existing roofing warranty.

§ 3.14.4 Only trades persons skilled and experienced in cutting and patching shall perform such work.

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# § 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. On a daily basis, the Contractor shall clean the areas in which it has performed work and shall remove all waste, materials, rubbish, its tools, construction equipment, machinery and surplus materials. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project. The Contractor shall completely clean the site of the Work, removing and disposing of all construction-related debris and rubbish, and cleaning all Work-related stains, spots, marks, dirt, mortar smears, plaster smears, paint smears, caulking smears, and other foreign materials from exposed surfaces inside and outside the Owner's buildings and within the Project limit lines.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner, or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement from the Contractor. At its option, the Owner may deduct the cost of clean-up pursuant to this Section 3.15.2 from any payments otherwise due to the Contractor pursuant to this Contract.

# § 3.16 Access to Work

The Contractor shall provide the Owner, Construction Manager, and Architect with access to the Work in preparation and progress wherever located. Federal, state, and local agencies with jurisdiction over the Project shall at all times have access to the Work wherever it is in preparation or progress. The Contractor shall provide for such access so that such agencies may perform their functions. The Contactor shall also allow access for all required tests and inspections.

# § 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner, Construction Manager, and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner, Architect, or Construction Manager. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect through the Construction Manager.

#### § 3.18 Indemnification

**§ 3.18.1** To the fullest extent permitted by law, the Contractor shall, and cause its Subcontractors to, defend, indemnify and hold harmless the Owner, Construction Manager, Architect, and their consultants, officers, directors, board members, agents and employees of any of them (collectively, "Indemnitees," individually, "Indemnitee") from and against all losses, damages, liabilities, actions, causes of action, claims, demands, fines, penalties, judgments, costs (including but not limited to attorneys' fees and expenses incurred in connection therewith and in the enforcement of this indemnification), charges, expenses and demands of whatever kind in connection with or arising from or out of (a) any negligent, willful or wrongful act or omission resulting in bodily injury (including death), personal injury or property damage (including loss of use) by the Contractor, its Subcontractors, Suppliers, their respective officers, employees, servants, agents, suppliers, invitees, successors and assigns (collectively, "Contractor Parties," and individually, "Contractor Party"), (b) performance of or failure to perform the Work or any breach of this Contract or infringement of any patent right by any Contractor Party, or (c) any statutorily imposed liability for injury to employees or failure to comply with any laws or regulations affecting the Work, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Nothing contained herein shall be construed to obligate the Contractor to indemnify, defend, and hold an Indemnitee harmless for claims caused solely by the Indemnitee's negligent acts or omissions.

The Contractor agrees to include the following indemnity provision in each and every contract it enters into with a Subcontractor, and to require that Subcontractor to include such provision in each contract it enters into with any lower tier Sub-subcontractor: "To the fullest extent permitted by law, sub-contractor shall defend, indemnify and hold harmless the Contractor, Owner, Owner's Consultants, Construction Manager's and Architect's consultants, and each of their respective representatives, board members, employees, directors, officers, and agents, from and against any and all claims, suits, actions, damages, losses, fines, penalties, costs, charges and expenses, including but not limited to attorneys' fees and the costs of any proceeding, arising out of or resulting from any performance of or failure to perform the Work, acts or omissions of the Subcontractor, its lower-tier Sub-subcontractors, and others for whom the Subcontractor is responsible, provided that such claim, damage, loss or expense is attributable to bodily

injury, sickness, disease or death, or economic losses or damages, damage to or destruction of property, and for environmental damage, or to injury to or destruction of tangible property and nuisance, but only to the extent caused by the acts or omissions or a breach of contract of the a Subcontractor, a Sub-Subcontractor to Subcontractor, and any person or entity directly or indirectly employed by them or any person or entity for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder."

**§ 3.18.2** In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

§ 3.18.3 The Contractor's defense and indemnity obligations under this Section 3.18 shall specifically include all claims and judgments that may be made against the Indemnitees under the Labor Law of the State of New York, and similar laws of other state or governmental bodies having jurisdiction; and further, against claims and judgments arising from violation of public ordinances and requirements of governing execution of the Work.

**§ 3.18.4 Claims by Governmental Authorities.** To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the Indemnitees from and against claims, damages, losses, and expenses arising out of any claims made against the Indemnitees under the laws of federal, state, or other governmental bodies having jurisdiction over the Work, including but not limited to claims arising from violation of public ordinances and other requirements of governing authorities, due to the Contractor's method of execution of the Work or implementation of any of the Contractor's other obligations under the Contract Documents.

§ 3.18.5 Liens and Security Interests. To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the Indemnitees from and against any actions, lawsuits, or other proceedings brought against Indemnitees as a result of liens or security interests of any type arising from the Work and filed against the Work, the site of any of the Work, the Project site and any improvements thereon, payments due the Contractor, or any portion of the property of any of the Indemnitees.

**§ 3.18.6 Intellectual Property.** The Contractor shall defend, indemnify, and hold harmless the Indemnitees from and against any claim or demand for patent fees, royalties, or otherwise on account of any invention, machine, article, process, copyright, or arrangement that may be used by the Contractor in performing the Work, other than as to any of the foregoing expressly called for in the Contract Documents to be so used. In the event of any injunction or legal action regarding such claim or demand that results in stopping the Work in whole or part, the Owner shall have the right to direct the Contractor to change the manner of performance of the Work to avoid such stoppage, all cost and expense occasioned thereby to be borne solely by the Contractor.

§ 3.18.7 The Contractor shall further indemnify and hold harmless the Indemnitees from and against any costs and expenses (including reasonable attorneys' fees) incurred by any of the Indemnitees in enforcing any of the Contractor's defense, indemnity, and hold harmless obligations under this Section 3.18 or as may otherwise be provided elsewhere in the Contract.

**§ 3.18.8** Subject to Section 3.18.9, all obligations of the Contractor under this Section 3.18 to defend the Indemnitees are obligations to provide full defenses at the sole cost and expense of the Contractor, regardless of any alleged culpability on the part of any Indemnitee or any ultimate determination of relative shares of liability of any Indemnitee or limitation of the Contractor's indemnity obligations in light of such determination.

**§ 3.18.9** To the extent any defense, indemnity, or hold harmless obligations under this Section 3.18 are made void or otherwise impaired by any law controlling their construction (including but not limited to laws limiting such obligations to the extent of the portion of damages caused by an indemnitor), such obligations shall be deemed to conform to the greatest rights to defense and indemnity permitted by such law (including but not limited to New York State General Obligations Law Section 5-322.1).

**§ 3.18.10** All provisions of this Section 3.18 shall survive termination of the Agreement or final completion. No obligations under this Section 3.18 shall be construed to negate, abridge, or reduce other rights or obligations to defense and indemnity, including but not limited to common law indemnity, which would otherwise exist as to a party or person described in this Section 3.18.

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# § 3.19 Existing Features and Underground Data

§ 3.19.1 The location of existing features shown on plans is intended for general information only. The Contractor, alone, is responsible for accurate determination of the location of all structures, and shall not be entitled to any increase in the Contract Sum or Contract Time due to difficulties or distances encountered in the Work, which should have been foreseeable thereby.

§ 3.19.2 The locations, depths and data as to underground conditions have been obtained from records, surface indications and data furnished by others. Information furnished is solely for the convenience of the Contractor without any warranty, expressed or implied as to its accuracy or completeness. The Contractor shall make no claim against the Owner, Construction Manager or Architect with respect to the accuracy or completeness of such information if it is erroneous, or if the conditions found at the time of construction are different from those as indicated.

# § 3.20 Construction Stresses

§ 3.20.1 The Contractor shall be solely responsible for the conditions which develop during construction and in the event any structure is dislocated, over strained, or damaged so as to affect its usefulness, the Contractor shall be solely responsible. The Contractor shall, at its own expense, take whatever steps necessary to strengthen, relocate, or rebuild the structure to meet all applicable requirements.

§ 3.20.2 The Contractor is responsible for restoration or repair of utilities, private property, buildings, pavement, walkways, roads, or other property damaged by its activities under this Agreement.

# § 3.21 Training and Instructions

§ 3.21.1 Upon Substantial Completion of the Work, the Contractor shall orient and instruct personnel of the Owner designated by it in the operation and maintenance of all equipment furnished by the Contractor and shall turn over all pertinent literature and operational manuals relating to the equipment. The format for organizing, binding, and delivering such manuals shall be as described in the Specifications.

# **ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER**

# § 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 The Construction Manager is the person or entity retained by the Owner pursuant to Section 2.3.3 and identified as such in the Agreement.

§ 4.1.3 The Architect is the interpreter of the technical requirements of the Drawings and Specifications with regard to questions the Contractor may have concerning its obligations under either. The Architect shall render such interpretations with such promptness as necessary to maintain progress of the Work. All changes in the Work must be processed through the Architect.

# § 4.2 Administration of the Contract

§ 4.2.1 The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be the Owner's representatives during construction until the date the Architect issues the final Certificate for Payment and during the correction period described in Article 12. The Construction Manager and Architect have the authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect will keep the Owner and the Construction Manager reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner and Construction Manager known deviations from the Contract Documents and defects and deficiencies observed in the Work.

§ 4.2.3 The Construction Manager shall provide one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner and Architect reasonably informed of the progress of the Work, and will promptly report to the Owner and Architect known deviations from the Contract Documents and the most recent Project schedule, and defects and deficiencies observed in the Work.

§ 4.2.4 The Construction Manager will schedule and coordinate the activities of the Contractor and other Contractors in accordance with the latest approved Project Schedule. The Contractor shall participate with other Contractors and the Construction Manager, the Architect and Owner in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule deemed necessary by the Owner or Construction Manager. The approved construction schedules shall be integrated into the Project Schedule and constitute the schedules to be used by the Contractor, other Contractors, the Architect, the Construction Manager and the Owner until subsequently revised.

§ 4.2.4.1 The Contractor shall assume full responsibility for the execution of its Work in the allotted duration times set forth in the Project Schedule.

§ 4.2.5 The Construction Manager, except to the extent required by Section 4.2.4, and Architect will not have control over, or charge of, construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Section 3.3.1, and neither will be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Neither the Construction Manager nor the Architect will have control over or charge of or be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work.

§ 4.2.6 Communications Facilitating Contract Administration. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Construction Manager, and shall contemporaneously provide the same communications to the Architect about matters arising out of or relating to the Contract Documents. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with other Multiple Prime Contractors shall be through the Construction Manager and shall be contemporaneously provided to the Architect if those communications are about matters arising out of or related to the Contract Documents. Communications by and with the Owner's own forces shall be through the Owner.

§ 4.2.7 The Construction Manager and Architect will review and certify all Applications for Payment by the Contractor, in accordance with the provisions of Article 9.

§ 4.2.8 The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents and will notify each other about the rejection. The Construction Manager shall determine in general whether the Work of the Contractor is being performed in accordance with the requirements of the Contract Documents and notify the Owner, Contractor and Architect of defects and deficiencies in the Work. Whenever the Construction Manager considers it necessary or advisable, the Construction Manager will have authority to require additional inspection or testing of the Work in accordance with Sections 13.5.2 and 13.5.3, upon written authorization of the Owner, whether or not such Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of Sections 4.2.18 through 4.2.20 inclusive, with respect to interpretations and decisions of the Architect. However, neither the Architect's nor the Construction Manager's authority to act under this Section 4.2.8 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing any of the Work.

§ 4.2.9 Utilizing the submittal schedule provided by the Contractor, the Construction Manager shall prepare, and revise as necessary, a Project submittal schedule incorporating information from other Contractors, the Owner, Owner's consultants, Owner's Separate Contractors and vendors, governmental agencies, and participants in the Project under the management of the Construction Manager. The Project submittal schedule and any revisions shall be submitted to the Architect for approval.

§ 4.2.10 The Construction Manager will receive and promptly transmit to the Architect all submittals from the Contractor such as Shop Drawings, Product Data and Samples. The Construction Manager's actions will be taken in accordance with the Project submittal schedule approved by the Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review by the Architect.

§ 4.2.11 The Architect will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Upon the Architect's completed review, the Architect shall transmit its submittal review to the Construction Manager.

§ 4.2.12 Review of the Contractor's submittals by the Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5 and 3.12. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.12.1 The Architect's review of Contractor's submittals shall be limited to an initial submittal and one (1) resubmittal. If the Architect is required to review additional submittals because the initial submittal and resubmittal failed to conform to the information given and the design concept expressed in the Contract Documents, the amount of compensation paid to the Architect by the Owner for additional services shall be deducted from the payments to the Contractor.

§ 4.2.12.2 The review will not be considered complete until an "ACTION" stamp or other written notice to that effect has been received by the Contractor.

§ 4.2.13 The Construction Manager will prepare Change Orders, Allowance Disbursements and Construction Change Directives.

§ 4.2.14 The Construction Manager and the Architect will take appropriate action on Change Orders or Construction Change Directives in accordance with Article 7 and the Architect will have authority to order minor changes in the Work as provided in Section 7.4. The Architect, in consultation with the Construction Manager, will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.15 Utilizing the documents provided by the Contractor, the Construction Manager will maintain at the site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These will be available to the Architect and the Contractor, and will be delivered to the Owner upon completion of the Project.

§ 4.2.16 The Construction Manager will assist the Architect in conducting inspections to determine the dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion in conjunction with the Architect pursuant to Section 9.8; and receive and forward to the Owner written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor's compliance with the requirements of the Contract Documents.

§ 4.2.17 If the Owner and Architect agree, the Architect will provide one or more project representatives to assist in carrying out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

§ 4.2.18 The Architect will interpret and decide matters concerning performance under, and requirements of the Contract Documents on written request of the Construction Manager, Owner or Contractor through the Construction

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Manager. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

**§ 4.2.19** Interpretations and decisions of the Architect will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings.

**§ 4.2.19.1** If Work is described or indicated in a manner which makes it impossible to carry out the requirements of the Contract Documents, or should discrepancies appear among the Contract Documents, the Contractor shall request interpretation before proceeding with the Work. If the Contractor fails to make such a request, no excuse will be entertained for failure to carry out the Work of the Contract Documents. Should a conflict occur in or between Contract Documents, the Contractor is deemed to have included in the Contract Sum the more expensive manner of doing the Work.

§ 4.2.20 The Architect's decisions, after consultation with the Owner, on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

**§ 4.2.21** The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager's recommendation. The Architect will review and respond in writing to the Construction Manager to requests for information about the Contract Documents. The Construction Manager's recommendation and the Architect's response to each request will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

# ARTICLE 5 SUBCONTRACTORS

# § 5.1 Definitions

**§ 5.1.1** A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include other Contractors or Separate Contractors or the subcontractors of other Contractors or Separate Contractors.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

# § 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

**§ 5.2.1** Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, within 10 days after award of the Contract, shall furnish in writing to the Construction Manager for review by the Owner, Construction Manager and Architect the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Construction Manager may reply within 14 days to the Contractor in writing stating (1) whether the Owner, the Construction Manager or the Architect has reasonable objection to any such proposed person or entity or, (2) that the Construction Manager, Architect or Owner requires additional time for review. Failure of the Construction Manager, Owner, or Architect to reply within the 14-day period shall constitute notice of no reasonable objection.

**§ 5.2.1.1** In no case shall payments be made on the Contract until a complete list of Subcontractors has been submitted by the Contractor to the Construction Manager for review by the Owner, Construction Manager, and Architect. Such list shall not be considered complete if the Owner, Construction Manager or Architect has any reasonable objection to any name listed thereon. Such list shall be submitted and resubmitted if necessary until it is considered complete.

**§ 5.2.1.2** Subcontractors will not be acceptable unless, when requested by the Owner, Architect or Construction Manager, evidence is furnished by the Contractor that the proposed Subcontractor has satisfactorily completed similar subcontracts as contemplated under this Contract, and has the necessary experience, personnel, equipment, plant and financial ability to complete the proposed subcontract in accordance with the intent of the Contract Documents and the Project Schedule. As verification of financial ability, the Owner reserves the right to request and

receive up to five (5) years of financial statements, bank references, bond/insurance company references and all other information required to assess financial ability.

**§ 5.2.2** The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

**§ 5.2.3** If the Owner, Construction Manager or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner, Construction Manager and Architect have no objection.

**§ 5.2.4** The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution.

§ 5.2.5 The Maintenance of the Project Schedule is critical. The Contractor shall award subcontracts to entities capable of performing in a manner that will maintain the Project Schedule and require its subcontractors to complete their work in accordance with the Project Schedule.

**§ 5.2.6** Upon written request from or on behalf of the Owner, the Contractor shall provide to the Owner executed, unredacted copies of all subcontracts, purchase orders or other agreements relating to the Work.

#### § 5.3 Subcontractual Relations

§ 5.3.1 By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors. Each subcontract shall contain provision for execution of lien waivers in form and substance acceptable to the Owner as a condition of payment by the Contractor. The Contractor shall require each Subcontractor to (1) inspect the Project site, including all relevant surfaces and job conditions, before beginning the Work and (2) accept or cite necessary corrections in the Project site, including surfaces or job conditions, before beginning the Work.

§ 5.3.2 The Contractor shall promptly notify the Owner and Architect of any material defaults by any Subcontractor or whether it has terminated its agreement with any of its Subcontractors for any reason.

#### § 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner pursuant to Article 14 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 60 days, through no fault of the Subcontractor, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor Contractor or other entity.

§ 5.4.4 All subcontracts over \$10,000 shall be in writing with copies of the written subcontract provided to the Owner promptly upon request.

§ 5.5 Payments to Subcontractors; Release of Liens and Claims. The Contractor shall pay each Subcontractor in accordance with subparagraph 9.6.2. The Contractor shall require each Subcontractor to submit with each application for payment a Release of Liens and Claims in a form approved by the Owner. The Owner shall have no obligation to pay, or to see the payment of any monies to any Subcontractor.

§ 5.6 No Relationship with Subcontractors. Nothing contained in this Contract shall be deemed to create any contractual relationship between the Owner and any Subcontractor or to create rights in any Subcontractor against the Owner. The Contractor shall promptly advise the Owner of any claim or demand by a Subcontractor claiming that any amount is due to such Subcontractor or claiming any default by the Contractor in any of its obligations to such Subcontractor.

§ 5.7 Discharge of Construction Liens. If any of the Contractor's Subcontractors or Sub-subcontractors file a construction lien against the Project or the Owner's Project funds, the Contractor shall within five (5) days of receipt of notice from the Owner, cause any such liens to be released by procuring and recording a bond or otherwise arrange for the removal or discharge of the lien. If the Contractor does not cause the lien to be released and discharged or removed, the Owner shall have the right to pay all sums necessary to obtain such a release and discharge, and to cause the costs it incurs in doing so (including reasonable attorneys' fees) to be paid by the Contractor. The Contractor shall indemnify, defend, and hold harmless the Owner from all claims, losses, demands, and causes of action or suits of whatever nature, including with respect to attorneys' fees incurred by the Owner, arising out of any such lien. The Contractor's obligation to indemnify in this paragraph shall be in addition to the Contractor's obligations to indemnify set forth elsewhere in this Contract.

# ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

# § 6.1 Owner's Right to Perform Construction with Own Forces and to Award Other Contracts

§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, which include persons or entities under separate contracts not administered by the Construction Manager, and to award other contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. Should the Contractor sustain any damage or delay through any act or omission of other Contractors having a contract with the Owner, or should the Contractor sustain any damage or delay through any act or omission of a Subcontractor, the Contractor shall have no claim against the Owner or its Architect or Construction Manager for such damage or delay.

§ 6.1.2 When the Owner performs construction or operations with the Owner's own forces or Separate Contractors, the Owner shall provide for coordination of such forces and Separate Contractors with the Work of the Contractor, who shall cooperate with them.

§ 6.1.2.1 The Contractor shall provide for coordination of its activities with the activities of each other Contractor. This includes, but is not limited to, the Owner's own forces or separate the Contractor's employed directly by the Owner.

§ 6.1.3 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.1.4 The Contractor accepts assignment of, and liability for, all purchase orders and other agreements for procurement of materials and equipment that are identified as part of the Contract Documents. The Contractor shall be responsible for such pre-purchased items, if any, as if the Contractor were the original purchaser. The Contract

Sum includes, without limitation, all costs and expenses in connection with delivery, storage, insurance, installation and testing of items covered in any assigned purchase orders or agreements. All warranty and correction of the Work obligations under the Contract Documents shall also apply to any pre-purchased items unless the Contract Documents specifically provide otherwise.

# § 6.2 Mutual Responsibility

§ 6.2.1 The Contractor recognizes and acknowledges that the Project is governed by and subject to the provisions of New York State General Municipal Law §101, et seq., governing the award of contracts on public improvement projects. As such, the Contractor recognizes and acknowledges that other Contractors or Separate Contractors will be performing work on the Project in conjunction with it. As such, the Contractor shall afford the Owner's own forces and other Contractors or Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.1.1 The Contractor shall not commit or permit any act which will interfere with the performance of the work of any other Contractor or Separate Contractor performing work on the Project. If the Contractor sustains any damage through any act or omission of Separate or other Contractors having a contract with the Owner for the performance of work upon the site or of work which may be necessary to be performed for the proper execution of the work to be performed hereunder, or through any act or omission of a subcontractor of such Separate or other Contractor, the Contractor shall promptly notify the Owner and the Construction Manager of such damage

§ 6.2.1.2 The Contractor agrees to defend, indemnify and hold harmless the Owner, Architect, Construction Manager, Consultants and Sub-consultants, from all claims made against any of them arising out of the Contractor's acts or omissions or the acts or omissions of any Subcontractor of the Contractor which have caused damage to the Owner, Architect, Construction Manager, Separate Contractor or other Contractor on the Project. The Owner's right to indemnification hereunder shall in no way be diminished, waived or discharged, or by the exercise of any other remedy provided for by the contract or by law. Further, the Owner shall withhold from the Contractor's Contract Sum an amount sufficient to cover such damage and all expenses and costs associated with the damage sustained.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner's own forces, Separate Contractors or other Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Construction Manager and Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor or other Contractors that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Construction Manager and the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's or other Contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractors or other Contractors that are not apparent.

§ 6.2.2.1 The Contractor shall promptly correct discrepancies or defects in its Work identified by Separate Contractors as affecting proper execution and results of the work of the Separate Contractors.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a Separate Contractors or to other Contractors, because of the Contractor's delays, improperly timed activities or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction, or to property of the Owner, Separate Contractors, or other Contractors as provided in Section 10.2.5 or elsewhere in the Contract Documents.

§ 6.2.5 The Owner, Separate Contractors, and other Contractors shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.2.6 Should the Contractor or its Subcontractors cause damage to the work or property of any Separate Contractor or other Multiple Prime Contractor, the Contractor shall, upon due notice, promptly attempt to settle by agreement or otherwise resolve the dispute with the Separate Contractor or other Multiple Prime Contractor. If such Separate Contractor or other Multiple Prime Contractor sues or makes any other claim against the Owner, Construction Manager, or Architect on account of any damage alleged to have been caused by the Contractor or its

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Subcontractors, the Contractor shall defend, indemnify, and hold harmless the Owner, Construction Manager, and Architect against such claim or proceedings at the Contractor's own expense. The Owner's right to indemnification hereunder shall in no way be diminished, waived or discharged, or by the exercise of any other remedy provided for by the Contract Documents or by law. Further, the Owner shall be entitled to withhold from the Contractor's Contract Sum an amount sufficient to cover such damage and all expenses and costs associated with the damage sustained.

**§ 6.2.7** When the Work of the Contractor or its Subcontractors overlap or dovetail with that of other Contractors, materials shall be delivered and operations conducted to carry on the Work continuously, in an efficient, workmanlike manner.

**§ 6.2.8** In case of interference between the operations of the Contractor and other Contractors, the Construction Manager will be the sole judge of the rights of each contractor and shall have the authority to decide in what manner the Work may proceed, and in all cases its decision shall be final. Any decision as to the method and times of conducting the Work or the use of space as required in this paragraph shall not be basis of any claim for delay or damages by the Contractor.

**§ 6.2.9** The Contractor, including its Subcontractors, shall keep itself informed of the progress of other Contractors and shall notify the Architect or the Construction Manager immediately in writing of lack of progress on the part of other Contractors where such delay will interfere with its own operations. Failure of the Contractor to keep informed of the work progressing on the Project and failure to give notice of lack of progress by others shall be construed as acceptance by the Contractor of the status of the work as being satisfactory for proper coordination with the Contractor's Work.

**§ 6.2.10** Delays or oversights on the part of the Contractor or its Subcontractors in getting any or all of the Work done in the proper way, thereby causing cutting, removing and replacing Work already in place, shall not be the basis for a claim for either an increase in the Contract Sum or Contract Time.

**§ 6.2.11** The Contractor shall promptly correct discrepancies or defects in its Work which have been identified by Separate Contractor(s) or other Contractor(s) as affecting proper execution and results of the work of such Separate Contractor(s) or other Contractor(s).

# § 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, other Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Construction Manager, with notice to the Architect, will allocate the cost among those responsible.

# ARTICLE 7 CHANGES IN THE WORK

# § 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, only by Change Order, Construction Change Directive or field order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents. The Owner may in its sole discretion reduce the scope of the Contractor's Contract with or without any specific reasons therefor.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Construction Manager, Architect and Contractor; a Construction Change Directive requires agreement by the Owner, Construction Manager and Architect and may or may not be agreed to by the Contractor; a field order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.2.1 Field orders are an interpretation of the Drawings or Specifications which order minor changes in the Contractor's work which will not result in an increase or decrease in the Contract Sum. From time to time, the Architect may issue field orders to the Contractor. The work included in such field order shall be performed by the Contractor at no additional cost to the Owner and shall not form the basis for a claim for an extension of the Contract Time. Hence, the Contractor shall perform the work included in field orders so as to cause no delay to its Work and/or the work of other Contractors or Separate Contractors engaged by the Owner in connection with the Project. All field orders shall be given to the Contractor and the Construction Manager by the Architect in writing.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or field order for a minor change in the Work. Additional work performed without authorization of a Change Order will not entitle the Contractor to an increase in the Contract Sum or an extension of the Contract Time. No course of conduct or prior dealings between the parties, nor express or implied acceptance of alterations or additions to the Work, and no claim that the Owner has been unjustly enriched by any alteration or addition to the Work, whether or not there is, in fact, any unjust enrichment of the Owner, shall be the basis for any claim to an increase in any amounts due under the Contract Documents or a change in any time period provided for in the Contract Documents. No amount shall be payable by the Owner to the Contractor for performance of work without a written and fully executed Change Order.

§ 7.1.4 Costs for changes in the Work shall not be allowed in excess of usual rentals charged in the area where the Project is located for similar equipment of like size and condition, including costs of necessary supplies and repairs for operating equipment on site in connection with other work unless its use incurs actual and additional costs to Contractor. If equipment not on Site is required for change in work only, cost of transporting equipment to and from Site will be allowed.

§ 7.1.5 When the Owner or Architect (in association with the Construction Manager) request that the Contractor perform work which is not included in the Contract Drawings or Specifications and which will result in additional cost to the Owner, the Architect shall request that the Contractor submit its proposal for performing such additional work. The Contractor shall submit its proposal to the Construction Manager and Architect for review. The Contractor's proposal shall include a complete itemization of the costs associated with performing its work including labor and materials. All proposals for any work that a Contractor, its Subcontractor(s) or Subsubcontractor(s) perform in connection with additional work shall be properly itemized and supported by sufficient substantiating data, including but not limited to material descriptions, material quantities, material unit prices, labor trade listings, labor hour quantities, labor trade rates, equipment descriptions and equipment rates with a percentage allowance for overhead and profit as set forth in Section 7.3.11. The Contractor's proposal shall also set forth the impact on the milestone and critical path dates set forth in the Contract Documents, the construction schedule and the Project schedule, which would result from implementation of the change, and be accompanied by such other information as the Owner may request.

§ 7.1.6 Overtime, when specifically authorized by the Owner in writing, and not as a corrective measure by the Contractor to expedite the progress of construction as ordered by the Owner based on its determination that the performance of the Work has not progressed to the level of completion required by the approved Schedule, shall be paid for by the Owner on the basis of premium payment only, plus the cost of insurance and taxes based on the premium payment period. Overhead and profit will not be paid by the Owner for overtime.

**§ 7.1.7** Unit prices shall be submitted in the Bid Form for various items as set forth therein, and are subject to approval and acceptance by the Owner. The Owner reserves the right to reject any unit price which is unreasonable or unbalanced, as compared with prevailing costs, or as compared with the unit prices submitted by other bidders for the Project. Approved unit prices quoted shall include all profit, overhead, bonds, insurance, labor, materials, equipment, tools, applicable taxes necessary to complete the work item and shall apply to all work added or work deducted.

# § 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Architect, and Contractor, stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

**§ 7.2.1.4** Changes in the Work involving additional Work or deletion of Work effecting an addition to or subtraction from the Contract Sum shall not be made until the Contractor submits to the Architect and Construction Manager the cost of the added or deleted Work with a complete and detailed listing of all Subcontractors involved, all materials, labor, overhead and profit, the impact on the Contract Time, and an appropriate Change Order has been issued. If requested, the Contractor shall submit detailed quotations for Subcontractors and material suppliers. Changes in the Work when not involving additions or deletions from the Contract Sum shall not be made until the Architect has issued an appropriate Change Order. All Change Orders must have the approval of the Owner, Construction Manager and Architect in writing. No change in Contract Time shall be allowed for Change Orders, except for

substantial changes in scope determined by the Owner. In the case of increased scope, it is expected that Change Order work shall be performed by increased manpower.

§ 7.2.2 Methods used in determining adjustments to the Contract Sum may include those listed in Section 7.3.3, as well as the limitations set forth in Sections 7.3.4 and 7.3.11. The Owner shall have the right to select the method of pricing to be used by the Contractor.

§ 7.2.3 Agreement on any Change Order shall constitute a final settlement of all Claims and other matters related to the change in Work that is the subject of the Change Order, including, but not limited to, all direct and indirect costs associated with such change (including, without limitation, all costs of associated delay, interference, acceleration, inefficiency, overhead, as well as costs of material, labor and supervision), and any and all adjustments to the Contract Sum and the Contract Time. Payment of a Change Order shall constitute accord and satisfaction of all Claims of the Contractor in connection with the change or changes to the Contract addressed by the Change Order and it is understood and agreed that a signed Change Order shall be the complete and fully integrated agreement for all related costs and there are no oral or written understandings, reservations, representations or agreements, directly or indirectly, connected with the Change Order and not affirmatively stated on the signed Change Order. In the event a Change Order increases the Contract Sum, the Contractor shall include the Work covered by such Change Orders in Applications for Payments as if such Work were originally part of the Contract Documents.

**§ 7.2.4** Upon the Contractor's completion of the Change Order work, and prior to payment being made to the Contractor for such work, the Contractor shall provide the Owner with the following information:

- .1 Certified payrolls itemizing the labor actually utilized in connection with the Change Order work; and
- .2 Copies of invoices from its Subcontractors supplying work in connection with the Change Order work.

§ 7.2.5 Additional work performed without authorization of a Change Order will not entitle the Contractor to an increase in the Contract Sum or an extension of the Contract Time, except as provided in Section 7.3, and except in the case of an emergency as provided in Section 10.4.

# § 7.3 Construction Change Directives

**§ 7.3.1** A Construction Change Directive is a written order prepared by the Construction Manager and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly. A Construction Change Directive may also be used to direct the Contract to remedy its nonconforming or defective Work.

**§ 7.3.2** A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order or to direct the Contractor to remedy its nonconforming or defective Work. In the event the Contractor and the Owner cannot agree on the sum by which the Contract Sum or the amount of time by which the Contract Time is to be increased or reduced based upon changes to the scope of the Work as described in Article 7, or due to the Contractor's failure to perform the Work in accordance with the Contract Documents, the Architect or Construction Manager shall issue a Construction Change Directive directing the Contractor to proceed with the disputed Work or correct defective Work and, if applicable, reflecting the addition to or reduction of the scope of the Contractor's Contract and the corresponding change in the Contract Sum or Contract Time, if any.

§ 7.3.2.1 If the Owner and the Contractor cannot agree that the requested Work properly forms the basis for a Change Order or on the sum by which the Contract is to be increased or reduced based upon changes to the scope of Work, the Architect or Construction Manager shall issue a Construction Change Directive signed by the Owner, Construction Manager and Architect reflecting the addition to, or removal of, the scope of Work and the Contractor shall (a) in the case of additional work to be performed by the Contractor, perform such additional work in an expeditious manner so as not to delay the Work of the Contractor or other Contractors working at the site and keep records of its performance of such additional work, and (b) in the case of work to be removed from the scope of the Contractor's Work, refrain from taking any steps in connection with the work associated with the deduction of the Contractor's Scope of Work; (b) the amount the Owner has determined to be the cost associated with the additional work (as those costs are identified and limited in Sections 7.3.4 and 7.3.11) or removal of the scope of the Contractor's Work until the Owner and the Contractor agree upon the increase or decrease in the

Contractor's Contract Sum, or until a claim filed by the Contractor has been determined; and (c) the extent to which the Contract Time will be adjusted as a result of the change in the scope of Work. Any claims must be filed in accordance with the requirements set forth in Article 15 of these General Conditions. Failure to timely file any claim in accordance with requirements set forth therein shall constitute a waiver of such claim.

§ 7.3.3 If the Construction Change Directive provides for a method for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon (unit prices shall be deemed to include all costs and expenses for the Contractor's changed Work, including costs of general conditions, insurance/bonds and overhead and profit attributable to the change);
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee subject to the limitations of Section 7.3.11;
- As provided in Section 7.3.4 subject to the limitations of Section 7.3.11; or
- .5 As provided in Section 7.3.2.1.

**§ 7.3.4** If the Construction Change Directive provides for a reasonable expenditure and savings method of adjusting the Contract Sum, the Construction Manager shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in Section 7.3.11. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Actual costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers compensation insurance;
- .2 Actual costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed. Sales taxes, if any are required, shall be indicated and added after the cost of the change is calculated. No overhead or profit will be paid on sales tax;
- **.3** Actual rental costs of machinery and equipment, exclusive of hand tools, rented from third parties; and
- .4 Actual costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the additional work. The Contractor shall submit with its proposal actual invoices from its insurance broker reflecting actual additional costs associated with the procurement of bonds and insurance. Bond premiums and/or credits shall be invoiced per Change Order. Lump sum bond premium requests will not be considered at the end of the Project.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Sum or Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

**§ 7.3.6** Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager of the Contractor's agreement or disagreement with (1) the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time or (2) the amount of the increase or decrease in the Contract Sum and Contract Time as provided in Section 7.3.2.1. Any claims must be filed in accordance with the requirements set forth in Article 15 of these General Conditions. Failure to timely file any claim in accordance with requirements set forth therein shall constitute a waiver of such claim.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 When the Owner or Architect request that portions of the Contractor's Work originally included in the Drawings or Specifications be deleted and which will result in a reduction of the Contract Sum, the Architect shall request that the Contractor submit its proposal for deleting the scope of such Work from the Contract. The Contractor's proposal shall include a complete itemization of the costs associated with deducting such Work including labor, materials, overhead and profit. The Contractor shall not be entitled to retain its overhead or profit for such work nor shall any of its Subcontractors which were to perform the work being deducted from the Contractor's scope of Work. Additionally, the Contractor shall reflect the reduced cost of premiums on bonds which

are to be supplied herein as a result of such change. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

**§ 7.3.9** Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Construction Manager and Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Construction Manager shall prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.3.11 The limit for the combined overhead and profit included in the total cost to the Owner shall be based on the following schedule:

- .1 For the Contractor, for Work performed by the Contractor's own forces, fifteen percent (15%) of the direct cost for labor and materials.
- .2 For the Contractor, for Work performed by the Contractor's Subcontractor, maximum of five percent (5%) of the amount due the Subcontractor for the Contractor's overhead and profit. For the Subcontractor, for Work performed by the Subcontractor's own forces, ten percent (10%) of the direct cost for labor and materials. The total combined overhead and profit for a change order shall be limited to 15% of the direct cost regardless if the Work is performed by the Contractor or the Subcontractor.
- .3 The markup on any part of the Work a Subcontractor subcontracts will be limited to one overhead and profit figure, in addition to the Contractor's overhead and profit markup. The Subcontractor and Sub-subcontractor may divide the overhead and profit amount as they agree upon.
- .4 Costs to which overhead and profit is to be applied shall be determined in accordance with Section 7.3.4.
- .5 In order to facilitate checking of quotations for extras and credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials, and subcontracts. Labor and material shall be itemized in the manner prescribed above. Where major cost items are subcontracts, they shall be itemized also.
- .6 Overhead and profit mark-up shall include, but not be limited to, the following:
  - .1 home office expense;
  - .2 field office expense;
  - .3 supervision;
  - .4 project management & estimation;
  - .5 small tools & equipment;
  - .6 research & layout;
  - .7 inspections & permits;
  - .8 material handing;
  - .9 record drawings: and
  - .10 safety and cleanup.

# § 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Construction Manager and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Construction Manager that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

# ARTICLE 8 TIME § 8.1 Definitions

**§ 8.1.1** Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

**§ 8.1.2** The date of commencement of the Work is the date established in the Agreement. The date shall not be postponed or extended by the failure to act of the Contractor or persons or entities for whom the Contractor is responsible to act.

**§ 8.1.3** The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8. The date of final completion is the date certified by the Architect and Owner in accordance with Section 9.10. Unless otherwise agreed in writing by the Owner, the Contractor agrees that Final Completion shall occur not more than 30 calendar days after the date of Substantial Completion.

**§ 8.1.4** The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

**§ 8.1.5** Work remaining to be completed after Substantial Completion, shall be limited to items which can ordinarily be completed within a thirty (30) day period (one month) before final payment is made.

# § 8.2 Progress and Completion

**§ 8.2.1** Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

**§ 8.2.1.1** The Contractor recognizes that the Project Schedule is of critical importance to the Owner and that failure by the Contractor to complete the Work in accordance with the construction schedule may cause significant damages to the Owner, including but not limited to the loss of State Aid from the State Department of Education. All aspects of construction must reflect a "time is of the essence" construction strategy. The "Bid Schedules" serve as a guide of critical milestone dates to the Project. Failure to meet intermediate milestone dates will jeopardize the overall Project Schedule. If the Contractor's performance of the Work evidences, to the Owner, Construction Manager or Architect, that timely completion may be in jeopardy, this will mandate the Contractor to increase staff, work overtime, or use other means to recover time, at the costs of the Contractor (s) responsible for delays. In addition, all costs due to delays in completion of the Work shall be borne by Contractor(s) responsible for delays.

**§ 8.2.2** The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner and the Owner's approval of such insurance. The date of commencement of the Work shall not be changed by the effective date of such insurance. The Work can not start until the required insurance and bonds are provided and the Contract has been executed.

**§ 8.2.3** The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion and final completion within the Contract Time. The Contractor agrees that the Work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will ensure full completion thereof within the Contract Time specified and, further, to provide such protections as may be necessary. It is expressly understood and agreed by the Contractor that the time for the substantial and final completion of the Work is a reasonable time for its completion, taking into consideration, among other things, the average climatic range and usual weather conditions prevailing in the Project's locality. The Contractor shall cooperate with the Owner, Architect, and other Contractors on the Project, making every reasonable effort to reduce the Contract Time.

**§ 8.2.4** In no case shall the Contractor delay the progress of the Work, or any part thereof, on account of changes in the Work or disputes caused by proposed or ordered changes in the Work (including the equitable value of the changes), or any disputes or disagreements as to the Work or extra work.

**§ 8.2.5** The Contractor recognizes that achieving Substantial Completion and final completion of the Work in accordance with the time limits set forth in the Agreement and as further set forth in the Milestone Schedule provided in the Project Manual are material conditions of this Agreement, and that if the Contractor fails to achieve Substantial Completion and final completion of the Work in accordance with such schedule, the Owner will incur damages as a result. The Owner and Contractor agree that the amount of such damages is difficult to ascertain with any precision. The Contractor and Owner have attempted to estimate reasonable daily figures for liquidated

damages, not to penalize the Contractor for late completion, but to reasonably estimate probable losses and damages to the Owner in the event of the late completion. If the Contractor does not achieve the completion date and milestone date for each Work item in the Contract, a milestone or critical path date reflected on the Project Schedule, or the date of Substantial Completion or final completion for the Work or any part thereof, liquidated damages will be assessed in the amount of \$1,000.00 for each and every calendar day after such time allowed for completion until Substantial Completion or final completion actually occurs.

**§ 8.2.5.1** The Contractor realizes that time is of the essence on this Contract and the Substantial Completion date and final completion date for each Work item in its Agreement, a Milestone Date reflected on the Project schedule, or the date of Substantial Completion or final completion of the Contractor's Work shall be no later than the date indicated therein. In the event the Contractor fails to complete any Work or substantially complete the Work by said schedule date, the sum per calendar day for each date not met, as delineated above, will be subtracted from the payment due the Contractor (or, if the amount due Contractor as payment is insufficient, any deficiency shall be paid by the Contract to the Owner), except in cases where the Contract Documents.

**§ 8.2.5.2** The said sum per calendar day shall constitute the liquidated damages incurred by the Owner for each day of delay beyond the agreed upon dates of Substantial Completion or final completion. The foregoing liquidated damages are intended to compensate the Owner only for the loss of beneficial use of the Work of the Contract. In the event the Contractor fails to complete all Work under this Contract by said scheduled dates, in addition to the liquidated damages incurred by the Owner in connection with the Contractor's delay, to the fullest extent permitted by law, the Contractor shall be liable for all costs incurred by the Owner for additional services provided by the Architect and Construction Manager, as well as liabilities to other Contractors and Separate Contractors working on the Project.

**§ 8.2.5.3** The Owner's right to liquidated damages shall survive abandonment of the Work by the Contractor or the Owner's termination of the Contract.

**§ 8.2.5.4** Notwithstanding the foregoing, if one or more of the liquidated damages provisions set out in the Agreement are held to be legally unenforceable as a penalty, the Owner shall be allowed to recover actual damages caused by the Contractor's failure to achieve the applicable Contract Time requirements.

**§ 8.2.6** In the event the Contractor fails to complete all Work under this Contract by said scheduled dates, the Contractor will not be permitted to perform any work during normal school hours without the express written authorization of the Owner. Such Work shall only be performed after school hours, Saturdays, Sundays, holidays or periods when school is unoccupied (subject to any restrictions of authorities having jurisdiction over the Project) at no additional cost of any kind to the Owner. In addition to damages incurred by the Owner in connection with the Contractor's delay, the Contractor shall be liable for all costs incurred by the Owner to provide staff, Architect and Construction Manager personnel as required to make the site available to the Contractor and perform inspections during such off hours.

§ 8.2.7 The Contractor understands that in order to meet the requirements of the Project Schedule, including intermittent milestone and critical path dates set forth in the Contract Documents, it may be required to work its personnel and equipment overtime on regular work days and on Saturdays and holidays, the cost of which is included in the Contract Sum. If the Owner specifically approves in writing reimbursement for overtime, the Contractor shall be paid by the Owner on the basis of the premium payment.

**§ 8.2.7.1** The Contractor may request access to the site during times beyond the work hours permitted. Approval is solely at the discretion of the Owner. If approval is given, the Contractor is responsible for paying all additional costs incurred by the Owner, Architect and Construction Manager for providing the site to the Contractor during the additional time periods.

**§ 8.2.8** The Owner shall have the right at any time to modify the Project Schedule; to suspend, delay or accelerate, in whole or in part, the commencement or execution of the Work or any potion thereof or to vary the sequence thereof; and to prescribe the time, order and priority of the various portions of the Work, and all other matters relating to the scheduling of the Work. The Contractor shall not be entitled to additional compensation for any such decisions made by the Owner.

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#### § 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed in the commencement or progress of the Work as a result of: Acts of God (such as tornado, flood, hurricane, pandemics, epidemics, etc. making performance temporarily impossible); the negligent acts or omissions of the Owner, Architect, Construction Manager, other Contractors, or their agents or employees in the performance of their respective obligations for the Work; strikes, lockouts or other labor disturbances (not arising from the labor practices of the Contractor or its Subcontractors, Suppliers, or Sub-subcontractors to comply with their obligations arising under the Contract); unusually adverse weather conditions; freight embargoes (provided that delays by the Contractor, its Subcontractors, Sub-subcontractors or Suppliers do not constitute an excusable cause of delay); changes in the Work to be performed by the Contractor (not caused or resulting from the failure of the Contractor or its Subcontractors, Suppliers or Sub-subcontractors); changes to laws or regulations after the effective date of the Contract; or any other cause beyond the reasonable control of the Contractor and its Subcontractors as determined by the Owner, provided the Contractor has used all reasonable efforts to mitigate the foregoing causes; then the Contractor shall be entitled to a day for day extension of the Contract Time for the established delay to the critical path of the Work subject to the provisions of this Article 8 and Article 15. Notwithstanding anything in the foregoing to the contrary, to the extent a delay is caused by the negligent acts or omissions of the Owner, Architect, Construction Manager, other Contractors, or their agents or employees, the Contractor agree to use its best efforts to provide the Owner with prompt written notice of any such act or omission that could reasonably be expected to cause an excused delay. The extension of time provided under this Section 8.3.1 shall be the Contractor's exclusive remedy.

**§ 8.3.1.1** The Contractor further acknowledges and agrees that adjustments in the Contract Time will be permitted for a delay only to the extent such delay (1) is not caused or could not have been anticipated by the Contractor, (2) could not be limited or avoided by the Contractor's timely notice to the Owner of the delay or reasonable likelihood that a delay will occur, and (3) is of a duration of more than one (1) day.

**§ 8.3.1.2** The Contractor's inability to secure sufficient personnel for the performance of the Work shall not constitute a basis for an extension of time. The Contractor shall not be entitled to an extension of time if the Architect or Construction Manager stops the Work due to the existence of or reasonable suspicion of a deficiency in the Work.

**§ 8.3.1.3** An extension of the Contract Time, if requested by the Contractor, shall only be considered after the Contractor has made reasonable effort to recover the lost time. An extension, or extensions, of time may be granted subject to the provisions of this Article 8, but only after written application therefore by the Contractor. An extension of time shall be only for the number of days of delay which the Architect or Construction Manager may determine to be due solely to the causes set forth in the application for extension of time. The Contractor shall not be entitled to receive a separate extension of time for each one of several causes of delay operating concurrently; but if at all, only the actual period of delay as determined by the Construction Manager or Architect.

§ 8.3.1.4 All requests for additional time shall be made in writing, delivered to the Construction Manager within five (5) calendar days from the time when the circumstance with potential for delay becomes reasonably known to the Contractor, supported by documentation which demonstrates to the Architect and Construction Manager's satisfaction that the critical path of the Work has been significantly altered by the delays to the activities in question through no fault of the Contractor or anyone for whom the Contractor is responsible, and that the Project schedule cannot be maintained by re-ordering other activities within the Project at no cost. This request shall also contain, at a minimum, the following information: (1) date of start of delay; (2) specific cause of delay; (3) effect of delay on construction progress; and (4) date of termination of delay. Upon receipt of the Contractor's request for an extension of time, the Owner will ascertain the facts and extent of the delay, and may, in its sole discretion, extend the time for completion of the Contractor's Work when in its judgment such an extension is justified. The Owner's determination will be final and binding in any litigation commenced by the Contractor against the Owner which arises out of the Owner's denial of an extension of time to the Contractor. Any approval of an extension of the Contractor's time to complete its Work shall be memorialized by written change order, signed by the Owner, Contractor, Architect and Construction Manager. When the Owner determines that the Contractor will be granted an extension of time, such extension shall be computed in accordance with the following: for each day of delay in the completion of its Work, the Contractor shall be allowed one day of additional time to complete its Contract. The Contractor shall not be entitled to receive a separate extension of time for each one of several causes of delay operating concurrently; rather, only the actual period of delay as determined by the Owner or its Architect may be allowed.

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§ 8.3.2 Notwithstanding anything to the contrary in the Contract Documents, an extension in the Contract Time, to the extent permitted and justified under Section 8.3.1, shall be the sole remedy of the Contractor for, and the Contractor waives its right to any claim for damages to the extent arising from, any (1) delay in the commencement, prosecution, or completion of the Work; (2) hindrance or obstruction in the performance of the Work; (3) loss of productivity or acceleration; or (4) other claims for disruption, interference, inefficiencies, impedance, hindrance, acceleration, resequencing, schedule impacts, lack of timeliness by the Owner or its consultants, and lack of coordination, errors or omissions in the design of the Project, cumulative impact of multiple change orders, unavailability of materials or equipment, delays in payment, and other delays and impacts (collective referred to herein as "Delay(s)"). In no event shall the Contractor be entitled to any compensation or recovery of any damages in connection with any Delay, including, but not limited to, delay costs, loss of productivity or efficiency, lost profits, extended jobsite general conditions and home office overhead, consequential damages, lost opportunity costs, impact damages, or other similar remuneration. The Owner's exercise of any of its rights or remedies under the Contract Documents (including, but not limited to, ordering changes in the Work, or directing suspension, rescheduling or correction of the Work), regardless of the extent or frequency of the Owner's exercise of such rights or remedies, shall not be construed as interference, hindrance or obstruction with the Contractor's performance of the Work and shall not entitle the Contractor to any additional compensation. The Contractor shall include a nodamages-for-delay clause in all subcontracts for the performance of the Work.

§ 8.3.3 Delays that affect the scheduled completion of the Work and are attributable to interference between Multiple Prime Contractors, Separate Contractors, Subcontractors, suppliers, utility companies or municipalities, shall be compensated solely by the granting of an extension of time to the Contractor by the Owner to complete the Work without charges to the Owner. The parties acknowledge that the Contract Time takes into account the time necessary for review of submittals and shop drawings, correcting design errors or omissions, coordination amongst other Contractors and Separate Contractors, change orders, delays incurred by seasonal limitations, work by utilities, and other administrative processing by all parties involved and are not compensatory. The Contractor agrees that it has included in its Bid prices the additional cost of doing work under this Contract caused by interference of the Architect, Construction Manager, other Contractors, Separate Contractors, Subcontractors, utility companies, etc. and the other non-compensatory Delays described above.

§ 8.3.4 When the Contract Time has been extended, as provided under Section 8.3, such extension of time shall not be considered as justifying extra compensation to the Contractor for administrative costs, home office, estimating, extended general conditions or other similar impact costs. The Contractor acknowledges that in agreeing to the Contract Sum it assessed the potential impact of the limitations in Section 8.3.2 on its ability to recover additional compensation in connection with a Work delay, interference, impact or hindrance and agrees that those limitations shall apply regardless of the accuracy of the Contractor's assessment or actual costs incurred by the Contractor.

§ 8.3.5 If the Contractor submits a progress report indicating, or otherwise expresses an intention to achieve, completion of the Work prior to any completion date required by the Contract Documents or expiration of the Contract Time, no liability of the Owner to the Contractor for any failure of the Contractor to so complete the Work shall be created or implied.

§ 8.3.6 The intent of the Contract is for Work to follow a logical sequence. The Contractor, however, may be required by the Owner, Construction Manager or Architect to temporarily omit or leave out any section of Work or perform Work out of sequence. Out of sequence work and come back time to these areas shall be performed at no additional cost to the Owner.

§ 8.3.7 Claims relating to Contract Time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.8 The Contractor understands that the timely prosecution of its obligations under the Contract is essential to the efficient completion of the Project and may have a direct bearing on the costs incurred by all other Contractors and Separate Contractors. The Contractor's obligations in this regard include, but are not limited to: 1) completing the Work in an orderly fashion and in accordance with an agreed upon progress schedule; 2) timely coordination and cooperation with the Owner, the Architect and the other Contractors and Separate Contractors to resolve disruptions, interferences or other problems as they arise; 3) providing sufficient personnel, systems and procedures to ensure

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that required materials, supplies and skilled human resources are available so that the Work is timely understood, anticipated, progressed and communicated where required to others involved with the Project; 4) maintaining accurate job progress schedules and systems; 5) timely notifying others working on the site when delays or interferences occur that will affect the Contractor's or other's work pertaining to the Project; 6) providing a skilled, informed and properly supported superintendent at the Project sites and at all required job meetings to provide meaningful information and commitments to efficiently cooperate in coordinating the work of the various contractors; and 7) timely reviewing all job minutes, correspondence and other communications and responding to same when required.

**§ 8.3.9** The Contractor agrees that its failure to timely cooperate and proceed can substantially increase the costs of other Contractors and Separate Contractors in attempting to timely prosecute their obligations under related contracts. Accordingly, the Contractor recognizes that other Contractors and Separate Contractors on the site are third-party beneficiaries of the Contractor's obligation to timely coordinate and prosecute its obligations under the Contract Documents. The Contractor hereby waives and shall not raise as a defense the absence of privity of contract between the Contractor and the other Contractors and Separate Contractors in any claim hereafter asserted by other Contractors or Separate Contractors to recover costs or damages for delay or interference and shall be responsible to other Contractors and Separate Contractors on the site for damages caused by the Contractor's failure to timely and properly perform its contractual obligations under the Contract Documents.

# ARTICLE 9 PAYMENTS AND COMPLETION

#### § 9.1 Contract Sum

**§ 9.1.1** The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents. Notwithstanding anything to the contrary contained in the Contract Documents, the Owner may withhold or offset any payment to the Contractor if and for so long as the Contractor fails to perform any of its obligations under any of the Contract Documents; provided, however, that any such holdbacks shall be limited to an amount sufficient in the reasonable opinion of the Owner to cure any default or failure of performance by the Contractor.

**§ 9.1.2** If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

# § 9.2 Schedule of Values

**§ 9.2.1** Within 15 days of Contract Award, the Contractor shall submit to the Construction Manager a schedule of values allocated to various portions of the Work for each building, prepared in the currently authorized form of AIA Document G703 – Continuation Sheet and supported by such data to substantiate its accuracy as the Construction Manager and Architect may require. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. The schedule of values shall state the names of all Subcontractors, Sub-subcontractors and material suppliers and the amounts to become due to each breakdown by specification section. The schedule of values shall contain, along with individual work items, separate line items for (1) mobilization, bonds, insurance, etc., (2) value of administrative close out submittals, (3) Allowance(s) if required elsewhere in the Project Manual, (4) separate subtotals by building, and (5) buildings further separated between "Additions/New Construction" and "Renovations/Reconstruction" as applicable. At the direction of the Architect, it shall include quantities, if applicable. The total for all items shall aggregate the Contract Sum.

**§ 9.2.2** Any schedule of values that fails to include sufficient detail, is unbalanced or exhibits "front loading" of the value of the Contractor's Work will be rejected. Furthermore, if the schedule of values has been approved by the Construction Manager and the Architect and is subsequently used, but later is found by the Construction Manager or Architect to be improper for any reason, sufficient funds shall be withheld from the Contractor's future applications for payment to ensure an adequate reserve (exclusive of normal retainage) to complete the Contractor's Work.

**§ 9.2.3** For each item, the value of labor shall be listed separately from the value of materials and other costs. All items within the schedule shall be of the same order of magnitude. The Schedule of Values shall contain line items in equal amounts allocated to initial project requirements (i.e., 1% bonds, 1% insurance, 1% mobilization, 1% general requirements, etc. ) and final project requirements (i.e., 1% for demobilization, 1% punch lists, 1% final cleaning, 1% as-built drawings and 1% O&M Manuals). Profit and overhead shall be included in each item. Included with this schedule shall be a cash flow projection upon which the Owner will be entitled to rely for the purpose of making adequate funds available for the Work.

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# § 9.3 Applications for Payment

§ 9.3.1 In accordance with Article 5 of the Agreement and the Payment Procedures in the Specifications, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, notarized and reflecting retainage as provided elsewhere in the Contract Documents. Applications for Payment will be in the currently authorized form of AIA Document G732 - 2019, "Application and Certificate for Payment," accompanied by AIA Document G703-1992, "Continuation Sheet," and must include (add and/or deduct) adjustments to the Contract Sum resulting from Work performed under approved Change Orders (specified under Article 7) and shall be shown separately on the application for previous and current periods. Each Application for Payment shall be prepared in such form and supported by such data to substantiate the Contractor's right to payments as the Owner and/or Architect may require such as copies of requisitions from Subcontractor and material suppliers. Each Application for Payment forwarded to the Owner by the Architect shall be subject to audit and approval by the Owner in accordance with the Owner's normal audit procedures. The Application for Payment must be accompanied by: (a) a current Contractor's lien waiver; (b) duly executed waivers of public improvement liens from all Subcontractors and material suppliers representing satisfaction of payment of all amounts requested by the Contractor on behalf of such entities in any previous application for payment; (c) certified payroll for all employees of the Contractor and employees of Subcontractors performing Work on the Project; (d) for contracts of \$250,000 and more, all Contractors and Subcontractors must attach a copy of proof of completion of the OSHA 10 course to the first Certified Payroll submitted and on each succeeding payroll where any new or additional employee is first listed; and (e) such other information which the Owner, Construction Manager or Architect request the Contractor furnish in connection with its Application for Payment.

**§ 9.3.1.1** The Construction Manager and Architect shall review the application for payment submitted by the Contractor and shall advise the Contractor of any adjustments to be made thereto. The Construction Manager and/or the Architect may make such adjustments under the circumstances set forth in Section 9.5.1. If any such adjustments are made by the Architect or Construction Manager, the Contractor shall submit an original itemized revised application with all documentation required by Section 9.3.1.

**§ 9.3.1.2** As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders.

**§ 9.3.1.3** Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or material supplier unless such Work has been performed by others whom the Contractor intends to pay.

**§ 9.3.1.4** Until Substantial Completion, the Owner shall pay ninety-five percent (95%) of the amount due the Contractor on account of progress payments, less an amount necessary to satisfy any claims, liens, or judgments against Contractor, which have not been suitably discharged. In accordance with Section 9.8.5, the Owner shall pay the entire amount retained from previous progress payments less two (2) times the amount required to complete items identified in a list prepared in accordance with Section 9.8.2 and the amount required to satisfy any outstanding claims, liens, or judgments against the Contractor.

**§ 9.3.1.5** The Contractor and its Subcontractors are required to submit certified payroll information to the Owner in accordance with New York State Law.

**§ 9.3.2** Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the Project site for subsequent incorporation in the Work. If approved in advance in writing by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest. The costs of applicable insurance, storage, and transportation to the site for such materials and equipment stored off the site shall not increase the Contract Sum.

**§ 9.3.2.1** Payment may be made for materials and equipment delivered and suitably stored on-site for future incorporation in the Work, subject to the following conditions:

- .1 Request for payment shall be considered for material or equipment, which is in short or critical supply, which has been specially fabricated for the Project or, at the discretion of the Construction Manager and Architect, for other materials or equipment.
- .2 A request for payment of material stored on-site must be made by the Contractor 10 days prior to actual, monthly cut-off date for Payment Applications.
- .3 Procedures required by the Owner shall include, but not necessarily limited to, submission by the Contractor to the Construction Manager and Architect of bills of sale and bills of lading for such materials and equipment, provisions of opportunity for the Construction Manager's and Architect's visual verification that such materials and equipment are in fact in storage; and, if stored off-site, submission by the Contractor of verification that such materials and equipment are stored in a bonded warehouse.
- .4 All such materials and equipment, including materials and equipment stored on-site but not yet incorporated into the Work, upon which partial payments have been made shall become the property of the Owner, but the care and protection of such materials and equipment shall remain the responsibility of the Contractor until incorporation into the Work and accepted by the Owner at substantial completion, including maintaining insurance coverage on a replacement cost basis without voluntary deductible.

**§ 9.3.2.2** Payment may be made for materials and equipment delivered and suitably stored off-site for future incorporation in the Work, subject to the following conditions:

- .1 The Contractor shall submit: a written validation by the Owner, Construction Manager or Architect that such materials are stored safely off site, in the quantities and condition stated by the Contractor; a copy of an invoice for the material and equipment; a bill of sale or equivalent indication of the quantity and value of the material or equipment; a written statement indicating the location and method of storage; and property insurance certificate or rider covering the specific material or equipment, which shall name the Owner as an additional insured party.
- .2 The Contractor shall submit a verification that such materials and equipment are stored in a bonded warehouse.
- **.3** A request for payment of material stored off-site must be made by the Contractor 10 days prior to actual, monthly cut-off date for Payment Applications.
- .4 All such materials and equipment upon which partial payments have been made shall become the property of the Owner, but the care and protection of such materials and equipment shall remain the responsibility of the contractor until incorporation into the Work and accepted by the Owner at substantial completion, including maintaining insurance coverage on a replacement cost basis without voluntary deductible.

**§ 9.3.3** The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

**§ 9.3.1** Notwithstanding such transfer of title, the Contractor shall have the full continuing responsibility to install materials and equipment, protect and maintain the Work, materials and equipment in proper condition and forthwith repair, replace and make good any damage thereto without cost to the Owner until such time as the Work covered by the Contract is fully accepted by the Owner. Such transfer of title shall in no way affect any of the Contractor's obligations under the Contract. In the event that after title has passed to the Owner, any such Work, supplies, materials and equipment are rejected as being defective or otherwise unsatisfactory, title to all such items shall be deemed to have been transferred back to the Contractor.

**§ 9.3.4** The Contractor further expressly undertakes to defend the Indemnitees (as defined previously in Section 3.18), at the Contractor's sole expense, against any actions, lawsuits or proceedings brought against Indemnitees as a result of liens filed against the Owner, the Work, the site of any of the Work, the Project site and any improvements thereon, payments due the Contractor or any portion of the property of any of the Indemnities (referred to collectively as liens in this Section 9.3.4). The Contractor hereby agrees to defend, indemnify, and hold Indemnitees harmless against any such liens or claims of lien and agrees to pay any judgment or lien resulting from any such actions, lawsuits, or proceedings.

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§ 9.3.5 The Owner shall release any payments withheld due to a lien or a claim of lien if the Contractor obtains security acceptable to the Owner or a lien bond which is: (1) issued by a surety acceptable to the Owner, (2) in form and substance satisfactory to the Owner, and (3) in an amount not less than One Hundred Fifty percent (150%) of such lien claim. By posting a lien bond or other acceptable security, however, the Contractor shall not be relieved of any responsibilities or obligations under this Section 9.3, including, without limitation, the duty to defend and indemnify the Indemnities in an action on the lien, lien discharge bond or underlying debt. The cost of any premiums incurred in connection with such bonds and security shall be the responsibility of the Contractor and shall not be part of, or cause any adjustment to, the Contract Sum.

§ 9.3.6 Notwithstanding the foregoing, the Owner reserves the right to settle any disputed public improvement lien claim by payments to the lien claimant or by such other means as the Owner, in the Owner's sole discretion, determines is the most economical or advantageous method of settling the dispute. The Contractor shall promptly reimburse the Owner, upon demand, for any payments so made.

# § 9.4 Certificates for Payment

§ 9.4.1 The Construction Manager will, within seven (7) days after the Construction Manager's receipt of the Contractor's Application for Payment, review the Application, certify the amount the Construction Manager determines is due the Contractor, and forward the Contractor's Application and Certificate for Payment to the Architect. Within seven (7) days after the Architect receives the Contractor's Application for Payment from the Construction Manager, the Architect will either issue to the Owner a Certificate for Payment, with a copy to the Construction Manager, for such amount as the Architect determines is properly due, or notify the Construction Manager and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1. The Construction Manager will promptly forward to the Contractor the Architect's notice of withholding certification.

§ 9.4.2 Where there is more than one Contractor performing portions of the Project, the Construction Manager will, within seven (7) days after the Construction Manager receives all of the Contractors' Applications for Payment: (1) review the Applications and certify the amount the Construction Manager determines is due each of the Contractors; (2) prepare a Summary of Contractors' Applications for Payment by combining information from each Contractor's application with information from similar applications for progress payments from the other Contractors; (3) prepare a Project Application and Certificate for Payment; (4) certify the amount the Construction Manager determines is due all Contractors; and (5) forward the Summary of Contractors' Applications for Payment and Project Application and Certificate for Payment to the Architect.

§ 9.4.2.1 Within seven (7) days after the Architect receives the Project Application and Project Certificate for Payment and the Summary of Contractors' Applications for Payment from the Construction Manager, the Architect will either (1) issue to the Owner a Project Certificate for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Project Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Project Application for Payment, and notify the Construction Manager and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward the Architect's notice of withholding certification to the Contractors.

§ 9.4.3 The Construction Manager's certification of an Application for Payment shall be based upon the Construction Manager's evaluation of the Work and the information provided as part of the Application for Payment. The Construction Manager's certification will constitute a representation that, to the best of the Construction Manager's knowledge, information and belief, the Work has progressed to the point indicated and the quality of the Work is in accordance with the Contract Documents. The certification will also constitute a recommendation to the Architect and Owner that the Contractor be paid the amount certified.

§ 9.4.4 The Architect's issuance of a Certificate for Payment shall be based upon the Architect's evaluation of the Work, the recommendation of the Construction Manager, and information provided as part of the Application for Payment. The Architect's certification will constitute a representation that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated, that the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified.

§ 9.4.5 The representations made pursuant to Sections 9.4.3 and 9.4.4 are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and

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inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Construction Manager or Architect.

**§ 9.4.6** The issuance of a separate Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed the Contractor's construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

#### § 9.5 Decisions to Withhold Certification

**§ 9.5.1** The Construction Manager or Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager's or Architect's opinion the representations to the Owner required by Section 9.4.4 and 9.4.5 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from the acts and omissions described in Section 3.3.2 because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner, another Prime Contractor or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- .7 failure to carry out the Work in accordance with the Contract Documents;
- .8 receipt by the Owner of a notice of withholding from the New York State Department of Labor or other administrative agencies having jurisdiction over the Project;
- .9 failure to comply with applicable federal, state or local statutes, regulations, and/or laws, including, without limitation, laws and regulations applicable to the provision of certified payrolls;
- .10 failure of the Contractor to provide executed performance and payment bonds and a current certificate of insurance and endorsements;
- .11 reasonable evidence that the Work has not progressed as indicated on the Application for Payment;
- .12 damages caused to the Owner, Construction Manager, the Architect or another Contractor as a result the Contractor's performance of its Work;
- .13 the Architect's and/or the Construction Manager's discovery or observation of work which has been previously paid for by the Owner which is defective and/or incomplete;
- .14 The amount requested exceeds the percent completion of Work on the site; or
- .15 breach of this Agreement.

Notwithstanding the extent to which the Construction Manager and/or Architect certify an Application for Payment, the Owner shall have the right to withhold payment, in whole or in part, should the Owner determine that any of the grounds for withholding certification set forth in this Section 9.5.1 do in fact exist. If the Owner withholds payment, in whole or in part, the Owner shall promptly provide to the Contractor, Architect and Construction Manager a written explanation of the reason(s) for which payment is withheld and shall promptly pay, in accordance with the Contract Documents, all amounts which are not in dispute.

**§ 9.5.2** If the Contractor disputes any determination by the Owner, Construction Manager or Architect with regard to any Certificate for Payment or in the event of a bona fide dispute between the Contractor and Owner, the Contractor nevertheless shall expeditiously continue to prosecute the Work and may submit a Claim in accordance with Article 15.

**§ 9.5.3** When the above reasons for withholding certification or the Owner's withholding of payment are removed, certification will be made for amounts previously withheld.

**§ 9.5.4** If the Architect or Construction Manager withholds certification for payment under Section 9.5.1, or if the Owner otherwise deems it necessary to protect its interests or the interests of the Project, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or material or equipment suppliers to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Construction Manager and both will reflect such payment on the next Certificate for Payment.

**§ 9.5.5** Notwithstanding anything above to the contrary, the Owner has the right to withhold payment to the Contractor to protect itself against damages incurred or which may be incurred as a result of the Contractor's breach or negligence, including, but not limited to, the items set forth in Section 9.5.1. With respect to any liens, claims, or other circumstances for which the Owner is entitled to withhold payments pursuant to decisions by the Architect pursuant to Section 9.5.1, the Owner shall be entitled to withhold a sum equal to twice the stated amounts of such liens or claims, or, where there is no stated amount, twice the amount determined by the Architect to be necessary to protect the interests of the Owner. The Owner will release payments withheld due to liens provided that the Contractor obtains a discharge of record of such lien, by bonding or otherwise. By posting a lien discharge bond, however, the Contractor shall not be relieved of any responsibilities or obligations under the Agreement, including, without limitation, the duty to defend, indemnify, and hold harmless the Indemnitees (as defined previously in Section 3.18). The cost of any premiums or other expenses incurred in connection with such bonds or other means of discharge of record shall be the sole responsibility of the Contractor and shall not be part of, or cause any adjustment to, the Contract Sum.

**§ 9.5.6** If the Owner is entitled to reimbursement or payment from the Contractor under or pursuant to the Contract, including but not limited to these General Conditions, such payment shall be made promptly upon demand by the Owner. Notwithstanding anything contained herein to the contrary, if the Contractor fails to promptly make any payment due the Owner, or the Owner incurs any costs and expenses to cure any default of the Contractor or to correct defective work, the Owner shall have an absolute right to offset such amount against the Contract Sum and may, in the Owner's sole discretion, elect either to: (1) deduct an amount equal to that which the Owner is entitled from any payment then or thereafter due the Contractor from the Owner, or (2) issue a written notice to the Contractor reducing the Contract Sum by an amount equal to that which the Owner is entitled.

**§ 9.5.7** If the Contractor disputes any determination by the Owner, Construction Manager or Architect with regard to any Certificate for Payment, or in the event of a bona fide dispute between the Contractor and the Owner, the Contractor nevertheless shall expeditiously continue to prosecute the Work.

# § 9.6 Progress Payments

**§ 9.6.1** After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents unless such requisition is not in accordance with the terms of the Contract Documents, and shall so notify the Construction Manager and Architect.

**§ 9.6.2** Payments received by the Contractor for Work properly performed by Subcontractors and suppliers shall be held in trust by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contracts with the Contractor for which payment was made by the Owner. The Contractor shall strictly comply with any common law, statutory, or decisional law trust fund requirements in the State of New York (including, without limitation, the requirements of New York Lien Law Article 3-A), and hereby agrees that the Owner has the same rights as any beneficiary of such trusts to examine the books and records of the Contractor to determine such compliance, from time to time at the Owner's sole discretion. The Contractor shall promptly pay each Subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in similar manner.

**§ 9.6.2.1** Within seven (7) days of receipt of a payment from the Owner, the Contractor shall pay each of its Subcontractors and suppliers for work performed and materials furnished by them as reflected in the payment from the Owner, less an amount necessary to satisfy any outstanding claims, liens, or judgments and less a retained amount of not more than 5%, except that the Contractor may retain not more than 10% provided that prior to

entering into a Subcontract with the Contractor, the Subcontractor is unable or unwilling to provide a performance bond and labor and material payment bond both in the full amount of the subcontract at the request of the Contractor. The Contractor shall not retain portions of the proceeds owed any Subcontractor or supplier from the Owner's payment to the Contractor for the "contract balance." Similar provisions apply to the Subcontractor and/or supplier paying each of its Subcontractors and suppliers. Nothing in this Section shall create in the Owner any obligation to pay, or to ensure that the Contractor pays, any Subcontractor or supplier, or any relationship in contract or otherwise, implied or expressed, between any Subcontractor or supplier and the Owner. The Contractor agrees that it shall comply with the payment requirements of Section 106-b(2) of the New York General Municipal Law, as amended, and that to the extent there is any conflict between that statutory section and the provisions of this Section 9.6.2.1, the provisions of the statute shall prevail.

**§ 9.6.3** The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner, Construction Manager and Architect on account of portions of the Work done by such Subcontractor.

**§ 9.6.4** The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven (7) days, the Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. Neither the Owner nor Construction Manager nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor except as may otherwise be required by law.

**§ 9.6.5** The Contractor's payments to its suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

**§ 9.6.6** A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

**§ 9.6.7** Payments received by the Contractor for Work properly performed by Subcontractors and suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust or shall entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

# § 9.7 Failure of Payment

If, through no fault of the Contractor, the Construction Manager and Architect do not issue a Certificate for Payment within 30 days of the Construction Manager's receipt of the Contractor's Application for Payment or if, through no fault of the Contractor, the Owner does not pay the Contractor the amount certified by the Construction Manager and Architect, subject to the Owner's right to withhold payment under the terms of the Contract Documents, within 30 days of the date established for such payment in the Contract Documents, then the Contractor may, upon seven (7) additional days' written notice and opportunity to cure to the Owner, Construction Manager and Architect, stop the Work until payment of the amount owing has been received. To the extent it is determined that payment to the Contractor was improperly held through no fault of the Contractor and the Contractor elected to stop its Work consistent with the procedure set forth in this Section, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up as provided for in the Contract Documents. However, if the Contractor stops its Work and it is determined that the Owner had the right to withhold payment under the terms of the Contract Documents, then the Contractor shall be responsible to the Owner for all costs and damages (including attorneys' fees) arising from such stoppage of Work and the Contractor shall not be entitled to any adjustment in the Contract Sum or the Contract Time. This Section shall not apply: (a) to the extent that the Contractor owes to the Owner any amount pursuant to the provisions of this Contract, or (b) to the extent the Owner is required to expend amounts to purchase additional insurance on behalf of the Contractor to meet the insurance requirements of this Agreement.

#### § 9.8 Substantial Completion

**§ 9.8.1** The date of Substantial Completion of the Project or a designated portion thereof is the date when construction is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the entire Project (or such portion thereof as Owner earlier elects to occupy or utilize) for the use for which it is intended. Minor items of completion or correction ("Punch List Work") may be performed after Substantial

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Completion, provided that such items can and shall be performed at such times and in such manner that such Work does not unreasonably interfere with the Owner's occupancy and use of the Project. Substantial Completion shall not be deemed to exist until (a) the Owner receives a Certificate of Occupancy for the Project (or such portion as elected by Owner) if such Certificate of Occupancy is required, and any other permits, approvals, licenses and any other documents from governmental authorities having jurisdiction therefore necessary for the beneficial occupancy of the Project and (b) the Contractor, Construction Manager, Architect and Owner have agreed upon a schedule for final completion and to provide the Owner with all as-built drawings, operating manuals, warranties and other required closeout documents. Warranties called for by the Agreement or by the Drawings and Specifications shall commence on the date of Substantial Completion of the Project or designated portion thereof, or any later date that the parties agree. This date shall be established by a Certificate of Substantial Completion signed by the Owner, Contractor, Architect and Construction Manager.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Construction Manager, and the Contractor and Construction Manager shall jointly prepare and submit to the Architect a comprehensive list which shall identify allnon-conforming, defective and incomplete Work and establish the date of commencement of warranties in connection with any such Work. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the list, the Architect, assisted by the Construction Manager, will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the list, which is not sufficiently complete in accordance with the requirements of the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Construction Manager or Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect, assisted by the Construction Manager, to determine Substantial Completion. If the Architect and the Construction Manager are required to perform additional substantial completion inspections because the Work fails to be substantially complete, the amount of compensation paid to the Architect and the Construction Manager by the Owner for additional services shall be deducted from the final payment to the Contractor.

§ 9.8.4 When the Architect, assisted by the Construction Manager, determines that the Work or designated portion thereof is substantially complete, the Construction Manager will prepare, and the Construction Manager and Architect shall execute a Certificate of Substantial Completion that shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all Punch List Work, which timeframe shall not exceed 30 days. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.8.5.1 In conformance with New York General Municipal Law Section 106-b(1)(a), upon proper execution of Certificate of Substantial Completion of Work, the Contractor shall submit a requisition for payment of the remaining amount of the Contract Sum. Upon certification of payment by the Architect, the Owner will approve and promptly pay the remaining amount of the Contract Sum less two times value of any remaining items to be completed or corrected and less an amount necessary to satisfy any claims, liens or judgments against Contractor which have not been suitably discharged. Such payment shall be made under terms and conditions governing final payment except that the Owner's making of such payment shall not constitute the Owner's waiver of any objection to all or any portion of the Work performed by the Contractor or any claims the Owner may then have against the Contractor.

§ 9.8.5.2 Neither the requisition for payment stipulated in Section 9.8.5.1 nor any portion of retained percentage shall become due until the Contractor submits to the Construction Manager:

.1 an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work for which the Owner or the Owner's property might in any way be responsible, have been

paid or otherwise satisfied, the form of which will be the currently authorized AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims";

- .2 consent of all sureties, if any, to such payment, the form of which will be the currently authorized AIA Document G707A, "Consent of Surety to Reduction in or Partial Release of Retainage," but which will not be required if the amount withheld under Section 9.8.3.1 exceeds the amount of retainage;
- .3 if required by the Owner, other data establishing payment or satisfaction of all such obligations, such as receipts, releases, and waivers of liens arising out of contract to such extent and in such form as may be designated by the Owner; and
- .4 all required closeout documents.

**§ 9.8.5.3** As the Punch List Work is satisfactorily completed or corrected, the Contractor may submit a requisition for payment of these items. The Contractor shall submit with each such requisition for payment affidavits, consents of surety, and other data as described in Section 9.8.5.2 covering work for which payment is requested. Upon certification of such requisitions by the Architect and Construction Manager, the Owner will approve and promptly pay the requisition less an amount two times that which is necessary to satisfy any claims, liens or judgments against the Contractor which have not been suitably discharged.

**§ 9.8.5.4** Where the Project includes heating, air conditioning, electrical, communication, data or other systems which are not put into operation at the time of occupancy, a sum shall be withheld until these systems have operated to the general satisfaction of the Architect. The Contractor shall provide complete start up and commissioning of the systems with a detailed check list as recommended by the equipment or system manufacturer. The retained amount shall approximate five percent (5%) of the cost of the systems as determined by the cost breakdown submitted. The guaranty/warranty period for such systems will not commence until after such Architect approval.

**§ 9.8.5.5** The Contractor shall complete the Punch List Work for the Project no later than 30 days after Substantial Completion of the Project. The Contractor shall be fully liable to the Owner for all damages suffered by the Owner as a result of delay in achieving final completion of the Work, including without limitation, additional architectural and construction management fees related to extended services.

**§ 9.8.5.6** No partial payments will be made after the time fixed for the completion of the Work or the time to which completion may be extended under the terms of the Contract, until the full and final completion and acceptance of all Work herein agreed upon.

**§ 9.8.6** If the Architect or the Construction Manager is required to inspect the Work more than two (2) times prior to certifying the Work as being substantially complete on account of the discovery of one or more items that are not sufficiently complete, the Contractor shall be liable to the Owner for the amount of any costs, additional fees or compensation due from or paid by the Owner to the Architect and/or the Construction Manager for the additional inspections.

# § 9.9 Partial Occupancy or Use

**§ 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Section 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor and Construction Manager shall jointly prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect after consultation with the Construction Manager.

**§ 9.9.2** Immediately prior to such partial occupancy or use, the Owner, Construction Manager, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

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**§ 9.9.3** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

**§ 9.9.4** The Contractor shall cooperate with the Owner in order to make portions of the Project available as soon as possible.

**§ 9.9.4.1** The Project site and buildings, whether work of the Contractor is partially or fully completed or not, are property of the Owner who shall have certain rights and privileges in connection with use of same.

**§ 9.9.4.2** Should there be, in the opinion of the Architect or Construction Manager, unwarranted delay on part of any Contractor in completion of incomplete or defective work or other Contract requirements, and the Architect so certifies, the Owner may have full or partial use and occupancy of any or all portions of buildings as required for moving in or installing furniture, fixtures, supplies, or equipment and for general cleaning and maintenance work. In such event, the Contractor whose unfinished work is done subsequent to installation of furniture, fixtures, equipment, etc., shall be responsible for the prevention of any damage to such installation. Such use or occupancy by the Owner shall in no instance constitute acceptance of any of the Work.

# § 9.10 Final Completion and Final Payment

**§ 9.10.1** Upon completion of the Work, the Contractor shall forward to the Construction Manager a written notice that the Work is ready for final inspection and acceptance and shall also forward to the Construction Manager a final Contractor's Application for Payment. Upon receipt, the Construction Manager will evaluate the completion of Work of the Contractor and then forward the notice and Application, with the Construction Manager's recommendations, to the Architect who will promptly make such inspection. When the Architect, finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect will promptly issue a final Certificate for Payment or Project Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

**§ 9.10.1.1** If the Work is not accepted by the Owner after final inspection and additional time is required to complete items identified during the final inspection, the date starting the two-year correction period described in Article 12.2 shall be set by the Architect at his discretion, but not later than the date of the final Certificate for Payment.

**§9.10.1.2** If the Architect and the Construction Manager are required to provide additional services, extend the duration of services to the Owner, and/or perform additional final inspections because the Work fails to comply with the requirements of the Contract Documents, or the Contractor did not complete the Work in accordance with the construction schedule or Project Schedule, the amount of compensation paid to the Architect and the Construction Manager by the Owner for additional services shall be deducted from the final payment due to the Contractor.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) all closeout documents required by the Contract Documents. including, without limitation, as-built drawings, attic stock, maintenance manual, operating instructions and other documents required to be delivered under the Contract in connection with the Work in the form required by the Owner, (2) confirmation that all start-up, testing, balancing and commissioning of systems, equipment and other materials has been successfully completed as required by the Contract Documents, (3) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (4) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (5) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (6) consent of surety, if any, to final payment, (7), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner, and (8) all warranties and guarantees required by the Contract Documents. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien

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§ 9.10.2.1 In addition to the submittals required in Section 9.10.2 above, the Contractor shall submit separate final release or waivers of lien for each Subcontractor, material supplier, or others with lien rights against the Project, and shall submit a list of such parties.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment by the Owner shall not constitute a waiver of claims, causes of action, damages or complaints by the Owner.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing in accordance with Article 15 and identified by that payee in writing as unsettled at the time of the final Application for Payment.

§ 9.10.6 At any time a lien is filed against the Project funds, the Owner may demand that the Contractor discharge said lien, through bonding or otherwise, and the Contractor must obtain the discharge of said lien within seven (7) days of such demand at the Contractor's sole cost and expense, and at no cost to the Owner. If any lien or other encumbrance required to be removed at the Contractor's sole cost and expense pursuant to this Section is not discharged of record as aforesaid, the Owner shall have the right to take such action as the Owner shall deem appropriate (which shall include the right to cause such lien or other encumbrance to be canceled and discharged of record), and in such event, all costs and expenses incurred by the Owner in connection therewith (including, without limitation, premiums for any bond furnished in connection therewith, and reasonable attorneys' fees, court costs and disbursements), shall be paid by the Contractor to the Owner on demand or, at the option of the Owner, deducted from any payment then due or thereafter becoming due from the Owner to the Contractor in accordance with the provisions of these General Conditions.

§ 9.10.7 Existing warranties shall not deprive the Owner of any cause of action, right, or remedy otherwise available for breach of any of the provisions of the Contract Documents. The periods referred to above shall not be construed as limitations on the time in which the Owner may pursue any such action, right or remedy.

§ 9.10.8 The Contractor shall achieve final completion of all Work, including, without limitation, correction of punch-list items, preparation and delivery of all manuals, presentation of training and completion of final paper submissions not later than 30 days following the date of Substantial Completion. In the event the Contractor shall fail to achieve final completion of the Work within such a period of time, the Contractor and the Contractor's surety, if any, shall be liable for and shall reimburse the Owner for any and all fees paid to the Architect and Construction Manager and other expenses made necessary by the Contractor's failure. Additional fees and expenses shall be charged by the Owner against any Final Payment due or which may become due to the Contractor, and the Contractor shall promptly pay or refund the Owner the excess, if any, upon the Owner's written request.

# ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

# § 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, implementing, directing, controlling, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor's safety program to the Construction Manager for review and coordination with the safety programs of other Contractors. The Construction Manager's responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager. The Contractor's safety precautions and programs shall include

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specific steps designed to minimize the risk of contracting or spread of COVID-19, including provision of all appropriate personal protective equipment, social distancing, avoiding stacking of trades, and other reasonable precautions.

§ 10.1.1 Prior to beginning any Work, the Contractor shall submit a copy of its corporate safety plan to the Owner and the Construction Manager. Two (2) weeks after receipt of the Notice to Proceed, the Contractor shall provide a site safety logistics plan to the Construction Manager. The site safety logistics plan should minimally include locations of the temporary fence and gates, traffic plans for deliveries and removals, refuse container locations, crane locations, pick locations, boom radium, and lift locations, stockpiles, toilet locations, site water and power locations, and safety. This plan shall also show the location of all staging and storage areas, clearly separating construction and school areas. The logistical information represented by the construction documents shall serve as a minimal guide. The Contractor is required to submit its corporate safety policy within ten (10) days of receipt of the Notice to Proceed. Said policy must minimally meet OSHA standards and define details concerning the maintenance of a safe work environment. The Contractor shall make the participation of its Subcontractors in its safety program mandatory. A list of key personnel, with addresses and telephone numbers for emergency purposes shall be forwarded to the Construction Manager and Architect. The Owner and the Construction Manager shall establish a fire coordination procedure and shall provide same to the Contractor for its use during the performance of its Work.

§ 10.1.2 The Contractor shall provide its own COVID-19 Safety Plan to the Owner prior to the start of the Work. The Contractor shall designate a person on its staff to be responsible for monitoring the wearing of PPE by each person on site working with or for the Contractor. The Contractor shall strictly follow and ensure that its Subcontractors follow the Contractor's COVID-19 Safety Plan as well as all applicable Center for Disease Control guidelines and federal, state and local orders and directives.

# § 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take necessary precautions for safety of, and shall provide reasonable protection to prevent damage, injury, infection or exposure to COVID-19, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor;
- .3 the Owner's real and personal property and other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction;
- .4 construction or operations by the Owner, Separate Contractors, or other Contractors; and
- .5 the existing buildings and premises in the vicinity of or affected by the Contractor's operations.

§ 10.2.1.6 Safe access to and egress from any building under construction as part of this Contract, or any existing building in which Work is being done under this Contract, shall be maintained and remain unencumbered by the Contractor in accordance with all applicable codes, rules and regulations of authorities having jurisdiction on the Work. The Contractor and its Subcontractors shall cooperate in maintaining this condition. Roadways, paths, walks, exits, service drives and other areas shall remain unobstructed and shall be maintained in a safe and satisfactory condition, for all persons using the building and premises. Materials shall not be stored promiscuously about the site or in the building, but shall be carefully stored in areas which will not interfere with pedestrian traffic or with access to and egress from adjacent properties and use of the building. The Contractor shall provide and maintain such temporary Work as may be required for the protection of its finished Work where liable to injury. The Contractor will be responsible for all of its Work, materials and equipment that may be damaged or stolen during the duration of the Contract and until the Work is accepted by the Owner. The Contractor shall make good any such damage or loss without expense to the Owner. The Contractor shall not permit unnecessary hazards to be created nor permit them to continue if they are discovered. The Contractor's storage and staging areas shall be only in locations assigned or approved by the Owner and Architect and may be required to be relocated by the Contractor as building occupancy or use changes during the course of the Work. This relocation will be done by the Contractor at no additional cost to the Owner.

§ 10.2.2 The Contractor shall comply with, and give notices required by, applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.2.1 The Contractor acknowledges that the Labor Law of the State of New York, and regulations adopted thereunder, place upon both the Owner and the Contractor certain duties and that liability for failure to comply

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therewith is imposed on both the Owner and the Contractor regardless of their respective fault. The Contractor hereby agrees that, as between the Owner and the Contractor, the Contractor is solely responsible for compliance with all such laws and regulations imposed for the protection of persons performing the Contract. The Contractor shall indemnify and hold harmless the Owner of and from any and all liability for violation of such laws and regulations or actions which may be brought against the Owner as the result thereof. In the event that the Contractor shall fail or refuse to defend any such action, the Contractor shall be liable to the Owner for all costs of the Owner in defending such claim or action and all costs of the Owner, including attorney's fee, in recovering such defense costs from the Contractor.

§ 10.2.2.2 All laborers, workers, and mechanics employed in the performance of the Work of this Project shall be certified as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least 10 hours in duration. The Contractor and its Subcontractors shall conduct their operation in accordance with the Safety Guides for Construction as issued by State Education Department, and the Contractor's safety program.

**§ 10.2.2.3** All safety equipment including hard hats, weather protective gear and PPE required for the Contractor to perform its Work are to be supplied by the Contractor or its Subcontractors. Within the designated construction areas, the Contractor's employees, superintendents, or other agents, and its Subcontractors, employees, superintendents, or other agents are required to wear hard hats and other required or essential safety equipment. Each person seen without a hard hat, or otherwise failing to comply with this requirement, will be ordered to leave the Project. No prior warnings will be given by the Owner, Construction Manager or Architect. The Contractor and its Subcontractors shall be solely responsible for making up and paying for any loss of production or required progress resulting from the removal of personnel from the Project as set forth herein including any costs incurred by the Owner in connection with the work of other Contractors.

**§ 10.2.3** The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

**§ 10.2.4** When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

**§ 10.2.4.1** When use or storage of explosives, or other hazardous materials, substances or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall give the Owner reasonable advance notice.

§ 10.2.4.2 If the Contract Documents require the Contractor to handle materials or substances that under certain circumstances may be designated as hazardous, the Contractor shall handle such materials in an appropriate manner.

**§ 10.2.5** The Contractor shall promptly remedy damage and loss to property referred to in Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4, except damage or loss attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18, and shall not be limited by such damage or loss being insured under property insurance required by the Contract Documents.

**§ 10.2.6** The Contractor shall schedule weekly safety meetings and each of its Subcontractors must be properly represented at such meetings. The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner, Construction Manager and Architect.

§ 10.2.7 The Contractor shall not load or permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition. The Contractor shall not load any part of the Work with materials, equipment, shores, bracing, or other items which in any way could cause damage to the Work or to other Work or could endanger persons in or about the Work.

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**§ 10.2.9** The Contractor shall be responsible for all breakage of glass, which has been furnished and installed as part of Contract and existing glass that is broken due to operations under the Contract for Work. No matter by whom or what cause glass was broken, the Contractor shall replace all broken glass before completion and acceptance of the Contractor's Work.

**§ 10.2.10** In addition to all requirements set forth herein, the Contractor and its Subcontractors shall fully comply with the provisions of the federal Occupational Safety and Health Act of 1970, as amended, and with any rules and regulations pursuant to the Act. This requirement shall apply continuously and not be limited to normal working hours.

**§ 10.2.11** The Contractor shall also be responsible, at the Contractor's sole cost and expense, for all measures necessary to protect any property adjacent to the Project and improvements therein. Any damage to such property or improvements shall be promptly repaired by the Contractor at its sole expense.

**§ 10.2.12** The Contractor shall immediately contact the Construction Manager and, within 24 hours, report, in writing, to the Owner, Architect and Construction Manager, all accidents arising out of or in connection with the Work which cause death, personal injury, or property damage, giving full details and statements of any witnesses. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported immediately by telephone or messenger to the Owner, Construction Manager, and Architect.

**§ 10.2.13** The Contractor shall be solely responsible for any conditions that develop during construction and in the event any structure is dislocated, over strained, or damaged so as to affect is usefulness, the Contractor shall be solely responsible. The Contractor shall take whatever steps necessary to strengthen, relocate or rebuild the structure to meet requirements at the sole expense of the Contractor.

**§ 10.2.14** The Contractor is responsible for restoration or repair of utilities, private property, buildings, pavement, walkways, roads, etc. damaged by its activities under this Agreement to the satisfaction of the Owner, Construction Manager and Architect.

**§ 10.2.15** From the commencement to the final completion of the Work, the Contractor shall keep the Work and the Owner's building(s) free from accumulation of water no matter the source or cause of water infiltration. This responsibility shall include additions/alterations of existing buildings. The Contractor shall be responsible for temporary roofing, tarps and other protection at roofs, cavity walls, etc. Should the Contractor fail to provide adequate protection causing flooding, damage or other disturbance to the existing building(s), the Contractor shall be responsible for all costs associated with clean up, remediation and repairs. Inasmuch as flooding and water damage have safety implications to the general public, clean up, remediation and repairs may be made by the Owner without prior notice to the Contractor. Administration costs incurred by the Owner, Construction Manager and Architect will also be back charged to the Contractor. The Contractor, by entering into this Contract, agrees to be liable for these costs.

**§ 10.2.16** Where solvents, chemicals, etc. are used in the installation or cleaning of materials or equipment under this Contract, which might cause injury or sickness to an employee or occupant of the building, they shall be used in strict conformance with the manufacturer's direction, material safety data sheets (OSHA 20) in the handling, storage and application of such materials shall be obtained by the Contractor and strictly adhered to. Every precaution shall be taken to prevent seepage of toxic fumes into the building. All hazardous waste material shall not be deposited in any dumpster, in any drain, or any part of the site, but shall be collected in a container specifically authorized by the EPA for the collection of said material, transported in accordance with DOT regulations and legally disposed of. Permits shall be obtained for storage, treatment and disposal of all hazardous materials.

#### § 10.2.17 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall

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# § 10.3 Hazardous Materials

**§ 10.3.1** The Contractor is responsible for compliance with any requirements included in the Contract Documents and all applicable laws, rules and regulations regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to, asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner, Construction Manager and Architect in writing. The Owner shall arrange for the material to be tested and if the test reveals that the material is a hazardous material or substance which has not been rendered harmless, the Owner shall pay for the test; otherwise, the Contractor shall comply with the reasonable instructions of the Owner after the test is conducted. This Section shall not apply in the case of asbestos which is to be removed and disposed of as part of the Work of the Contract.

**§ 10.3.2** Upon receipt of the Contractor's written notice, the Owner shall obtain the services of a licensed laboratory to verify a presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and the Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shut-down, delay and start-up.

**§ 10.3.3** To the fullest extent permitted by law, but only to the extent of available insurance proceeds, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Construction Manager, Architect, their consultants, and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that the person seeking indemnification: (1) did not bring such material onto the Project site; (2) timely provided notice of the condition and stopped Work in the affected area as required by Section 10.3.1; and (3) has a claim, damage, loss or expense that is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself). The Owner shall have no indemnity obligation to the extent that such damage, loss or expense is due to the fault or negligence of the party seeking indemnity or the fault or negligence of a third party for whom the Owner is not responsible.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall indemnify the Owner for the cost and expense the Owner incurs (1) for remediation of a material or substance the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

**§ 10.3.6** If, without negligence or fault on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance (that was not brought to the site by the Contractor or those for whom the Contractor is responsible) solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.3.7 The Contractor shall notify the Owner of any storage, use, or discovery of hazardous material on the Project site which the Contractor knows or reasonably should know could cause bodily injury or death and of any injury or death attributable to any such hazardous material.

§ 10.3.8 The Contractor shall take all reasonable precautions and measures to prevent any contamination by or spread or disturbance of hazardous or potentially hazardous substances or materials stored, used, or discovered on the Project site.

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**§ 10.3.9** For the avoidance of any doubt, COVID-19 shall not be considered a Hazardous Material for purposes of this Article 10.3.

# § 10.4 Emergencies

§ 10.4.1 The Contractor shall provide at the site, such equipment and medical facilities as are necessary to supply first-aid service to anyone at the Work.

**§ 10.4.2** The Contractor must promptly report in writing to the Construction Manager all emergencies whatsoever arising out of, or in connection with the performance of the Work, whether on, or adjacent to the site, which caused death, personal injury or property damages, giving full details and statements of witnesses. In addition, if death, injury, or damages are caused, the emergency shall be reported immediately to the Construction Manager, Owner, and Architect.

**§ 10.4.3** In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

**§ 10.4.4** All fire and emergency access, including roads, rights-of-way, corridors, doors, and stairs, and all existing fire and smoke detection systems shall be maintained at all times in accordance with fire safety laws. If the Work requires the temporary obstruction of any fire and emergency access or existing fire and smoke detection systems, the Construction Manager shall be notified at least 72 hours in advance.

# ARTICLE 11 INSURANCE AND BONDS

# § 11.1 Contractor's Liability Insurance

**§ 11.1.1** The Contractor shall purchase from and maintain in a company or companies licensed to do business in State of New York, having an A.M. Best "A-" or better rating, and one to which the Owner has no reasonable objection such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations and completed operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed, including private entities performing Work at the site and exempt from the coverage on account of number of employees or occupation, which entitles shall maintain voluntary compensation coverage at the same limits specified for mandatory coverage for the duration of the Project. As required by the New York State Workers' Compensation Law, all out of state contractors working in New York must provide a Workers' Compensation Insurance Policy that specifically lists New York in Item 3A of the Policy Information page;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees or persons or entities excluded by statute from the requirements of Section 11.1.1.1 but obligated by the Contract Documents to provide the insurance required by that section;
- .3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- .4 Claims for damages insured by usual personal injury liability coverage;
- .5 Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- .6 Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;
- .7 Claims for bodily injury or property damage arising out of completed operations;
- .8 Claims involving contractual liability insurance applicable to the Contractor's obligations under Section 3.18;
- .9 Where the Contract or Subcontract involves asbestos, the insurance required by Section 11.1 shall specifically include the words asbestos abatement work and shall specify any limitations on completed operation time period. If there is a limitation, it will be at the Owner's discretion to accept or reject that limitation;
- .10 Insurance must remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing or replacing defective Work in accordance with Section 12.2.2.2;

- .11 Liability insurance (including Umbrella Excess Liability policy) shall include all major divisions of coverage and be on a comprehensive basis. The required coverage shall be written on an occurrence basis and shall include the following:
  - Premises Operations (including X, C and U coverage as applicable). a.
  - b. Independent Contractor's Protective.
  - c. Products and Completed Operations.
  - d. Contractual, including specified provision for Contractor's obligation under Section 3.18 of the General Conditions.
  - Owned, non-owned and hired motor vehicles. e.
  - f. Broad Form Property Damage including Completed Operations.
  - Pollution Legal Liability Insurance (as applicable to the Prime Contract or Subcontract g. including asbestos abatement activities).
  - Personal injury liability with Employment Exclusion deleted. h.
- The insurance policies required to be purchased and maintained by the Contractor under this .12 Agreement shall be: (i) written on an occurrence basis, and (ii) shall be primary on a per project basis for the defense and indemnification of any action or claim asserted against the Owner (and its Board, employees and volunteers), Construction Manager, Architect, and/or the Contractor for Work performed under the Agreement regardless of any other collectible insurance or any language in the insurance policies that may be to the contrary. The policies of the Owner and Architect and their consultants shall be excess and noncontributory.
- .13 A fully completed New York Construction Certificate of Liability Insurance Addendum (Acord 855 2014/15) must be included with the certificates of insurance. For any "yes" answers on Items G through L on this Form – additional details must be provided in writing.

The Contractor shall not commence work under this Contract and shall not be considered "approved" until it has obtained all insurance required in this Article 11 and the Specifications, and such insurance has been approved by the Owner; nor shall the Contractor allow any of its Subcontractors to commence work under its Subcontract until it has obtained all similar insurance for protection of itself, the Contractor and the Owner.

§ 11.1.2 The insurance required by Article 11 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment, and, with respect to the Contractor's completed operations coverage, until the expiration of three years after Final Completion of the Work. All coverages are to be written on an occurrence basis unless approved by the Owner.

§ 11.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work and thereafter upon renewal or replacement of each required policy of insurance. These certificates and the insurance policies required by this Article 11 shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section 11.1.2. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the Contractor with reasonable promptness.

§ 11.1.3.1 The insurance requirements set out herein and elsewhere in the Contract Documents are independent from all other obligations of the Contractor under the Contract Documents and apply whether or not required by any other provision of this Agreement.

§ 11.1.3.2 Neither the Owner or Construction Manager shall have any duty to the Contractor or to any of its insurers or their insurance agents to review any certificates or copies of insurance furnished by the Contractor or to determine whether the terms of each certificate or policy of insurance comply with the insurance-related provisions of the Agreement. A failure to detect that the Contractor has not submitted certificates, or proper certificates, or is otherwise not in compliance with the insurance-related provisions of the Agreement shall not be considered a waiver or other impairment of any of the Owner's rights under such insurance-related provisions.

§ 11.1.4 The Contractor shall cause all liability insurance policies coverage required by the Contract Documents (excluding Workers' Compensation) to include (1) the Owner (and its Board of Education, employees and

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volunteers), Construction Manager, Architect, and their consultants as additional insureds on a primary and noncontributory for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner (and its Board of Education, employees and volunteers) as additional insureds on a primary and non-contributory for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations. If the terms of policies expire, or the lives of the insurance companies terminate, before the Contract is completed or during the period of completed operations coverage, and the Contractor fails to maintain continuance of such insurance, the Owner is entitled to provide protection for itself, to pay premiums, and to charge the cost to the Contractor.

§ 11.1.5 It is expressly understood and agreed that:

- .1 The amount of insurance provided in the insurance coverages required by Article 11 and any other provision of the Contract Documents shall not be construed to be a limitation of the liability on the part of the Contractor or any of its Subcontractors.
- .2 Any type of insurance or any increase in limits of liability not described above which the Contractor requires for its own protection or on account of statute shall be its own responsibility and at its own expense and shall not be charged back to the Project.
- .3 The carrying of insurance described shall in no way be interpreted as relieving the Contractor or any Subcontractor of any responsibility or liability under the Contract.
- .4 In the event of a failure of Contractor to furnish and maintain said insurance and to furnish satisfactory evidence thereof, the Owner shall have the right (but not the obligation) to take out and maintain the same for all parties on behalf of the Contractor who agrees to furnish all necessary information thereof and to pay the cost thereof to the Owner immediately upon presentation of an invoice.
- .5 Any work performed without having the insurance coverage is at Contractor's own risk.
- .6 The Contractor agrees to indemnify the Owner for any applicable deductibles and self-insured retentions.

#### § 11.1.6 Schedule of Insurance

The Contractor and its Subcontractors, at their own expense, shall procure and maintain the following insurance coverages with limits of liability not less than the limits specified, or greater if required by law.

#### § 11.1.6.1 Workers' Compensation and Employers' Liability

Workers' compensation and employers' liability insurance coverage complying with the laws of the Project location and elsewhere as may be required and shall include a minimum of:

| Workers' Compensation      | Statutory                 |
|----------------------------|---------------------------|
| Bodily Injury by Accident: | \$1,000,000 Each Accident |
| Bodily Injury by Disease:  | \$1,000,000 Each Employee |
| Bodily Injury by Disease:  | \$1,000,000 Policy Limit  |

The workers' compensation and employers' liability policies shall be endorsed to waive the right of subrogation against the Owner and its Board of Education, employees and volunteers, Construction Manager and Architect.

#### § 11.1.6.2 Commercial General Liability

Commercial general liability written on ISO occurrence form providing coverage for Premises and Operations, Products-Completed Operations, Independent Contractors, Personal and Advertising Injury (Employment Exclusion deleted), Blanket Contractual Liability, and Broad Form Property Damage (including coverage for Explosion, Collapse, and Underground Hazards).

| Occurrence Form:                  |                           |
|-----------------------------------|---------------------------|
| General Aggregate:                | \$2,000,000 (per project) |
| Products/Completed Operations     |                           |
| Aggregate:                        | \$2,000,000 (per project) |
| Each Occurrence:                  | \$1,000,000               |
| Personal and Advertising Injury:  | \$1,000,000               |
| Property Damage (Aggregate)       | \$2,000,000 (per project) |
| Property Damage (Each Occurrence) | \$1,000,000               |
| Fire Damage (any one fire):       | \$300,000                 |
| Medical Expense (any one person): | \$10,000                  |

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#### § 11.1.6.3 Automobile Liability

Business automobile liability, including liability arising out of any owned, leased, non-owned or hired automobile with per accident limits of liability of not less than \$1,000,000. The Contractor shall cause the automobile liability coverage required herein to include the Owner and its Board of Education, employees and volunteers, Construction Manager, Architect, and their consultants as additional insureds on a primary and non-contributory basis. The automobile liability policy shall be endorsed to waive the right of subrogation against the Owner and its Board of Fire Education, employees and volunteers, Construction Manager and Architect.

#### § 11.1.6.4 Owners and Contractors Protective Liability Insurance

The Contractor shall procure and maintain at the Contractor's own expense until final completion of the Work covered by the Contract, and any extension thereof, Owners and Contractors Protective Liability Coverage issued in the name of the Owner and covering the liability for damages imposed by law upon the Owner with respect to all operations under the agreement by the Contractor or its Subcontractors, including omissions and supervisory acts of the Owner. Such policy shall be delivered to the Owner no later than fifteen (15) days of awarding the Contract. Unless otherwise specifically required by special specifications, each policy shall be issued with limits not less than \$1,000,000 per occurrence and \$2,000,000 aggregate.

#### § 11.1.6.5 Pollution Legal Liability Insurance

If the Work includes the removal, mitigation or other handling of pollutants or hazardous materials of any type, the Contractor will be required to carry and maintain pollution legal liability insurance coverage with the minimum limits set forth below, in a form acceptable to the Owner and written by an insurance company acceptable to the Owner. Proof of such coverage shall be provided prior to the commencement of the Work. With coverage for the services rendered for the Owner, including, but not limited to removal, replacement enclosure, encapsulation and disposal of asbestos, or any other hazardous material, along with any related pollution events, including coverage for third-party liability claims for bodily injury, property damage and clean-up costs. The limits shall be as follows:

| Each Occurrence:                                | \$1,000,000                           |
|---|---------------------------------------|
| Products and Completed<br>Operations Aggregate: | \$2.000.000                           |
| 1 66 6  | <i>y y</i>                            |
| General Aggregate:                              | \$2,000,000 (specific to the project) |

These limits shall include products and completed operations. The Contractor's pollution legal liability policy shall also include coverage for non-owned disposal site liability, mold remediation and related expenses. If retroactive date is used, it must pre-date the inception of the Contract. If the Contractor is using motor vehicles to be used for transporting hazardous materials, the Contractor shall provide pollution legal liability broadened coverage (ISO endorsement CA 9948 or equivalent) as well as proof of MCS 90. The coverage shall include a three-year reporting period following substantial completion of the Work. The Contractor shall cause the pollution liability coverage required herein to include the Owner and its Board of Education, employees and volunteers, Construction Manager, Architect, and their consultants as additional insureds on a primary and non-contributory basis. The pollution legal liability policy shall be endorsed to waive the right of subrogation against the Owner and its Board of Education, employees and volunteers, Construction Manager and Architect.

#### § 11.1.6.6 Umbrella Liability

Provide follow form excess coverage over the commercial general liability, employers' liability, automobile liability

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and pollution legal liability (if required by contract) policies with limits not less than \$5,000,000 each occurrence and \$5,000,000 aggregate specific to the Contract. The Contractor shall cause the excess coverage required herein to include the Owner and its Board of Education, employees and volunteers, Construction Manager, Architect, and their consultants as additional insureds on a primary and non-contributory basis. The umbrella liability policy shall be endorsed to waive the right of subrogation against the Owner and its Board of Fire Education, employees and volunteers, Construction Manager and Architect.

## § 11.2 Owner's Liability Insurance

The Owner shall purchase and maintain the Owner's usual liability insurance. Neither the Owner's usual liability insurance nor any other insurance obtained by the Owner reduces or otherwise affects the Contractor's insurance requirements under Section 11.1.

## § 11.3 Property Insurance

§ 11.3.1 The Contractor shall purchase and maintain, in a company lawfully authorized to do business in New York, property insurance written on a builder's risk "all risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.3 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project. Losses up to the deductible amount shall be the responsibility of the Contractor unless caused solely by the Owner.

§ 11.3.1.1 The Contractor's property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for the Architect's, Contractor's, and Construction Manager's services and expenses required as a result of such insured loss. This property insurance shall cover portions of the Work stored off the site, and also portions of the Work in transit.

§ 11.3.1.2 The said insurance policy shall contain a provision that the loss, if any, is to be made adjustable with and payable to the Owner as trustee for the insureds, and a provision that it shall not be changed or cancelled and that it will be automatically renewed upon expiration and continued in force unless the Owner is given thirty (30) days written notice to the contrary.

§ 11.3.1.3 The Contractor shall have the sole responsibility to promptly report any loss to the insurer and to furnish the latter with all necessary details relating to the occurrence of the loss and the amount thereof. The Owner, Construction Manager, Architect, Contractor and all subcontractors of the Contractor waive all rights, each against the others, for damages caused by fire or other perils covered by insurance provided under the terms of this Section, except such rights as they may have to the proceeds of insurance received; provided, however, this waiver shall not apply to any manufacturer, supplier or similar agent under any guarantee or warranty.

§ 11.3.1.4 The Contractor shall not violate or permit to be violated any condition of such policy and shall at all times satisfy the fire safety requirements of the Owner and the insurance company issuing the same.

§ 11.3.1.5 The procurement and maintenance of said policy shall in no way be construed or be deemed to relieve the Contractor from any of the obligations and risks imposed upon it by this Contract or to be a limitation on the nature or extent of such obligations and risks.

§ 11.3.1.6 Not less than thirty days prior to the expiration date or renewal date, the Contractor shall supply the Owner with an updated replacement certificate of insurance and endorsements. The Contractor shall advise the Owner of any letter or notification that cancels, materially changes, or non- renews the policy and Contractor shall require the insurance carrier(s) to copy the Owner on any letter or notification that cancels, materially changes, or non-renews the policy. Before the Contractor shall be entitled to have any progress payment rendered on account of the work which is to be insured pursuant to this Section, it shall furnish to the Owner a certificate in duplicate of the insurance herein required. Such insurance must be procured from an insurance carrier approved by the Owner, licensed to do business in the State of New York ("admitted" carrier), and rated at least "A-" by A.M. Best Company.

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§ 11.3.2 Boiler and Machinery Insurance. The Owner, if applicable to the Work and at its sole option, may purchase and maintain boiler and machinery insurance or shall do so if required by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner. This insurance will include interests of the Owner, Construction Manager, Contractor, Subcontractors and Sub-subcontractors in the Work.

§ 11.3.3 Loss of Use Insurance. The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused.

§ 11.3.4 If the Contractor requests in writing that insurance for risks other than those described in this Section 11.3 or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost for it will be charged to the Contractor by appropriate Change Order.

§ 11.3.5 Upon the Contractor's request, the Owner will provide copies of each policy that includes insurance coverages required by this Section 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project.

**§ 11.3.6 Waivers of Subrogation.** The Owner and Contractor waive all rights against (1) each other and any of their respective subcontractors, sub-subcontractors, agents and employees, and (2) the Construction Manager, Construction Manager's consultants, Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their respective subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire or other causes of loss to the extent of proceeds under property insurance obtained pursuant to this Section 11.3 or other property insurance applicable to the Work, except such rights as the Owner and Contractor may have to the proceeds of such insurance held by the Owner. The Owner or Contractor, as appropriate, shall require of the Construction Manager, Construction Manager's consultants, Architect, Architect's consultants, Owner's separate contractors described in Article 6, if any, and any of their respective subcontractors, sub-subcontractors, agents, and employees, by appropriate written agreements, similar waivers each in favor of other parties enumerated in this Section 11.3.6. The policies must provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation is effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity has an insurable interest in the property damaged.

#### § 11.4 Performance Bond and Payment Bond

§ 11.4.1 The Contractor shall furnish performance and labor and material payment bonds, each in an amount equal to one hundred percent (100%) of the Contract Sum, meeting all statutory requirements of the State of New York, in form and substance satisfactory to the Owner in its sole discretion and, without limitation, complying with the following specific requirements:

- .1 The prescribed form of the performance and payment bonds shall conform to AIA A312-2010, and other shall be satisfactory to the Owner in the Owner's sole judgment;
- .2 The cost of the required bonds shall be included in the Contract Sum;
- .3 Bonds shall be executed by a responsible surety licensed in New York State, listed in the latest issue of the U.S. Treasury Circular 570 and having an A.M. Best's rating of no less than A-/IX and shall remain in effect for a period not less than two years following the date of Substantial Completion or the time required to resolve any items of incomplete Work and the payment of any disputed amounts, whichever time period is longer;
- .4 The Contractor shall require the attorney in fact who executes the required bond on behalf of the surety to affix thereof a certified and current copy of his power of attorney indicating the monetary limit of such power. The signatures of the Contractor and Surety shall be acknowledged by a notary public;
- .5 Every bond under this Section 11.4.1 must display the surety bond number.

**§ 11.4.2** A rider including the following provisions shall be attached to each bond:

- 1. This bond includes performance by the Contractor of any correction and warranty obligations in the Contract Documents, including such performance after the dates of Substantial Completion and final completion.
- 2. Surety hereby agrees that it consents to and waives notice of any addition, alteration, omission, change, or other modification of the Contract Documents. Such addition, alteration, change,

extension of time, or other modification of the Contract Documents, or a forbearance on the part of either the owner or the Contractor to the other, shall not release the Surety of its obligations hereunder and notice to the Surety of such matters is hereby waived.

3. Surety further agrees that in event of any default by the Owner in the performance of the Owner's obligations to the Contractor under the Contract, the Contractor or Surety shall cause written notice of such default (specifying said default in detail) to be given to the Owner, and the Owner shall have thirty (30) days from time after receipt of such notice within which to cure such default, or such additional reasonable period of time as may be required if the nature of such default is such that it cannot be cured within thirty (30) days. Such Notice of Default shall be sent by certified or registered U.S. Mail, return receipt requested, first class postage prepaid, to the Owner.

**§ 11.4.3** All bonds shall be maintained in full force during the duration of the Project and for a period of two (2) years after the date of the Contractor's acceptance of final payment as guarantee that the Contractor will make good any faults or defects in the work arising from improper or defective workmanship or materials which may appear during the comeback warranty period.

**§ 11.4.4** The Contactor shall deliver the required bonds to the Owner prior to beginning construction activity at the Project site, but no later than seven (7) days after execution of the Contract.

§ 11.4.5 The Owner may, in the Owner's sole discretion and without prior notice to the Contractor, inform surety of Contractor's Work and obtain consents as necessary to protect the Owner's rights, interest, privileges and benefits under and pursuant to any bond issued in connection with the Contractor's Work.

**§ 11.4.6** If the surety on any Bond furnished by the Contractor is declared a bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of this Article, the Contractor shall within ten (10) days thereafter substitute another Performance and Payment Bond and surety, both of which must be acceptable to the Owner.

**§ 11.4.7** The Contractor shall keep the surety informed of the progress of the Work, and, where necessary, obtain the surety's consent to, or waiver of: (1) notice of changes in the Work; (2) request for reduction or release of retention; (3) request for final payment; and (4) any other material required by the surety. The Owner shall be notified by the Contractor, in writing, of all communications with the surety. The Owner may, in the Owner's sole discretion, inform the surety of the progress of the Work and obtain consents as necessary to protect the Owner's rights, interest, privileges and benefits under any pursuant to any bond issued in connection with the Work.

**§ 11.4.8** Notwithstanding any other provisions in any performance or payment bond, it shall not be a condition precedent to termination of a Contract or Contractor that notice be sent to or meeting be arranged or held with the Contractor (principal) and surety, prior to such termination. Any such requirement(s) shall be void and unenforceable and the Owner shall have the right to reject any such bond(s) or ignore such condition. The exclusive method of termination of a Contract or the Contractor is contained in the Contract Documents, and the Contractor and surety expressly agree to be bound thereby.

**§ 11.4.9** Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

**§ 11.4.10** The Contractor shall provide for the continuation of the performance bond as a maintenance bond for two (2) full years after the date of final payment request at the full final Contract Sum.

§ 11.5 Neither the procurement nor the maintenance of any type of insurance by the Owner or the Contractor shall in any way be construed or be deemed to limit, discharge, waive or release the Contractor from any of the obligations and risks imposed upon him by the Contract or to be a limitation on the nature or extent of such obligations or risks.

§ 11.6 Nothing in the Contract shall create or give to third parties any claim or right of action against the Contractor, Architect, Construction Manager or Owner beyond such as may legally exist irrespective of the Contract.

### ARTICLE 12 UNCOVERING AND CORRECTION OF WORK § 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Construction Manager's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by either, be uncovered for their examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered which the Construction Manager or Architect has not specifically requested to observe prior to its being covered, the Construction Manager or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or one of the other Contractors in which event the Owner shall be responsible for payment of such costs.

## § 12.2 Correction of Work

## § 12.2.1 Before or After Final Payment



The Owner, through its Architect or Construction Manager, shall have the authority to reject Work performed by the Contractor that does not conform to the requirements of the Drawings, Specifications, or both. The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

## § 12.2.2 After Final Payment

§ 12.2.2.1 If, within two (2) years after the date of Final Payment for the Work or a designated portion thereof, or after the date for commencement of warranties established otherwise in the Contract Documents, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The obligation set forth hereunder shall survive acceptance by the Owner of the Work or termination of the Contract. The Owner shall give such notice promptly after discovery of the condition. The Contractor's Performance Bond shall remain in full force and effect through this two-year comeback correction period.

§ 12.2.2.2 The two-year period for correction of the Work shall be extended with respect to portions of Work first performed after Final Payment by the period of time between Final Payment and the actual completion of that portion of the Work.

§ 12.2.3 Upon completion of any Work under or pursuant to this Section 12.2, the two-year period for correction of Work in connection with the Work requiring correction shall be renewed and recommence.

§ 12.2.4 The obligations shall cover any repair and replacement to any part of the Work or other property caused by the defective or nonconforming Work.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.3.1 If the Contractor fails to commence to correct, repair and make good any defects in its Work within a reasonable time, not to exceed ten (10) days from the date the Contractor received written notice from the Owner per Section 12.2.2.1, the Owner may correct it in accordance with Section 2.5 and the Contractor shall, upon demand, pay to the Owner all amounts which it expends for such corrective work.

§ 12.2.3.2 In emergencies occurring during the two-year correction period, the Owner may correct any defect immediately and charge the cost to the Contractor. The Owner shall at once notify the Contractor, who may take over the Work and make any corrections remaining after its forces arrive at the Work. Repair work not started within ten (10) days following notice to the Contractor of any defect may be considered an emergency.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner, Multiple Prime Contractors or Separate Contractors, whether completed or partially completed, caused by the Contractor's

correction or removal of Work that is not in accordance with the requirements of the Contract Documents. The Contractor shall also replace or repair to satisfaction of Owner any and all damage done to the building or its contents in consequence of work performed in fulfilling any applicable warranty. This clause is general in nature and will not operate to waive stipulations of other clauses that specify warranty periods in excess of two (2) years.

**§ 12.2.5** Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the two-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

### § 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as determined by the Owner, with the advice of the Construction Manager and Architect. Such adjustment shall be effected whether or not final payment has been made. For this Section to apply, the Owner must accept nonconforming Work in writing specifying the non-conforming Work being accepted. Notwithstanding any acceptance by the Owner, if the Owner discovers non-conforming Work that the Owner has not expressly accepted in writing, the Owner may demand that the Contractor correct such Work as per the provisions of Article 12 hereof.

# ARTICLE 13 MISCELLANEOUS PROVISIONS

#### § 13.1 Governing Law

The Contract shall be governed by the law of the State of New York, and the parties expressly agree that any claim, dispute, or other controversy of any nature arising out of the Contract or performance of the Work shall be commenced and maintained in New York State Supreme Court, Westchester County.

**§ 13.1.2** The Contractor shall at all times observe and comply with all federal, state and local laws and all laws, ordinances and regulations of the Owner, in any manner affecting the Work and all such orders decreed as exist at present and those which may be enacted later, by bodies or tribunals having jurisdiction or authority over the Work, and the Contractor shall defend, indemnify and save harmless the Owner and its Board of Education, officers, agents, or servants against any claim or liability arising from, or based on, a violation of any such law, ordinances, regulation, order or decree, whether by himself or by his employee or agents. Historical lack of enforcement of any law, local or otherwise, shall not constitute a waiver of Contractor's responsibility for compliance with such law in a manner consistent with the Agreement unless and until the Contractor has received written consent for the waiver of such compliance from the Owner and the agency responsible for the enforcement of such law.

**§ 13.1.3** Except as other specified, the Contractor shall comply with the current editions of applicable specifications of the following agencies, herein referenced. In the case of conflicting requirements, the most stringent shall apply: New York State Department of Education (NYSED); American Society for Testing and Materials (ASTM); New York State Department of Health (NYSDH); applicable NYS Building Code; U.S. Department of Commerce, Commercial Standards (C.S.); New York State Department of Public Work (NYSDPW); American National Standards Institute (ANSI); National Electric Code (NEC); American Insurance Association; National Fire Protection Association (NFPA); Americans with Disabilities Act (ADA); SMACNA - Technical Manuals and Standards; IAQ (Indoor Air Quality) Guidelines of Occupied Buildings Under Construction - 1995.

**§ 13.1.4** Building codes, regulations, and other applicable governmental requirements shall govern the Work of this Project. The Contractor shall comply with all requirements of the Occupational Safety and Health Administration (OHSA) of the U.S. Department of Labor, and all regulations of the New York State Labor Law pertaining to hazardous conditions that may develop in connection with the Work of this Contract. All Work and materials of the Contract shall comply with all federal, state, county and local building, health, plumbing, HVAC, and electrical codes, laws, ordinances and regulations that apply to the Work. All Work of this Project shall be subjected to the provisions of all applicable requirements of local utility company regulations. Any covered product or material used shall comply with combustion/toxicity tests as found in the New York State Building Code and shall be listed by the Department of State Building Materials and Finishes Data File.

#### § 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided

AIA Document A232<sup>m</sup> - 2019. Copyright © 1992, 2009, and 2019 by The American Institute of Architects. All rights reserved. WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This draft was produced by AIA software at 09:44:12 ET on 02/11/2020 under Order No.5818406942 which expires on 10/13/2020, and is not for resale. in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

**§ 13.2.2** The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

**§ 13.2.3** In case any provision of this Agreement should be held to be contrary to, or invalid, under the law of any country, state or other jurisdiction, such illegality or invalidity, shall not affect in any way, any other provisions hereof, all of which shall continue, nevertheless, in full force and effect in any country, state or jurisdiction in which such provision is legal and valid.

## § 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

**§ 13.3.2** Neither the acceptance of all or any part of the work covered by the Contract; nor any payment therefore; nor any order or application for payment issued under the Contract or otherwise issued by the Owner, Architect, Construction Manager, or any board member, officer, agent or employee of the Owner; nor any permission or direction to continue with the performance of the Contract before or after its specified completion date; nor any performance by the Owner of any of the Contractor's duties or obligations; nor any aid lent to the Contractor by the Owner in its performance of such duties or obligations; nor any delay or omission by the Owner to exercise any right or remedy accruing to it under the terms of the Contract or existing at law or in equity or by statute or otherwise; nor any other thing done or omitted to be done by the Owner, its commissioners, officers, agents or employees; shall be deemed to be a release to the Contractor or its sureties from any obligations, liabilities or undertakings in connection with the Owner may be entitled because of any breach thereof, excepting only a written instrument expressly providing for such release or waiver. No cancellation, rescission or annulment hereof, in whole or as to any part of the Contract, because of such hereof, shall be deemed a waiver of any money damages to which the Owner may be entitled because of such be owner of any breach of the Contract shall be deemed to be a waiver of any breach hereof.

**§ 13.3.3** The rights stated in these General Conditions and the Contract Documents are cumulative and not in limitation of any rights of the Owner at law or in equity.

§ 13.3.4 The Owner shall not be responsible for damages or for loss of anticipated profits on Work not performed on account of any termination of the Contractor by the Owner or by virtue of the Owner's exercise of its right to take over the Contractor's Work.

§ 13.3.5 The Owner shall not be liable to the Contractor for punitive damages on account of its termination of the Contractor or any other alleged breach of the Agreement and the Contractor hereby expressly waives its right to claim such damages against the Owner.

**§ 13.3.6** The Contractor hereby expressly waives any rights it may have in law or in equity to lost bonding capacity as a result of any of the actions of the Owner, the Architect or the Construction Manager taken in connection with the Contractor's Work on the Project.

**§ 13.3.7** The Contractor agrees that it waives the defense of privity of contract as between itself and each other Multiple Prime Contractor. In the event that an act or omission by a Multiple Prime Contractor or its Subcontractors of any tier causes impact, damage or loss in any form to the Contractor, then the Multiple Prime Contractor responsible in whole or in part for such impact, damage or loss agrees it is directly responsible and liable to the Contractor. The Contractor acknowledges and agrees that this waiver of the defense or privity of contract permits and requires it to commence an action or suit directly against the responsible Multiple Prime Contractor. The Owner, Architect and the Construction Manager shall not be parties to such suit. The Contractor waives and relinquishes any right and claim as against the Owner, to the extent such claim is caused, or contributed to, by a Multiple Prime Contractors of any tier.

#### § 13.4 Tests and Inspections

**§ 13.4.1** Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. Tests, inspections and approvals of portions of the Contractor's Work required by the Drawings or Specifications shall be made at an appropriate time. Unless otherwise provided, the Contractor shall arrange for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. The Owner shall bear costs of (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating their cost to the Contractor.

**§ 13.4.1.1** Tests inspections and approval of portions of the Contractor's Work required by laws, ordinances, rules, regulations or orders of public authorities or governmental agency having jurisdiction shall be made at an appropriate time. The Contractor shall consult with the Architect concerning the need for testing and/or inspection of its Work pursuant to law, ordinance, regulation or orders of public authorities or governmental agencies and shall advise the Owner in writing that it has made arrangements for such tests, inspections and approvals with the appropriate public authority or governmental agency. The Contractor shall be solely responsible for making timely notice of the need for a test, inspection and/or approval with the relevant public authority or governmental agencies and shall bear all costs associated with such testing, inspection or approval required by such public authority or governmental agency.

**§ 13.4.2** If the Construction Manager, Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Section 13.4.1, the Construction Manager or Architect shall, upon written authorization from the Owner, instruct the Contractor to arrange for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

**§ 13.4.3** If such procedures for testing, inspection or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses shall be at the Contractor's expense, including the cost of retesting for verification of compliance if necessary until the Architect certifies that the Work in question does comply with the requirements of the Contract Documents, and none of such costs shall be included in computing the Contract Sum.

**§ 13.4.4** Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Construction Manager for transmittal to the Architect.

**§ 13.4.5** If the Construction Manager or Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

**§ 13.4.7** Any material to be furnished shall be subject to inspections and tests in the shop and field by the Architect. Shop inspection shall not relieve the Contractor of the responsibility to furnish satisfactory materials and the right is reserved to reject any material at any time before final acceptance of the Work, when in the opinion of the Architect the materials and-/or workmanship do not conform to the Specification requirements.

#### § 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the legal rate as required in General Municipal Law Section 106-b.

### § 13.6 Time Limits on Claims

**§ 13.6.1** No action or proceeding shall lie or be maintained by the Contractor, nor anyone claiming under or through the Contractor, against the Owner upon any claim arising out of or based on the Agreement or the Contract Documents or by reason of any act or omission or requirements relating to the giving of notices and information, unless such action or proceeding shall be commenced within one (1) year after submission to the Owner of the final Application for Payment. As to a claim based upon money required to be retained for any period after the date of the final Application for Payment, such action must be commenced within six (6) months after such money becomes due and payable under the terms of the Contract. Notwithstanding, if the Contract is terminated by the Owner, any action or proceeding by the Contractor must be commenced within six (6) months after the date of such termination. The Contractor's acceptance of final payment shall constitute a release of all claims against the Owner. This provision shall not relieve the Contractor of the obligation to comply with the provisions of the law relating to notices of claim.

**§ 13.6.2** Acts or failures to act occurring during the construction of the Project or following the issuance of the final certificate for payment, which give rise to a cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any warranty provided under Section 3.5, the date of any correction of the Work or failure to correct the Work by the Contractor under Section 12.2, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor, whichever occurs last.

## § 13.7 No Oral Waiver or Constructive Changes

The provisions of the Contract Documents shall not be changed, amended, waived, or otherwise modified in any respect except by a writing signed by the Owner. No person is authorized on behalf of the Owner to orally change, amend, waive, or otherwise modify the terms of the Contract Documents or any of the Contractor's duties or obligations under or arising out of the Contract Documents. Any change, waiver, approval, or consent granted to the Contractor shall be limited to the specific matters stated in the writing signed by the Owner, and shall not relieve the Contractor of any other of the duties and obligations under the Contract Documents. No "constructive" changes shall be allowed.

#### § 13.8 Notices Regarding Liens

The Contractor shall provide to the Owner copies of all notices of any type regarding liens received from Subcontractors, Sub-subcontractors, or suppliers to the Contractor.

#### § 13.9 Wages Rates

The Contractor shall, and cause its Subcontractors to, comply with prevailing wage rate determinations as issued by the State of New York Department of Labor for the location and duration of this Project. Current wage rates for this Project are included in the Project Manual.

#### § 13.10 General Provisions

Any specific requirement in this Contract that the responsibilities or obligations of the Contractor also apply to a Subcontractor is added for emphasis and is also hereby deemed to include a Subcontractor of any tier. The omission of a reference to a Subcontractor in connection with any of the Contractor's responsibilities or obligations shall not be construed to diminish, abrogate or limit any responsibilities or obligations of a Subcontractor of any tier under the Contract Documents or the applicable subcontract.

#### § 13.11 Manufacturer's and Trade Standards

**§ 13.11.1** Whenever any manufacturer of material utilized in the Project issues recommended fabrication, installation, erection, and/or application standards or instructions, such standards or instructions shall be strictly followed in the performance of the Work, except as specified otherwise.

**§ 13.11.2** Whenever any trade, organization, institution, utility company, code group, society, association and governing board standard, or requirement of specification is adopted by reference in the Contract Documents, all Work related thereto shall be performed in strict accord with the referenced edition thereof and amendments thereto, except where a higher standard is specifically required by the Contract Documents.

**§ 13.11.3** The Contractor shall take full responsibility for failure of materials, devices, equipment, systems, and finishes not fabricated, installed, erected, or applied in accord with the requirements of this Section and shall remove, replace, repair or correct any such failures or deficiencies promptly upon notification by the Owner or Architect.

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## ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

#### § 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 90 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped; or
- **.2** An act of government, such as a declaration of national emergency, that requires all Work to be stopped; or
- .3 Because the Construction Manager has not certified or the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4 and 9.5, or because the Owner has not made payment after 14 days written notice of such failure to make payment provided that such failure is not due to a disputed amount, and except to the extent the Owner is excused from timely making all or part of any payment on a Certificate for Payment as per any other provisions of the Contract Documents.

Notwithstanding the preceding or anything else in the Contract Documents, the Contractor shall not cease or delay the progress of the Work for any reason other than one set forth in Section 9.7.1, it being agreed that monetary damages shall be an adequate remedy for the Contractor for any breach of this Agreement or the Contract Documents by the Owner.

**§ 14.1.2** The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion.

**§ 14.1.3** If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon 30 days' written notice and opportunity to cure to the Owner, terminate the Contract and recover from the Owner payment for such Work properly performed for which it has not otherwise been compensated, but in no event shall the Owner be liable to the Contractor for any prospective loss, including, but not limited to, termination expenses, loss of anticipated profits, impact damages, unabsorbed overhead, or the like. Notwithstanding the foregoing, any such payments to the Contractor shall be less any setoffs to which the Owner may be entitled as per any other provision of the Contract Documents.

**§ 14.1.4** If the Work is stopped for a period of 90 consecutive days through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon 30 additional days' written notice to the Owner, Construction Manager and Architect (during which the Owner shall have the right and opportunity to cure), terminate the Contract and recover from the Owner as provided in Section 14.1.3.

#### § 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 refuses or fails to supply enough properly skilled workers or proper materials or equipment to complete the Work in a diligent, efficient, timely, workmanlike, skillful, and careful manner;
- .2 fails to make payment to Subcontractors or Suppliers for materials or labor in accordance with the respective agreements between the Contractor and its Subcontractors or Suppliers;
- .3 disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority, or its health and safety plan;
- .4 otherwise is guilty of substantial breach of or default under a provision of the Contract Documents;
- .5 cannot complete the Work within the Contract Time or within the time to which such completion may have been extended; provided, however, that the impossibility of timely completion is, in the Owner's opinion, attributable to conditions within the Contractor's control;
- .6 breaches any warranty made by the Contractor under or pursuant to the Contract Documents;
- .7 is or has been unnecessarily or unreasonably or willfully delaying the performance and completion of the Work, or the award of necessary subcontracts, or the placing of necessary material and equipment orders;

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- .8 fails to furnish the Owner with assurances satisfactory to the Owner evidencing the Contractor's ability to complete the Work in compliance with all requirements of the Contract Documents;
- .9 refuses to proceed with the Work or extra work when and as directed by the Owner, Construction Manager or Architect;
- .10 fails after commencement of the Work to proceed continuously with the construction and completion of the Work for more than 10 days, except as permitted under the Contract Documents;
- .11 fails or neglects to complete the Work within the Contract Time or in accordance with the Construction Schedule;
- .12 refuses or fails to correct deficient Work performed by it;
- .13 the Contractor's progress of the Work is such that the Owner reasonably believes that the Contractor shall not be able to achieve Substantial Completion by the Substantial Completion Date and the Contractor has not delivered and implemented a recovery plan required under the Contract or has not recovered the schedule sufficient to meet the respective Contract Time requirements as required by written notice to the Contractor by the Owner; or
- .14 disregards the instructions of the Construction Manager, Architect or Owner (when such instructions are based on the requirements of the Contract Documents).

**§ 14.2.2** When any of the above reasons exist, the Owner may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven (7) days' written notice, terminate employment of the Contractor at the expiration of such seven (7) day period, and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor and take possession of materials stored off-site by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient utilizing for such purpose such of the Contractor's plant, materials, equipment, tools and supplies remaining on the site, and also such subcontractors as it may deem advisable, or if may call upon the Contractor's surety at its own expense to do so. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work. Such accounting shall be final, binding and conclusive upon the Contractor, its surety, and any person claiming under or through the Contractor, as to the amount thereof.

**§ 14.2.3** When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

**§ 14.2.4** In the event that the Owner declared the Contractor in default of the Work or any part of the Work, the Contractor, in addition to any other liability to the Owner hereunder or otherwise provided for or allowed by law, shall be liable to the Owner for any costs it incurs for additional architectural, engineering and construction administration services necessary, in its opinion, because of the default and the total amount of other damages incurred by the Owner from the date when the Work should have been completed by the Contractor in accordance with the terms hereof to the date of actual completion of the Work, both of which items shall be considered as costs incurred by the Owner in completing the Work and the amount of which may be charged against and deducted out of such monies as would have been payable to the Contractor or its surety if the Work had been completed without a default. If the costs of finishing the Work exceed the unpaid Contract balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall, upon application, be certified by the Initial Decision Maker, and this obligation for payment shall survive termination of the Contract.

**§ 14.2.4.1** The costs of finishing the Work also include, without limitation, all reasonable attorneys' fees incurred in responding to the default and enforcing the Owner's rights under the Contract Documents, additional title costs, insurance, additional interest because of any delay in completing the Work, loss of State Building Aid, and all other direct and indirect and consequential damages incurred by the Owner by reason of the termination of the Contractor as stated herein. In addition, the Owner shall have the right to recover all costs, including attorneys' fees, incurred by the Owner in enforcing its rights and remedies under this Section 14.2, including costs and attorneys' fees incurred in any dispute resolution proceeding.

**§14.2.4.2** It is recognized that: (1) if an order for relief is entered on behalf of Contractor pursuant to Title 11 of the United States Code, (2) if any other similar order is entered under any other debtor relief laws, (3) if Contractor

makes a general assignment for the benefit of its creditors, (4) if a receiver is appointed for the benefit of its creditors, or (5) if a receiver is appointed on account of its insolvency, any such event could impair or frustrate Contractor's performance of the Contract. Accordingly, it is agreed that upon the occurrence of any such event, Owner shall be entitled to request of Contractor or its successor in interest adequate assurance of future performance in accordance with the terms and conditions of the Contract. Failure to comply with such request within ten (10) days of delivery of the request, or Owner's determination that the assurances are not adequate, shall entitle Owner to terminate the Contract and to the accompanying rights set forth in Subparagraphs 14.2.1 through 14.2.4 hereof. In all events pending receipt of adequate assurance of performance and actual performance in accordance therewith, Owner shall be entitled to proceed with the Work with its own forces or with other Contractors on a time and material or other appropriate basis, the cost of which will be back charged against the Contract Sum.

§ 14.2.5 If the Owner wrongfully terminates the Contract for cause, the rights, remedies and obligations of the parties will be the same as if the Owner had terminated the Contract for convenience under Section 14.4.

§ 14.2.6 In the event that the Contractor, or the Contractor's surety, challenges the Owner's termination of the Contract for cause, and the Owner prevails in litigation in connection with such challenge, whether initiated by the Owner or by the Contractor or the Contractor's surety, the Owner shall be entitled to its costs, including reasonable attorney's fees, incurred as a result of such litigation, as part of any judgment against the Contractor or the Contractor's surety. Such costs, including reasonable attorney's fees, shall be deemed a cost of finishing the Work.

#### § 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine. The Owner shall incur no liability by reason of such suspension, delay, or interruption except that the Contractor may request an extension of its time to complete its Work in accordance with Article 8 hereof.

§ 14.3.2 The Contract Time shall be adjusted for increases in time caused by suspension, delay or interruption as described in Section 14.3.1. No adjustment shall be made to the extent:

- .1 that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of this Contract.

#### § 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the whole or any portion of the Contract for the Owner's convenience and without cause upon not less than seven (7) days' written notice to the Contractor. Notwithstanding any other provision to the contrary in the Contract, the Owner reserves the right at any time and in its absolute discretion to terminate the services of the Contractor or the Work by giving written notice to the Contractor. This termination for convenience of the Owner provision allows and authorizes the Owner to terminate this Contract at any time and for any reason whatsoever. This right may be exercised by the Owner in its complete discretion. Termination by the Owner under this Section shall be by Notice of Termination delivered to the Contractor specifying the extent of termination and the effective date.

§ 14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall immediately and in accordance with instructions from the Owner:

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work;
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders; and
- .4 proceed to complete the performance of the Work required under portions of the Contract not terminated, if any.

§ 14.4.3 Upon receipt of written notice of the Owner's exercise of such termination, the Contractor shall, as the Contractor's sole and exclusive remedy, be paid for the Work properly executed in accordance with the Contract Documents prior to the effective date of termination and for items properly fabricated off-site, delivered and stored in accordance with the Owner's instructions or the Contract Documents before such effective date. The Contractor's entitlement to payment for all such work shall be predicated on its performance of such work in accordance with the Contract Documents as certified by the Architect and Construction Manager. The Contractor shall be entitled to no other payment and waives any claim for damages including, but not limited to, lost profits, any prospective loss,

underutilization of personnel or equipment, unabsorbed overhead, and any and all items of consequential loss or damage. The Owner shall be entitled to credit against any payment to be made to the Contractor pursuant to this Section 14.4 the following: (1) payments previously made to the Contractor for the terminated portion of the Work; (2) claims which the Owner has against the Contractor under the Contract Documents; and (3) the value of the materials, supplies, equipment, or other items that are to be disposed of by the Contractor, the cost of which is included in the Contract Sum. Notwithstanding the foregoing, in the event of a termination under Section 14.4.1 prior to the issuance of a Notice to Proceed, the Contractor shall not be entitled to any compensation whatsoever.

#### ARTICLE 15 CLAIMS AND DISPUTES

### § 15.1 Claims

**§ 15.1.1 Definition.** A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. Neither a Request for Information, nor a Construction Change Directive, nor a Change Order, nor a reservation of rights, nor minutes of a meeting, nor a daily report, nor any log entry, nor an Owner's request for or the Contractor's response to a Change Order proposal, nor notice of a potential or future claim shall constitute a Claim.

#### § 15.1.2 Time Limits on Claims

§ 15.1.2.1 Claims by the Contractor must be initiated by written notice to the Owner and the Initial Decision Maker. Claims by the Contractor must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the Contractor first recognizes the condition giving rise to the Claim, whichever is earlier.

**§ 15.1.2.2** Written notice shall contain a heading stating "Notice of Claim" to clearly identify it as such. Such notice shall set forth in detail the circumstances that form the basis for the Claim and shall include the following: (1) a clear statement of claim matter, including background and chronology; (2) documentation in support of claim matter; (3) documentation in support of claimed damages; and (4) certification by responsible officer of claimant.

**§ 15.1.2.3** The Owner shall not be liable to any Contractor or Subcontractor for damages caused by any breach of Contract, delay in performance or other act of neglect by other Contractors or Subcontractors having Contracts for performance of any portion of work.

#### § 15.1.3 Notice of Claims

**§ 15.1.3.1** Claims by the Contractor must be initiated by written notice to the Owner and to the Architect with a copy sent to the Construction Manager within the time limits set forth in Section 15.1.2.1 above. The purpose of the written notice is to give the Owner prompt opportunity: (a) to cancel or revise orders or directions, change plans, mitigate or remedy circumstances giving rise to the Claim or to take other action that may be desirable; (b) to monitor and verify the facts and circumstances as they occur; and (c) to verify any costs and expenses claimed by the Contractor contemporaneously as they are incurred. Written notice is required whether or not the Owner, Construction Manager or Architect is aware of the facts or circumstances that constitute the basis for the Contractor's Claim, and no action or conduct of the Owner, Construction Manager, Architect or any other person will be regarded as a waiver of such notice requirement except only a written statement to such effect signed by the Owner. Failure of the Contractor to give written notice as required by this Section shall be deemed conclusively to be a waiver and release of any Claim, and such written notice shall be a condition precedent to the Contractor's right to make any Claim arising out of, under or in connection with the Contract or its performance of the Work.

**§ 15.1.3.2** Written notice shall contain a heading stating "Notice of Claim" to clearly identify it as such. Such notice shall set forth in detail the circumstances that form the basis for the Claim and shall include the following: (1) a clear statement of the claim, including background and chronology; (2) documentation in support of the claim; (3) documentation in support of claimed damages; and (4) certification by responsible officer of the Contractor. The responsibility to substantiate Claims shall rest with the Contractor. An additional Claim arising from the same occurrence or condition made after the Initial Claim has been implemented by Change Order shall not be considered.

§ 15.1.3.3 The Contractor agrees that it has and will make no claim for damages against the Owner by reason of any act or failure to act by any other Contractor, Separate Contractor or Subcontractors having contracts for performance of any portion of work of the Project or in connection with the Owner's, Architect's or Construction Manager's acts or omissions to act in connection with such other Contractors, Separate Contractors or Subcontractors.

## § 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim by the Contractor, except as otherwise agreed in writing or as provided in Section 9.7, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments of undisputed amounts in accordance with the Contract Documents; provided, however, that the Contractor shall use its best efforts to furnish the Architect and Owner, as expeditiously as possible, with notice of any Claim including, without limitation, those in connection with concealed or unknown conditions, once such Claim is recognized, and shall cooperate with the Architect and the Owner in any effort to mitigate the alleged or potential damages, delay or other adverse consequences arising out of the condition which is the cause of such a Claim. The Construction Manager will prepare Change Orders and the Architect will issue a Certificate for Payment or Project Certificate for Payment in accordance with the decisions of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost. If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.3. The Contractor agrees that an express condition precedent to the Contractor's entitlement to any increase in the Contract Sum shall be fulland complete compliance to the satisfaction of the Owner with the requirements of Article 15. The Contractor acknowledges the no damages for delay provisions set forth in Sections 8.3.2 and 15.1.6.1.4 hereof.

§ 15.1.5.1 The Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Time if:

- The Contractor knew of the existence of such conditions at the time Contractor made a final .1 commitment to Owner in respect of Contract Sum and Contract Times by the submission of a bid or becoming bound under a negotiated contract; or
- .2 The existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test or study of the site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for the Contractor prior to Contractor's making such final commitment;
- .3 The Contractor failed to give the written notice within the time and as required by Section 15.1.2; or
- 4 If the Owner and the Contractor are unable to agree on entitlement to or as to the amount or length of any such equitable adjustment in the Contract Sum or Contract Times, a claim may be made therefore as provided in Article 15. However, the Owner, Construction Manager, and Architect shall not be liable to the Contractor for any claims, costs, losses or damages sustained by the Contractor on or in connection with any other project or anticipated project.

#### § 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Sections 15.1.2 and 15.1.3 shall be given. The Contractor's Claim shall include an estimate of the probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

§ 15.1.6.1.1 An application for extension of time must set forth in detail the circumstances that form the basis for the Claim, the date upon which each cause of delay began to affect the progress of the Work, the date upon which each cause of delay ceased to affect the progress of the Work and the number of days' increase in the Contract Time claimed as a consequence of each such cause of delay. The Contractor shall provide such supporting documentation as the Owner, Construction Manager or Architect may require including, where appropriate, a revised construction schedule indicating all the activities affected by the circumstances forming the basis of the Claim for an increase in the Contract Time.

§ 15.1.6.1.2 The Contractor shall not be entitled to a separate increase in the Contract Time for each one of the number of causes of delay which may have concurrent or interrelated effects on the progress of the Work, or for concurrent delays due to the fault of the Contractor.

§ 15.1.6.1.3 The Contractor agrees that an express condition precedent to the Contractor's entitlement to any extension of the Contract Time shall be full and complete compliance to the satisfaction of the Owner with the requirements of Articles 8 and 15.

§ 15.1.6.1.4 The Owner shall not be liable to the Contractor or any of its Subcontractor for claims, impact costs, extended general conditions, unabsorbed overhead or delay damages of any nature caused by or arising out of delay, disruption, interference, inefficiencies, impedance, hindrance, acceleration, resequencing, schedule impacts, lack of timeliness by the Owner or its Architect or Construction Manager, and lack of coordination or scheduling, cumulative impact of multiple change orders, errors or omissions in the design of the Project, delay and other

performance impacts. The sole remedy against the Owner for such delays shall be the allowance of additional time for completion of the Work, the amount of which shall be subject to the Claims procedure set forth herein. Except only in the case of the Owner's failure to provide access to the site of the Work such that the Contractor is wholly unable to perform the Work, which shall be the sole and exclusive exception to the no-damages-for-delay provision contained herein, the Contractor expressly agrees not to make and hereby waives any claim for damages for delay, including, but not limited to, those resulting from increased labor or material costs, extended general conditions, directions given or not given by the Owner, Construction Manager, or Architect, including scheduling and coordination of the Work; the Architect's preparation of drawings and specifications or the Construction Manager's or Architect's review of shop drawings and requests for instructions; errors or omissions in the design of the Project; or, on account of any delay, disruption, interference, impedance, inefficiency, lack of productivity, obstruction or hindrance for any cause whatsoever by the Owner, Construction Manager, Architect or any other Contractor or Separate Contractor on the Project, whether or not the delays or their causes or their length were foreseeable or contemplated by the parties when they entered into the Contract. The Contractor agrees that its sole right and remedy therefore shall be an extension of the Contract Time, if appropriate. It is emphasized that no monetary recovery may be obtained by the Contractor for delay against the Owner, Construction Manager, Architect, other Contractor or Separate Contractor based on any reason and that the Contractor's sole remedy, if appropriate, is additional time.

**§ 15.1.6.2** If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction. In planning his construction schedule within the agreed Contract Time, it shall be assumed that the Contractor has anticipated the amount of adverse weather conditions normal to the site of the Work for the season or seasons of the year involved. Only those weather delays attributable to other than normal weather conditions will be considered by the Architect.

**§ 15.1.7 Waiver of Claims for Consequential Damages.** The Contractor waives any and all claims for consequential damages of any kind and nature arising out of or relating to this Contract. This waiver includes, without limitation, damages incurred by the Contractor for principal office expenses including compensation for personnel stationed there, unabsorbed overhead, for losses of financing, business and reputation, and loss of profit and anticipated profit. This waiver of consequential damages shall survive termination of the Contract.

#### § 15.2 Initial Decision

**§ 15.2.1** Claims by the Contractor, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims by the Contractor excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to binding dispute resolution of any Claim. If an initial decision has not been rendered within 30 days after the Contractor's Claim has been referred to the Initial Decision Maker, the Contractor may proceed with binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

**§ 15.2.2** The Initial Decision Maker will review Claims by the Contractor and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

**§ 15.2.3** In evaluating Claims by the Contractor, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

**§ 15.2.4** If the Initial Decision Maker requests a party to provide a response to a Claim by the Contractor or to furnish additional supporting data, such party shall respond, within 10 days after receipt of such request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished or (3) advise the Initial Decision Maker that no supporting data will be

furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim by the Contractor in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim by the Contractor, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect and Construction Manager, if the Architect or Construction Manager is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to binding dispute resolution.

§ 15.2.6 Intentionally omitted.

§ 15.2.6.1 Intentionally omitted.

§ 15.2.7 Intentionally omitted.

§ 15.2.8 If a Claim by the Contractor relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

#### § 15.3 Dispute Resolution

§ 15.3.1 At the election of the Owner, the Owner and Contractor will attempt in good faith to resolve any controversy or claim arising out of or relating to the Contract, its breach, termination or validity through non-binding mediation and otherwise as set forth in this Section. Unless otherwise agreed, any mediation shall take place at the location of the Project.

§ 15.3.2 Should the Contractor seek to pursue any claim subject to this Section 15.3, the Contractor shall make a written demand to the Owner requesting that the Owner elect whether or not mediation is required. The written demand shall expressly reference this Section 15.3 and be addressed via Certified Mail, Return Receipt Requested, to the Superintendent of Schools for the Owner. The Owner shall respond in writing. If a writing is not post marked to, or otherwise received by, the Contractor within 15 business days of receipt by the Owner of such demand relating to mediation, the Owner shall be deemed to have elected to forgo mediation.

§ 15.3.3 If the controversy or claim has not been resolved pursuant to the mediation procedure within 60 days of the commencement of such procedure, or if the Owner elects not to participate in mediation, any further proceedings shall be via litigation, which litigation shall be venued exclusively in New York Supreme Court, County of Westchester.

§ 15.3.4 Wherever reference is made to arbitration in the Contract Documents, such reference shall be changed to refer to litigation.

§ 15.3.5 The Contractor shall carry on the Work and maintain its schedule during any proceeding under this article 15.

§ 15.3.6 The laws of the State of New York without reference to its conflicts of the law principles shall govern the Contract.

§ 15.3.7 In no event may a demand for mediation be made, or litigation filed, after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statutes of limitations.

#### **ARTICLE 16 SPECIAL CONDITIONS**

#### § 16.1 Equal Opportunity

§ 16.1.1 The Contractor shall maintain policies for equal employment opportunity for construction employment. During performance of the Agreement, the Contractor agrees as follows:

§ 16.1.2 The Contractor and its Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. The Contractor shall take affirmative action to ensure that all applicants are employed, and that employees are treated during employment without regard to their race, religion, color, sex, or national origin. Such action shall include, but not be limited to, the following:

employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship and on-the-job training.

§ 16.1.3 The Contractor will post and keep posted in conspicuous places, for employees and applicants for employment, notices obtained by the Contractor from the New York State Division of Human Rights as set forth in the General Regulations of that Division at 9 NYCRR 466.1(a), such conspicuous places to be as defined in 9 NYCRR 466.1(b), and such other postings as that Division may require with respect to New York State's laws, codes, rules, and regulations governing discrimination in employment.

**§ 16.1.4** The Contractor will state in all solicitations or advertisements for employees placed by, or on behalf, of the Contractor, that all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color or national origin.

**§ 16.1.5** The Contractor will comply with provisions of Sections 290-299 of the Executive Law and with the Civil Rights Law, will furnish all information and reports deemed necessary by the State Commissioner of Human Rights under these non-discrimination clauses and such sections of the Executive Law, and will permit access to the Contractor's books, records and accounts by the Owner, the State Commissioner of Human Rights, the Attorney General and the Industrial Commissioner for the purposes of investigation to ascertain compliance with these nondiscrimination clauses and such sections of the Executive Law and Civil Rights Law.

**§ 16.1.6** The Contractor will send to each labor union, or representatives of workers, with which it has, or is bound by a collective bargaining or other Agreement or understanding notices obtained from the State Commissioner of Human Rights, advising such Labor Union or representative of the Contractor's Agreement under requirements of this Article. If the Contractor was directed to do so by Owner as part of the Bid, the Contractor shall request such labor union or representative to furnish him with a written statement that such labor union or representative either will affirmatively cooperate within the limits of its legal and contractual authority in the implementation of the policy and provisions of these non-discrimination clauses or that it consents and agrees that recruitment accordance with the purposes and provisions of these non-discrimination clauses. If such labor union or representative fails or refuses to comply with such a request that it furnish such a statement, the Contractor shall promptly notify the Owner and State Commissioner of Human Rights of such failure or refusal.

§ 16.1.7 The Agreement may be forthwith canceled, terminated or suspended in whole, or in part, by Owner upon the basis of a finding made by the State Division of Human Rights, that the Contractor has not complied with these nondiscrimination clauses, and the Contractor may be declared ineligible for future Contracts made by, or in behalf of, the State, or Authority or Agency of the State, or Housing Authority or an Urban Renewal Agency, or Contracts requiring the approval of the Commissioner of Housing and Community Renewal, until it has satisfied the State Division of Human Rights, that it has established and is carrying out a program in conformity with the provisions of these non-discrimination clauses. Such findings shall be made by the State Division of Human Rights after conciliation efforts by the Division have failed to achieve compliance with these non-discrimination clauses and after a verified complaint has been filed with the Division, notice thereof has been given to the Contractor, and an opportunity has been afforded by the Contractor to be heard publicly in accordance with the Executive Law. Such sanctions may be imposed and remedies invoked immediately of, or in addition to sanction in remedies otherwise provided by law. If the Agreement is canceled or terminated under provisions of this Article, in addition to other rights of Owner provided in the Agreement upon its breach by the Contractor, the Contractor will hold Owner harmless against any additional expenses or costs incurred by Owner in completing the work or in purchasing the services, materials, equipment or supplies contemplated by Agreement and Owner may withhold payments from the Contractor in an amount sufficient for this purpose and recourse may be had against authority on the Performance Bond if necessary.

**§ 16.1.8** The Contractor will include the provisions of this Article in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to operations to be performed within the State of New York. The Contractor will take such action in enforcing such provisions of such subcontractor or purchase order as the State Division of Human Rights or the Owner may direct, including sanctions or remedies for non-compliance. If the Contractor becomes involved in or is threatened with litigation with a subcontractor or a vendor, as a result of such direction by the State Division of Human Rights, the Contractor shall promptly so notify the Owner and the Attorney General, requesting the Attorney General to intervene and protect the interests of the State of New York.

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## § 16.2 Waiver of Immunity

**§ 16.2.1** The Contractor hereby agrees to the provisions of Paragraph 139-a and 139-b of the New York State Finance Law and Section 103-a of the New York General Municipal Law, which require that upon the refusal of a person, when called before a grand jury, head of a State department, temporary State commission or other State agency, or the organized crime task force in the Department of Law, which is empowered to compel the attendance of witnesses and examine them under oath, to testify in an investigation concerning any transaction or contract had with the State, any political subdivision thereof, a public authority or with any public department, agency or official of the State or of any political subdivision thereof or of a public authority, to sign a waiver of immunity against subsequent criminal prosecution or to answer any relevant question concerning such transaction or contract.

**§ 16.2.1.1** Such person, and any firm, partnership or corporation of which he is a member, partner, director or officer shall be disqualified from thereafter selling to or submitting bids to or receiving awards from or entering into any contracts with New York State or any public department, agency or official thereof for goods, work or services, for a period of five years after such refusal.

§ 16.2.1.2 Any and all contracts made with the State of New York, or any public department, agency or official thereof since the effective date of this law, by such person, and by an firm, partnership or corporation of which he is a member, partner, director or officer may be canceled or terminated by the State of New York without incurring any penalty or damages on account of such cancellation or termination, but any moneys owning by the State of New York for goods delivered or work done prior to the cancellation or termination shall be paid.

#### § 16.3 Non-Collusive Clause as Required by NYS General Municipal Law Section 103-d

**§ 16.3.1** Every bid or proposal hereafter made to a political subdivision of the state or any public department, agency or official thereof where competitive bidding is required by statute, rule, regulation or local law, for work or services performed or to be performed or goods sold or to be sold, shall contain the following statement subscribed by the bidder and affirmed by such bidder as true under the penalties of perjury: Non-collusive bidding certification.

**§ 16.3.2** By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief, the following:

**§ 16.3.2.1** The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competitions, as to any matter relating to such prices with any other bidder or with any competitor.

**§ 16.3.2.2** Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor.

**§ 16.3.2.3** No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

**§ 16.3.3** A bid shall not be considered for award nor shall any award be made where requirements of this Article have not been complied with; provided however, that in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which set forth in detail the reasons therefore. Where requirements of this Article have not been complied with, the bid shall not be considered for award nor shall any award by made unless the head of the purchasing agent of the political subdivision, public department, agency or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

**§ 16.3.4** The fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed, or pending, publication of new or revised price list for such items, or (c) has sold the same items to other customers at the same prices being bids, does not constitute a disclosure within the meaning of this Article.

**§ 16.3.5** Any bid hereafter made to any political subdivision of the state or any public department, agency official thereof by a corporate bidder for work or services performed or to be performed or good sold or to be sold, where competitive bidding is required by statute, rule, regulation, or local law, and where such bid contains the certification referred to in subdivision one of this section, shall be deemed to have been authorized shall be deemed to in-

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clude the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

## § 16.4 Assignment of Public Contracts

As provided in Section 109 of the General Municipal Law, the Contractor is prohibited from assigning, transferring, conveying, subletting or otherwise disposing of the same, or of his right title, or interest therein, or his power to execute such contract or any other person or corporation without the previous consent in writing of the officer, board or agency awarding the contract. If any contractor, to whom any contract is let, granted and awarded, as required by law, by any officer, board or agency in a political subdivision, or of any district therein, shall without the previous written consent specified in subdivision one of this section, assign, transfer, convey, sublet or otherwise dispose of such contract, or his right, title or interest therein, or his power to execute such contract, to any other person or corporation, the officer, board or agency which let, made, granted, or awarded such contract shall revoke and annul such contract, and the political subdivision or district therein, as the case may be, and such officer, board or agency shall be relieved and discharged form any and all liability and obligations growing out of such contract to such contractor, and to the person or corporation to which such contract shall have been assigned, transferred, conveyed, sublet or otherwise disposed of, and such contract, except so much as may be required to pay his employees. The provisions of this section shall not hinder, prevent, or affect an assignment by any such contractor for the benefit of his creditors made pursuant to the laws of this state.

## § 16.5 Fingerprinting

Pursuant to the Safe Schools Against Violence in Education Act ("SAVE" legislation) and Part 87 of the Regulations of the Commissioner of Education, any individual who, as a result of their work on this capital project, will move (or migrate) in and out of student occupied areas for more than five (5) days a year, must be fingerprinted. The Contractor shall be responsible to ensure that it (and its employees) are in full compliance with the fingerprinting provisions New York's SAVE Legislation and Part 87 of the Regulations of the Commissioner of Education at the Contractor's sole cost and expense.

# ARTICLE 17 NEW YORK STATE LABOR LAW REQUIREMENTS

### § 17.1 Working Hours

§ 17.1.1 The Contractor specifically agrees as required by the New York State Labor Law ("Labor Law"), Sections 220 and 220-d, as amended, that:

- .1 No laborer, worker, or mechanic in the employ of the Contractor, Subcontractor or other person doing or contracting to do the whole or any part of the work included in the Contract Documents shall be permitted or required to work more than eight hours in any one calendar day or more than five (5) days in any one week, except to the extent permitted in the case of extraordinary emergencies described in the Labor Law.
- .2 The wages to be paid to each laborer, worker, or mechanic in the employ of the Contractor, Subcontractor, or other person doing or contracting to do all or any part of the work included in the Contract Documents for a legal day's work shall be not less than the prevailing rate of wages as defined by the Labor Law.
- .3 Each laborer, workman or mechanic employed by the Contractor, a Subcontractor, or other person doing or contracting to do all or any part of the work included in the Contract Documents shall be provided the supplements required by Article 8 of the Labor Law.
- .4 The minimum hourly rate of wage to be paid shall be not less than that stated in the General Conditions, and shall be as designated by the industrial Commissioner.
- .5 The Contractor's and any Subcontractor's or other person's filing of payrolls in a manner prescribed by subdivision 3-a of Section 220 of the Labor Law shall be a condition precedent to the to the Owner's payment of any sums due and owing to the Contractor, Subcontractor or other party for work done on or with respect to the Project.

#### § 17.2 Wage Rates

§ 17.2.1 The Contractor specifically agrees, as required by the Labor Law, that the Contract may be forfeited and no sum paid for any work done thereunder on a second conviction for willfully paying less than:

- .1 the prevailing wage rates as provided in Labor Law Section 220(3) as amended, or,
- .2 the minimum wage rates as provided in Labor Law Section 220-d, as amended.

§ 17.2.2 The Contractor shall comply with Prevailing Wage Rates as issued by the State of New York Department of Labor for the location and duration of this Project. Current wage rates for this project are included in the Project

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Manual as part of the Contract Documents. The Contractor is responsible to regularly review "Prevailing Wage Schedules/Updates" available on the "Prevailing Wage/Public Work" link on State of New York Department of Labor "Business in New York" web page (www.labor.state.ny.gov) to identify and implement any applicable changes to Prevailing Wage Rates during the Project.

**§ 17.2.3** The Contractor shall comply with all the requirements of the Labor Law Section 220-a, as amended, regarding mandatory submission of certified payroll records, which shall be included with each application for payment.

## § 17.3 Anti-Discrimination

§ 17.3.1 The Contractor specifically agrees, as required by the provisions of Section 220-e of the Labor Law, as amended, that:

- .1 In the hiring of employees for the performance of work under the Contract or any subcontract hereunder, no contractor, subcontractor, nor any person acting on behalf of such contractor or subcontractor, shall be reason of race, creed, color, sexual orientation, or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates;
- .2 No contractor, subcontractor, nor any person on its behalf, shall in any manner, discriminate or intimidate any employee hired for the performance of work under the contact on account of race, creed, color, sexual orientation, or national origin.
- .3 There may be deducted from the amount payable to the Contractor by the Owner under the contract a penalty at fifty dollars for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of the contract; and
- .4 The Contract may be canceled or terminated by the Owner, and all monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of this section of the Contract.

## ARTICLE 18 GENERAL MUNICIPAL LAW REQUIREMENTS OF THE STATE OF NEW YORK

#### § 18.1 Payment of Contractors and Subcontractors

§ 18.1.1 The Contractor specifically agrees it is bound by Section 106-b of the New York General Municipal Law.

# ARTICLE 19 SPECIFIC CONFORMANCE TO THE LAWS OF THE STATE OF NEW YORK

#### § 19.1 Statutory Requirements

**§ 19.1.1** The parties agree that each is bound to the provisions of the laws of the State of New York governing bidding and contracting for public improvement projects, including but not limited to applicable provisions of the General Obligations Law, Labor Law, and General Municipal Law. To the extent any provisions in the Contract Documents conflict with any provisions of New York Law, the statutory provisions shall prevail and the conflicting provisions in the Contract Documents shall be deemed to conform to the statutory provisions.

§ 19.1.2 To the extent the laws of the State of New York governing bidding and contracting for public improvement projects mandate inclusion of specific terms in contracts for such improvements, but which are not already included in these General Conditions, such terms shall be deemed and hereby are incorporated into these General Conditions.

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## SECTION 01 10 00 - SUMMARY OF WORK - MULTIPLE PRIME CONTRACTS

#### 1.1 PROJECT INFORMATION

- A. Project: Bedford Central School District Phase 2
- B. Project Location: Bedford, NY
- C. Owner: Bedford Central School District
- D. Architect: BBS Architects & Design
- E. Construction Manager: Arris Contracting Company, Inc.
- F. The overall scope of work includes:

Fox Lane High School – abatement, library renovation, cafeteria renovations, locker room renovations, gym and fitness center renovations, guidance and art room renovations, plus all associated. HVAC, electrical and plumbing upgrades.

Fox Lane Middle School – abatement, main office and nurse suite renovation, music room renovation, steam room renovations, main entrance addition, plus all associated. HVAC, electrical and plumbing upgrades.

Administration Building – abatement, men's/women's toilet room renovations plus all associated, custodial storage room addition plus all associated, toilet room renovation, boiler room renovation. HVAC, electrical and plumbing upgrades.

All prime contractors are required to actively coordinate and sequence with other contractors and the owner provided items to ensure accuracy of the installations and a smooth flow of work.

The contractor shall provide all labor, materials, equipment and services to furnish deliver and install all materials and related work as shown on the drawings, as required by these specifications and/or as directed by the Architect/Construction Manager.

#### G. Contracts:

- 1. The Project will be constructed under a multiple prime-contracting arrangement.
- 2. Prime Contracts are separate contracts between the Owner and separate contractors, representing significant construction activities. Each prime contract is performed concurrently with and closely coordinated with construction activities performed on the Project under prime contracts. Prime contracts for this Project include:
  - a. General Work Contract. (GC or GWC)
  - b. Mechanical Work Contract. (MC, HVAC or HC)
  - c. Electrical Work Contract. (EC)
  - d. Plumbing Work Contract. (PC)

#### 1.2 DIVISION OF WORK

Each contract shall include all labor materials, plans, tools, equipment and supervision which are required for or incidental to the proper completion of the work as indicated on the drawings and described in the following specification sections:

### 1.3 GENERAL REQUIREMENTS – ALL CONTRACTS

- 1. All DIVISION 00 Sections
- 2. All DIVISION 01 Sections

#### Special Notes – ALL CONTRACTS:

- Work hours M-F 7:00AM 4:30PM. Contractor will appropriately staff the project to avoid Saturday and Overtime hours which result in Owner, Construction Manager and Architect additional costs. (2<sup>nd</sup> shift where indicated by Milestone schedule 3:00 pm – 11:00 pm)
- 2. Delivery black out times- No Contractor trucks/deliveries are allowed during school bus times as indicated by owner approx. **7:00 am 8:30 am or 2:00 pm 3:30 pm**.
- 3. Each prime contractor to include all required insurance coverages as outlined by the General Conditions and front-end sections in their base bid. Provide renewals ahead of expiration. No contractors will be allowed onsite if their insurance has expired.
- 4. Contractors are specifically reminded of their responsibilities for clean up as per Section 017423. Maintaining a clean jobsite is considered a safety issue and will be strictly enforced. In addition to daily cleaning, the contractor is required to hire a professional cleaning company to final clean all areas impacted by the construction. This includes completely cleaning any surfaces/equipment/furniture which has been dusted by the construction work. If the contractor does not properly perform this function when directed by the Owner/CM, within 4 hours of being notified the owner will perform the work with others and deduct the cost from the contractor.
- 5. Each Contractor shall provide suitable rubbish containers device(s) for their own use (both demolition and construction debris), properly maintained and serviced, replaced as required and protected from access by the public fencing as may be specified herein or approved by the Architect or Construction Manager.
- 6. Existing building space may not be used for storage unless approved by Owner.
- 7. Each Contractor is required to submit their corporate safety policy within 10 days of receipt of the Notice to Proceed. Said Policy must minimally meet OSHA Standards and define details concerning the maintenance of a safe work environment and shall also define practices for the maintenance of hygiene and minimizing of the spread of infectious / contagious diseases.

#### 1.4 GENERAL WORK CONTRACT (GC or GWC)

In addition to the General Requirements, Division 1, included in this bid package contractor shall provide for proper completion of work as indicated on all drawings and in accordance with the terms and conditions described in the following sections:

#### **DIVISION 02 – EXISTING CONDITIONS**

Section 024119 – Selective Demolition Section 028000 – Asbestos Work Under This Contract Section 028100 – Asbestos Handling Certificate Section 028218 – Abatement of Asbestos Flooring/Mastic – Liquid Chemical Scrape Method Section 029000 – Lead Containing Materials Abatement

#### **DIVISION 03 – CONCRETE**

Section 030100 – Concrete Surface Preparation for Coating Section 030130 – Concrete Reconstruction and Resurfacing (Non-Structural) Section 030130.11 – Cementitious Concrete Finish Coating Section 030130.12 – Elastomeric Concrete Finish Coating Section 033000 – Cast-in-Place Concrete Section 035416 – Self Leveling Cementitious Underlayment

### **DIVISION 04 – MASONRY**

Section 040100 – Masonry Restoration and Cleaning Section 040120 – Masonry Surface Preparation for Coating Section 040140 – Natural Stone Repair and Repointing Section 042000 – Unit Masonry Section 047200 – Architectural Cast Stone

## **DIVISION 05 – METALS**

Section 050530 – Cold Galvanizing

- Section 051200 Structural Steel Framing
- Section 052100 Steel Joist Framing

Section 053000 - Metal Decking

Section 054000 - Cold Formed Metal Framing

Section 055000 – Metal Fabrications

Section 055200 – Metal Railings

## **DIVISION 06 – WOODS, PLASTICS & COMPOSITES**

Section 061000 – Rough Carpentry Section 061643 – Exterior Gypsum Sheathing Section 062000 – Finish Carpentry Section 068400 – Architectural Composite Columns

## **DIVISION 07 – THERMAL AND MOISTURE PROTECTION**

Section 071000 – Dampproofing Section 071326 – Self-Adhering Sheet Waterproofing Section 072100 – Building Insulation Section 072113 - Ultra Wall Insulation and Air Barrier System Section 072114 – Mineral Board Insulation (Thermafiber) Section 072419 – Exterior Insulation and Finish System Section 072423 – Direct Applied Exterior Finish System Section 072500 – Gypsum Board Weather-Resistant Barrier & Air Barrier System Section 072600 - Vapor Retarders Section 072713 – Self-Adhered Non-Permeable Air Barrier Membrane Section 073113.10 – Asphalt Shingles (Landmark Premium) Section 074213.23 – Metal Composite Material Wall Panels (Alucobond) Section 074293 – Metal Fascia and Soffit Panels Section 074600 - Vinyl Siding Section 075216 – SBS Modified Bitumen Roofing (Mop-Torch) Section 075323 – EPDM Roofing System Fully Adhered Section 075423 - TPO Roofing System Fully Adhered

- Section 076000 Flashing and Sheet Metal
- Section 076219 Fabricated Gravel Stops and Fascia
- Section 077000 Roof Specialties and Accessories
- Section 078100 Spray-Applied Fire Resistive Materials
- Section 078413 Penetration Firestopping
- Section 078443 Joint Firestopping
- Section 079100 Exterior Wall Joint Seals (Emseal)
- Section 079200 Joint Sealants
- Section 079219 Acoustical Joint Sealants
- Section 079513 Expansion Joint Cover Assemblies

#### **DIVISION 08 – OPENINGS**

- Section 081113 Hollow Metal Doors and Frames
- Section 081416 Flush Wood Doors
- Section 083300 Rolling Counter Fire Shutters
- Section 084113 Aluminum Entrances and Storefronts
- Section 085113 Aluminum Windows
- Section 085659 Aluminum Voice Around Transaction Security Window
- Section 087100 Door Hardware
- Section 088000 Glazing
- Section 088200 Metal Window Panels
- Section 088723 Security Window Film
- Section 088813 Fire Rated Glazing

#### **DIVISION 09 – FINISHES**

Section 090561.13 – Moisture Vapor Emission Control Section 092300 - Gypsum Plaster Section 092900 - Gypsum Wall Board Section 093013 – Porcelain and Glazed Ceramic Tile Section 095000 - Acoustical Ceiling Systems Section 095133 – Acoustical Metal Ceiling Systems Section 095426 – Suspended Wood Ceilings Section 096466.11 - Wood Athletic Flooring (Conner "Duracushion III") Section 096513 - Resilient Rubber Stair Treads Section 096519 - Resilient Tile Flooring Section 096566.11 – Indoor Resilient Athletic Surfacing Section 096623 - Thin-Set Epoxy Terrazzo Flooring Section 096723.12 - Resinous Flooring (Accelera-C) Section 096766 - Polyurethane Floor System Section 096800 - Carpeting Section 098129 - Sprayed Acoustical Applications Section 098413 - Acoustical Wall Panels Section 098413.11 - Sound-Absorbing Wall Panels Section 099000 - Painting Section 099600.11 - High-Performance Coatings (Scrubtough)

## **DIVISION 10 – SPECIALTIES**

Section 101100 – Visual Display Units

Section 101400 – Signage

Section 101416 – Roof Identification Plaque

Section 101453 – Traffic Signage

Section 102119 – Plastic Toilet Compartments

Section 102226 – Operable Partitions

Section 102813 – Toilet Accessories

Section 104400 - Fire Extinguishers, Cabinets and Accessories

Section 105114 - Fully-Welded Athletic Lockers

## **DIVISION 11 – EQUIPMENT**

Section 111200 – Parking Control Equipment

## **DIVISION 12 – FURNISHINGS**

Section 122400 – Manual Operated Roller Shades Section 123200 – Laboratory Wood Casework and Equipment Section 123213 – Wood Casework and Classroom Wardrobe Units Section 123216 – Manufactured Plastic-Laminate-Clad Casework

## **DIVISION 31 – EARTHWORK**

Section 310000 – Earthwork Section 310001 – Site Work General Provisions Section 310002 – Stake Out Section 311000 – Site Clearing Section 312317 – Trenching Section 312318 – Rock Removal Section 312500 – Erosion and Sediment Controls Section 312510 – Temporary Tree and Plant Protection

## **DIVISION 32 – EXTERIOR IMPROVEMENTS**

Section 320116 – Cold Milling Section 320117 – Pavement Repair and Resurfacing Section 321216 – Asphalt Paving Section 321216.11 – Asphalt Overlay Section 321236 – Pavement Sealing Section 321413.19 – Permeable Pre-Cast Concrete Unit Paving Section 321640 – Granite Curbs Section 321723 – Pavement Markings Section 321913.14 – Playground Surfacing (Synthetic Grass) Section 322700 – Site Furnishings Section 323113 – Vinyl Coated Chain Link Fences and Gates Section 323119 – Decorative Metal Fences and Gates Section 323223 – Segmented Retaining Walls Section 328000 – Irrigation System Section 329200 – Turf and Grasses Section 329219 – Seeding Section 329219.11 – Native Plant Seeding Section 329300 – Plants Section 329301 – Plant Maintenance

## **DIVISION 33 – UTILITIES**

Section 333000 – Sanitary Sewage Section 334000 – Storm Drainage Utilities Section 334000.11 – Cleaning Existing Storm Water Drainage Systems Section 334010 – Storm Water Drainage Retention Structures Section 334100 – Reinforced Concrete Piping Section 334613 – Subsurface Drainage System (Foundation Walls)

## Special Notes: General Work Contract (GC or GWC):

- 1. All exterior site work (walks, stairs, asphalt, etc.) is by the General Contractor.
- 2. General Contractor will include in their base bid to supply and install ¼" thick minimum of self-leveling for ALL areas receiving new flooring at all schools. The thickness will vary due to varying floor slab elevations from room to room, areas where chases and walls removed, ceramic tile removed, floor abatement, grind down high spots, etc. GC will closely review and bid accordingly to achieve a consistent flat and level floor at no additional cost to Owner.
- All asbestos abatement work is by the General Contractor. GC is specifically notified that they will need to provide temporary framing/plywood protections to secure window wall openings after abatement is completed.
- 4. Access doors for MEP trades furnished by trade requiring access; installation by General Contractor.
- 5. All new windows to receive window shades.
- 6. Fire Alarm magnetic holders furnished and wired by Electrical Contractor, installed on door by the General Contractor.
- 7. In addition to daily general housekeeping, the General Contractor shall provide a weekly broom sweep and damp mop of all areas for the entire duration of the project.
- 8. For roof Skylight removals and install, General Contractor will abate area, cut hole, install wood blocking & flash for watertight installation using a roofer who is certified by the existing roof manufacturer to maintain warranty coverage. (Roof abatement and related patching for HVAC items will be by the Mechanical Contractor.
- 9. General Contractor will install floor protections (utilizing heavy duty "Ram-Board" with taped joints, or equivalent) to protect new floor surfaces from damage until final cleaning and acceptance by owner.

## 1.5 MECHANICAL WORK CONTRACT (MC, HVAC or HC)

In addition to the General Requirements, Division 1, included in this bid package contractor shall provide for proper completion of work as indicated on all drawings and in accordance with the terms and conditions described in the following specification sections:

#### **DIVISION 02 – EXISTING CONDITIONS**

Section 024119 – Selective Demolition (Building) Section 028000 – Asbestos Work Under This Contract (As needed for Mechanical Work) Section 029000 – Lead Containing Materials Abatement (As needed for Mechanical Work)

#### **DIVISION 03 – CONCRETE**

Section 033000 - Cast-in-Place Concrete (For Mechanical related pads, etc.)

## **DIVISION 05 – METALS**

Section 051200 – Structural Steel Framing (For Mechanical penetrations, etc.) Section 055000 – Metal Fabrications (For Mechanical penetrations, etc.)

## **DIVISION 06 – WOODS, PLASTICS & COMPOSITES**

Section 061000 – Rough Carpentry (For Mechanical related blocking, etc.)

#### **DIVISION 07 – THERMAL AND MOISTURE PROTECTION**

Section 075323 – EPDM Roofing System Fully Adhered (As needed for Mechanical Work) Section 075423 – TPO Roofing Fully Adhered (As needed for Mechanical Work) Section 076000 – Flashing and Sheet Metal (As needed for Mechanical Work) Section 078413 – Penetration Firestopping (As needed for Mechanical Work) Section 079200 – Joint Sealants (As needed for Mechanical Work)

## **DIVISION 23 – HEATING, VENTILATING AND AIR CONDITIONING (HVAC)**

Section 230000 – General Provisions Section 230010 – Codes, Standards and Permits Section 230300 – Basic Mechanical Materials and Methods Section 230400 – Painting of Mechanical Work Section 230513 – Common Motor Requirements for HVAC Equipment Section 230516 – Expansion Compensation Section 230519 – Meters and Gauges for HVAC Piping Section 230523 – General Duty Valves for HVAC Piping Section 230548 – Vibration Controls for HVAC Section 230580 – Mechanical Testing Requirements Section 230593 – HVAC Testing, Adjusting and Balancing Section 230680 – Fire Stopping Section 230700 – HVAC Insulation Section 230713 – Duct Insulation – Interior

Section 230714 – Duct Insulation – Exterior

Section 230800 – Commissioning of HVAC

Section 230900 – Direct Digital Control System for HVAC

Section 230923 – Automatic Temperature Control Systems (Andover)

Section 230923.1 - Automatic Temperature Control Systems (Andover) - Maintenance Building

Section 230923.2 – Sequence of Operations

Section 231123 – Facility Natural-Gas Piping

Section 232113 – Hydronic Piping

Section 232116 – Hydronic Piping Specialties

Section 232123 – Hydronic Pumps

Section 232213 – Steam and Condensate Piping

Section 232300 – Refrigeration Piping Systems

Section 233000 – Air Distribution

Section 233101 – Duct Cleaning

Section 233113 - Ductwork

Section 233300 – Duct Accessories

Section 233400 – Fans

Section 233543 - Variable Frequency Drives

Section 233600 - Air Terminal Units

Section 233713 – Diffusers, Registers and Grilles

Section 234568 – Hydronic Finned Tube Radiation

Section 235100 - Chimneys & Breeching

Section 235200 – Cast Iron Boilers, Burners, Lead Lag Equipment

Section 236000 – VRF System Indoor Evaporator Units (2 to 5 Ton)

Section 236700 – VRF System Outdoor Condenser Units (6 to 42 Tons)

Section 238126 – VRF System Outdoor Condenser Units (6 to 42 Tons)

Section 238126.1 – VRF System Outdoor Condenser Units (1 to 3 Tons)

Section 237406 – Packaged Rooftop Ventilators with Energy Recovery

Section 237433 – Indoor Package Make-up Air Unit with Heating

Section 237488 – Dedicated Outdoor Air Systems with Energy Recovery

Section 238223 – Unit Ventilators

Section 238236 – Heating & Cooling Terminal Units

Section 238239.1 – Hydronic Cabinet Unit Heaters

Section 238239.2 – Electric Cabinet Heaters

#### **DIVISION 26 – ELECTRICAL**

Section 260519 – Low Voltage Electrical Power Conductors and Cables (For HVAC control wiring)

#### Special Notes: Mechanical Work Contract (MC, HVAC or HC):

1. Access doors are furnished by the Mechanical Contractor and installed by the General Contractor.

- 2. All HVAC Louvers/vents are supplied and installed by the Mechanical Contractor. MC will make their own penetration cuts through existing walls, install lintels and/or new metal panels provided by the General Contractor.
- 3. Mechanical Contractor to provide finished end caps and/or trim necessary to properly finish off any areas where HVAC units have been cut into existing fin tube, cabinets, etc.
- 4. All Mechanical related roofing work is by the Mechanical Contractor. MC will layout, cut hole, install steel supports, install wood blocking, install curb/rails, flash and provide watertight installation using roofer subcontractor who is approved, by manufacturer of existing roofing system to maintain warranty. (Roof Skylight work is by General Contractor)
- 5. VFD's, disconnects, starters, etc. are to be supplied by the Mechanical Contractor, and will be installed by the Electrical Contractor, unless noted otherwise.
- 6. All HVAC control wiring is provided and installed by the Mechanical Contractor. (Power wiring to units by the Electrical Contractor)
- 7. Mechanical Contractor is responsible for making their own through wall and through floor duct/piping penetrations and associated patching/fire-stopping.
- 8. Any existing ceiling removal/replacement and modifications necessary to install new mechanical work to be done by the Mechanical Contractor.
- 9. Fire Alarm Duct detectors supplied and wired by the Electrical Contractor. (Mechanical Contractor installs the duct detector)
- 10. Solenoid valves supplied and installed by Mechanical Contractor will be wired by Electrical Contractor, unless noted otherwise.

#### 1.6 ELECTRICAL WORK CONTRACT (EC)

In addition to the General Requirements, Division 1, included in this bid package contractor shall provide for proper completion of work as indicated on all drawings and in accordance with the terms and conditions described in the following specification sections.

#### **DIVISION 02 – EXISTING CONDITIONS**

Section 024119 - Selective Demolition (Building)

#### **DIVISION 03 – CONCRETE**

Section 033000 – Cast-in-Place Concrete (As needed for Electrical Work)

#### **DIVISION 05 – METALS**

Section 055000 – Metal Fabrications (As needed for Electrical Work)

#### DIVISION 06 - WOODS, PLASTICS & COMPOSITES

Section 061000 – Rough Carpentry (As needed for Electrical Work)

#### **DIVISION 07 – THERMAL AND MOISTURE PROTECTION**

Section 078413 – Penetration Firestopping (As needed for Electrical Work)

## **DIVISION 26 – ELECTRICAL**

Section 260500 - Common Work Results for Electrical Section 260519 – Low Voltage Electrical Power Conductors and Cables Section 260526 - Grounding and Bonding Section 260529 – Fasteners, Attachments and Supporting Devices Section 260532 – Raceways, Fittings and Accessories Section 260534 - Outlet Junction and Pull Boxes Section 260543 – Underground Cable and Conduit Systems Section 260553 - Identification for Electrical Systems Section 260810 - Mandatory UL Participation Section 260924 - Lighting Controls - Lutron Vive Section 260943 – Network Lighting Controls Section 260943.13 - Wireless Network Lighting Controls Section 262213 - Dry-Type Distribution Transformers Section 262416 - Panelboards Section 262726 - Wiring Devices Section 262816 - Heavy Duty Safety Switches Section 265100 – Interior Lighting Section 265600 - Exterior Lighting

## **DIVISION 27 – COMMUNICATIONS**

Section 271501 – Communications and Horizontal Cabling Section 272000 – Data Communications Network Equipment Section 274116 – Audio Visual Systems Section 274116.10 – PA Sound System - Modify/Expand Existing System Section 275313 – Synchronized Clock Systems

## **DIVISION 28 – ELECTRONIC SAFETY AND SECURITY**

Section 281500 – Integrated Access Control Hardware Section 281523.17 – Audio Video Intercom (IP) Section 282100 – Surveillance Cameras Section 284613.10 – Fire Alarm (Modify Existing)

#### **DIVISION 31 – EARTHWORK**

Section 310000 – Earthwork (as needed for Electrical Work) Section 310001 – Site Work General Provisions (As needed for Electrical Work)

## **DIVISION 32 – EXTERIOR IMPROVEMENTS**

Section 321216 – Asphalt Paving (As needed for Electrical Work)

## Special Notes: Electrical Work Contract (EC)

- 1. Access doors if needed for electrical are furnished by Electrical Contractor and installed by General Contractor.
- 2. VFD's, disconnects, motor starters, etc. which are supplied by Mechanical Contractor will be installed by Electrical Contractor, unless noted otherwise.
- 3. Any excavation/backfill for electrical items (U/G conduits, site lighting bases, etc.) is by the Electrical Contractor. This includes proper backfill, compaction and restoration to original condition for any impacted surfaces.
- 4. Any existing ceiling removal/replacement necessary to install new electrical work to be done by the Electrical Contractor. (e.g. – new conduits for feeders through existing ceilings, etc.). In areas of ceiling removal, the EC will tie up and secure any low hanging wires, using zip ties at 6'-0" on center.
- 5. Electrical Contractor will relocate existing utilities which conflict with the new construction. (e.g. wire mold on casework or window wall scheduled for replacement.
- 6. Fire Alarm magnetic holders furnished and wired by Electrical Contractor, Installed on door by the General Contractor.
- 7. All systems work is by Electrical Contractor including Fire Alarm, Security, PA system Door Access, WAP's, Data, etc. (This includes removal and reinstallation of any devices impacted by new construction work).
- 8. Any wood blocking or panel backboards for electrical items by Electrical Contractor.
- 9. All concrete for electrical items is by Electrical Contractor. (Site Lighting bases, conduit encasement, etc.)
- 10. Electrical Contractor to wire any Fire Alarm duct detectors which are provided by the Mechanical Contractor.
- 11. Electrical Contractor is specifically notified construction is phased which necessitates that utilities & services will need to be temporarily connected and maintained as necessary to ensure that all occupied areas have the required services.
- 12. Solenoid valves supplied and installed by Mechanical Contractor will be wired by Electrical Contractor, unless noted otherwise.

#### 1.7 PLUMBING WORK CONTRACT (PC)

In addition to the General Requirements, Division 1, included in this bid package contractor shall provide for proper completion of work as indicated on all drawings and in accordance with the terms and conditions described in the following specification sections.

## **DIVISION 02 – EXISTING CONDITIONS**

Section 024119 – Selective Demolition (Building)

## **DIVISION 03 – CONCRETE**

Section 033000 - Cast-in-Place Concrete (As needed for Plumbing Work)

### **DIVISION 05 – METALS**

Section 055000 - Metal Fabrications (As needed for Plumbing Work)

#### **DIVISION 06 – WOODS, PLASTICS & COMPOSITES**

Section 061000 – Rough Carpentry (As needed for Plumbing Work)

#### **DIVISION 07 – THERMAL AND MOISTURE PROTECTION**

Section 078413 – Penetration Firestopping (As needed for Plumbing Work)

#### **DIVISION 21 – FIRE SUPPRESSION**

Section 210500 – Fire Sprinkler Work included

#### **DIVISION 22 – PLUMBING**

Section 220000 – Plumbing General Provisions Section 220010 – Codes, Standards & Permits Section 220020 – Cutting and Patching Section 220030 – Schedule of Equivalency Section 220100 – Maintenance Instructions Section 220300 – Plumbing Basic Materials & Methods Section 220553 – Plumbing Identification Systems Section 220555 – Access to Plumbing Work Section 220680 – Fire Stopping Section 220719 – Plumbing Insulation Section 220801 – Plumbing Testing, Adjusting & Balancing Section 221000 – Plumbing Piping Systems Section 221316 – Sanitary Waste and Vent Piping Section 221400 – Storm Water Piping Section 224000 – Plumbing Fixtures and Trim

#### **DIVISION 31 – EARTHWORK**

Section 310000 – Earthwork (As needed for Plumbing Work) Section 310001 – Site Work General Provisions (As needed for Plumbing Work)

## **DIVISION 33 – UTILITIES**

Section 333000 – Sanitary Sewage (As needed for Plumbing Work) Section 334000 – Storm Drainage Utilities (As needed for Plumbing Work)

## Special Notes: Plumbing Work Contractor (PC):

- 1. Access doors are furnished by Plumbing Contractor and installed by General Contractor.
- 2. Any control wiring for plumbing supplied equipment is provided and installed by Plumbing Contractor. (Power wiring by Electrical Contractor)
- 3. Plumbing Contractor is responsible for making their own through wall and through floor piping penetrations and associated patching/fire-stopping.
- 4. Plumbing Contractor is responsible for any plumbing-related sub slab cut and patch. This includes existing slab sawcut, chop out concrete, excavation, sub slab piping, trench drains, backfill with 3/8" pea gravel, new concrete slab patch.

## 1.8 PRIME CONTRACTOR'S USE OF PREMISES

- A. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the work is indicated.
- B. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
- C. Owner's representative(s) will cover the project for the standard Monday Friday shift. If a contractor requests additional hours to make up schedule time or weekends, he will need to reimburse Owner for additional coverage or costs (e.g. Architect, Construction Manager, etc.) at their contractual rate.
- D. General: Limitations on site usage as well as specific requirements that impact utilization are indicated on the drawings and by other contract documents. In addition to these limitations and requirements, the Contractor shall administer allocation of available space equitably among the separate sub-contractors and other entities needing access and space, so as to produce the best overall efficiency in performance of the total work of the project. The Contractor shall schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
- E. After the equipment is no longer required for the work, it shall be promptly removed from the project site. Protection of construction materials and equipment stored at the project site from weather, theft, damage and all other adversity is solely the responsibility of the Contractors.
- F. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas indicated. If additional storage is necessary, obtain and pay for such storage off-site.
- G. The Contractor(s) and any entity for which the Contractor is responsible shall not erect any sign of the Project site without the prior written consent from the Owner, which may be withheld in the sole discretion of the Owner.
- H. The Contractor(s) shall ensure that the work, at all times, is performed in a manner that affords reasonable access, both vehicular and pedestrian, to the site of the work and all adjacent areas. The work shall be performed, to the fullest extent reasonably possible, in such a manner that public areas adjacent to the site of the work shall be free from all debris,

building materials, and equipment likely to cause hazardous conditions. Without limitation of any other provision of the Contract Documents, contractor shall use its best efforts to minimize any interference with the occupancy or beneficial use of: Any areas and building adjacent to the site of the work or the building in the event of partial occupancy.

- I. Maintain the building in a safe and weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building during the construction period.
- J. Each Prime Contractor is responsible for maintaining a safe jobsite. This includes actively reviewing their work areas to ensure that they are in compliance with all required OSHA regulations. It is a contract requirement that each contractor conducts weekly tool-box safety meetings to ensure that their employees are properly educated and utilizing safe work practices. (Copies of these weekly meetings and a list of the attendees will be forwarded to the CM Site Superintendent on a weekly basis). Contractors will comply with all requirements outlined in the General Conditions including providing their employees with PPE (personal protective equipment) such as masks, hand sanitizer, hard hats, proper work boots, safety harness, safety glasses, etc.
- K. Tobacco use in any form, drinking alcoholic beverages or open fires will not be permitted on the project site.
- L. Utility Outages and Shutdown:
  - 1. Limit the disruption of utility services to hours the building is unoccupied, weekends or holidays at no additional cost.
  - Do not disrupt or shut down line safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days' notice to Owner and authorities having jurisdiction.
  - 3. Prevent accidental disruption of utility services to other facilities.
  - 4. All costs for manning of temporary shutdowns and utility crossovers, including 24-hour fire watch if necessary, are included in the contractor's bid regardless of weekend, holiday, etc

### 1.9 OCCUPANCY REQUIREMENTS

- A. Partial owner Occupancy: The Owner reserves the right to occupy the place and install equipment in completed areas of the work prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work, such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.
- B. The Architect will prepare a Certificate of Substantial Completion for each specific portion of the work to be occupied prior to Owner occupancy.
- C. Obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
- D. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.
- E. Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building.

#### 1.10 DEFINITIONS

A. Definitions as applied to "Contractors" involved with the work of this Project:

- 1. "The Contractor" or "Contractor" meaning that Respective Prime Contractor normally responsible for that work referenced;
- "Respective Prime Contractor" meaning either the General Contractor, Plumbing, HVAC, Electrical, Sitework, Fire Protection Contractors normally responsible for the referenced work.
- 3. "Trade Contractor" meaning that Respective Prime Contractor as above; and such other terms relating to Contractors to be taken in context with respect to referenced work.
- 4. Further, wherein said Division 0 and 1 and respective Sections therein, any reference is made to "General Contractor", same shall be construed to mean "Contractor for the General Construction, or General Work Contractor".
- B. The Owner cannot guarantee the correctness of the existing conditions shown and assumes no responsibility therefore, it shall be the responsibility of the Contractor to visit the site and verify all existing conditions prior to bid.
- C. The Owner will purchase certain items required for the overall operation of this facility through outside vendors.
- D. The Contractor(s) will cooperate with said vendors as may be necessary to permit the work to be accomplished.
  - 1. The cooperation may extend to the receiving, unloading and placement of said equipment if directed by the Owner.
  - 2. Each Contractor is advised that the Owner may enter into separate contracts as may be in their best interest.
  - Each Contractor is further advised that there will be a full on-site Project Representative/Construction Manager, whose duties will be defined at the preconstruction meeting.

#### 1.11 ADDITIONAL SECURITY PROVISIONS

- A. All Contractors' employees shall use a single means of access and egress, except in the case of emergency, to be designated by the Construction Manager.
- B. Each Contractor and each Subcontractor shall require his employees, while on the job site, to wear, in a conspicuous location, a photo I.D. button bearing the name of the employee and the Contractor. The buttons of each Contractor shall be numbered consecutively. An up-to-date list of all I.D. buttons, indicating the name and number for each employee, shall be furnished to the Construction Manager.

## 1.12 ASBESTOS AND LEAD PAINT AWARENESS REQUIREMENTS

- A. Contractor agrees not to use or permit the use of any asbestos containing material in or on any property belonging to the Owner.
- B. For purposes of this requirement, asbestos free shall mean free from all forms of asbestos, including actinolite, amosite, anthophyllite, chrysotile, crocidolite and tremolite, both in friable and non-friable states and without regard to the purposes for which such material is used.

## 1.13 CONSTRUCTION TIME AND PHASING REQUIREMENTS

- A. Each Contractor is advised the "time is of the essence" of the Contract as defined in the "General Conditions" for the completion of the construction of the facility. It is understood that the work is to be carried through to completion with the utmost speed consistent with good workmanship.
- B. Time of Completion shall be as established in the Milestone Schedules (Section 011100).
- C. The Contractor shall maintain fences and barricades at all times and shall repair/ restore and/ or pay for any temporary fencing damaged by their work.
- D. Maintain at all times, all exits and walkways.
- E. Where the barricade is removed for work, the Contractor performing such work shall provide adequate safety personnel to prevent unauthorized persons from approaching the work area.
- F. Construction Phasing: The phasing and/ or milestone schedule contained in Section 011100 has been established for the overall construction of the project.
- G. Electrical and mechanical services to the functioning spaces shall be maintained at all times.
- H. Swing-overs to new facilities shall be made so as to cause the least interruption to the facilities' operations.
- I. The Contractor shall provide and maintain all required separations between old and new construction to prevent:
  - 1. Unauthorized entrance to construction areas by others than Architect, Construction Manager, or Owner.
  - 2. Heat loss from existing building, water (rain or ground) infiltration into existing building.
- J. Exterior alteration and restoration, as required, may proceed outside of phasing schedule at the Contractor's option with concurrence from the Architect, Construction Manager and Owner.
- K. Site development work shall proceed in such a manner to cause the least amount of disruption to the ongoing operations as possible.

#### 1.14 PROOF OF ORDERS, DELIVERY DATES AND SUPPLY CHAIN TRACKING

- A. Within 2 weeks after the approval of shop drawings, samples, product data and the like, the Contractor shall provide copies of purchase orders for all equipment and materials which are not available in local stock. The Contractor shall submit written statements from suppliers confirming the orders and stating promised delivery dates. Failure to provide this critical information will result in Owner holding monthly requisition payments until received.
- B. To mitigate potential disruptions in material supply chains, the Contractor(s) must procure all necessary project materials in advance and store them onsite in their own Conex boxes. This requirement applies to commonly available materials such as piping, conduits, wire, and metal studs. The owner will compensate for these stored materials upon delivery to the jobsite, as outlined in Section 012900.

C. This information shall be incorporated within the progress schedules so required as part of Section 013216 and 013300 and shall be monitored so as to ensure compliance with promised dates.

#### 1.15 FIELD MEASUREMENTS

Each Respective Contractor shall take all necessary field measurements prior to fabrication and installation of work and shall assume complete responsibility for accuracy of same.

## 1.16 INITIAL SUBMITTAL REQUIREMENTS

As outlined in Division 01, each Contractor shall provide items noted including - bonds, insurance, emergency telephone numbers, progress scheduling, schedules of submittals, subcontractor listings and the like prior to the start of any work. The owner will not issue contracts until all bonds and insurance information is received by the contractor and verified correct.

#### 1.17 SCHEDULES

The milestone schedule presented in the documents is for bidding and general purposes. Due to the nature of the work, it is the intention of the Construction Manager to negotiate actual work periods for the project among the various Prime Contractors involved with this bidding process, as well as separate contractors involved with other phases of the work solicited under separate proposals. Each Contractor shall, under terms of the General Conditions, mutually cooperate in the rescheduling of work to permit an uninterrupted use of the facilities by the Owner, without additional cost to the Owner.

#### General:

- 1. The objective of this project is to complete the overall work in the shortest period of time and to protect the building and occupants from damages caused by weather and construction activity during the progress of the work.
- 2. To meet these objectives, the Contractor shall plan the work, obtain materials, and execute the construction in the most expeditious manner possible in accordance with the requirements listed below.
- 3. If the Contractor fails to expedite and pursue any part of the work, the Owner may terminate the contract or may carry out the work with others per the General Conditions.
- 4. The Contractor shall work in coordination with work of other Contractors and Owner
- 5. All contractors are required to comply with proper sequencing of work and provide other prime contractors sufficient time to install their work (e/g/-metal stud walls get fully framed; MEP contractors perform roughing/testing/inspections; then walls are sheathed with gypsum no sheet rocking one side unless CM approved). If contractor "boxes out" another prime contractor, he will be directed to stop work and open if necessary, to enable other trades to complete their work. No compensation for lost time due to stop-work will be provided.

Milestone Schedule (See Section 01 11 00).

## 1.18 ADDITIONAL REQUIREMENTS

The following are additional general and special requirements which will govern the work of the projects covered by these Documents.

- A. If it appears that some of the work cannot be completed by the scheduled date, the Contractor shall increase the work force or increase the hours of work, including evenings and weekends as necessary, and cover any additional costs to the Owner, Architect and Construction Manager.
- B. If the work is complete but the area has not been cleaned or debris and equipment remain, the Owner and/or Construction Manager will notify the Contractor of the deficiencies. The Contractor will have up to four hours to clean the specified area(s) to the satisfaction of the Owner and/or Construction Manager. If the Contractor fails to do so, the Owner reserves the right to prepare the area for occupancy using their own resources and deduct the associated costs from the Contract amount.
- C. Contractor must plan, provide and maintain his own access, ramping and egress as required into and out of the site, staging of trailer(s), materials, machinery, and equipment in agreement with the Construction Manager's Superintendent. Maintain free and safe access on the jobsite for other related project personnel. Maintain safe pedestrian or vehicular traffic must be regulated by a flagman. Trucking and delivery operation should be coordinated with Construction Manager's Superintendent and all other trades.
- D. Contractor is responsible to maintain existing site fencing in its existing condition. Modifications of the fence to better accommodate the contract work can be discussed with the Construction Manager. These changes shall than be handled by this Contractor at his expense and in accordance with the Construction Manager's Superintendent's direction. Any cost incurred as a result of damages shall be changed to this Contractor.
- E. Contractor's personnel will not be permitted to use Owners facilities (including toilet, telephone, food services, etc.) for their own benefit. Contractor's Superintendent must explain this to all their field forces.
- F. Contractor shall limit his operations including storage of materials and prefabrication to areas within the Contract Limit Lines.
- G. Contractor shall coordinate the use of premises with the Owner and Construction Manager and shall move at his own expense any stored products under Contractor's control, including excavated material, which interfere with operations of the Owner or separate Contractors.
- H. Contractor shall obtain and pay for off-site storage as needed to maintain the Owner's use of their premises. The costs of any required storage shall not be an additional expense to the Owner.
- I. Contractor shall assume full responsibility for the protection and safekeeping of products under this Contract stored on the site and shall cooperate with the Construction Manager to ensure security for the Owner's Property.
- J. The intention of the work is to follow a logical sequence; however, the Contractor may be required by Construction Manger to temporarily omit or leave out any section of his work or perform his work out of sequence. All such out of sequence work and come back time to these areas shall be performed at no additional cost.
- K. Contractor shall submit a three-week (man-loaded work activity and area) to Construction Manager each week. Contractor's representative shall attend a weekly meeting with all contractors, chaired by Construction Manager, for the purpose of job coordination and sequencing.
- L. Contractor is responsible to coordinate the job with other trades and Construction Manager, and to cooperate with other trades in pursuit of the overall project's coordination drawings and actively participate in resolving discrepancies, conflicts, interferences, etc.

- M. The Contractor shall take special care in verifying that his equipment matches the characteristics of the power being supplied.
- N. Any Contractor personnel including Project Managers, Supervisors, etc. who engage in any personal attacks, belligerent or threatening speech/texts, etc., to the Owner, or any of its agents, will be removed from working on the project.
- O. Unsafe practices, horseplay, abusive behavior or language, wanton destruction of property, use of drugs or alcohol, possession of firearms, and solicitation shall not be tolerated. There will be no warnings, and Contractor shall designate a responsible on-site Supervisor to handle any situations that may arise, including termination.
- P. Each Contractor is responsible to supply and install all blocking/bracing necessary to properly secure their work. This responsibility includes coordinating the installation in concealed areas without delaying other trades.
- Q. Union business shall not be conducted on site. Any Union representative that visits the site must declare what Contractor's personnel they represent and must be escorted by that Contractor's Union steward at all times. No visitors, sales representatives or non-working personnel shall be permitted on site without prior consent of the Construction Manager. No photographs shall be taken without the Construction Manager's prior approval.
- R. Contractor shall provide protection from damage to adjacent and adjoining work and/or structures. Contractor shall clean, repair and/or replace any damage for which this Contractor is responsible.
- S. Contractor shall submit hourly rate sheets that would apply to time and material work for all pertinent trades upon Award of Contract.
- T. Contractor shall examine surfaces and conditions prior to start of work. Report unacceptable conditions to the Construction Manager. Do not proceed until unacceptable conditions are corrected and acceptable. Starting work implies acceptance of existing conditions.
- U. Each Prime Contractor shall include general housekeeping of light debris. All debris from each Prime Contractor will be collected daily and disposed of into their dumpsters. In addition to daily general housekeeping, the General Work Contractor shall provide a weekly broom sweep and damp mop of all areas for the entire duration of the project. The broom sweep shall include debris from all trades working on site.
- V. Sleeves and Sleeve Layout It is the responsibility of the Prime Contractor requiring a sleeve to provide the sleeve and a layout sketch to the Prime Contractor performing the construction activity that the sleeve goes in.
- W. Limited site space is available in areas as designated by the Construction Manager. Construction trade parking is not permitted in Owner's employee parking lot.
- X. Prior to commencing the work, each Contractor shall provide written acceptance of grades, structures, substrates, and/or systems installed by other Contractors as suitable for installation of his work. Failure to provide this verification prior to commencing work shall constitute acceptance of the existing conditions.
- Y. Each Contractor shall coordinate with the Construction Manager for lay down areas, staging areas, and overall use of project site.
- Z. All Contractors and their employees, subcontractors and supplier are expressly prohibited from entering the occupied areas of the school building during school hours without prior written permission of the Construction Manager and for using any of its facilities (i.e. restrooms, cafeteria, etc.).
- AA. No recycled import fill materials are permitted.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 011000

## SECTION 01 33 00 - ELECTRONIC SUBMITTAL PROCEDURES

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including the following:
  - 1. Contractor's construction schedule.
  - 2. Submittal schedule.
  - 3. Daily construction reports.
  - 4. Shop Drawings.
  - 5. Product Data.
  - 6. Samples.
  - 7. Quality assurance submittals.
- B. Administrative Submittals: Refer to other Division 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
  - 1. Permits.
  - 2. Applications for Payment.
  - 3. Performance and payment bonds.
  - 4. Insurance certificates.
  - 5. List of subcontractors.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Division 1 Section " Payment Procedures" specifies requirements for submittal of the Schedule of Values.
  - 2. Division 1 Section " Project Management and Coordination" specifies requirements governing preparation and submittal of required Coordination Drawings.
  - 3. Division 1 Section "Project Meetings" specifies requirements for submittal and distribution of meeting and conference minutes.
  - 4. Division 1 Section "Quality Requirements" specifies requirements for submittal of inspection and test reports.
  - 5. Division 1 Section "Closeout Procedures " specifies requirements for submittal of Project Record Documents and warranties at project closeout.

#### 1.3 DEFINITIONS

- A. Coordination Drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended.
  - 1. Preparation of Coordination Drawings is specified in Division 1 Section " Project Management and Coordination" and may include components previously shown in detail on Shop Drawings or Product Data.

- B. Field samples are full-size physical examples erected on-site to illustrate finishes, coatings, or finish materials. Field samples are used to establish the standard by which the Work will be judged.
- C. Mockups are full-size assemblies for review of construction, coordination, testing, or operation; they are not Samples.

## 1.4 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
    - I. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
  - 3. Processing: To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for resubmittals.
    - I. Submittals must be transmitted in accordance with the requirements of Section 1.6.
    - 2. Allow between 8 10 business days for initial review of the first round of submittals. See 1.6 for more information. Allow additional time if the Architect must delay processing to permit coordination with subsequent submittals.
    - 3. If an intermediate submittal is necessary, process the same as the initial submittal.
    - 4. Allow an additional 5 business days for reprocessing each resubmittal.
    - 5. No extension of Contract Time will be authorized because of contractor's failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
    - 6. If the contractor delays on key submittals which can negatively impact the project schedule, the owner and his agent(s) can withhold payments as necessary until the proper submittal paperwork is received.
- B. Submittal Preparation:
  - Each copy of each submittal will have a "submittal cover sheet" attached identifying all information requested by Architect. (see copy after this section) All SCS must be approved by contractor (see electronic stamp B.5) signed, dated and have all fields completely filledout. Any submittal received without proper use of this Cover Sheet will be returned immediately to the contractor. Cover sheet for contractor's use is included at the end of this section.
  - 2. A Submittals Website, an internet (web-based) service shall be used by all contractors to provide an on-line database and repository which shall be used to transmit and track project related documents. The Submittals Website is provided by the Construction Manager. Upon Contract award the successful bidders will be given log on instructions. The intent for using the Submittals Website is to expedite the construction process by reducing paperwork, improving information flow, and decreasing submittal review turnaround time.
  - 3. Project submittals (shop drawing, product data and quality assurance submittals) shall be transmitted by the Contractor in Portable Document Format (PDF) to the Submittals Website, where it will be tracked and stored for retrieval for review. After the submittal is

reviewed it is uploaded back to the Submittals Website for action or use by the Contractor and Owners Representatives.

- 4. The service also tracks and stores documents related to the project such as RFI's (Request for Information), Contacts, Meeting Minutes, Punchlist, and Non-Compliance Notices.
- 5. For each submittal, the Contractor shall review and apply electronic stamp certifying that the submittal complies with the requirements of the Contract Documents, including verification of manufacturer/product, dimensions and coordination of information with other parts of the work. (contractor sign and date)
- 6. It is the Contractor's responsibility to provide the submittals in a PDF format. The contractor may use any of the following options:
  - a. Subcontractors and suppliers provide paper submittals to the Contractor, who electronically scans and converts them to PDF format.
  - b. Contract a Scanning Service, which will allow the Contractor and the Contractor's subcontractors and suppliers to provide paper submittals to the Scanning Service, which electronically scans and converts them to PDF format. It will be the Contractor's responsibility to transmit the scanned submittals to the Submittals Website.
- 7. Image Quality:
  - a. Image resolution: The PDF files shall be created at a minimum resolution of 200 dots per inch utilizing the original document size. The Contractor will be responsible to increase the resolution of the scanned file or images being submitted as required to adequately presenting the information.
  - b. Image Color Rendition: When information represented requires color to convey the intent and compliance, provide full color PDF reproduction.
- C. Contractor Internet Service and Equipment Requirements:
  - 1. The Contractor will be required to have an Email address and Internet access at Contractor's main office.
  - 2. Unless the Contractor will exclusively be using a Scanning Service to create all PDF documents, the Contractor will be required to own a PDF reviewing, creating and editing software, such as Adobe Acrobat (www.adobe.com), Bluebeam PDF Revu (www.bluebeam.com), or other similar PDF reviewing, creating and editing software for applying electronic stamps and comments.
  - 3. The Contractor will be required to have a web browser such as Internet Explorer 11, Firefox 40-60.
  - 4. The Contractor will be required to have Adobe Reader version 11: Sage uses a pdf creator to generate forms. In order to print / view forms you will need Adobe Reader.
  - 5. Contractors are required to have network securities in place such as anti-virus that is active and up to date. Do not access Contract Management from unsecured or public network location such as free WI-FI hotspots.
- D. Training and Support:
  - I. A training manual shall be available, free of charge from the Construction Manager, for all project participants regarding use of the Submittals Website and PDF submittals.
  - 2. Training if required, will be provided by the Construction Manager via Zoom. The appropriate personnel from each contractor office are required to attend this meeting.
- E. Paper Copies:
  - 1. Contractor Copies: The Contractor will be responsible for making copies, for the Contractor's own use and for use by its subcontractors and suppliers.
- F. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the CM electronically using a transmittal form.

The CM will then transmit to the Architect. The Architect will not accept submittals received from sources other than the Construction Manager.

- 1. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
- 2. Transmittal Form: Use AIA Document G810 and submit Sage notification to ACCI that the submittal has been uploaded. The contractor's transmittal must have the subject description properly filled out, so that all parties can see what section/product is being submitted without having to open the actual submittal.
- 3. Transmittal Form: Use the sample form at the end of this Section for transmittal of submittals.

## 1.5 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Distribution: It is the contractor's responsibility to coordinate submittals with each subcontracting trade. Each contractor shall be required to provide their subcontractors with a complete list of their submittals in order that other contractors can request required submittal information.
  - 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.

#### 1.6 SUBMITTAL SCHEDULE

- A. Submittals must be prepared and transmitted as follows, unless otherwise approved by the Construction Manager:
  - 1. Within 15 working days after Notice to Proceed:
    - I. HVAC Units (UV, VRF, CU, ACCU, EF, etc.)
    - 2. Aluminum Windows, Entrances. Storefronts, FRP & Glass
    - 3. Boiler, Breeching and Flue Liner at Bedford Hills
    - 4. Light Fixtures, Site Lighting Poles
    - 5. Panelboards & Switchgear
    - 6. Doors & Hardware
    - 7. Hot Water heaters and Booster Pumps
    - 8. All other submittals critical to the schedule.
  - 2. Balance of Submittals after 15 days but within 30 days after Notice to Proceed.
  - 3. If the contractor misses the milestone submittal timeframes listed above, the owner / agents can withhold requisition payments until the required paperwork is received. If there are any open submittals beyond 45 days of contract award, the owner will stop all contractor payments until all missing paperwork is received.
  - 4. Upon approval by the Construction Manager, non-critical submittals may be transmitted later.
  - 5. Prepare submittals including information in paragraph 1.4B above.
- B. Schedule Updating: Revise the submittal schedule after each meeting or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

## 1.7 DAILY CONSTRUCTION REPORTS

A. Prepare a daily construction report recording the following information concerning events at the site, and submit one copy to the Architect and one copy to the Construction Manager by 10:00

am the following day. Any contractor not submitting required reports will not receive approval on the subsequent application for payment until such time that all required information is submitted:

- 1. List of subcontractors at the site.
- 2. Count of personnel at the site (substantiates payroll).
- 3. High and low temperatures, general weather conditions.
- 4. Accidents and unusual events.
- 5. Meetings and significant decisions.
- 6. Stoppages, delays, shortages, and losses.
- 7. Meter readings and similar recordings.
- 8. Emergency procedures.
- 9. Orders and requests of governing authorities.
- 10. Change Orders received, implemented.
- 11. Services connected, disconnected.
- 12. Equipment or system tests and startups.
- 13. Partial Completions, occupancies.
- 14. Substantial Completions authorized.

#### 1.8 SHOP DRAWINGS

- A. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
- B. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates and similar Drawings. Include the following information:
  - 1. Dimensions.
  - 2. Identification of products and materials included by sheet and detail number.
  - 3. Compliance with specified standards.
  - 4. Notation of coordination requirements.
  - 5. Notation of dimensions established by field measurement.
  - 6. Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 36 by 48 inches.
  - 7. All Technical Submittals: Electronic shop drawing submittal to Construction Manager.
  - 8. Do not use Shop Drawings without an appropriate final stamp indicating action taken.
  - 9. Maintain approved copies on site to record "as-built" conditions.
  - 10. Submit additional copies of as-built, approved drawings as specified in project closeout.

## 1.9 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Submit prior to shop drawings or simultaneously when products are specified items or A/E approval is granted. Product Data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.
  - 1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following that are not required, mark copies to indicate the applicable information. Include the following information:
    - I. Manufacturer's printed recommendations.

- 2. Compliance with trade association standards.
- 3. Compliance with recognized testing agency standards.
- 4. Application of testing agency labels and seals.
- 5. Notation of dimensions verified by field measurement.
- 6. Notation of coordination requirements.
- 2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
- 3. Submit digitally through the Submittals Website to CM.
- 4. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
  - I. Do not proceed with installation until a copy of Product Data is in the Installer's possession.
  - 2. Do not permit use of unmarked copies of Product Data in connection with construction.

#### 1.10 SAMPLES

- A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern. Sample are submitted directly to the architect's home office and copy Construction Manager with transmittal.
  - 1. Mount or display Samples in the manner to facilitate review of qualities indicated. Prepare Samples to match the Architect's sample. Include the following:
    - I. Specification Section number and reference.
    - 2. Generic description of the Sample.
    - 3. Sample source.
    - 4. Product name or name of the manufacturer.
    - 5. Compliance with recognized standards.
  - 2. Submit Samples for review of size, kind, color, pattern, and texture. Submit Samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
    - I. Where variation in color, pattern, texture, or other characteristic is inherent in the material or product represented, submit at least 3 multiple units that show approximate limits of the variations.
    - 2. Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
    - 3. Refer to other Sections for Samples to be returned to the Contractor for incorporation in the Work. Such Samples must be undamaged at time of use. On the transmittal, indicate special requests regarding disposition of Sample submittals.
    - 4. Samples not incorporated into the Work, or otherwise designated as the Owner's property, are the property of the Contractor and shall be removed from the site prior to Substantial Completion.
  - 3. Preliminary Submittals: Submit a full set of choices where Samples are required for selection of color, pattern, texture, or similar characteristics from a range of standard and premium choices.

- I. The Architect will review and distribute selections made or other action.
- 4. Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation, and similar characteristics, submit 6 sets to the Architect who will distribute one set to CM and two (2) to the contractor marked with the action taken.
- 5. Maintain sets of Samples, as returned, at the Project Site, for quality comparisons throughout the course of construction.
  - I. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
  - 2. Sample sets may be used to obtain final acceptance of the construction associated with each set.
- B. Distribution of Samples: Prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.
  - 1. Field samples are full-size examples erected on-site to illustrate finishes, coatings, or finish materials and to establish the Project standard.
    - I. Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

## 1.11 QUALITY ASSURANCE SUBMITTALS

- A. Submit quality-control submittals, including design data, certifications, manufacturer's instructions, manufacturer's field reports, and other quality-control submittals as required under other Sections of the Specifications.
- B. Certifications: Where other Sections of the Specifications require certification that a product, material, or installation complies with specified requirements, submit a notarized certification from the manufacturer certifying compliance with specified requirements.
  - 1. Signature: Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the company.
- C. Inspection and Test Reports: Requirements for submittal of inspection and test reports from independent testing agencies are specified in Division 1 Section "Quality Control."

## 1.12 ARCHITECT'S ACTION

- A. Except for submittals for the record or information, where action and return is required, the Architect will review each submittal, mark to indicate action taken, and return promptly.
  - 1. Compliance with specified characteristics is the Contractor's responsibility, as stated on the approval stamp.
- B. Action Stamp: The Architect will stamp each submittal with a uniform, action stamp. The Architect will mark the stamp appropriately to indicate the action taken, as follows:
  - 1. Unsolicited Submittals: The Architect will return unsolicited submittals to the sender without action.
  - 2. Final Unrestricted Release: When the Architect marks a submittal "Furnish as Corrected", the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
  - 3. Final-But-Restricted Release: When the Architect marks a submittal "Make Corrections Noted", the Work covered by the submittal may proceed provided it complies with notations

or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance. (No resubmittal is required.)

- 4. "Revise and Resubmit" When the Architect marks a submittal "Revise and Resubmit", do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay.
- 5. Returned for Resubmittal: When the Architect marks a submittal "Rejected", do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay. Repeat as necessary to obtain different action mark.
  - I. Do not use, or allow others to use, submittals marked "Rejected" at the Project Site or elsewhere where Work is in progress.
- 6. Other Action: Where a submittal is for information or record purposes only and does require approval and the contractor is responsible for the conformance of the product, the Architect will return the submittal marked "Reviewed".
- 7. "Submit specified item": When submittal is marked "Submit Specified Item", the Contractor shall immediately submit the specified item,

EXECUTION (Not Applicable)

END OF SECTION 013300

#### SECTION 01 45 29 - TESTING LABORATORY SERVICES

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 DESCRIPTION

- A. From time to time during the progress of the Work, the Construction Manager or Owner may require that testing be performed to determine that the Work complies with the specified requirements.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Section 01 33 00 Electronic Submittal Procedures specifies requirements for development of a schedule of required tests and inspections.
  - 2. Section 01 45 00 Quality Requirements specifies the administrative and procedural requirements for quality control services.
  - 3. Section 01 45 33 Special Inspections & Structural Procedures identifies the areas which must be tested.

#### PART 2 - PRODUCTS

#### 2.1 TESTING LABORATORY

A. The New York State Certified testing laboratory will be selected by the Owner.

#### PART 3 - EXECUTION

#### 3.1 PAYMENT FOR TESTING SERVICES

- A. Except where specifically indicated as being the Contractor's responsibility, tests and inspections required by the Owner, Construction Manager and/or Architect will be paid for by the Owner.
- B. Retesting: When initial tests indicate non-compliance with Contract Documents, the responsible Prime Contractor is required to pay for all subsequent re-testing until compliance is accomplished.
- C. Contractor's Convenience Testing: Testing requested by the contractor for his information or convenience shall be paid for by Contractor.
- D. Code Compliance Testing Where indicated in the Documents, tests required by Building Code or Ordinances or by an approval authority shall be paid for by the Owner.

## 3.2 COOPERATION WITH TESTING LABORATORY

- A. Access:
  - 1. Provide representatives of the testing laboratory access to the work at all times.
  - 2. Provide facilities for such access in order that the laboratory may properly perform its function.
- B. Schedule and Notification:
  - 1. When tests are required by the Contract Documents or by the Construction Manager, Architect or Owner, contractor will notify Construction Manager within 48 hours prior to expected time for operations requiring testing services.
  - 2. If, after such notification, the testing laboratory is prevented from performing its work due to incompleteness of the project work, all extra costs for testing attributable to the delay shall be paid by the Contractor.

#### 3.3 SPECIMENS

- A. All sampling equipment and personnel shall be provided by the testing laboratory.
- B. All deliveries of specimens and samples to the testing laboratory shall be performed by the testing laboratory.

#### END OF SECTION 014529

## SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

#### General

## 1.1 SUMMARY

This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.

Temporary utilities include, but are not limited to, the following:

- 1. Sewers and drainage.
- 2. Water Service and distribution.
- 3. Stormwater control within building
- 4. Sanitary facilities, including toilets, wash facilities, and drinking-waterfacilities.
- 5. Ventilation.
- 6. Electric power service.
- 7. Lighting.

Security and protection facilities include, but are not limited to, the following:

- 1. Environmental protection.
- 2. Tree and plant protection.
- 3. Site enclosure fence.
- 4. Security enclosure and lockup.
- 5. Barricades, warning signs, and lights.
- 6. Temporary enclosures.
- 7. Site road access and traffic control
- 8. Temporary partitions.
- 9. Fire protection.

Unless work of this section is indicated to be provided under a specific contract, each Prime Contractor must provide, maintain and remove required temporary facilities necessary to perform his own construction activities.

Accessible Temporary Egress: Comply with applicable provisions in ICC/ANSI A117.1.

#### 1.2 QUALITY ASSURANCE

Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:

- 1. Building code requirements.
- 2. Health and safety regulations.

- 3. Utility company regulations.
- 4. SED 155.5 Regulations
- 5. Police, fire department, and rescue squad rules.
- Environmental protection regulations. Standards: Comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations," ANSI A10 Series standards for "Safety Requirements for Construction and Demolition," and NECA Electrical Design Library "Temporary Electrical Facilities."
- 7. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with NFPA 70 "National Electric Code."

Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

## 1.3 PROJECT CONDITIONS

Temporary Utilities: Each contractor will prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of permanent service.

Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the work progresses. Do not overload facilities or permit them to interfere with progress. Take necessary fire-preventive measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist onsite.

#### 1.4 DIVISION OF RESPONSIBILITIES

General: These Specifications assign the Contractor responsibilities. Each

Prime Contractor is responsible for the following:

- 1. Installation, operation, maintenance and removal of each temporary facility considered as its own normal construction activity, as well as the costs and use charges except as listed below.
- 2. Plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting necessary exclusively for its own activities.
- 3. Generator power for their own work.
- 4. Its own storage, lockable Conex boxes and fabrication sheds. (Locate/Move as directed by CM)
- 5. Hoisting requirements, including hoisting loads in excess of 2 tons, hoisting material or equipment into spaces below grade, and hoisting requirements outside the building enclosure. (Rigging insurance must be provided when contractor hoisting equipment)
- 6. Collection and disposal of its own waste material.
- 7. Secure lock-up of its own tools, materials and equipment.
- 8. Construction aids PPE and miscellaneous services and facilities necessary exclusively for its own construction activities.

- 9. Maintaining temporary facilities provided by Contractor.
- 10. Containers for non-hazardous waste and debris generated by their own removals and construction operations.

#### 1.5 USE CHARGES

General: Cost or use charges for temporary facilities are not chargeable to Owner, Architect or Construction Manager and shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, the following:

- 1. The Architect and Construction Manager
- 2. Other Contractors.
- 3. Owner's construction forces, including testing agencies
- 4. Personnel of authorities having jurisdiction.

Water Service: Each contractor needs to provide their own water connections to existing services.

Electric Power Service: Temporary electric power including set-up and maintenance is the responsibility of the **Electrical Contractor**. Use charges by owner.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

General: Provide new materials. If acceptable to the Architect / CM, the Contractor may use undamaged, previously used materials in good condition. Provide materials suitable for use intended.

Lumber and Plywood:

- 1. For signs and directory boards, provide exterior-type, Grade B-B high density concrete form overlay plywood of sizes and thicknesses indicated.
- 2. For safety barriers, sidewalk bridges, and similar uses, provide minimum 5/8- inch-thick exterior plywood.

Tarpaulins: Provide waterproof, fire-resistant, UL-labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures, provide translucent, nylon-reinforced, laminated polyethylene or polyvinyl chloride, fire-retardant tarpaulins.

## 2.2 EQUIPMENT

Water Hoses: Provide 3/4-inch, heavy-duty, abrasion-resistant, flexible rubber hoses 100 feet long, with pressure rating greater than the maximum pressure of the water distribution system. Provide adjustable shutoff nozzles at hose discharge.

Fire Extinguishers: Provide hand-carried, portable, UL-rated, Class A fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL-rated, Class ABC, dry-chemical extinguishers or a combination of extinguishers of NFPA-recommended classes for the exposures.

#### PART 3 - EXECUTION

## 3.1 TEMPORARY UTILITY INSTALLATION

Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve Protect adequately and result in minimum interference with performance of the work. Relocate and modify facilities as required.

Contractor shall provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

1. Arrange with utility company CM and Owner to make connections for temporary services.

## 3.2 CONTRACTOR FIELD OFFICES

Contractors may with permission from the construction manager establish a field office for their own use. Said offices for the individual prime contractor, sub-contractors, specialty contractors and the like shall be of such size and design as approved by the CM and shall be located in the Construction Managers designated area. Each representative contractor will arrange for telephone service and electric service, if required, directly with the utility company.

Maintain onsite, all articles for First Aid treatment. The contractor shall also establish standing arrangements for the immediate removal and hospital treatment of any employees and other persons on the job site who may be injured or who may become ill during the course work.

No space will be provided within existing buildings for use as a contractor filed office.

## 3.3 TEMPORARY AND PERMANENT SERVICES, GENERAL

The Contractor's use of any permanent system or service of the building or portions thereof shall be subject to the Owners approval.

The Contractor shall be responsible for any and all damage to permanent services used and shall make good any and all damage to the satisfaction of the owner, prior to final completion and acceptance.

NOTE - In accordance with OSHA and other applicable regulations, the representative Contractors performing erection of structural "skeleton" type work are solely responsible for the netting, guard rail protection and such other safety devices as deemed necessary to protect the workers and public from harm.

#### 3.4 TEMPORARY LIGHT AND POWER

Temporary Electric Power Service: **Electrical Contractor** shall provide and pay all costs to provide a weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of work during the construction period.

- 1. Responsibility: All work under this section to be provided by the **Electrical Contractor**.
- 2. Temporary services for temporarily or permanently installed building equipment such as sump pumps, boilers, cabinet heating and/ or cooling units and fans shall be furnished, installed, operated and maintained so that the said equipment may be operated for drainage

and temporary heat when required and/ or when so ordered by the Architect/ Construction Manager.

- 3. Electrical Contractor shall maintain all parts of the electrical system (temporary and permanent power) active and in-service at all times throughout the contract duration as governed by the Construction Manager. All temporary lighting to be controlled by standard switches per code (outside of power panels).
- 4. Electrical Contractor shall maintain power during the hours established by Construction Manager.
- 5. Temporary Service: Install service and grounding in compliance with the National Electric Code (NFPA 70). Include necessary meters, transformers, overload protected disconnect and main distribution switch gear. Comply with all NECA, NEMA and UL Standards
- 6. Provide temporary service with an automatic ground-fault interrupter feature, activated from the circuits of the system.
- 7. Power Distribution System: Provide circuits of adequate size and proper characteristics for each use. In general run wiring overhead. Rise vertically where wiring will be least exposed to damage from construction operations.
- 8. Provide metal conduit, tubing or armored cable for protection of temporary power wiring where exposed to possible damage during construction operations. Where permitted by code, wiring of circuits not exceeding 110-120 Volt 20 Amp rating and wiring of lighting circuits may be non- metallic sheathed cable in areas where located overhead and exposed. Do not wire temporary lighting with plain, exposed (insulated) electrical conductors. Provide metal enclosures or boxes for wiring devices.
- 9. Provide overload-protected disconnect switch as required by code.

#### TEMPORARY ELECTRICAL AND TELEPHONE SERVICES

- 1. Temporary Power Source: At each building / renovation area, use the existing electrical power distribution system for temporary power source.
- 2. Owner's Requirements: Do not disrupt the Owner's needs for continuous power at each building.
- Electrical Contractor shall provide temporary power and lighting facilities for use of all trades. All temporary light and power shall be in accordance with the required Codes and Safety Standards.
- Construction Manager trailer hook up at the Bedford Fox Lane Campus staging area was already completed in last phase. Electrical Contractor shall include in their base bid all costs for disconnection and removal of electrical service.
- 5. All ot her contractor trailer use / connection charges for power and telephone to be paid for by the respective contractor.

#### TEMPORARY POWER DISTRIBUTION

1. General Requirements: Electrical Contractor shall provide feeders and branch circuits of adequate size and proper characteristics as required to supply temporary receptacle and lighting loads. Size service and feeder conductors to restrict voltage drop to maximum 5 percent at 80 percent power factor. Provide properly sized overcurrent protection for each temporary electrical circuit.

#### RECEPTACLE REQUIREMENTS

1. General Requirements: Provide temporary receptacle outlets as required Minimum Requirements: Provide a minimum of one quad 120-volt receptacle per 250 square feet of building floor area, with maximum spacing of 50 feet on center for operation of portable tools and appliances during the construction period.

2. Branch Circuits: All temporary receptacle branch circuits to be rated 20 amps with a maximum of (3) duplex receptacles per circuit. Temporary receptacle branch circuits shall be independent of temporary lighting circuits.

#### LIGHTING REQUIREMENTS

- 1. General Requirements: **Electrical Contractor** shall provide both interior and exterior lighting at areas as required to provide adequate illumination for safe and proper construction operations and Project Site security.
- 2. Minimum Requirements: Provide illumination levels adequate for construction operations and safe traffic conditions. As a minimum provide one 200- w a t t lamp per 400 square feet of building floor area, with maximum spacing of 20 feet. Any rooms in excess of 500 sf will receive one 400-watt metal halide fixture for each 1000 sf of area. (or LED equivalents).
- 3. Supplemental Lighting: If required, supplemental lighting beyond minimum requirements shall be provided via suitable portable lighting units with cord and plugs, and shall be paid for by the Contractor or Sub- Contractor

requiring such additional lighting.

- 4. Branch Circuits: All temporary lighting branch circuits to be loaded to a maximum of 1400 watts per 20 amp circuit. Temporary lighting branch circuits shall be independent of temporary receptacle circuits.
- 5. Restrictions: Do not use permanent lighting systems for temporary construction lighting purposes.

#### MAXIMUM LOADS

1. General: Lighting and power loads connected to the temporary power distribution system shall be limited to the following maximum individual loads:

| imum |
|------|
| KVA  |
| KVA  |
| ΚVA  |
| K    |

 General: The temporary power distribution system shall be sufficiently sized to provide temporary power as required within this section. Meter and Meter connections to be part of electrical contractors base bid.

#### ELECTRICAL WELDERS

1. Separate Power Sources Required: Power for electric welders and for other loads larger than the maximum allowable sizes shall be taken from portable power sources provided, paid for and operated by the Contractor or Sub- Contractor requiring the use of such equipment. Remove such power sources when no longer needed.

#### ELECTRICAL ENERGY COSTS

 Paid By Owner: Charges for electrical energy usage for temporary power and lighting will be paid by the Owner, when taken from the Owner's electrical services. Contractor and Sub-Contractors shall exercise measures to conserve energy usage. Use of owner electric for items not specific to project (e.g. heating construction shanties, etc.) will not be permitted

## 3.2 TEMPORARY TOILET & SANITARY FACILITIES

Sanitary Facilities: Sanitary facilities include temporary toilets, wash facilities and drinking water fixtures. Comply with governing regulations including safety and health codes for the type, number, location, operation and maintenance of fixtures and facilities; provide not less than specified requirements. Install in locations which will best serve the project's needs. Existing facilities should not be used.

The **General Contractor** is responsible for sanitary facilities at both FLHS & FLMS building locations. These responsibilities include: maintenance, cleaning and supplies for use by all trades for the entire duration of the project. Sufficient quantity/locations to properly handle the number of workers onsite. (Minimum 1 per 10 employees) Provide separate toilet facilities for male and female construction personnel.

Supply and maintain toilet tissue, paper towels, paper cups and other disposable materials as appropriate for each facility, including Owner's Representative's temporary offices for full contract duration. Provide covered waste containers for used material. Provide separate toilet facilities for male and female construction personnel.

#### 3.7 TEMPORARY WATER

Each Contractor shall handle their own temporary water services:

- 1. Provide and pay for all connections
- 2. Protect temporary and permanent lines against any damage.
- 3. Provide all hose and other extensions from connections installed by the Plumbing Contractor and all labor, materials and supplies required to supply water to the work.
- 4. Prevent water damage to the work.

#### 3.8 STORAGE FACILITIES

Each Contractor shall provide temporary storage and other facilities as required for their own use. Temporary structures shall be located at the Construction Manager's designated staging area and shall be removed upon completion of the work or when directed.

Materials delivered to the site shall be safely stored and adequately protected against loss or damage in watertight, environmentally controlled, lockable, Conex boxes. Particular care shall be taken to protect humidity/temperature sensitive materials (e.g. – wood doors, casework, ceiling tile, etc) in the proper climate-controlled environment. All costs for properly storing materials is paid for by applicable contractor in their base bid.

Due to limited on site storage space, each Contractor shall coordinate delivery of his materials with the Construction Manager who will determine when large deliveries shall be made and shall be designate storage locations on site for delivered materials. All stored materials must be stored in locked, watertight trailers, paid for by applicable contractor.

## 3.9 SCAFFOLDING AND STAGING

All scaffold, staging and appurtenances thereto shall comply in total to the requirements of Safety and Health Regulations for Construction Chapter XVII of OSHA, Part 1926 and all related amendments.

#### 3.10 RUBBISH CONTAINER

Each Contractor shall provide suitable rubbish container device(s) for his own use, properly maintained and serviced, replaced as required and protected from access by the public fencing as may be specified herein or approved by the Architect or Construction Manager.

Each Prime Contractor and Subcontractor shall sweep up and gather together daily all his own rubbish and removed materials and place same in containers.

#### 3.11 CONSTRUCTION FENCING

Temporary construction fencing shall be of good quality and neat in appearance; 6' high chain link fencing, 9 ga fabric. Open-Mesh Chain Link Fencing: Provide 0.120-inch-thick, galvanized steel posts, (on stanchions at paved areas) and 2.875" dia. Gate posts. Provide lockable gates. (Keys to owner, architect and CM).

Site access gates shall be provided as required, complete with all operating hardware and security devices.

Should fencing be required to be relocated or modified during the course of the project due to additional access needed by the contractor, same shall be done at the total expense of the contractor.

**General Work Contractor** shall provide staging areas at FLHS & FLMS as per marked drawing at the end of this Specification Section

a) In addition to the staging plan fencing, the General Contractor shall provide an additional enclosure. 75' x 75'x 6' high on stanchions with 20' gate to be located at the Construction Managers direction. (include all costs in base bid).

## 3.12 DAILY CLEANUP

Each Contractor shall furnish daily janitorial services for the project and perform any required maintenance of facilities as deemed necessary by the Construction Manager during the entire life of the contract. If any contractor fails to keep the site safe and broom clean within 4 hours of being notified by CM, either verbally or in writing, the construction manager will have the cleanup work performed by others and the contractors will be back charged accordingly.

1. In addition to the above, the **General Contractor** shall provide a daily sweep and a weekly damp mop of all work areas.

#### 3.13 BURNING

Burning will not be permitted.

#### 3.14 FIRE PREVENTION CONTROL

Each Contractor shall comply with the safety provisions of the National Fire Protection Association's "National Fire Codes" pertaining to the work and, particularly, in connection with any cutting or welding performed as part of the work.

## 3.15 TEMPORARY FIRE PROTECTION

Each Contractor shall take all possible precautions for the prevention of fires.

- 1. Where flame cutting torches, blow torches, or welding tools are required to be used, their use shall be as approved by the Construction Manager at the site.
- 2. When welding tools or torches of any type are in use, have available in the immediate

vicinity of the work a fire extinguisher of the dry chemical 20 lbs. Type. The fire extinguisher(s) shall be provided and maintained by the Contractor doing such work.

Fuel for cutting and heating torches shall be gas only and shall be contained in Underwriters laboratory approved containers.

No volatile liquids shall be used for cleaning agents or as fuels for motorized equipment or tools within a building except with the express approval of the Owner and/or Architect and in accordance with local codes. On-site bulk storage of volatile liquids shall be outside the buildings at locations directed by the Owner, who shall determine the extent of volatile liquid allowed within the building at any given time.

Each Contractor shall comply with the following requirements relating to compressed gas:

- 3. Where compressed gas of any type is used for any purpose at the site, it shall be contained in cylinders complying with ICC regulations. Gases of different types shall not be stored together except when in use and when such proximity is required.
- 4. All persons required to handle gas cylinders or to act as temporary firemen (Fire Watchers) shall be able to read, write and understand the English language; they shall also be required by the Contractor to read Part 3 of Pamphlet P-1 "Safe Handling of Compressed Gases" published by the Compressed Gas Association, 500 Fifth Avenue, New York, NY 10036.

Each Contractor shall comply with the following requirements relating to welding and cutting:

- 5. All cutting and/or welding (electric or gas) must be done only by skilled, certified and licensed personnel.
- 6. During welding or cutting operations, a contractor's man shall act as a fire watcher.

The fire watcher shall have proper eye protection and suitable firefighting equipment including fire extinguisher (bearing current inspection Certificate), protective gloves and any other equipment deemed necessary.

- 7. Tanks supplying gases for welding or cutting are to be placed in an upright position securely fastened, and close as practical to the operation. Tanks, actives or spares, shall be protected from excess heat and shall not be placed in stairways, hallways or exits. When not in use, protective valve cap shall be screwed on the cylinder.
- 8. Adequate fire extinguishing equipment shall be maintained at all welding or cutting operations.

#### 3.16 VENTILATION AND HUMIDITY CONTROL FOR CONSTRUCTION:

**General Contractor** will provide temporary ventilation as required for protecting the building from any adverse effects of high humidity during construction activities. Select dehumidification and ventilating equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements and have sufficient quantity of units to produce necessary ambient conditions.

1. Interior Dust Mitigation & Environmental Protection / Plan - The construction work will be taking place next to occupied areas, thus the General Contractor will provide and maintain a strict negative air environment with machines of sufficient size/qty to properly ventilate the square footage of the work areas. Any dust/fumes must be exhausted through a flexible hose using a temporary up-blast fan to above roof to completely eliminate any vapors/odors/dust. This includes properly sealing windows, doors and openings to create a negative air environment. The contractors protection plan will be submitted in advance and include a detailed and highlighted sketch of the program and a narrative explaining

sequencing and procedures to insure no infiltration to other areas

- 2. Each Contractor shall be responsible for his own temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of highhumidity.
- 3. Ventilate enclosed area to dissipate humidity, and to prevent accumulation of dust, fumes, vapors or gases.
- 4. Provide equipment as necessary for air and fresh exchange for the work area per OSHA standards.
- 5. If Contractor fails to adequately ventilate the building during the construction process, thereby causing humidity and possible mold issues, the owner will hire others to properly address and deduct costs from the Contractor accordingly.
- 6. General Contractor will provide negative air environment of sufficient size/qty to fully ventilate the square footage of work areas and exhaust any dust/fumes through flexible duct hose to exterior top eliminate any orders / smoke.
- 7. Any contractor allowing water infiltration to building is responsible for cleanup and commercial dehumidifiers of sufficient size/qty to prevent mold growth. Failure to immediately address (4 hours' notice) will result in the owners hiring others and back-charging in order to insure a safe environment.
- 3.17 TEMPORARY ROADS, TRACKING PADS, PARKING AREA AND CONCRETE WASHOUT PITS: ( all work by GC )
  - 1. **Temporary roads/ Parking Area /Tracking pad areas at each field location** will consist of one-layer soil separation fabric, 8" of 2" crushed stone. Contractor will maintain and field dress with additional material as necessary to prevent ruts and potholes.
  - 2. Above work includes access / delivery to work areas, and to equipment and storage areas and sheds.
  - 3. Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust. Contractor must maintain dust control on a continuous basis.
  - 4. Road Cleaning: Maintain roads and walkways in an acceptably clean condition. This includes the removal of debris daily, if required, and/or a minimum of once a week due to all project traffic. Road cleaning equipment to be wet/vacuum type. The General Contractor will clean any construction-related dirt/debris from Town and State roadways as well as district access drives and parking lots throughout the duration of the project. Temporary parking by construction personnel shall be allowed only in areas so designated.
  - 5. General Work Contractor is responsible for all snow and ice removal for access to their work locations. This includes, temporary roadways, CM trailer and access to staging areas. Stockpile snow in areas as designated by Construction Manager.

#### 3.18 DE-WATERING FACILITIES AND DRAINS

Each Prime Contractor is directly responsible for de-watering of their excavations. The responsibility of de-watering of the site as to facilitate the work will be the responsibility of the Sitework Contractor, coordinate with CM.

Comply with requirements in applicable Division 31 Sections for temporary drainage and dewatering facilities and operations not directly associated with construction activities included in individual Sections. Where feasible, use same facilities. Maintain Project site, excavations, and construction free of water.

Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining property nor endanger permanent drainage piping system, provide temporary drainage where roofing or similar waterproof deck construction is completed.

## 3.19 ROOF PROTECTIONS

- A. All Contractors shall provide temporary protection on the roof surface when it is necessary for work to take place on completed sections. (Minimum 2" polyiso insulation and plywood)
- B. Upon such notification as required in subparagraph A, the Contractor shall assume responsibility for damages, if any, to the roofing system caused by the work of other trades, except that financial liability for any and all damages rests with the offending trade.

## 3.20 TEMPORARY SITE SAFETY AND DIRECTIONAL SIGNS

- A. The **General Contractor** shall provide signs as required below. Install signs where required or indicated to inform public and persons seeking entrance to project. All signage and posts become the property of the owner at the conclusion of the project.
- B. Construct signs in accordance with section 619 of the NYS DOT standard specifications (MUTCD overall sign size, letter size, metal signage). Support on breakaway metal posts or attach to fencing; do not attach signs to buildings or permanent construction.
- C. Include relocating temporary site safety and directional signs as many times as required or directed.
- D. For construction traffic control/flow at entrances/exits, as designated by the Owner (6 required) Large sign 4' x4' Orange with Black Letters ( "Construction Entrance Only")
- E. To direct visitors (4 required)
- F. For construction parking (2 required)
- G. To direct deliveries (4 required)
- H. Emergency egress only Construction area (4 required)
- I. Per OSHA standards as necessary
- J. For "No Smoking" safe work site at multiple locations (12 required)
- K. Construction Area Do Not Enter (30) mount on fence
- L. No Trespassing (30) mount on fence
- M. A premobilization meeting to establish location and quantities of all signage will be held with contractor, Construction Manager, and owner. Prior to the start of any actual work the signage must be reviewed / approved by the Construction Manager.
- 3.21 STORMWATER CONTROL

The General Work Contractor shall provide earthen embankments, silt fence, haybales, and similar barriers in and around excavations and subgrade construction, sufficient to prevent flooding by runoff of storm water from heavy rains during sitework activities.

#### 3.22 BARRICADES, WARNING SIGNS AND LIGHTS:

Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard.

#### 3.23 TEMPORARY ENCLOSURES

A. **General Contractor** will provide temporary 2" x4" wood framing, 2" polyiso insulation, ½" plywood, and cover with 6 mil plastic; for any open exterior window removal, wall removal, door entrance locations, etc. created as part of their contract for weather and security protection at the end of each workday.

Any other temporary enclosures for specific openings for a contractor to perform their work are the responsibility of the contractor creating the opening and shall be installed to protect the building from exterior elements, security issues, odors / noise resulting from construction.

## 3.24 TEMPORARY DUST PARTITIONS and FLOOR PROTECTIONS

- A. **General Contractor** shall erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate work areas from fumes.
  - Construct dustproof, floor to ceiling partitions of not less than 3-5/8" 20 ga. studs , 2 layers of 6 mil poly sheets inside / outside, sound batt insulation, exterior sheathing 5/8" plywood, interior sheathing 5/8" gypsum taped/painted where owner occupied. Caulk seal joints and perimeter to prevent dust migrations. Equip partitions with dustproof doors and security locks.
  - 2. Cover floor with 2 layer poly and extend up the side 18". Overlap and tape full length joints
  - 3. In addition to any temporary partition locations shown on attached drawing, General Contractor will include in his base bid 7 ea. 9' x12' temporary partitions meeting the above criteria for use where directed.
  - 4. Temporary Floor Protections Shall be "Ram-Board" **Heavy Duty** with taped joints or equivalent. Finish Flooring ( new or existing ) will be fully covered by GC. Areas of isolated MEP work will be protected with Ram- Board by the individual prime contractor
  - 5. Any unfinished openings (e.g. windows, doors, fire shutters, etc) which remain in place by the start of school in September will be completely enclosed with fire-rated AC plywood painted.

### 3.25 OPERATION, TERMINATION, AND REMOVAL

Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.

Termination and Removal: Unless the Architect/ CM requests that it be maintained longer, remove each temporary facility when the need has ended or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been affected because of interference with the temporary facility.

Repair damaged work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are the Contractors property.

2. At Substantial Completion, clean and renovate permanent facilities used during the construction period including.

END OF SECTION

## **DIVISION 01 – GENERAL REQUIREMENTS**

### SECTION 017000 - CONTRACT CLOSEOUT

#### 1.01 CONTENTS

- 1. Scope
- 2. Punch List and Final Inspection
- 3. Operations and Maintenance Instructions
- 4. Project Closeout Documents
- 5. Emergency Repairs
- 6. Contractor's Guarantee

#### 1.02 SCOPE

A. Prior to the release of final accrued retainage monies, the Contractor shall comply with the procedures for closing out the Construction Contract and to effect the project's transition to the Owner as summarized herein below.

#### 1.03 PUNCH LIST AND FINAL INSPECTION

- A. Preparation of Punch List:
  - 1. When the Contractor determines that the project is substantially complete, he shall prepare a "Punch List" of the last items to be completed or corrected and shall notify the Owner in writing through the Architect that the project will be ready for a final inspection on a definite date which shall be stated in such notice. Such notification shall be given at least ten (10) days prior to the date stated for final inspection.
  - 2. It shall be noted here, and emphasized, that preparation of the "Punch List" is a responsibility of the Contractor and <u>not</u> the Architect. The Architect's sole role will be that of an observer to assure that the design intent is carried out, and as an administrator of the Construction Contract.
  - The Contractor's failure to include an item of deficiency on the punch list issued to the Contractor shall not relieve the Contractor of its responsibility to perform its work in accordance with the Drawings and/or Specifications, and as such, the punchlist may be revised, updated, and/or reissued at any time.
- B. Review and Substantial Completion:
  - 1. The Architect will review the Contractor's "Unacceptable and Non-Conforming Work List / Punch List" and on the basis of his inspection will verify the condition of substantial completion and prepare the Certificate of Substantial Completion.
- C. Completion and Final Inspection:
  - Written notice shall also be given to the Architect by the Contractor upon completion of any work which, on the above stated final inspection, was determined to be incomplete, incorrect, or unsatisfactory and not to the stage of substantial completion. On receipt of such notice, additional inspection(s) will be made until completion of all contract requirements are effected. If the Architect is required to inspect the Contractor's work more than twice, the Contractor shall be liable to the Owner for the services performed by the Architect as a result of additional inspections.

2. The final inspection is intended to be a last review to determine that the work included in the contract has indeed been executed in accordance with all of the Contract Documents. Requests to render a final inspection of an incomplete building or to prepare the Contractor's "Punch List" will not be honored.

## 1.04 OPERATIONS AND MAINTENANCE INSTRUCTIONS

- A. The Contractor shall start up, test, adjust, balance and otherwise place in a satisfactory working condition all items of mechanical and electrical systems, and shall fully instruct representatives of the Owner in the care and operation of such systems.
- B. Instruction of the Owner's Maintenance Supervisor in the proper methods of cleaning and maintaining all the finished surfaces and the proper methods of replacement of the consumable items such as filters, light bulbs, washers, etc., shall be a part of this work.

## 1.05 CONTRACT CLOSEOUT DOCUMENTS

- A. Prior to submittal of Final Application for Payments, the Contractor shall submit the following documents to the Architect:
  - 1. Contractor's notarized affidavit that all payrolls, bill and materials, equipment, and other indebtedness connected with the work have been paid (AIA G706).
  - 2. Notarized Certificates of Waiver of Liens for himself (AIA G706a), each Subcontractor, each material supplier or person furnishing materials or services to the project (AIA G706).
  - 3. List of subcontractors and major material suppliers including address, telephone number, and name of individual to contact (AIA G705).
  - 4. Validated warranties and notarized copies of all guarantees for equipment and materials specifically called for in the Contract Documents.
  - 5. Consent of Surety to Final Payment (AIA G707).
  - 6. Conformed Construction Drawings (As-builts), per section 017839.
  - 7. Record digital copy of each shop drawing or installation diagram.
  - 8. Operating manual (three (3) sets) assembled and bound, each containing:
    - a. Explanatory brochures of all equipment.
    - b. Catalog cut.
    - c. Wiring diagrams.
    - d. Instruction sheets for operation and maintenance.
  - 9. Guarantees:
    - a. Standard guarantee as per attached form.
    - b. Additional specific guarantees required by Technical Section of Contract Documents.
    - c. Manufacturer's warranties together with list of all items of equipment of material carrying warranty.
  - 10. Attic Stock Receipts (where applicable). Refer to individual Specification Sections for requirements.
  - 11. Fire Underwriters Certification (where applicable).

- 12. Asbestos Documents including Asbestos License, Transport, Manifest, Notifications & Logs (where applicable). Refer to Specification Section 028000.
- 13. In addition, Contractors shall refer to the Closeout Checklist following this section for additional requirements. Following the award of the contract the Architect will use this checklist to identify what items are required for Closeout of this project.
- 14. Contractor to submit a digital copy of all of the above documents in addition to hard copies as depicted.
- B. Package all items properly indexed and deliver to Architect for review and transmittal to Owner.

## 1.06 EMERGENCY REPAIRS

A. During a valid warranty period, if the Contractor is unable or unwilling to respond immediately to make emergency repairs under conditions which the Owner may determine to be an emergency situation, the Owner reserves the right, and the Contractor recognizes such right, to make such emergency repairs and then to bill the Contractor for a fair and reasonable amount in reimbursement for such repairs.

## 1.07 CONTRACTOR'S GUARANTEE

A. The following two pages are the <u>Contractor's Guarantee</u> and shall be submitted along with the required Closeout Documents.

## END OF SECTION

# CONTRACTOR'S GUARANTEE

CONTRACTOR'S NAME AND ADDRESS

## OWNER'S NAME AND ADDRESS

| PROJECT:       | <br> |
|----------------|------|
|                | <br> |
| CONTRACT FOR:  | <br> |
| CONTRACT DATE: |      |

The Contractor hereby guarantees that all Work performed and/or materials installed under the above referenced contract is of the quality that will comply with all specific requirements of the contract documents and hereby insures the Owner against all defects of material for two (2) years and workmanship for a period of two (2) years from and after the date of Final Payment. This does not waive stipulation of other clauses which specify guarantee periods in excess of the obligations herein.

It is further agreed that if, after due inspection, the Architect, as provided in the General Conditions of the Contract for Construction, shall decide that the replacement or repair of any of the Work is, in his opinion, necessary, such defective Work will be repaired or removed and replaced with New Work, meeting all requirements of the Contract Documents, same being done promptly and without expense to the Owner. Repairs and replacements are to include all costs of replacing or repairing other work damaged by the removal and replacements of the work covered by this guarantee and all costs necessary for restoring any portion of the building and its contents which are damaged due to defects in this Contractor's Work or materials.

The Contractor agrees to perform all corrective work necessary promptly upon receipt of written notification from the Owner unless the Owner has previously given the Contractor a written acceptance of such condition.

The Contractor stipulates and agrees that if he fails or neglects to carry out promptly the provisions of this guarantee or any part thereof, the Owner may cause all defects to be remedied and all repairs to be made without further notice to the Contractor and shall charge to and recover the expense thereof from the Contractor and/or Sureties.

Such decisions as the architect shall render in connection with this guarantee are subject to the provisions of the General Conditions.

CONTRACTOR:

CORPORATE SEAL:

BY: \_\_\_\_\_

DATED: \_\_\_\_\_

# STATE OF NEW YORK, COUNTY OF \_\_\_\_\_\_ ss:

| On  | the   |              | day    | of      | ,                    | 20,         | before     | me       | personally      | came     |
|-----|-------|--------------|--------|---------|----------------------|-------------|------------|----------|-----------------|----------|
|     |       |              |        |         | , to me knowr        | n, who beii | ng by me   | duly sv  | worn, did depo  | ose and  |
| say |       |              | that   |         | he                   |             | res        | sides    |                 | at       |
|     |       |              |        |         |                      |             |            |          | , that h        | e is the |
|     |       | of_          |        |         |                      |             |            | , the co | prporation desc | ribed in |
| and | which | executed the | forego | oing ii | nstrument; that he k | nows the    | seal of sa | id corp  | oration; that t | he seal  |

affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of said corporation, and that he signed his name thereto by like order.

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_\_ ss:

| On     | the    |              | day      | of      | ,            | 20,         | before     | me      | personally      | came     |
|--------|--------|--------------|----------|---------|--------------|-------------|------------|---------|-----------------|----------|
|        |        |              |          |         | , to me know | n, and know | vn to me t | o be th | e individual de | escribed |
| in, ar | nd who | executed the | e forego | ing ins | trument, and | acknowle    | dged to m  | e that  | execute         | d same.  |

NOTARY PUBLIC, State of New York

Client:

| ARCHITECTS           | client:    |
|----------------------|------------|
| LANDSCAPE ARCHITECTS | Project:   |
| ENGINEERS            | Contractor |

**BBS Job No.:** 

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D

# **CLOSEOUT CHECKLIST**

| Line  | Item  | Required    | Responsible | Date Complete |
|-------|---|-------------|-------------|---------------|
| 1     | Change Orders & Allowances Fully Executed                               | $\boxtimes$ | BBS         |               |
| 2     | UNC/Punch List Issued   | $\boxtimes$ | BBS         |               |
| 3     | SED Certification of Substantial Completion Issued                      | $\boxtimes$ | BBS         |               |
| 4     | Final Inspection Performed  | $\boxtimes$ | BBS         |               |
| 5     | DOL Wage Rate Completion Form   | $\square$   | BBS         |               |
| 6     | Final Payment Application   | $\boxtimes$ | Contractor  |               |
| 7     | Release of Liens from Prime Contractor (AIA G706a)                      | $\boxtimes$ | Contractor  |               |
| 8     | Affidavit of Payment Prime Contractor (AIA G706)                        | $\boxtimes$ | Contractor  |               |
| 9     | List of Subcontractors and Suppliers (AIA G705)                         | $\boxtimes$ | Contractor  |               |
| 10    | Release of Liens from Subs & Suppliers (AIA G706a)                      | $\boxtimes$ | Contractor  |               |
| 11    | Consent of Surety to Final Payment (AIA G707)                           | $\boxtimes$ | Contractor  |               |
| 12    | Contractor's Guarantee (017000)   | $\square$   | Contractor  |               |
| 13    | As-Built Drawings (017839)  |             | Contractor  |               |
| 14    | O&M Manuals (017000)  |             | Contractor  |               |
| 15    | Record Copy Submittals (017000)   |             | Contractor  |               |
| 16    | Attic Stock Receipt (various individual sections)                       |             | Contractor  |               |
| 17    | Maintenance Bond (General Conditions)                                   |             | Contractor  |               |
| 18    | Electrical Inspection Certificate (017000/260810)                       |             | Contractor  |               |
| 19    | Fire Alarm NFPA 72 System Record of Completion (284613/E0.01)           |             | Contractor  |               |
| 20    | Equipment Guarantees/Warranties (017000)                                |             | Contractor  |               |
| 21    | Demonstration/Training Proof (various individual sections)              |             | Contractor  |               |
| 22    | HVAC Testing & Balancing (230593)                                       |             | Contractor  |               |
| 23    | Elevator Inspection (142100/142200)                                     |             | Contractor  |               |
| 24    | Cx Report (230800)  |             | Contractor  |               |
| 25    | Asbestos License, Transport, Manifest, Notifications, Logs (028000)     |             | Contractor  |               |
| 26    | Lead Renovation, Repair & Painting (RRP) Certification (029000)         |             | Contractor  |               |
| 27    | NYSDEC 375 Clean Fill Certification (310000)                            |             | Contractor  |               |
| 28    | Public School Fire Safety Report  |             | Third Party |               |
| 29    | Controlled/Special Inspection Results                                   |             | Third Party |               |
| 30    | Asbestos License, Clean-Air, CoC, Location Plans, Lab<br>Accreditations |             | Third Party |               |
| 31    | Lead Clearance Wipe Tests   |             | Third Party |               |
| 32    | Lead in Water Test (New Faucets)  |             | Third Party |               |
| 33    | SWPPP Notice of Termination   |             | Third Party |               |
| 34    | Certificate of Occupancy  |             | AHJ         |               |
| Notor |   |             |             |               |

Notes:

## SECTION 017329 – CUTTING AND PATCHING

#### PART 1 - GENERAL

## 1.1. SUMMARY

- A. This section includes procedural requirements for cutting and patching.
- B. Related sections include the following:
  - 1. Division 02 through 28 sections for specific requirements and limitations applicable to cutting and patching individual parts of the work.
    - a. Requirements in this Section also apply to Mechanical and Electrical installations associated with this project.
- C. Division of Responsibilities for Cutting and Patching Work: Each Prime Contractor shall perform cutting and patching required for its portion of the work.

## 1.2. **DEFINITIONS**

- A. Cutting: Removal of existing construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other work.

## 1.3. SUBMITTALS

- A. Cutting and Patching Plan: Where approval of procedures for cutting and patching is required before proceeding (see Article 1.4 below), submit a proposed plan describing procedure at least 14 days before the time cutting and patching will be performed requesting approval to proceed. Include the following information, as applicable, in the proposal:
  - 1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
  - 2. Changes to existing construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in buildings appearance and other significant visual elements.
  - 3. Products: List products to be used and firms or entities that will perform the work.
  - 4. Dates: Indicate when cutting and patching will be performed.
  - 5. Utilities: List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.
  - 6. Structural Elements: Where cutting and patching involved adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
  - 7. Architect's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

## 1.4. QUALITY ASSURANCE

- A. Minimize cutting and patching of work by properly coordinating construction sequences with Architect.
- B. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
  - 1. Obtain Architect's approval before cutting and patching any structural work that is not indicated on drawings.
- C. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
  - 1. Obtain Architect's approval before cutting and patching any operational element that is not indicated on drawings.
- D. Miscellaneous Elements: Do not cut and patching the following elements or related components, that are not indicated on drawings, in a manner that could change their load-carrying capacity, that results in increased maintenance or decreased operation life or safety.
  - 1. Water, moisture, or vapor barriers.
  - 2. Membranes and flashings.
  - 3. Equipment supports.
  - 4. Piping, ductwork, vessels, and equipment.
  - 5. Noise and vibration-control elements and systems.
- E. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

# PART 2 - PRODUCT

# 2.1. MATERIALS

- A. General: Comply with requirements specified in other sections of these specifications.
- B. OSHA approved systems, equipment, scaffolding, PPE, lanyards, rigging, etc.
- C. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
  - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

## PART 3 - EXECUTION

## 3.1. EXAMINATION AND SAFETY

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
  - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates including compatibility with existing finishes or primers.
  - 2. Proceed with installation only after unsafe or unsatisfactory conditions are corrected.

# 3.2. PREPARATION

- A. Temporary Support: Provide temporary support of work to be cut.
- B. Roof Water Tightness Contractor must ensure that proper weather conditions, protections, and manpower are present prior to cutting existing roof areas. Contractor is responsible for any interior damages with any direct/indirect costs which accrue if they fail to maintain water tightness.
- C. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection for any portions of project that might be damaged/soiled during cutting and patching operations.

## **3.3. PERFORMANCE**

- A. General: Each trade shall employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.
  - 1. Cut existing construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition(s).
  - 2. Related Electrical and Mechanical work will be performed by licensed subcontractors.
- B. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
  - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. Existing Finished Surfaces: Cut or drill from exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  - 4. Mechanical and Electrical Services: By-pass utility services such as pipe or conduit, before cutting, where services are shown or required to be removed, relocated or abandoned. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  - 5. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Each trade shall patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other sections of these specifications. Utilize workers who are authorized/skilled in the discipline to be patched (e.g.-mason, carpenter, painter, etc.)
  - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.

- Exposed Finishes: Restore exposed finishes of patched areas and extend finish
  restoration into retained adjoining construction in a manner that will eliminate evidence
  of patching and refinishing.
- 3. Floors and Walls: Where portions of walls or partitions that are removed extend on finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
  - a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch, from wall-to-wall or corner-to-corner. Provide additional coats until patch blend with adjacent surfaces.
- 4. Ceilings: Patch, repair, or rehang existing ceilings as necessary to provide and even-plane surface of uniform appearance.
- 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

# 3.4. CLEANING

A. Thoroughly clean areas and spaces where cutting and patching is performed or used as access. Remove completely: paint, mortar, oils, putting and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering to its original condition.

## SECTION 017423 - CLEANING UP - BUILDING

## PART 1 - GENERAL

#### **1.1. DESCRIPTION OF THE WORK**

- A. The work of this section relates to the following:
  - 1. Maintain all premises and public properties/roadways free from accumulation of waste, debris, dirt, mud and rubbish caused by operations on a daily basis.
  - 2. At completion of work, remove waste materials, rubbish tools, equipment, machinery and surplus materials, and clean all sight exposed surfaces; leave project clean and ready for occupancy.
  - 3. Remove all overspray caused by construction operations from adjacent construction, surfaces and vehicles
- B. Related Requirements Specified Elsewhere
  - 1. Division 1, Summary of Work: Section 011000
  - 2. Cleaning for Specific Products or Work: the respective sections of the Specifications.

## **1.2.** SAFETY REQUIREMENTTS

- A. Standards: Maintain project in accord with safety and insurance standards.
- B. Hazard Control/Cleaning Products
  - 1. Store volatile waste in covered metal container and remove from premises daily.
  - 2. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
  - 1. Do not burn or bury rubbish and waste materials on project site.
  - 2. Do not dispose of volatile waste such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
  - 3. Do not dispose of waste into streams or waterways.

# PART 2 - PRODUCTS

## 2.1. MATERIALS

A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.

## PART 3 - EXECUTION

## 3.1. REQUIREMENTS DURING CONSTUCTION

- A. Execute daily cleaning to ensure that the building, grounds, and public properties and roadways are maintained free from accumulations of waste materials, rubbish, dirt, mud and dust.
- B. Moisten dry materials and debris to suppress and prevent airborne dust.
- C. Each day, all contractors shall adhere to the following:
  - 1. Areas of intense activity, such as cutting and sawing must be swept clean and reorganized at the end of each day. Utilize dust control methods such as plastic containment, containment hut and/or wetting of surfaces.

- 2. Areas of moderate activity such as installation of plumbing, ductwork, electrical work must be returned to good order at the end of each day.
- 3. Debris below scaffolds (and shoring/re-shoring) must at all time, be kept sufficiently consolidated to keep walkways free of tripping hazards. These work areas must also be swept clean immediately upon removal of scaffolds.
- 4. All swept up debris, waste materials, and packing must be removed and placed in the dumpster by the end of the workday.
- 5. All stored material must be protected and kept in good order.
- 6. As portions of the work are completed, all used and excess materials must be removed promptly.
- 7. Daily clean-up and good housekeeping is the responsibility of each contractor individually and will be monitored by the Construction Manager. If any contractor fails to perform cleaning when directed or does not properly clean within 4 hours of being notified by Construction Manager, the owner will hire others and charge contractor(s) accordingly.
- 8. Contractors shall promptly comply with requests to organize scattered materials.
- D. Each Contractor is responsible for furnishing all dumpsters or other such containers as required for collection, storage and legal disposal of all debris and rubbish resultant from their construction operations. The Construction Manager shall locate and request to move such containers as necessary and legally dispose of waste as containers are filled. Separate and recycle as required authorities and regulations.
- E. Vacuum clean areas when ready to receive finish painting, and continue vacuum cleaning on an as needed basis until building is ready for Substantial Completion or occupancy
- F. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights.
- G. Schedule cleaning operations so that dust and other containment resulting from cleaning process will not fall on wet, newly painted surfaces.

# 3.2. FINAL CLEANING

- A. Each Contractor shall:
  - 1. Employ professional cleaners for final cleaning.
  - 2. In preparation for substantial completion or occupancy, conduct final inspection of all exposed interior and exterior surfaces, and of concealed spaces.
  - 3. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from sight-exposed interior and exterior finished surfaces; polish surface so designated to shine finish
  - 4. Maintain cleaning until project, or portion thereof, is occupied by owner.
  - 5. Repair, patch and touch up marred surfaces to specified finish, to match adjacent surfaces.
  - 6. If the contractor fails to perform final cleaning when directed or does not properly clean within 4 hours of being notified by Construction Manager, the owner will hire others or perform the cleaning with their own work force and charge contractor accordingly.

- B. General Contractor shall complete the following restoration operations before requesting inspection for certification of Substantial Completion for entire Project or portion of Project:
  - 1. Restoration of any lawn and walk/curb areas disturbed by construction operations. This includes repairs of any ruts / damage created by Heavy Equipment, Lulls, Cranes, etc.
  - 2. Hire professional cleaning company (not construction tradesmen) to thoroughly clean all surfaces, including glass, floors, carpeting, ceramic tile, doors, windows, casework, etc.
  - 3. Clean and wax Resilient floors using the exact same products / coats as the owner's custodial staff for compatibility purposes. Vacuum all carpet areas.
  - 4. Power sweep all asphalt areas using a commercial street sweeper (water method).
  - 5. Remove any stickers, protective coverings, etc.
  - 6. Clean all materials & equipment etc. inside and out.
- C. Mechanical Contractor shall complete the following cleaning operations before requesting final inspection for certification of Substantial Completion for entire Project or portion of Project:
  - 1. Clean all mechanical units, including removal of any stickers, protective covering. Wipe down all of surface.
  - 2. Vacuum out all ductwork, grills / louvers to insure there is no construction debris or dust.
  - 3. Replace all air filters at no additional cost immediately prior to owner occupancy.
- D. Electrical Contractor shall complete the following cleaning operations before requesting final inspection for certification of Substantial Completion for entire Project or portion of Project:
  - 1. Clean surfaces of all electrical equipment from any dust. Remove any labels or protective films.
  - 2. Replace any burned out or non-functioning bulbs.

# 3.3. RUBBISH REMOVAL

A. Contractors shall comply with all Local, State and Federal Laws, Codes and Requirements regarding recycling and trash or rubbish removal.

## SECTION 017700 – CLOSEOUT PROCEDURES

## PART 1 - GENERAL

## 1.1. RELATED DOCUMENTS

**A.** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections apply to this section.

## 1.2. SUMMARY

- **A.** This section includes administrative and procedural requirements for contract closeout including but not limited to, the following:
  - 1. Substantial Completion & Inspection procedures.
  - 2. Project record documents.
  - **3.** Operation and maintenance manual submittal.
  - **4.** Start-up and adjustments.
  - 5. Spare Parts.
  - **6.** Demonstration & Training.
- **B.** Closeout requirements for specific construction activities are included in the appropriate Sections.
- **C.** Multiple Prime Contracts: Provisions of this section apply to the construction activities of all Prime Contractors.

# **1.3.** SUBSTANTIAL COMPLETION

- **A.** Preliminary Procedures: Before requesting inspection for Certification of Substantial Completion, complete the following. List exceptions in the request.
  - 1. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the work claimed as substantially complete.
    - **a.** Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
    - **b.** If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the work is not complete.
  - 2. Advise the Owner of pending insurance changeover requirements.
  - **3.** Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.
  - **4.** Obtain and submit releases enabling the Owner unrestricted use of the work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - **5.** Submit record drawings, maintenance manuals, final project photographs, damage or settlement surveys, property surveys, and similar final record information.
  - 6. Deliver tools, spare parts, extra stock, and similar items.

- **7.** Make final changeover of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of changeover in security provisions.
- 8. Complete startup testing of systems and instructions of the Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements. Startup of existing removed/replaced rooftop HVAC units will include written confirmation from contractor's mechanical subcontractor that all systems are adjusted and functioning properly.
- **9.** Complete final cleanup requirements, including touch-up painting.
- **10.** Touch up and otherwise repair and restore marred, exposed finishes.
- **B.** Initial Inspection: Conducted between Construction Manager and Contractor, once all incomplete items identified are completed, a request for review by the Architect shall be made.
- **C.** Inspection Procedures: On receipt of a Request for Inspection, the Architect will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
  - The Architect will conduct a re-inspection upon request, provided the work is substantially complete. If multiple inspections are required due to the contractor's failure to complete the work, the resulting costs will be charged to the Owner and deducted from the contractor through a change order.
  - **2.** Results of the complete inspection will form the basis of requirements for final acceptance.

# **1.4.** FINAL ACCEPTANCE

- **A.** Preliminary Procedures: Before requesting final inspection for Certification of Final Acceptance and Final Payment, complete the following. List exceptions in the request.
  - 1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.
  - **2.** Submit an updated final statement, accounting for final additional changes to the Contract Sum.
  - **3.** Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, endorsed and dated by the Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Architect.
  - **4.** Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion or when the Owner took possession of and assumed responsibility for corresponding elements of the Work.
  - 5. Submit consent of surety to final payment.
  - 6. Submit a final liquidated damages settlement statement.

- **7.** Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- **8.** All items in the Construction Checklist must be received and approved prior to any retainage reduction.
- **B.** Re-Inspection Procedure: The Architect will re-inspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been complete except for items whose completion is delayed under circumstances acceptable to the Architect.
  - 1. Upon completion of re-inspection, the Architect will prepare a certificate of final acceptance. If the Work is incomplete, the Architect will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance. Note that multiple inspection due to Contractor not being complete will result in a charge to the Owner in which the amount shall be deducted from said Contractor via change order.
  - **2.** If necessary, re-inspection will be repeated, but may be chargeable to the Owner and back-chargeable to the Contractor in conditions within his control.

## SECTION 017701 - CHECKLIST FOR PROJECT CLOSEOUT AND PROCESSING OF FINAL PAYMENT

## PART 1 - GENERAL

#### 1.1. FINAL PAYMENT

Final payment will not be processed until all items indicated are received in accordance with Section 017701 – Checklist for Project Closeout.

## 1.2. CLOSE-OUT SUBMITTALS

## One (1) bound, hard cover, 3-ring binder:

- [ ] Contractor's Affidavit of Payment of Debts and Claims: AIA G706.
- [ ] Contractor's Affidavit of Release of Liens: AIA G706A with:
- [ ] Separate AIA G706A for subcontractors, suppliers, and others with lien rights against the property of owner, together with a list of those parties.
- [ ] Consent of Surety to Final Payment: AIA G707.
- [ ] Operation and Maintenance Manuals for all equipment installed on the project.
- [ ] As-Built Drawings (1 full-size hard copy).
- [ ] Fully executed Certificate of Substantial Completion: AIA G704.
- [ ] Contractor's written warranty and extended warranties as required by the Contract.

## Two (2) complete electronic copies (thumb drives) of the following:

- [ ] All items listed above.
- [ ] Typed or printed instructions covering the care and operations of equipment and systems furnished and installed.
- [ ] Manufacturers instruction books, diagrams, spare parts lists covering all equipment.
- [ ] Instruction of Owner's Representative in care and maintenance of new equipment.
- [ ] All approved shop drawings.
- [ ] Certificates of compliance and inspection (where applicable electrical, elevator, etc.).
- [ ] Spare parts and Maintenance Materials (receipt signed by ACCI & Owner).
- [ ] Evidence of compliance with requirements of governing authorities (Certificates of Inspection, Waste Manifests).
- [ ] Certificates of insurance for products and completed operations.
- [ ] Notarized statement that only non-asbestos materials were installed on this project.
- [ ] Maintenance bond as per the requirements of the Contract.
- [ ] Project Record Documents.

NOTE: Retainage reduction are allowed as outlined in the Contract.

## SECTION 017719 - PROJECT RECORD DOCUMENTS

## PART 1 - GENERAL

## 1.1. SUMMARY

- **A.** Requirements set forth herein are in addition to and shall be considered as complementary to the General Conditions of the Contract and project specifications.
- **B.** All Contractors, Subcontractors, Sub-Subcontractors, Vendors and the like shall be required to familiarize themselves with said provisions.

## **1.2. REQUIREMENTS**

- **A.** Project Record Drawings
- **B.** Record Drawing Certification

## **1.3. PROJECT RECORD DRAWINGS**

- **A.** The purpose of the project drawings is to record the actual location of the work in place including but not limited to underground lines, concealed piping within buildings, concealed valves and control equipment, and to record changes in the work.
- **B.** In addition to the above, these drawings shall be "color-coded", by each trade, on a daily basis to indicate progress of the work. Color legend will be assigned by the Architect.
- **C.** In addition to the sets of contract drawings that are required by the Contractor on the site to perform the work, the Contractor shall maintain, at the site, one (1) copy of all drawings, specifications and addenda that are part of the Contract as awarded.
- D. Each of these documents should be clearly marked "Project Record Copy", maintained in a clean and neat condition available at all times for inspections by the Owner, Construction Manager or the Architect, and shall not be used for any other purpose during the progress of the work.
- **E.** The Construction Manager will be the custodian on the project record documents until the end of the Project.
- **F.** Project Record Requirements
  - **1.** The Contractor shall mark-up the "Project Record Copy" to show:
    - **a.** Approved changes in the work.
    - **b.** Location of underground work and completed work.
    - c. Details not shown in the original Contract Documents.
    - d. Any relocation of work including piping, conduits, ducts and the like.
    - e. All changes in dimensions.
    - f. All access doors and "tack" location access points in accessible ceilings.
    - **g.** Location of all plumbing, heating, ventilating, air conditioning or electrical assemblies, whether existing to remain or newly installed.
    - **h.** Revisions to any electrical circuitry.
  - 2. Such information shall include, but shall not be limited to:

- **a.** Footing depth in relation to finished grade elevations.
- **b.** Any change in floor elevations.
- **c.** Any structural changes.
- **d.** Any substitutions
- **e.** Elevations and locations of all underground utilities, services, or structures referenced to permanent above ground structures and monuments.
- f. Designation of all utilities as to the size and use of such utilities.
- g. All invert elevations of manholes.
- **h.** The location of all utilities, services and appurtenances concealed in building structures that have been installed differently from that required by the Contract.
- i. Any approved change orders.
- **j.** Other such data as required by the Architect and/or Owner to establish a complete record of "As-Constructed" conditions.
- **G.** The Contractor shall keep the project record documents up to date from day to day as the work progresses. Appropriate documents are to be updated promptly and accurately; no work is to be permanently concealed until all required information has been recorded.
- **H.** The project record drawings are to be submitted by the Contractor to the Architect through the Construction Manager when all the work is completed and is approved by the Owner and the Architect before the Contractor may request final payment.
- If the project record drawings as submitted are found to be unacceptable due to incompleteness or inaccurate information, the drawings shall be returned to the responsible Contractor for corrective action and resubmitted for approval prior to the release of final payment.
- J. The Contractor shall submit all approved Shop Drawings of the Work as installed.

## 1.4. RECORD DRAWING CERTIFICATION

- **A.** The record drawings required under the terms and conditions of this Section shall be reviewed and processed by each of the Prime Contractors as part of their overall contractual responsibility.
- **B.** This certification may be issued for individual trades as a collective document to cover the entire record drawing requirements of the project.

The format of this certification shall be as follows: The record drawings prepared by:

for \_\_\_\_\_

\_\_\_\_\_ have been reviewed by

the undersigned and:

Appears to be an accurate representation of the work incorporated within the project and are accepted as submitted in accordance with the technical documents.

This record document review made by this office is for determination of compliance to the requirements of the Contract Documents.

Firm Name: \_\_\_\_\_\_

Review Date: \_\_\_\_\_\_ By: \_\_\_\_\_

## SECTION 017823 – OPERATION AND MAINTENANCE REQUIREMENTS

## PART 1 - GENERAL

#### 1.1. SUMMARY

- **A.** Requirements set forth herein are in addition to and shall be considered as complementary to the General Conditions of the Contract and the project specifications.
- **B.** All Contractors, Subcontractors, Sub-Subcontractors, Vendors and the like shall be required to familiarize themselves with said provisions.

## **1.2. REQUIREMENTS**

- A. Startup and Demonstration
- B. Parts List
- **C.** Operation and Maintenance Data

## **1.3.** STARTUP AND DEMONSTRATION

- **A.** The work required herein consists of starting up and demonstrating all systems and equipment to operating personnel and includes training of said operating personnel.
- **B.** The respective Trade or Subcontractor shall make arrangements, via the Construction Manager and/or the Owner (with notification to the Architect), as to whom the instructions are to be given in the operation of the basic and auxiliary systems and the period of time in which they are to be given.
- **C.** As specified in individual sections, furnish the services of instructors to train designated personnel in adjustment, operation, maintenance, and safety requirements of equipment and systems. If procedures are not specified for specific items of equipment, follow that recommended by the item manufacturer.
- D. Instructors shall be thoroughly familiar with the equipment and systems and shall be trained in operating theory as well as practical operation and maintenance work. Instruction shall be given after the equipment or system has been accepted and turned over to the Owner. The duration of instruction shall be as specified in individual sections but shall be not less than two (2) days of each portion of operating mechanical/electrical systems. Use Operating and Maintenance Data as a training guide.
- E. The Architect shall be completely satisfied that the Owner's designated representatives have been thoroughly and completely instructed in the proper operation of all systems and equipment before final payment is made. If the Architect, Owner, or Construction Manager determines that complete and thorough instructions have not been given by the Contractor to the Owner's Representative, then the offending Contractor shall be directed by the Architect to provide whatever instructions are necessary until the intent of this paragraph of the Specification has been complied with as determined by the Architect.

## 1.4. PARTS LIST

**A.** As required, the respective Trade or Subcontractor shall furnish instructions for the ordering and stocking of spare parts for all equipment installed. The lists shall include parts numbers and suggested suppliers. Each set shall also include an itemized list of component parts that should be kept on hand and where such parts can be purchased.

## **1.5. OPERATION AND MAINTENANCE DATA**

- **A.** The Contractor shall submit to the Architect for approval of all instructions for the installation, operation, care and maintenance of all equipment, fixtures and systems.
  - Provide typed or printed label identifying binder as operating and maintenance data. List title of project, contract number, and location of equipment.
  - **2.** Furnish manufacturer's printed data or sheets neatly typewritten on 8-1/2 inch by 11 inch, 20 pound minimum white paper. Provide indexed tabs.
  - **3.** Drawings: Bind in with text. Provide reinforcement rings. Fold larger drawings to the size of the text pages.
  - **4.** Information shall indicate possible problems with equipment and suggested corrective action.
  - 5. See Specification Section 017701 Project Record Documents for additional instructions.

# 1.6. CONTENT OF MANUAL FOR EQUIPMENT AND SYSTEMS

- **A.** The instructions shall contain information deemed necessary by the Architect and include but not be limited to the following:
  - **1.** Introduction:
    - **a.** Explanation of Manual and its use.
    - **b.** Summary description of all mechanical and electrical and equipment operating systems.
    - c. Purpose of systems.
    - **d.** Maintenance scheduling summary analysis, sheets and software operating instructions and diskette(s).
  - 2. System:
    - **a.** Detailed description of all systems.
    - **b.** Illustrations, schematics, block diagrams, photographs and other exhibits.
    - c. Complete wiring diagrams, tabulations and installation drawings.
    - d. Valve tag charts and control diagrams.
    - e. ½ size reduced copy of "Record Drawings"
  - 3. Operations:
    - **a.** Complete detailed, step-by-step, sequential description of all phases of operation for portion of the systems, including startup, shutdown, adjusting and balancing, and emergency procedures. Include all posted instruction charts.
  - 4. Maintenance:
    - **a.** Parts list and parts number.

- **b.** Maintenance, lubrication and replacement charts and Contractor's recommendations for preventative maintenance.
- c. Troubleshooting charts for systems and components.
- **d.** Instructions of testing each type of part.
- e. Recommended list of on-hand spare parts.
- f. Complete calibration instructions for all parts and entire systems.
- g. Instructions for charging, filling, draining and purging.
- **h.** General or miscellaneous maintenance notes.
- **5.** Manufacturer's Literature:
  - **a.** Complete listing for all parts with names, addresses and telephone numbers.
  - **b.** Care and operation.
  - **c.** All and other pertinent brochures, illustrations, drawings, cuts, bulletins, technical data, certified performance charts and other literature with the model actually furnished to be clearly and conspicuously identified.
  - **d.** Internal wiring diagrams and engineering data sheets for all items and/or equipment to be furnished.
  - e. Guarantee and warranty data.
- **6.** Instruction for lubricating each piece of equipment installed. Instructions shall state type of lubricant, where and how frequently lubrication is required.
- **7.** Frame all instructions under glass and hang in the Mechanical Room or other location as directed by Architect.

## 1.7. MANUALS FOR PRODUCTS, MATERIALS, AND FINISHES

- A. Submit three (3) copies of complete manual.
- **B.** Content: Provide complete information for Architectural products, applied materials, and finishes.
  - **1.** Manufacturer's data, including catalog number, size, composition, color and texture designations, and information for reordering.
  - **2.** Instructions for care and maintenance, including manufacturer's recommendations for cleaning agents and methods; cautions detrimental cleaning agents and methods; and recommended schedule for cleaning and maintenance.

# SECTION 01 78 36 – WARRANTIES

## 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for warranties required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
  - 1. Refer to the General Conditions for terms of the Contractor's period for correction of the Work.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Division 1 Section "Submittals" specifies procedures for submitting warranties.
  - 2. Division 1 Section "Closeout Procedures" specifies contract closeout procedures.
  - 3. Divisions 3 through 33 Sections for specific requirements for warranties on products and installations specified to be warranted.
  - 4. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- C. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- D. Separate Prime Contracts: Each prime contractor is responsible for warranties related to its own contract.

## **1.2 DEFINITIONS**

- A. Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

## **1.3 WARRANTY REQUIREMENTS**

- A. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement.

The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace

or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.

- D. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
  - 1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- E. Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence of entities required.

## 1.4 SUBMITTALS

- A. Submit written warranties to the Architect and Construction Manager prior to the date certified for Substantial Completion. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the architect.
  - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect and Construction Manager within 15 days of completion.
- B. When the Contract Documents require the Contractor, or the Contractor and a subcontractor, supplier or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner, through the Architect and Construction Manager, for approval prior to final execution.
  - 1. Refer to Divisions 3 through 33 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Form of Submittal: At Final Completion compile 2 copies of each required warranty properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. **Warranties must be job-specific from the manufacturer and**

**reference this project.** Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.

- 1. See "Closeout Procedures" and "Checklist for Project Closeout" for additional information.
- 2. When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2 – PRODUCTS (NOT USED)

# PART 3 – EXECUTION (NOT USED)

# CONTRACTOR'S GUARANTEE

CONTRACTOR'S NAME AND ADDRESS

# OWNER'S NAME AND ADDRESS

|                | <br>  |
|----------------|-------|
|                |       |
| PROJECT:       | <br>- |
| LOCATION:      |       |
| CONTRACT FOR:  | <br>_ |
| CONTRACT DATE: |       |

The Contractor hereby guarantees that all Work performed and/or materials installed under the above referenced contract is of the quality that will comply with all specific requirements of the contract documents and hereby insures the Owner against all defects of material for two (2) years and workmanship for a period of two (2) years from and after the date of Final Payment. This does not waive stipulation of other clauses which specify guarantee periods in excess of the obligations herein.

It is further agreed that if, after due inspection, the Architect, as provided in the General Conditions of the Contract for Construction, shall decide that the replacement or repair of any of the Work is, in his opinion, necessary, such defective Work will be repaired or removed and replaced with New Work, meeting all requirements of the Contract Documents, same being done promptly and without expense to the Owner. Repairs and replacements are to include all costs of replacing or repairing other work damaged by the removal and replacements of the work covered by this guarantee and all costs necessary for restoring any portion of the building and its contents which are damaged due to defects in this Contractor's Work or materials.

The Contractor agrees to perform all corrective work necessary promptly upon receipt of written notification from the Owner unless the Owner has previously given the Contractor a written acceptance of such condition.

The Contractor stipulates and agrees that if he fails or neglects to carry out promptly the provisions of this guarantee or any part thereof, the Owner may cause all defects to be remedied and all repairs to be made without further notice to the Contractor and shall charge to and recover the expense thereof from the Contractor and/or Sureties.

Such decisions as the architect shall render in connection with this guarantee are subject to the provisions of the General Conditions.

CONTRACTOR:

CORPORATE SEAL:

BY: \_\_\_\_\_

DATED: \_\_\_\_\_

# STATE OF NEW YORK, COUNTY OF \_\_\_\_\_\_ ss:

| On  | the           | day           | of     | ,                    | 20,        | before     | me       | personally      | came     |
|-----|---------------|---------------|--------|----------------------|------------|------------|----------|-----------------|----------|
|     |               |               |        | , to me known        | n, who bei | ng by me   | duly sv  | worn, did depo  | ose and  |
| say |               | that          |        | he                   |            | res        | sides    |                 | at       |
|     |               |               |        |                      |            |            |          | , that h        | e is the |
|     |               | of            |        |                      |            |            | , the co | prporation desc | ribed in |
| and | which execute | ed the forego | oing i | nstrument; that he k | nows the   | seal of sa | id corp  | oration; that t | he seal  |

affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of said corporation, and that he signed his name thereto by like order.

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_\_ ss:

| On     | the    | <u> </u>     | day      | of      | ,            | 20,         | before      | me       | personally      | came     |
|--------|--------|--------------|----------|---------|--------------|-------------|-------------|----------|-----------------|----------|
|        |        |              |          |         | , to me know | n, and know | vn to me te | o be th  | e individual de | escribed |
| in, ar | nd who | executed the | e forego | ing ins | trument, and | _acknowle   | dged to m   | e that _ | execute         | d same.  |

NOTARY PUBLIC, State of New York

## **DIVISION 08 – OPENINGS**

## **SECTION 087100 – DOOR HARDWARE**

## PART 1 - GENERAL

#### 1.01 SUMMARY

- A. Section includes:
  - 1. Mechanical and electrified door hardware
  - 2. Electronic access control system components
  - 3. Field verification, preparation and modification of existing doors and frames to receive new door hardware.
- B. Section excludes:
  - 1. Windows
  - 2. Cabinets (casework), including locks in cabinets

  - Signage
     Toilet accessories
  - 5. Overhead doors
- C. Related Sections:
  - 1. Section 061000 Rough Carpentry
  - 2. Section 062000 Finish Carpentry
  - 3. Section 079200 Joint Sealants for sealant requirements applicable to threshold installation specified in this section.
  - 4. Section 081113 Hollow Metal Doors and Frames
  - 5. Section 081416 Flush Wood Doors
  - 6. Section 081433 Stile and Rail Doors
  - 7. Section 084113 Aluminum Entrances and Storefronts
  - 8. Section 084114 Aluminum Security Framed Entrances and Storefronts
  - 9. Section 084123 Fire Rated Aluminum Framed Entrances and Storefronts
  - 10. Section 087113 Automatic Door Operator
  - 11. Division 09 sections for touchup, finishing or refinishing of existing openings modified by this section.
  - 12. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wirina.
  - 13. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

## 1.02 SUMMARY

- A. UL. LLC
  - 1. UL 10B Fire Test of Door Assemblies
  - 2. UL 10C Positive Pressure Test of Fire Door Assemblies
  - 3. UL 1784 Air Leakage Tests of Door Assemblies
  - 4. UL 305 Panic Hardware
- B. DHI Door and Hardware Institute
  - 1. Sequence and Format for the Hardware Schedule

- 2. Recommended Locations for Builders Hardware
- Keying Systems and Nomenclature
   Installation Guide for Doors and Hardware
- C. NFPA National Fire Protection Association
  - 1. NFPA 70 National Electric Code
  - 2. NFPA 80 2016 Edition Standard for Fire Doors and Other Opening Protectives
  - 3. NFPA 101 Life Safety Code
  - 4. NFPA 105 Smoke and Draft Control Door Assemblies
  - 5. NFPA 252 Fire Tests of Door Assemblies
- D. ANSI American National Standards Institute
  - 1. ANSI A117.1 2017 Edition Accessible and Usable Buildings and Facilities
  - 2. ANSI/BHMA A156.1 A156.29, and ANSI/BHMA A156.31 Standards for Hardware and **Specialties**
  - 3. ANSI/BHMA A156.28 Recommended Practices for Keying Systems
  - 4. ANSI/WDMA I.S. 1A Interior Architectural Wood Flush Doors
  - 5. ANSI/SDI A250.8 Standard Steel Doors and Frames

## 1.03 SUBMITTALS

- D. General:
  - 1. Submit in accordance with Conditions of Contract and Section 013300 Submittal Procedures.
  - 2. Prior to forwarding submittal:
    - a. Comply with procedures for verifying existing door and frame compatibility for new hardware, as specified in PART 3. "EXAMINATION" article, herein.
    - b. Review drawings and Sections from related trades to verify compatibility with specified hardware.
    - Highlight, encircle, or otherwise specifically identify on submittals; deviations from Contract C. Documents, issues of incompatibility or other issues which may detrimentally affect the Work.
- E. Action Submittals:
  - 1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
  - 2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
    - a. Wiring Diagrams: For power, signal, and control wiring and including:
      - 1) Details of interface of electrified door hardware and building safety and security systems.
      - 2) Schematic diagram of systems that interface with electrified door hardware.
      - 3) Point-to-point wiring.
      - 4) Risers.
  - 3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.
    - a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.

- 4. Door Hardware Schedule:
  - a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.
  - b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
  - c. Indicate complete designations of each item required for each opening, include:
    - 1) Door Index: door number, heading number, and Architect's hardware set number.
    - 2) Quantity, type, style, function, size, and finish of each hardware item.
    - 3) Name and manufacturer of each item.
    - 4) Fastenings and other pertinent information.
    - 5) Location of each hardware set cross-referenced to indications on Drawings.
    - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
    - 7) Mounting locations for hardware.
    - 8) Door and frame sizes and materials.
    - 9) Degree of door swing and handing.
    - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
- 5. Key Schedule:
  - a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
  - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
  - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
  - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
  - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
  - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
- F. Informational Submittals:
  - 1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
  - 2. Provide Product Data:
    - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
    - b. Include warranties for specified door hardware.
- G. Closeout Submittals:
  - 3. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
    - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
    - b. Catalog pages for each product.
    - c. Final approved hardware schedule edited to reflect conditions as installed.
    - d. Final keying schedule

- e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
- f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.
- H. Inspection and Testing:
  - 4. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
    - a. fire door assemblies, in compliance with NFPA 80.
    - b. required egress door assemblies, in compliance with NFPA 101.

## 1.04 QUALITY ASSURANCE

- A. Qualifications and Responsibilities:
  - 1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
  - 2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
  - 3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
    - a. For door hardware: DHI certified AHC or DHC.
    - b. Can provide installation and technical data to Architect and other related subcontractors.
    - c. Can inspect and verify components are in working order upon completion of installation.
    - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
  - 4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

# B. Certifications:

- 1. Fire-Rated Door Openings:
  - a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
  - b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
- 2. Smoke and Draft Control Door Assemblies:
  - a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105
  - b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.

- 3. Electrified Door Hardware
  - a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
- 4. Accessibility Requirements:
  - a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.
- C. Pre-Installation Meetings
  - 1. Keying Conference
    - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
      - 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
      - 2) Preliminary key system schematic diagram.
      - 3) Requirements for key control system.
      - 4) Requirements for access control.
      - 5) Address for delivery of keys.
  - 2. Pre-installation Conference
    - a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
    - b. Inspect and discuss preparatory work performed by other trades.
    - c. Inspect and discuss electrical roughing-in for electrified door hardware.
    - d. Review sequence of operation for each type of electrified door hardware.
    - e. Review required testing, inspecting, and certifying procedures.
    - f. Review questions or concerns related to proper installation and adjustment of door hardware.
  - 3. Electrified Hardware Coordination Conference:
    - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

## 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.

- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

## 1.06 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.
- E. Existing Openings: Where existing doors, frames and/or hardware are to remain, field verify existing functions, conditions and preparations and coordinate to suit opening conditions and to provide proper door operation.

## 1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
  - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
  - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
    - a. Mechanical Warranty
      - 1) Locks
        - a) Mortise: 3 years
        - b) Cylindrical: 10 years
        - c) Falcon: 10 years
      - 2) Exit Devices
        - a) 3 years
      - 3) Closers
        - a) 25 years
      - 4) Automatic Operators
        - a) 2 years
    - b. Electrical Warranty
      - 1) Locks
        - a) 1 year
      - 2) Exit Devices
      - a) 1 year
      - 3) Closers
        - a) 2 years

#### 1.08 MAINTENANCE

- A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
- B. Turn over unused materials to Owner for maintenance purposes.

## PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

- A. Approval of alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance with the Instructions to Bidders.
- B. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- C. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

#### 2.02 MATERIALS

- A. Fabrication
  - 1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
  - 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
  - 3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- B. Modification and Preparation of Existing Doors: Where existing door hardware is indicated to be removed and reinstalled.
  - 1. Provide necessary fillers, Dutchmen, reinforcements, and fasteners, compatible with existing materials, as required for mounting new opening hardware and to cover existing door and frame preparations.
  - 2. Use materials which match materials of adjacent modified areas.
  - 3. When modifying existing fire-rated openings, provide materials permitted by NFPA 80 as required to maintain fire-rating.
- C. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
  - 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.
- D. Cable and Connectors:

- 1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.
- 2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.
- 3. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

## 2.03 HINGES

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. Ives 5BB series
  - 2. Acceptable Manufacturers and Products:
    - a. Hager BB1191/1279 series
    - b. McKinney TB series
    - c. Best FBB series
- B. Requirements:
  - 1. Provide hinges conforming to ANSI/BHMA A156.1.
  - 2. Provide five knuckle, ball bearing hinges.
  - 3. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
    - a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
    - b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high
  - 4. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
    - a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
    - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
  - 5. 2 inches or thicker doors:
    - a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high
    - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
  - 6. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
  - 7. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
  - 8. Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.
  - 9. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
    - a. Steel Hinges: Steel pins
    - b. Non-Ferrous Hinges: Stainless steel pins
    - c. Out-Swinging Exterior Doors: Non-removable pins
    - d. Out-Swinging Interior Lockable Doors: Non-removable pins
    - e. Interior Non-lockable Doors: Non-rising pins
  - 10. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate

electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.

## 2.04 CONTINUOUS HINGES

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Ives
  - 2. Acceptable Manufacturers:
    - a. Select
    - b. Roton
    - c. ABH
- B. Requirements:
  - 1. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
  - 2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.
  - 3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
  - 4. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
  - 5. On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
  - 6. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
  - 7. Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.

## 2.05 ELECTRIC POWER TRANSFER

- A. Manufacturers:
  - 1. Scheduled Manufacturer and Product:
    - a. Von Duprin EPT-10
  - 2. Acceptable Manufacturers and Products:
    - a. ABH PT1000
    - b. Securitron CEPT-10
    - c. Security Door Controls PTM
- B. Requirements:
  - 1. Provide power transfer with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
  - 2. Locate electric power transfer per manufacturer's template and UL requirements, unless interference with operation of door or other hardware items.

# 2.06 FLOOR CLOSERS

A. Manufacturers:

- 3. Scheduled Manufacturer:
  - a. Dormakaba
- 4. Acceptable Manufacturers:
  - b. Jackson
  - c. Rixson
- B. Requirements:
  - 1. Provide floor closers complete with ball-bearing top pivot, floor plates, intermediate pivots and cement boxes unless indicated otherwise.
  - Provide one intermediate pivot for single-acting doors less than 91 inches (2311 mm) high and one additional intermediate pivot per leaf for each additional 30 inches (762 mm) in height or fraction thereof. Intermediate pivots spaced equally not less than 25 inches (635 mm) or not more than 35 inches (889 mm) on center, for doors over 121 inches (3073 mm) high.
  - 3. Provide floor closers with adjustable swing speed, latch speed, back-check, and built in positive stop at specified degree of opening.
  - 4. Spring Power: Continuously adjustable over full range of closer sizes, with reduced opening force for physically handicapped.
  - 5. Hydraulic Regulation: By tamper-proof, non-critical valves. Provide separate adjustment for latch speed, general speed, and backcheck.
  - 6. Provide appropriate model where floor closers are specified at fire rated openings.
  - 7. Provide lead-lined model where floor closers are specified at lead-lined doors.
  - 8. Provide pivots with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electrified pivot nearest to electrified locking component. If manufacturer of electrified locking component requires another device for power transfer, then provide recommended power transfer device and appropriate quantity of pivots.
  - 9. Provide mortar guard for each electric pivot specified, unless specified in hollow metal frame specification.

# 2.07 PIVOT SETS

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Ives
  - 2. Acceptable Manufacturers:
    - a. Dormakaba
    - b. Rixson
    - c. ABH
- B. Requirements:
  - 1. Provide pivot sets complete with oil-impregnated top pivot, unless indicated otherwise.
  - 2. Where offset pivots are specified, Provide one intermediate pivot for doors less than 91 inches (2311 mm) high and one additional intermediate pivot per leaf for each additional 30 inches (762 mm) in height or fraction thereof. Intermediate pivots spaced equally not less than 25 inches (635 mm) or not more than 35 inches (889 mm) on center, for doors over 121 inches (3073 mm) high.
  - 3. Provide appropriate model where pivot sets are scheduled at fire rated openings.
  - 4. Provide lead-lined model where pivot sets are specified at lead-lined doors.

- 5. Provide pivots with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electrified pivot nearest to electrified locking component. If manufacturer of electrified locking component requires another device for power transfer, then provide recommended power transfer device and appropriate quantity of pivots.
- 6. Provide mortar guard for each electric pivot specified, unless specified in hollow metal frame specification.

# 2.08 FLUSH BOLTS

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Ives
  - 2. Acceptable Manufacturers:
    - a. Rockwood
    - b. DCI
    - c. Trimco
- B. Requirements:
  - Provide automatic, constant latching, and manual flush bolts with forged bronze or stainlesssteel face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12 inch (305 mm) steel or brass rods at doors up to 90 inches (2286 mm) in height. For doors over 90 inches (2286 mm) in height increase top rods by 6 inches (152 mm) for each additional 6 inches (152 mm) of door height. Provide dust-proof strikes at each bottom flush bolt.

## 2.09 COORDINATORS

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Ives
  - 2. Acceptable Manufacturers:
    - a. Rockwood
    - b. DCI
    - c. Trimco
- B. Requirements:
  - 1. Where pairs of doors are equipped with automatic flush bolts, an astragal, or other hardware that requires synchronized closing of the doors, provide bar-type coordinating device, surface applied to underside of stop at frame head.
  - 2. Provide filler bar of correct length for unit to span entire width of opening, and appropriate brackets for parallel arm door closers, surface vertical rod exit device strikes, or other stop mounted hardware. Factory-prepared coordinators for vertical rod devices as specified.

## 2.10 MORTISE LOCKS

A. Manufacturers and Products:

- 1. Scheduled Manufacturer and Product:
  - a. Schlage L9000 series
- 2. Acceptable Manufacturers and Products:
  - a. Accurate 9000/9100 series
  - b. Sargent 8200 series
  - c. Best 45H series
- B. Requirements:
  - 1. Provide mortise locks conforming to ANSI/BHMA A156.13 Series 1000, Grade 1, and UL Listed for 3-hour fire doors.
  - 2. Indicators: Where specified, provide indicator window measuring a minimum 2-inch x 1/2 inch with 180-degree visibility. Provide messages color-coded with full text and/or symbols, as scheduled, for easy visibility.
  - 3. Provide locks manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance.
  - 4. Provide lock case that is multi-function and field reversible for handing without opening case. Cylinders: Refer to "KEYING" article, herein.
  - 5. Provide locks with standard 2-3/4 inches (70 mm) backset with full 3/4 inch (19 mm) throw stainless steel mechanical anti-friction latchbolt. Provide deadbolt with full 1-inch (25 mm) throw, constructed of stainless steel.
  - 6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
  - 7. Provide electrified options as scheduled in the hardware sets. Where scheduled, provide switches and sensors integrated into the locks and latches. Provide motor based electrified locksets that comply with the following requirements:
    - a. Universal input voltage single chassis accepts 12 or 24VDC to allow for changes in the field without changing lock chassis.
    - b. Fail Safe/Fail Secure changing mode between electrically locked (fail safe) and electrically unlocked (fail secure) is field selectable without opening the lock case
    - c. Low maximum current draw maximum 0.4 amps to allow for multiple locks on a single power supply.
    - d. Low holding current maximum 0.01 amps to produce minimal heat, eliminate "hot levers" in electrically locked applications, and to provide reliable operation in wood doors that provide minimal ventilation and air flow.
    - e. Connections provide quick-connect Molex system standard.
  - 8. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.
    - a. Provide levers with vandal resistant technology for use at heavy traffic or abusive applications.
    - b. Lever Design: Schlage see hardware groups.

## 2.11 CYLINDRICAL LOCKS – GRADE 1

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. Schlage ND series
  - 2. Acceptable Manufacturers and Products:

- a. Sargent 11-Line
- b. Corbin-Russwin CL3100 series
- c. Best 9K series
- B. Requirements:
  - 1. Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, and UL Listed for 3-hour fire doors.
  - 2. Cylinders: Refer to "KEYING" article, herein.
  - 3. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2inch latch throw. Provide proper latch throw for UL listing at pairs.
  - 4. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
  - 5. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
  - 6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
  - 7. Provide electrified options as scheduled in the hardware sets.
  - 8. Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.
    - a. Provide levers with vandal resistant technology for use at heavy traffic or abusive applications.
    - b. Lever Design: Schlage Rhodes.

## 2.12 DEADLOCKS

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. Schlage L400 series
  - 2. Acceptable Manufacturers and Products:
    - a. Best 38H series
    - b. Sargent 4870 series
- B. Requirements:
  - 1. Provide mortise deadlock series conforming to ANSI/BHMA A156.
  - 2. Cylinders: Refer to "KEYING" article, herein.
  - 3. Provide deadlocks with standard 2-3/4 inches (70 mm) backset. Provide deadbolt with full 1- inch (25 mm) throw, constructed of stainless steel.
  - 4. Provide manufacturer's standard strike.

# 2.13 EXIT DEVICES

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. Von Duprin 98/35A series
  - 2. Acceptable Manufacturers and Products:
    - a. Precision APEX 2000 series
    - b. Sargent 19-43-GL-80 series
- B. Requirements:

- 1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
- 2. Cylinders: Refer to "KEYING" article, herein.
- 3. Provide smooth touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
- 4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
- 5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
- 6. Provide exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.
- 7. Provide flush end caps for exit devices.
- 8. Provide exit devices with manufacturer's approved strikes.
- 9. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
- 10. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
- 11. Provide cylinder or hex-key dogging as specified at non fire-rated openings.
- 12. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
- 13. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
- 14. Provide electrified options as scheduled.
- 15. Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
- 16. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.
- 17. Special Options:
  - a. SI: Provide dogging indicators for visible indication of dogging status.
  - b. **QM**: Rim Exit Devices: provide devices with damper-controlled re-latching to reduce operational noise. Where lever trim is specified, provide damper controlled lever return.
  - c. CVC: Concealed Vertical Cable Exit Devices: provide cable-actuated concealed vertical latch system in two-point for non-rated or fire rated wood doors up to a 90 minute rating and less bottom latch (LBL) configuration for non-rated or fire rated wood doors up to 20 minute rating. Vertical rods not permitted.
    - 1) Cable: Stainless steel with abrasive resistant coating. Conduit and core wire ends snap into latch and center slides without use of tools.
    - 2) Wood Door Prep: Maximum 1 inch x 1.1875 inch x 3.875 inches top latch pocket and 1 inch x 1.1875 inch x 5 inches bottom latch pocket which does not require the use of a metal wrap or edge for non-rated or fire rated wood doors up to a 45 minute rating.
    - 3) Latchbolts and Blocking Cams: Manufactured from sintered metal low carbon copperinfiltrated steel, with molybdenum disulfide low friction coating.
    - 4) Top Latchbolt: Minimum 0.38 inch (10 mm) and greater than 90<sup>-degree</sup> engagement with strike to prevent door and frame separation under high static load.
    - 5) Bottom Latchbolt: Minimum of 0.44-inch (11 mm) engagement with strike.
    - 6) Product Cycle Life: 1,000,000 cycles.
    - 7) Latch Operation: Top and bottom latch operate independently of each other. Top latch fully engages top strike even when bottom latch is compromised. Separate trigger mechanisms not permitted.
    - 8) Latch release does not require separate trigger mechanism.
    - 9) Cable and latching system characteristics:
      - a) Installed independently of exit device installation, and capable of functioning on door prior to device and trim installation.

- b) Connected to exit device at single point in steel and aluminum doors, and two points for top and bottom latches in wood doors.
- c) Bottom latch height adjusted, from single point for steel and aluminum doors and two points for wood doors, after system is installed and connected to exit device, while door is hanging
- d) Bottom latch position altered up and down minimum of 2 inches (51 mm) in steel and aluminum doors without additional adjustment. Bottom latch deadlocks in every adjustment position in wood doors.
- e) Top and bottom latches in steel and aluminum doors and top latch in wood doors may be removed while door is hanging.

# 2.14 ELECTRIC STRIKES

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. Von Duprin 6000 Series.
  - 2. Acceptable Manufacturers and Products:
    - a. Folger Adam 300 Series
    - b. HES 1006 Series
- B. Requirements:
  - 1. Provide electric strikes designed for use with type of locks shown at each opening.
  - 2. Provide electric strikes UL Listed as burglary resistant that are tested to a minimum endurance test of 1,000,000 cycles.
  - 3. Where required, provide electric strikes UL Listed for fire doors and frames.
  - 4. Provide transformers and rectifiers for each strike as required. Verify voltage with electrical contractor.

## 2.15 POWER SUPPLIES

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. Schlage/Von Duprin PS900 Series
  - 2. Acceptable Manufacturers and Products:
    - a. Precision ELR series
    - b. Sargent 3500 series
- B. Requirements:
  - 1. Provide power supplies approved by manufacturer of supplied electrified hardware.
  - Provide appropriate quantity of power supplies necessary for proper operation of electrified locking components as recommended by manufacturer of electrified locking components with consideration for each electrified component using power supply, location of power supply, and approved wiring diagrams. Locate power supplies as directed by Architect.
  - 3. Provide regulated and filtered 24 VDC power supply, and UL class 2 listed.
  - 4. Provide power supplies with the following features:
    - a. 12/24 VDC Output, field selectable.

- b. Class 2 Rated power limited output.
- c. Universal 120-240 VAC input.
- d. Low voltage DC, regulated and filtered.
- e. Polarized connector for distribution boards.
- f. Fused primary input.
- g. AC input and DC output monitoring circuit w/LED indicators.
- h. Cover mounted AC Input indication.
- i. Tested and certified to meet UL294.
- j. NEMA 1 enclosure.
- k. Hinged cover w/lock down screws.
- I. High voltage protective cover.

#### 2.16 CYLINDERS

- A. Manufacturers:
  - 1. Scheduled Manufacturer and Product:
    - a. Match Existing
  - 2. Acceptable Manufacturers and Products:
    - a. No Substitute
- B. Requirements:
  - 1. Provide permanent or interchangeable cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.

## 2.17 KEYING

- A. Scheduled System:
  - 1. Existing factory registered system:
    - a. Provide cylinders/cores keyed into Owner's existing factory registered keying system. Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

OR

- B. Requirements:
  - 1. Construction Keying:
    - a. Replaceable Construction Cores. (OPTION: if using temporary construction cores in IC core cylinder in either F/S or S/F.)
      - 1) Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
        - a) 3 construction control keys
        - b) 12 construction change (day) keys.
      - 2) Owner or Owner's Representative will replace temporary construction cores with permanent cores.

- 2. Permanent Keying:
  - a. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
    - 1) Master Keying system as directed by the Owner.
  - b. Forward bitting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
  - c. Provide keys with the following features:
    - 1) Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
    - 2) Patent Protection: Keys and blanks protected by one or more utility patent(s).
    - Geographically Exclusive: Where High Security or Security cylinders/cores are indicated, provide nationwide, geographically exclusive key system complying with the following restrictions.
  - d. Identification:
    - 1) Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.
    - 2) Identification stamping provisions must be approved by the Architect and Owner.
    - 3) Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
    - 4) Failure to comply with stamping requirements will be cause for replacement of keys involved at no additional cost to Owner.
    - 5) Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
  - e. Quantity: Furnish in the following quantities.
    - 1) Change (Day) Keys: 3 per cylinder/core.
    - 2) (OPTION for interchangeable cores) Permanent Control Keys: 3.
    - 3) Master Keys: 6.

### 2.18 KEY CONTROL SYSTEM

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Telkee
  - 2. Acceptable Manufacturers:
    - a. HPC
    - b. Lund
- B. Requirements:
  - 1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.
    - a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
    - b. Provide hinged-panel type cabinet for wall mounting.

## 2.19 DOOR CLOSERS

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. LCN 4010/4110/4020 series
  - 2. Acceptable Manufacturers and Products:
    - b. Corbin-Russwin DC8000 series
    - c. Sargent 281 series
- B. Requirements:
  - Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. Certify surface mounted mechanical closers to meet fifteen million (15,000,000) full load cycles. ISO 9000 certify closers. Stamp units with date of manufacture code.
  - 2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
  - 3. Cylinder Body: 1-1/2-inch (38 mm) diameter with 11/16-inch (17 mm) diameter double heat-treated pinion journal.
  - 4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
  - 5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.
  - 6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.
  - 7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers. When closers are parallel arm mounted, provide closers which mount within 6-inch (152 mm) top rail without use of mounting plate so that closer is not visible through vision panel from pull side.
  - 8. Pressure Relief Valve (PRV) Technology: Not permitted.
  - 9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI/BHMA Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).
  - 10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

## 2.20 DOOR CLOSERS

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. LCN 4050A series
  - 2. Acceptable Manufacturers and Products:
    - a. Norton 7500 series
    - b. Sargent 351 series
- B. Requirements:

- 1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
- 2. Provide door closers with fully hydraulic, full rack and pinion action with cast aluminum cylinder.
- 3. Closer Body: 1-1/2-inch (38 mm) diameter with 11/16-inch (17 mm) diameter heat-treated pinion journal and full complement bearings.
- 4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and all weather requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
- 5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.
- 6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and back check.
- 7. Pressure Relief Valve (PRV) Technology: Not permitted.
- 8. Provide stick on templates, special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

#### 2.21 ELECTRO-HYDRAULIC AUTOMATIC OPERATORS

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. LCN 4600 series
  - 2. Acceptable Manufacturers and Products:
    - a. Norton 6000 series
    - b. Besam Power Swing
- B. Requirements:
  - 1. Provide low energy automatic operator units with hydraulic closer complying with ANSI/BHMA A156.19.
  - 2. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
  - Provide units with conventional door closer opening and closing forces unless power operator motor is activated. Provide door closer assembly with adjustable spring size, back-check, and opening and closing speed adjustment valves to control door
  - 4. Provide units with on/off switch for manual operation, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay.
  - 5. Provide drop plates, brackets, and adapters for arms as required for details.
  - 6. Provide wireless actuator switches and receivers for operation as specified.
  - 7. Provide weather-resistant actuators at exterior applications.
  - Provide key switches with LED's, recommended and approved by manufacturer of automatic operator as required for function described in operation description of hardware group below. Cylinders: Refer to "KEYING" article, herein.
  - 9. Provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of automatic operator for each individual leaf. Actuators control both doors simultaneously at pairs. Sequence operation of exterior and vestibule doors with automatic operators to allow ingress or egress through both sets of openings as directed by Architect. Locate actuators, key switches, and other controls as directed by Architect.
  - 10. Provide units with vestibule inputs that allow sequencing operation of two units, and SPDT relay for interfacing with latching or locking devices.

### 2.22 DOOR TRIM

- A. Manufacturers:
  - 1. Scheduled Manufacturer:

a. Ives.

- 2. Acceptable Manufacturers:
  - a. Trimco
  - b. Rockwood
- B. Requirements:
  - 1. Provide push plates, push bars, pull plates, pulls, and hands-free reversible door pulls with diameter and length as scheduled.

## 2.23 PROTECTION PLATES

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Ives
  - 2. Acceptable Manufacturers:
    - a. Trimco
    - b. Rockwood
- B. Requirements:
  - 1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
  - Sizes plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.
  - 3. At fire rated doors, provide protection plates over 16 inches high with UL label.

## 2.24 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

- A. Manufacturers:
  - 1. Scheduled Manufacturers:
    - a. Glynn-Johnson
  - 2. Acceptable Manufacturers:
    - a. Rixson
    - b. ABH
- B. Requirements:
  - 1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.
  - 2. Provide friction type at doors without closer and positive type at doors with closer.

## 2.25 DOOR STOPS AND HOLDERS

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Ives
  - 2. Acceptable Manufacturers:
    - a. Trimco
    - b. Rockwood
- B. Provide door stops at each door leaf:
  - 1. Provide wall stops wherever possible. Provide concave type where lockset has a push button of thumbturn.
  - 2. Where a wall stop cannot be used, provide universal floor stops.
  - 3. Where wall or floor stop cannot be used, provide overhead stop.
  - 4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

## 2.26 THRESHOLDS

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Pemko
  - 2. Acceptable Manufacturers:
    - a. No Substitute
- B. Requirements:
  - 3. Provide thresholds as specified and per architectural details. Match finish of other items.
  - 4. For Level floor use 2548A
  - 5. For 3/8" offset use 200A x 228 A
  - 6. For 1/2" offset use R.50.SMRAK
  - 7. For 3/4" offset use R.75.SMRAK
  - 8. Over 3/4" offset use R.VARI/AK

### 2.27 SILENCERS

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Ives
  - 2. Acceptable Manufacturers:
    - a. Rockwood
    - b. Trimco
- B. Requirements:

- 1. Provide "push-in" type silencers for hollow metal or wood frames.
- 2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
- 3. Omit where gasketing is specified.

## 2.28 ROLLER LATCHES

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. Ives
  - 2. Acceptable Manufacturers:
    - a. Rockwood
    - b. Trimco
- B. Requirements:
  - 1. Provide roller latches with 4-7/8 inches (124 mm) strike at single doors to fit ANSI frame prep. If dummy levers are used in conjunction with roller latch mount roller latch at a height as to not interfere with proper mounting and height of dummy lever.
  - 2. Provide roller latches with 2-1/4 inches (57 mm) full lip strike at pair doors. Mount roller in top rail of each leaf per manufacturer's template.

## 2.29 MAGNETIC HOLDERS

- A. Manufacturers:
  - 1. Scheduled Manufacturer:
    - a. LCN
  - 2. Acceptable Manufacturers:
    - a. Rixson
    - b. Sargent
- B. Requirements:
  - 1. Provide wall or floor mounted electromagnetic door release as specified with minimum of 25 pounds of holding force. Coordinate projection of holder and armature with other hardware and wall conditions to ensure that door sits parallel to wall when fully open. Connect magnetic holders on fire-rated doors into the fire control panel for fail-safe operation.

#### 2.20 FINISHES

- A. Finish: BHMA 626/652 (US26D); except:
  - 1. Hinges at Exterior Doors: BHMA 630 (US32D)
  - 2. Aluminum Geared Continuous Hinges: BHMA 628 (US28)
  - 3. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
  - 4. Protection Plates: BHMA 630 (US32D)
  - 5. Overhead Stops and Holders: BHMA 630 (US32D)
  - 6. Door Closers: Powder Coat to Match
  - 7. Wall Stops: BHMA 630 (US32D)

- 8. Latch Protectors: BHMA 630 (US32D)
- 9. Weatherstripping: Clear Anodized Aluminum
- 10. Thresholds: Mill Finish Aluminum

## PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.
- B. Field verify existing doors and frames receiving new hardware and existing conditions receiving new openings. Verify that new hardware is compatible with existing door and frame preparation and existing conditions.
- C. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- D. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.02 PREPARATION

- A. Where on-site modification of doors and frames is required:
  - 1. Carefully remove existing door hardware and components being reused. Clean, protect, tag, and store in accordance with storage and handling requirements specified herein.
  - 2. Field modify and prepare existing doors and frames for new hardware being installed.
  - 3. When modifications are exposed to view, use concealed fasteners, when possible.
  - 4. Prepare hardware locations and reinstall in accordance with installation requirements for new door hardware and with:
    - a. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
    - b. Wood Doors: DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
    - c. Doors in rated assemblies: NFPA 80 for restrictions on on-site door hardware preparation.

#### 3.02 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
  - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
  - 2. Custom Steel Doors and Frames: HMMA 831.
  - 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
  - 4. Installation Guide for Doors and Hardware: DHI TDH-007-20
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.

- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Construction Cores Lock Cylinders:
  - 1. Install construction cores to secure building and areas during construction period.
  - 2. Replace construction cores with permanent cores as indicated in keying section.
  - 3. Furnish permanent cores to Owner for installation.
- J. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:
  - 1. Conduit, junction boxes and wire pulls.
  - 2. Connections to and from power supplies to electrified hardware.
  - 3. Connections to fire/smoke alarm system and smoke evacuation system.
  - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
  - 5. Connections to panel interface modules, controllers, and gateways.
  - 6. Testing and labeling wires with Architect's opening number.
- K. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- L. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- M. Closer/Holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- N. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
- O. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- P. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.
- Q. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

- R. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- S. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

#### 3.03 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
  - 1. Spring Hinges: Adjust to achieve positive latching when door can close freely from an open position of 30 degrees.
  - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
  - 3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy, and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- C. Instruct Owner's personnel in proper adjustment and maintenance of hardware and hardware finishes during the final adjustment of hardware.
- D. Continued Maintenance Service: Approximately six months after the acceptance of hardware in each area, the Installer, accompanied by a representative of the latch and lock manufacturer, shall return to the project and re-adjust every item of hardware to restore to proper function of doors and hardware. Consult with and instruct the Owner's personnel in recommended additions to the maintenance procedures. Replace hardware items which have deteriorated or failed due to faulty design, materials, or installation of hardware units. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware.

#### 3.04 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

## 3.05 DOOR HARDWARE SCHEDULE

A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.

- B. Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- D. Hardware Sets:

# SECTION 087100.1 - FOX LANE HIGH SCHOOL DOOR HARDWARE

A. Hardware Sets:

106583 OPT0359740 Version 2

# HARDWARE SET NO. 01 - SINGLE PASSAGE

| FIOVILLE | eacho  | GL (0) (S) With the following. |                        |   |        |     |
|----------|--------|--------------------------------|------------------------|---|--------|-----|
| QTY      |        | DESCRIPTION                    | CATALOG NUMBER         |   | FINISH | MFR |
| 1        | EA     | CONT. HINGE                    | 224XY                  |   | 628    | IVE |
| 1        | EA     | PASSAGE SET                    | ND10D RHO 14-047       |   | 626    | SCH |
| 1        | EA     | SURFACE CLOSER                 | 4011                   |   | 689    | LCN |
| 1        | EA     | KICK PLATE                     | 8400 10" X 2" LDW B-CS |   | 630    | IVE |
| 1        | EA     | WALL STOP                      | WS406/407CVX           |   | 630    | IVE |
| 3        | EA     | SILENCER                       | SR64                   |   | GRY    | IVE |
|          |        |                                | (OMIT WHERE SMOKE/FIRE |   |        |     |
|          |        |                                | SEALS ARE PROVIDED)    |   |        |     |
|          |        | ET NO. 02 - SINGLE PASSAG      |                        |   |        |     |
|          |        | GL door(s) with the following: |                        |   |        |     |
| QTY      | outrie | DESCRIPTION                    | CATALOG NUMBER         |   | FINISH | MFR |
| 1        | EA     | CONT. HINGE                    | 112XY                  | E | 628    | IVE |
| 1        | EA     | PASSAGE SET                    | ND10D RHO 14-047       |   | 626    | SCH |
| 1        | EA     | WALL STOP                      | WS406/407CVX           | Ē | 630    | IVE |
| 1        | EA     | PERIMETER GASKETING            | BY DOOR MANUFACTURER   |   |        |     |
| HARDV    | VARE S | ET NO. 02A - SINGLE PASSA      | GE - A/G DOOR          |   |        |     |
| Provide  | each S | GL door(s) with the following: |                        |   |        |     |
| QTY      |        | DESCRIPTION                    | CATALOG NUMBER         |   | FINISH | MFR |
| 1        | EA     | CONT. HINGE                    | 112XY                  |   | 628    | IVE |
| 1        | EA     | PASSAGE SET                    | ND10D RHO 14-047       |   | 626    | SCH |
| 1        | EA     | OH STOP                        | 90S                    |   | 630    | GLY |
| 1        | EA     | PERIMETER GASKETING            | BY DOOR MANUFACTURER   |   |        |     |
|          |        | ET NO. 03 - SINGLE RESTRO      |                        |   |        |     |
|          |        | GL door(s) with the following: |                        |   |        |     |
| QTY      |        | DESCRIPTION                    | CATALOG NUMBER         |   | FINISH | MFR |
|          |        | = = = = • • • • • • • • •      |                        |   |        |     |

| QTY |    | DESCRIPTION                          | CATALOG NUMBER  | FINISH | MFR |
|-----|----|--------------------------------------|---|--------|-----|
| 1   | EA | CONT. HINGE                          | 224XY   | 628    | IVE |
| 1   | EA | PRIVACY LOCK W/<br>OUTSIDE INDICATOR | ND40S RHO OS-OCC                                      | 626    | SCH |
| 1   | EA | OH STOP                              | 90S   | 630    | GLY |
| 1   | EA | KICK PLATE                           | 8400 10" X 2" LDW B-CS                                | 630    | IVE |
| 3   | EA | SILENCER                             | SR64<br>(OMIT WHERE SMOKE/FIRE<br>SEALS ARE PROVIDED) | GRY    | IVE |
|     |    |                                      |   |        |     |

HARDWARE SET NO. 03A - SINGLE RESTROOM

Provide each SGL door(s) with the following:

| 110010 | 0 00011 0 | oe door(o) mar are renowing.                                  |                        |        |     |
|--------|-----------|---|------------------------|--------|-----|
| QTY    |           | DESCRIPTION   | CATALOG NUMBER         | FINISH | MFR |
| 1      | EA        | CONT. HINGE   | 224XY                  | 628    | IVE |
| 1      | EA        | PRIVACY LOCK W/   | ND40S RHO OS-OCC       | 626    | SCH |
|        |           | OUTSIDE INDICATOR   |                        |        |     |
| 1      | EA        | SURFACE CLOSER  | 4011                   | 689    | LCN |
| 1      | EA        | KICK PLATE  | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1      | EA        | WALL STOP   | WS406/407CVX           | 630    | IVE |
| 1      | EA        | GASKETING   | 188SBK PSA             | BK     | ZER |
|        |           | SET NO. 03B - SINGLE RESTR<br>SGL door(s) with the following: | OOM - EXISTING FRAME   |        |     |
| QTY    |           | DESCRIPTION   | CATALOG NUMBER         | FINISH | MFR |
| 1      | EA        | CONT. HINGE   | 224XY                  | 628    | IVE |
| 1      | EA        | PRIVACY LOCK W/   | ND40S RHO OS-OCC       | 626    | SCH |
|        |           | OUTSIDE INDICATOR   |                        |        |     |
| 1      | EA        | SURFACE CLOSER  | 4011                   | 689    | LCN |

| 1 | EA | SURFACE CLOSER | 4011                   | 689 | LCN |
|---|----|----------------|------------------------|-----|-----|
| 1 | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS | 630 | IVE |
| 1 | EA | WALL STOP      | WS406/407CVX           | 630 | IVE |
| 1 | EA | GASKETING      | 188SBK PSA             | BK  | ZER |

EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE.

# HARDWARE SET NO. 04 - SINGLE OFFICE

Provide each SGL door(s) with the following:

| QTY |    | DESCRIPTION          | CATALOG NUMBER  | FINISH | MFR |
|-----|----|----------------------|---|--------|-----|
| 1   | EA | CONT. HINGE          | 224XY   | 628    | IVE |
| 1   | EA | ENTRANCE/OFFICE LOCK | ND50BDC RHO   | 626    | SCH |
| 1   | EA | WALL STOP            | WS406/407CVX  | 630    | IVE |
| 3   | EA | SILENCER             | SR64<br>(OMIT WHERE SMOKE/FIRE<br>SEALS ARE PROVIDED) | GRY    | IVE |

HARDWARE SET NO. 04A - SINGLE OFFICE - A/G DOOR

| QTY |    | DESCRIPTION          | CATALOG NUMBER       | FINISH | MFR |
|-----|----|----------------------|----------------------|--------|-----|
| 1   | EA | CONT. HINGE          | 112XY                | 628    | IVE |
| 1   | EA | ENTRANCE/OFFICE LOCK | ND50BDC RHO 14-047   | 626    | SCH |
| 1   | EA | WALL STOP            | WS406/407CVX         | 630    | IVE |
| 1   | EA | PERIMETER GASKETING  | BY DOOR MANUFACTURER |        |     |

HARDWARE SET NO. 05 - SINGLE CLASSROOM SECURITY Provide each SGL door(s) with the following:

| Provide  | each S     | GL door(s) with the following: |                                    |   |        |     |  |  |
|--|------------|--------------------------------|------------------------------------|---|--------|-----|--|--|
| QTY  |            | DESCRIPTION                    | CATALOG NUMBER                     |   | FINISH | MFR |  |  |
| 1  | EA         | CONT. HINGE                    | 224XY                              |   | 628    | IVE |  |  |
| 1  | EA         | CLASSROOM SECURITY 0           | ND78BDC RHO IS-CRS                 |   | 626    | SCH |  |  |
| 2  | EA         | SFIC CORE                      | BEST - TO MATCH EXISTING<br>SYSTEM |   | 626    | BES |  |  |
| 1  | EA         | SURFACE CLOSER                 | 4011                               |   | 689    | LCN |  |  |
| 1  | EA         | KICK PLATE                     | 8400 10" X 2" LDW B-CS             |   | 630    | IVE |  |  |
| 1  | EA         | WALL STOP                      | WS406/407CVX                       |   | 630    | IVE |  |  |
| 1  | EA         | GASKETING                      | 188SBK PSA                         |   | BK     | ZER |  |  |
| HARDWARE SET NO. 05A - SINGLE CLASSROOM SECURITY<br>Provide each SGL door(s) with the following: |            |                                |                                    |   |        |     |  |  |
|  | e each S   |                                |                                    |   |        |     |  |  |
| QTY  | <b>F A</b> | DESCRIPTION                    |                                    |   | FINISH | MFR |  |  |
| 1  | EA         | CONT. HINGE                    |                                    |   | 628    | IVE |  |  |
| 1  | EA         | CLASSROOM SECURITY 0           |                                    |   | 626    | SCH |  |  |
| 2  | EA         | SFIC CORE                      | BEST - TO MATCH EXISTING<br>SYSTEM |   | 626    | BES |  |  |
| 1  | EA         | SURFACE CLOSER                 | 4111 EDA                           |   | 689    | LCN |  |  |
| 1  | EA         | KICK PLATE                     | 8400 10" X 2" LDW B-CS             |   | 630    | IVE |  |  |
| 1  | EA         | WALL STOP                      | WS406/407CVX                       |   | 630    | IVE |  |  |
| 1  | EA         | GASKETING                      | 188SBK PSA                         |   | BK     | ZER |  |  |
|  |            | ET NO. 05B - SINGLE CLASSI     | ROOM SECURITY                      |   |        |     |  |  |
|  | e each S   | GL door(s) with the following: |                                    |   |        |     |  |  |
| QTY  |            | DESCRIPTION                    | CATALOG NUMBER                     | _ | FINISH | MFR |  |  |
| 1  | EA         | CONT. HINGE                    | 224XY                              |   | 628    | IVE |  |  |
| 1  | EA         | CLASSROOM SECURITY 0           |                                    |   | 626    | SCH |  |  |
| 2  | EA         | SFIC CORE                      | BEST - TO MATCH EXISTING<br>SYSTEM |   | 626    | BES |  |  |
| 1  | EA         | OH STOP                        | 90S                                |   | 630    | GLY |  |  |
| 1  | EA         | SURFACE CLOSER                 | 4011                               |   | 689    | LCN |  |  |
| 1  | EA         | KICK PLATE                     | 8400 10" X 2" LDW B-CS             |   | 630    | IVE |  |  |

 1
 EA
 KICK PLATE
 8400 10" X 2" LDW B-CS

 1
 EA
 GASKETING
 188SBK PSA

ZER

BK

HARDWARE SET NO. 05C - SINGLE CLASSROOM SECURITY - EXISTING FRAME Provide each SGL door(s) with the following:

|     |    | ()                   |                                    |        |     |
|-----|----|----------------------|------------------------------------|--------|-----|
| QTY |    | DESCRIPTION          | CATALOG NUMBER                     | FINISH | MFR |
| 1   | EA | CONT. HINGE          | 224XY                              | 628    | IVE |
| 1   | EA | CLASSROOM SECURITY 0 | ND78BDC RHO IS-CRS                 | 626    | SCH |
| 2   | EA | SFIC CORE            | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1   | EA | OH STOP              | 90S                                | 630    | GLY |
| 1   | EA | SURFACE CLOSER       | 4011                               | 689    | LCN |
| 1   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1   | EA | GASKETING            | 188SBK PSA                         | BK     | ZER |
|     |    |                      |                                    |        |     |

EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE.

HARDWARE SET NO. 05D - SINGLE CLASSROOM SECURITY - EXISTING FRAME Provide each SGL door(s) with the following:

| - |     |    | <u> </u>             |                                    |        |     |
|---|-----|----|----------------------|------------------------------------|--------|-----|
|   | QTY |    | DESCRIPTION          | CATALOG NUMBER                     | FINISH | MFR |
|   | 1   | EA | CONT. HINGE          | 224XY                              | 628    | IVE |
|   | 1   | EA | CLASSROOM SECURITY 0 | ND78BDC RHO IS-CRS                 | 626    | SCH |
|   | 2   | EA | SFIC CORE            | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
|   | 1   | EA | SURFACE CLOSER       | 4111 CUSH                          | 689    | LCN |
|   | 1   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS             | 630    | IVE |
|   | 1   | EA | GASKETING            | 188SBK PSA                         | BK     | ZER |
|   |     |    |                      |                                    |        |     |

EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE. HARDWARE SET NO. 05E - SINGLE CLASSROOM SECURITY - MAG HOLD OPEN Provide each SGL door(s) with the following:

|     |    | <u> </u>             |                                    |        |     |
|-----|----|----------------------|------------------------------------|--------|-----|
| QTY |    | DESCRIPTION          | CATALOG NUMBER                     | FINISH | MFR |
| 1   | EA | CONT. HINGE          | 224XY                              | 628    | IVE |
| 1   | EA | CLASSROOM SECURITY 0 | ND78BDC RHO IS-CRS                 | 626    | SCH |
| 2   | EA | SFIC CORE            | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1   | EA | FIRE/LIFE HOLDER     | 4040SEH 24V/120V AC/DC AS<br>REQ   | 689    | LCN |
| 1   | EA | SURFACE CLOSER       | 4111 CUSH                          | 689    | LCN |
| 1   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1   | EA | WALL STOP            | WS406/407CVX                       | 630    | IVE |
| 1   | EA | GASKETING            | 188SBK PSA                         | BK     | ZER |
|     |    |                      |                                    |        |     |

NOTE: 4040SEH HOLDER AND STOP ARM CLOSER MUST BE TEMPLATED TO SAME DEGREE OF OPENING OTHERWISE DAMAGE MAY OCCUR TO HOLDER IF FORCED BEYOND ITS LIMIT.

HARDWARE SET NO. 05F - SINGLE CLASSROOM SECURITY - EXISTING FRAME

Provide each SGL door(s) with the following:

| QTY |    | DESCRIPTION          | CATALOG NUMBER                     | FINISH | MFR |
|-----|----|----------------------|------------------------------------|--------|-----|
| 1   | EA | CONT. HINGE          | 224XY                              | 628    | IVE |
| 1   | EA | CLASSROOM SECURITY 0 | ND78BDC RHO IS-CRS                 | 626    | SCH |
| 2   | EA | SFIC CORE            | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1   | EA | SURFACE CLOSER       | 4011                               | 689    | LCN |
| 1   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1   | EA | WALL STOP            | WS406/407CVX                       | 630    | IVE |
| 1   | EA | GASKETING            | 188SBK PSA                         | BK     | ZER |

EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE.

HARDWARE SET NO. 06 - SINGLE CLASSROOM SECURITY - A/G DOOR

|     |    | ()                   |                           |        |     |
|-----|----|----------------------|---------------------------|--------|-----|
| QTY |    | DESCRIPTION          | CATALOG NUMBER            | FINISH | MFR |
| 1   | EA | CONT. HINGE          | 112XY                     | 628    | IVE |
| 1   | EA | CLASSROOM SECURITY 0 | ND78BDC RHO 14-047 IS-CRS | 626    | SCH |
| 2   | EA | SFIC CORE            | BEST - TO MATCH EXISTING  | 626    | BES |
|     |    |                      | SYSTEM                    |        |     |
| 1   | EA | OH STOP              | 90S                       | 630    | GLY |
| 1   | EA | SURFACE CLOSER       | 4021                      | 689    | LCN |
| 1   | EA | FLUSH CEILNG MTG     | 4020-18G SRT              | 689    | LCN |
|     |    | PLATE                |                           |        |     |
| 1   | EA | PERIMETER GASKETING  | BY DOOR MANUFACTURER      |        |     |

HARDWARE SET NO. 06A - SINGLE CLASSROOM SECURITY - A/G DOOR Provide each SGL door(s) with the following:

| QTY |    | DESCRIPTION          | CATALOG NUMBER                     | FINISH  | MFR |
|-----|----|----------------------|------------------------------------|---------|-----|
| QII |    |                      | CATALOG NUMBER                     | FINISIT |     |
| 1   | EA | CONT. HINGE          | 112XY                              | 628     | IVE |
| 1   | EA | CLASSROOM SECURITY 0 | ND78BDC RHO 14-047 IS-CRS          | 626     | SCH |
| 2   | EA | SFIC CORE            | BEST - TO MATCH EXISTING<br>SYSTEM | 626     | BES |
| 1   | EA | SURFACE CLOSER       | 4021T                              | 689     | LCN |
| 1   | EA | MOUNTING PLATE       | 4020T-18 SRT                       | 689     | LCN |
| 1   | EA | WALL STOP            | WS406/407CVX                       | 630     | IVE |
| 1   | EA | PERIMETER GASKETING  | BY DOOR MANUFACTURER               |         |     |

HARDWARE SET NO. 07 - PAIR CLASSROOM SECURITY

Provide each PR door(s) with the following:

| QTY |    | DESCRIPTION          | CATALOG NUMBER           | FINISH | MFR |
|-----|----|----------------------|--------------------------|--------|-----|
| 2   | EA | CONT. HINGE          | 224XY                    | 628    | IVE |
| 1   | EA | AUTO FLUSH BOLT      | FB41P                    | 630    | IVE |
| 1   | EA | DUST PROOF STRIKE    | DP2                      | 626    | IVE |
| 1   | EA | CLASSROOM SECURITY 0 | ND78BDC RHO IS-CRS       | 626    | SCH |
| 2   | EA | SFIC CORE            | BEST - TO MATCH EXISTING | 626    | BES |
|     |    |                      | SYSTEM                   |        |     |
| 1   | EA | COORDINATOR          | COR X FL                 | 628    | IVE |
| 2   | EA | MOUNTING BRACKET     | MB                       | BLK    | IVE |
| 2   | EA | SURFACE CLOSER       | 4111 EDA                 | 689    | LCN |
| 2   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS   | 630    | IVE |
| 2   | EA | WALL STOP            | WS406/407CVX             | 630    | IVE |
| 1   | EA | GASKETING            | 188SBK PSA               | BK     | ZER |

HARDWARE SET NO. 08 - SINGLE STOREROOM

|     |    | ( ) <b>C</b>   |                                    |        |     |
|-----|----|----------------|------------------------------------|--------|-----|
| QTY |    | DESCRIPTION    | CATALOG NUMBER                     | FINISH | MFR |
| 1   | EA | CONT. HINGE    | 224XY                              | 628    | IVE |
| 1   | EA | STOREROOM LOCK | ND80BDC RHO                        | 626    | SCH |
| 2   | EA | SFIC CORE      | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1   | EA | SURFACE CLOSER | 4011                               | 689    | LCN |
| 1   | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1   | EA | WALL STOP      | WS406/407CVX                       | 630    | IVE |
| 1   | EA | GASKETING      | 188SBK PSA                         | BK     | ZER |
|     |    |                |                                    |        |     |

# HARDWARE SET NO. 08A - SINGLE STOREROOM

| Provid | e each s | GL door(s) with the following:  |   |   |        |     |
|--------|----------|---------------------------------|---|---|--------|-----|
| QTY    |          | DESCRIPTION                     | CATALOG NUMBER                                |   | FINISH | MFR |
| 1      | EA       | CONT. HINGE                     | 224XY   |   | 628    | IVE |
| 1      | EA       | STOREROOM LOCK                  | ND80BDC RHO                                   |   | 626    | SCH |
| 2      | EA       | SFIC CORE                       | BEST - TO MATCH EXISTING                      |   | 626    | BES |
|        |          |                                 | SYSTEM  |   |        |     |
| 1      | EA       | WALL STOP                       | WS406/407CVX                                  |   | 630    | IVE |
| 3      | EA       | SILENCER                        | SR64  |   | GRY    | IVE |
|        |          |                                 | (OMIT WHERE SMOKE/FIRE<br>SEALS ARE PROVIDED) |   |        |     |
|        |          |                                 | SEALS ARE PROVIDED)                           |   |        |     |
| HARD   | WARE S   | SET NO. 08B - SINGLE STORE      | ROOM  |   |        |     |
|        |          | GL door(s) with the following:  |   |   |        |     |
| QTY    |          | DESCRIPTION                     | CATALOG NUMBER                                |   | FINISH | MFR |
| 1      | EA       | CONT. HINGE                     | 224XY   |   | 628    | IVE |
| 1      | EA       | STOREROOM LOCK                  | ND80BDC RHO                                   |   | 626    | SCH |
| 2      | EA       | SFIC CORE                       | BEST - TO MATCH EXISTING                      |   | 626    | BES |
|        |          |                                 | SYSTEM  |   |        |     |
| 1      | EA       | SURFACE CLOSER                  | 4111 EDA                                      |   | 689    | LCN |
| 1      | EA       | GASKETING                       | 188SBK PSA                                    |   | BK     | ZER |
|        |          | SET NO. 08C - SINGLE STORE      | ROOM  |   |        |     |
|        |          | SGL door(s) with the following: |   |   |        |     |
| QTY    |          | DESCRIPTION                     | CATALOG NUMBER                                |   | FINISH | MFR |
| 1      | EA       | CONT. HINGE                     | 224XY   |   | 628    | IVE |
| 1      | EA       | STOREROOM LOCK                  | ND80BDC RHO                                   | Ē | 626    | SCH |
| 1      | EA       | SFIC CORE                       | BEST - TO MATCH EXISTING                      |   | 626    | BES |
| •      | <u> </u> |                                 | SYSTEM  |   | 020    | 220 |
| 1      | EA       | OH STOP                         | 90S   |   | 630    | GLY |
| 1      | EA       | SURFACE CLOSER                  | 4011  |   | 689    | LCN |
| 1      | EA       | GASKETING                       | 188SBK PSA                                    |   | BK     | ZER |
|        |          |                                 |   |   |        |     |
|        |          | SET NO. 08D - SINGLE STORE      | EROOM   |   |        |     |
|        |          | SGL door(s) with the following: |   |   |        |     |
| QTY    |          |                                 |   |   | FINISH |     |
| 1      | EA       | CONT. HINGE                     |   |   | 628    | IVE |
| 1      | EA       | STOREROOM LOCK                  | ND80BDC RHO                                   |   | 626    | SCH |
| 2      | EA       | SFIC CORE                       | BEST - TO MATCH EXISTING<br>SYSTEM            |   | 626    | BES |
| 1      | EA       | SURFACE CLOSER                  | 4111 CUSH                                     |   | 689    | LCN |
| 1      | EA       | GASKETING                       | 188SBK PSA                                    | Ē | BK     | ZER |
| 1      |          | CAURE HING                      |   |   |        |     |

HARDWARE SET NO. 08E - SINGLE STOREROOM - EXISTING FRAME Provide each SGL door(s) with the following:

|     |    | - ()           | 5 |                                    |        |     |
|-----|----|----------------|---|------------------------------------|--------|-----|
| QTY |    | DESCRIPTION    |   | CATALOG NUMBER                     | FINISH | MFR |
| 1   | EA | CONT. HINGE    |   | 224XY                              | 628    | IVE |
| 1   | EA | STOREROOM LOCK |   | ND80BDC RHO                        | 626    | SCH |
| 2   | EA | SFIC CORE      |   | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1   | EA | SURFACE CLOSER |   | 4011                               | 689    | LCN |
| 1   | EA | KICK PLATE     |   | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1   | EA | WALL STOP      |   | WS406/407CVX                       | 630    | IVE |
| 1   | EA | GASKETING      |   | 188SBK PSA                         | BK     | ZER |
|     |    |                |   |                                    |        |     |

EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE.

# HARDWARE SET NO. 08G - SINGLE STOREROOM - EXISTING FRAME

Provide each SGL door(s) with the following:

| QTY |    | DESCRIPTION    | CATALOG NUMBER                     | FINISH | MFR |
|-----|----|----------------|------------------------------------|--------|-----|
| 1   | EA | CONT. HINGE    | 224XY                              | 628    | IVE |
| 1   | EA | STOREROOM LOCK | ND80BDC RHO                        | 626    | SCH |
| 2   | EA | SFIC CORE      | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1   | EA | SURFACE CLOSER | 4111 CUSH                          | 689    | LCN |
| 1   | EA | GASKETING      | 188SBK PSA                         | BK     | ZER |
|     |    |                |                                    |        |     |

EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE.

# HARDWARE SET NO. 09 - PAIR STOREROOM

|    |    | () 5              |   |        |     |
|----|----|-------------------|---|--------|-----|
| QT | Ϋ́ | DESCRIPTION       | CATALOG NUMBER  | FINISH | MFR |
| 2  | EA | CONT. HINGE       | 224XY   | 628    | IVE |
| 2  | EA | MANUAL FLUSH BOLT | FB358   | 626    | IVE |
| 1  | EA | DUST PROOF STRIKE | DP2   | 626    | IVE |
| 1  | EA | STOREROOM LOCK    | ND80BDC RHO   | 626    | SCH |
| 2  | EA | SFIC CORE         | BEST - TO MATCH EXISTING<br>SYSTEM                    | 626    | BES |
| 2  | EA | SURFACE CLOSER    | 4111 CUSH   | 689    | LCN |
| 2  | EA | SILENCER          | SR64<br>(OMIT WHERE SMOKE/FIRE<br>SEALS ARE PROVIDED) | GRY    | IVE |

HARDWARE SET NO. 09A - PAIR STOREROOM - EXISTING FRAME Provide each PR door(s) with the following:

|   | ovide | Caoni |                   |                                    |        |     |
|---|-------|-------|-------------------|------------------------------------|--------|-----|
| ( | QTY   |       | DESCRIPTION       | CATALOG NUMBER                     | FINISH | MFR |
| 2 | 2     | EA    | CONT. HINGE       | 224XY                              | 628    | IVE |
|   | 1     | EA    | AUTO FLUSH BOLT   | FB41P                              | 630    | IVE |
|   | 1     | EA    | DUST PROOF STRIKE | DP2                                | 626    | IVE |
|   | 1     | EA    | STOREROOM LOCK    | ND80BDC RHO                        | 626    | SCH |
| 2 | 2     | EA    | SFIC CORE         | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
|   | 1     | EA    | COORDINATOR       | COR X FL                           | 628    | IVE |
| 2 | 2     | EA    | MOUNTING BRACKET  | MB                                 | BLK    | IVE |
| 2 | 2     | EA    | SURFACE CLOSER    | 4111 CUSH                          | 689    | LCN |
| 2 | 2     | EA    | KICK PLATE        | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 2 | 2     | EA    | WALL STOP         | WS406/407CVX                       | 630    | IVE |
|   | 1     | EA    | GASKETING         | 188SBK PSA                         | BK     | ZER |
|   |       |       |                   |                                    |        |     |

## EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE.

## HARDWARE SET NO. 09B - PAIR STOREROOM - EXISTING FRAME

Provide each PR door(s) with the following:

| 1101100 | odonii |                     |                          |        |     |
|---------|--------|---------------------|--------------------------|--------|-----|
| QTY     |        | DESCRIPTION         | CATALOG NUMBER           | FINISH | MFR |
| 2       | EA     | CONT. HINGE         | 224XY                    | 628    | IVE |
| 1       | EA     | CONST LATCHING BOLT | FB61P                    | 630    | IVE |
| 1       | EA     | DUST PROOF STRIKE   | DP2                      | 626    | IVE |
| 1       | EA     | STOREROOM LOCK      | ND80BDC RHO              | 626    | SCH |
| 2       | EA     | SFIC CORE           | BEST - TO MATCH EXISTING | 626    | BES |
|         |        |                     | SYSTEM                   |        |     |
| 1       | EA     | COORDINATOR         | COR X FL                 | 628    | IVE |
| 2       | EA     | SURFACE CLOSER      | 4011                     | 689    | LCN |
| 2       | EA     | KICK PLATE          | 8400 10" X 2" LDW B-CS   | 630    | IVE |
| 2       | EA     | WALL STOP           | WS406/407CVX             | 630    | IVE |
| 1       | EA     | GASKETING           | 188SBK PSA               | BK     | ZER |
|         |        |                     |                          |        |     |

## EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE.

HARDWARE SET NO. 10 - VAULT DOOR

Provide each SGL door(s) with the following:

|     |    | ()                  |   |        |     |
|-----|----|---------------------|---|--------|-----|
| QTY |    | DESCRIPTION         | CATALOG NUMBER  | FINISH | MFR |
| 1   | EA | CONT. HINGE         | 224XY   | 628    | IVE |
| 1   | EA | ELEC CLASSROOM LOCK | CO-200-CY-70-KP-RHO-B 4B<br>BATTERY OPERATED          | 626    | SCE |
| 1   | EA | SFIC CORE           | BEST - TO MATCH EXISTING<br>SYSTEM                    | 626    | BES |
| 1   | EA | OH STOP             | 90S   | 630    | GLY |
| 1   | EA | SURFACE CLOSER      | 4011  | 689    | LCN |
| 1   | EA | KICK PLATE          | 8400 10" X 2" LDW B-CS                                | 630    | IVE |
| 3   | EA | SILENCER            | SR64<br>(OMIT WHERE SMOKE/FIRE<br>SEALS ARE PROVIDED) | GRY    | IVE |
|     |    |                     |   |        |     |

HARDWARE SET NO. 11 - SINGLE EXIT - EXISTING FRAME

Provide each SGL door(s) with the following:

| QTY  | DESCRIPTION        | CATALOG NUMBER         | FINISH | MFR |
|------|--------------------|------------------------|--------|-----|
| 1 EA | CONT. HINGE        | 224XY                  | 628    | IVE |
| 1 EA | FIRE EXIT HARDWARE | 98-L-BE-F-06           | 626    | VON |
| 1 EA | SURFACE CLOSER     | 4011                   | 689    | LCN |
| 1 EA | KICK PLATE         | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1 EA | WALL STOP          | WS406/407CVX           | 630    | IVE |
| 1 EA | GASKETING          | 188SBK PSA             | BK     | ZER |

EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE.

# HARDWARE SET NO. 12A - SINGLE EXIT - LOCKDOWN

|     |    | (,)                |                        |        |     |
|-----|----|--------------------|------------------------|--------|-----|
| QTY |    | DESCRIPTION        | CATALOG NUMBER         | FINISH | MFR |
| 1   | EA | CONT. HINGE        | 224XY                  | 628    | IVE |
| 1   | EA | FIRE EXIT HARDWARE | 98-L-F-2SI-06          | 626    | VON |
| 2   | EA | RIM CYLINDER       | 1E72                   | 626    | BES |
| 1   | EA | SURFACE CLOSER     | 4111 EDA               | 689    | LCN |
| 1   | EA | KICK PLATE         | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1   | EA | WALL STOP          | WS406/407CVX           | 630    | IVE |
| 1   | EA | GASKETING          | 188SBK PSA             | BK     | ZER |
|     |    |                    |                        |        |     |

HARDWARE SET NO. 13 - PAIR EXITS

Provide each PR door(s) with the following:

| Provide | e each P | 'R door(s) with the following: |   |       |         |       |
|---------|----------|--------------------------------|---|-------|---------|-------|
| QTY     |          | DESCRIPTION                    | CATALOG NUMBER  |       | FINISH  | MFR   |
| 2       | EA       | CONT. HINGE                    | 224XY   |       | 628     | IVE   |
| 2       | EA       | FIRE EXIT HARDWARE             | 9827-L-BE-F-LBRAFL-06-499F                                |       | 626     | VON   |
| 2       | EA       | SURFACE CLOSER                 | 4111 EDA  |       | 689     | LCN   |
| 2       | EA       | KICK PLATE                     | 8400 10" X 2" LDW B-CS                                    |       | 630     | IVE   |
| 2       | EA       | WALL STOP                      | WS406/407CVX  |       | 630     | IVE   |
| 1       | EA       | GASKETING                      | 188SBK PSA  |       | BK      | ZER   |
|         |          | ET NO. 14 - PAIR EXITS - M     | AG HOLD OPEN  |       |         |       |
| Provide | e each P | PR door(s) with the following: |   |       |         |       |
| QTY     |          | DESCRIPTION                    | CATALOG NUMBER  |       | FINISH  | MFR   |
| 2       | EA       | CONT. HINGE                    | 224XY   |       | 628     | IVE   |
| 2       | EA       | FIRE EXIT HARDWARE             | 9827-L-F-LBRAFL-06-499F                                   |       | 626     | VON   |
| 2       | EA       | RIM CYLINDER                   | 1E72  |       | 626     | BES   |
| 2       | EA       | SURFACE CLOSER                 | 4111 EDA  |       | 689     | LCN   |
| 2       | EA       | KICK PLATE                     | 8400 10" X 2" LDW B-CS                                    |       | 630     | IVE   |
| 2       | EA       | MAGNET                         | SEM7830 12V/24V/120V<br>PROVIDE EXTENSIONS AS<br>REQUIRED |       | 689     | LCN   |
| 1       | EA       | GASKETING                      | 188SBK PSA  |       | BK      | ZER   |
|         |          | ET NO. 14A - PAIR EXITS - M    | MAG HOLD OPEN   |       |         |       |
|         | e each P | PR door(s) with the following: |   |       |         |       |
| QTY     |          | DESCRIPTION                    | CATALOG NUMBER  |       | FINISH  | MFR   |
| 2       | EA       | CONT. HINGE                    | 224XY   |       | 628     | IVE   |
| 2       | EA       | FIRE EXIT HARDWARE             | 9827-L-F-LBRAFL-06-499F                                   |       | 626     | VON   |
| 2       | EA       | RIM CYLINDER                   | 1E72  |       | 626     | BES   |
| 2       | EA       | FIRE/LIFE HOLDER               | 4040SEH 24V/120V AC/DC AS<br>REQ                          |       | 689     | LCN   |
| 2       | EA       | SURFACE CLOSER                 | 4111 CUSH   |       | 689     | LCN   |
| 2       | EA       | KICK PLATE                     | 8400 10" X 1" LDW B-CS                                    |       | 630     | IVE   |
| 1       | EA       | GASKETING                      | 188SBK PSA  |       | BK      | ZER   |
| NOTE:   | 4040SE   | EH HOLDER AND STOP ARM         | I CLOSER MUST BE TEMPLATED TO                             | ) SAN | IE DEGR | EE OF |

NOTE: 4040SEH HOLDER AND STOP ARM CLOSER MUST BE TEMPLATED TO SAME DEGREE OF OPENING OTHERWISE DAMAGE MAY OCCUR TO HOLDER IF FORCED BEYOND ITS LIMIT. HARDWARE SET NO. 15 - PAIR EXITS - LOCKDOWN

Provide each PR door(s) with the following:

| QTY |    | DESCRIPTION         | CATALOG NUMBER       | FINISH | MFR |
|-----|----|---------------------|----------------------|--------|-----|
| 2   | EA | CONT. HINGE         | 112XY                | 628    | IVE |
| 1   | EA | PANIC HARDWARE      | LD-9827-EO-LBR       | 630    | VON |
| 1   | EA | PANIC HARDWARE      | LD-9827-L-2SI-LBR-06 | 626    | VON |
| 2   | EA | RIM CYLINDER        | 1E72                 | 626    | BES |
| 2   | EA | SURFACE CLOSER      | 4111 CUSH            | 689    | LCN |
| 1   | EA | PERIMETER GASKETING | BY DOOR MANUFACTURER |        |     |

EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE.

HARDWARE SET NO. 15A - PAIR EXITS - LOCKDOWN

Provide each PR door(s) with the following:

| QTY |    | DESCRIPTION         | CATALOG NUMBER              | FINISH | MFR |
|-----|----|---------------------|-----------------------------|--------|-----|
| 2   | EA | CONT. HINGE         | 224XY                       | 628    | IVE |
| 1   | EA | FIRE EXIT HARDWARE  | 9827-EO-F-LBR-499F          | 630    | VON |
| 1   | EA | FIRE EXIT HARDWARE  | 9827-L-F-2SI-LBRAFL-06-499F | 626    | VON |
| 2   | EA | RIM CYLINDER        | 1E72                        | 626    | BES |
| 2   | EA | SURFACE CLOSER      | 4111 CUSH                   | 689    | LCN |
| 1   | EA | GASKETING           | 188SBK PSA                  | BK     | ZER |
| 1   | EA | PERIMETER GASKETING | BY DOOR MANUFACTURER        |        |     |

HARDWARE SET NO. 15B - PAIR EXITS - LOCKDOWN - EXISTING FRAME Provide each PR door(s) with the following:

| TTOVIG |    |                     |                             |  |        |     |
|--------|----|---------------------|-----------------------------|--|--------|-----|
| QTY    |    | DESCRIPTION         | CATALOG NUMBER              |  | FINISH | MFR |
| 2      | EA | CONT. HINGE         | 224XY                       |  | 628    | IVE |
| 1      | EA | FIRE EXIT HARDWARE  | 9827-EO-F-LBR-499F          |  | 630    | VON |
| 1      | EA | FIRE EXIT HARDWARE  | 9827-L-F-2SI-LBRAFL-06-499F |  | 626    | VON |
| 2      | EA | RIM CYLINDER        | 1E72                        |  | 626    | BES |
| 2      | EA | SURFACE CLOSER      | 4111 EDA                    |  | 689    | LCN |
| 1      | EA | GASKETING           | 188SBK PSA                  |  | BK     | ZER |
| 1      | EA | PERIMETER GASKETING | BY DOOR MANUFACTURER        |  |        |     |

EXISTING FRAME:

NOTE: CONTRACTOR TO FILL/PATCH ANY OLD HARDWARE PREPARATIONS IN EXISTING FRAME THAT WILL BE NO LONGER USED WITH NEW DOOR/HARDWARE. CONTRACTOR IS RESPONSIBLE FOR ANY NEW MORTISES/HARDWARE PREPARATION TO EXISTING FRAME TO ACCOMMODATE NEW DOOR AND HARDWARE. HARDWARE SET NO. 16 - PAIR EXITS - LOCKDOWN - MAG HOLD OPEN Provide each PR door(s) with the following:

|     |    | ()                  |   |        |     |
|-----|----|---------------------|---|--------|-----|
| QTY |    | DESCRIPTION         | CATALOG NUMBER                                | FINISH | MFR |
| 2   | EA | CONT. HINGE         | 224XY   | 628    | IVE |
| 1   | EA | PANIC HARDWARE      | LD-9827-EO-LBR                                | 630    | VON |
| 1   | EA | PANIC HARDWARE      | LD-9827-L-2SI-LBR-06                          | 626    | VON |
| 2   | EA | RIM CYLINDER        | 1E72  | 626    | BES |
| 2   | EA | SURFACE CLOSER      | 4111 EDA                                      | 689    | LCN |
| 2   | EA | KICK PLATE          | 8400 10" X 1" LDW B-CS                        | 630    | IVE |
| 2   | EA | MAGNET              | SEM7830 12V/24V/120V<br>PROVIDE EXTENSIONS AS | 689    | LCN |
|     |    |                     | REQUIRED                                      |        |     |
| 1   | EA | PERIMETER GASKETING | BY DOOR MANUFACTURER                          |        |     |
| I   | EA | FERIMETER GASKETING | BT DOOR WANDFACTURER                          |        |     |

HARDWARE SET NO. 17 - PAIR EXITS - A/G DOORS - MAG HOLD OPEN

Provide each PR door(s) with the following:

|     |    | ()                  |                                  |        |     |
|-----|----|---------------------|----------------------------------|--------|-----|
| QTY |    | DESCRIPTION         | CATALOG NUMBER                   | FINISH | MFR |
| 2   | EA | CONT. HINGE         | 112XY                            | 628    | IVE |
| 1   | EA | PANIC HARDWARE      | LD-9827-EO-LBR                   | 630    | VON |
| 1   | EA | PANIC HARDWARE      | LD-9827-L-2SI-LBR-06             | 626    | VON |
| 2   | EA | RIM CYLINDER        | 1E72                             | 626    | BES |
| 2   | EA | FIRE/LIFE HOLDER    | 4040SEH 24V/120V AC/DC AS<br>REQ | 689    | LCN |
| 2   | EA | SURFACE CLOSER      | 4111 CUSH                        | 689    | LCN |
| 1   | EA | PERIMETER GASKETING | BY DOOR MANUFACTURER             |        |     |

NOTE: 4040SEH HOLDER AND STOP ARM CLOSER MUST BE TEMPLATED TO SAME DEGREE OF OPENING OTHERWISE DAMAGE MAY OCCUR TO HOLDER IF FORCED BEYOND ITS LIMIT.

HARDWARE SET NO. 18 - SINGLE FRP EXTERIOR

Provide each SGL door(s) with the following:

|        |         | - () 5              |                      |        |     |
|--------|---------|---------------------|----------------------|--------|-----|
| QTY    |         | DESCRIPTION         | CATALOG NUMBER       | FINISH | MFR |
| 1      | EA      | CONT. HINGE         | 112XY                | 628    | IVE |
| 1      | EA      | PANIC HARDWARE      | CD-98-NL-OP-110MD    | 630    | VON |
| 1      | EA      | RIM CYLINDER        | 1E72                 | 626    | BES |
| 1      | EA      | MORTISE CYLINDER    | 1E74                 | 626    | BES |
| 1      | EA      | FLUSH PULL          | BY DOOR MANUFACTURER |        |     |
| 1      | EA      | SURFACE CLOSER      | 4111 HCUSH           | 689    | LCN |
| 1      | EA      | PERIMETER GASKETING | BY DOOR MANUFACTURER |        |     |
| 1      | EA      | THRESHOLD           | SEE BELOW            |        | PEM |
| NOTE:  | THRES   | HOLD:               |                      |        |     |
| FOR LE | EVEL FL | _OOR USE: 2548A     |                      |        |     |

FOR 3/8" OFFSET USE: 200A X 228 A

FOR 1/2" OFFSET USE: R.50.SMRAK

FOR 3/4" OFFSET USE: R.75.SMRAK OVER 3/4" OFFSET USE: R.VARI/AK

| HARDWARE SET NO. 19 - PAIR EXTERIOR ALUMINUM AND GLASS |
|--|
| Provide each PR door(s) with the following:            |

| FIOVIU | Fronde each Frit door(s) with the following. |                          |                            |  |        |     |
|--------|--|--------------------------|----------------------------|--|--------|-----|
| QTY    |  | DESCRIPTION              | CATALOG NUMBER             |  | FINISH | MFR |
| 2      | EA   | CONT. HINGE              | 112XY                      |  | 628    | IVE |
| 1      | EA   | REMOVABLE MULLION        | KR4954                     |  | 689    | VON |
| 1      | EA   | PANIC HARDWARE           | CD-35A-EO                  |  | 626    | VON |
| 1      | EA   | PANIC HARDWARE           | CD-35A-NL-OP-388           |  | 626    | VON |
| 1      | EA   | RIM CYLINDER             | 1E72                       |  | 626    | BES |
| 3      | EA   | MORTISE CYLINDER         | 1E74                       |  | 626    | BES |
| 1      | EA   | ELECTRIC STRIKE          | RE-USE EXISTING            |  |        |     |
| 2      | EA   | 90 DEG OFFSET PULL       | 8190EZHD 10" STD           |  | 630-   | IVE |
|        |  |                          |                            |  | 316    |     |
| 2      | EA   | OH STOP & HOLDER         | 90H                        |  | 630    | GLY |
| 2      | EA   | SURFACE CLOSER           | 4021                       |  | 689    | LCN |
| 2      | EA   | FLUSH CEILNG MTG         | 4020-18G SRT               |  | 689    | LCN |
|        |  | PLATE                    |                            |  |        |     |
| 1      | EA   | PERIMETER GASKETING      | BY DOOR MANUFACTURER       |  |        |     |
| 1      | EA   | THRESHOLD                | SEE BELOW                  |  |        | PEM |
| 2      | EA   | DOOR POSITION SWITCH     | RE-USE EXISTING            |  |        |     |
|        | THRES  |                          |                            |  |        |     |
| FOR L  | EVEL FI                                      | LOOR USE: 2548A          |                            |  |        |     |
| FOR 3  | /8" OFF                                      | SET USE: 200A X 228 A    |                            |  |        |     |
| FOR 1  | /2" OFF                                      | SET USE: R.50.SMRAK      |                            |  |        |     |
| FOR 3  | /4" OFF                                      | SET USE: R.75.SMRAK OVER | 3/4" OFFSET USE: R.VARI/AK |  |        |     |
|        |  |                          |                            |  |        |     |

# HARDWARE SET NO. 20 - PAIR EXTERIOR FRP

Provide each PR door(s) with the following:

| 1100100 | 5 000111 | r addi (d) mar and ronoming. |                      |        |     |
|---------|----------|------------------------------|----------------------|--------|-----|
| QTY     |          | DESCRIPTION                  | CATALOG NUMBER       | FINISH | MFR |
| 2       | EA       | CONT. HINGE                  | 112XY                | 628    | IVE |
| 1       | EA       | REMOVABLE MULLION            | KR4954               | 689    | VON |
| 1       | EA       | PANIC HARDWARE               | CD-98-EO             | 630    | VON |
| 1       | EA       | PANIC HARDWARE               | CD-98-NL-OP-110MD    | 630    | VON |
| 1       | EA       | RIM CYLINDER                 | 1E72                 | 626    | BES |
| 3       | EA       | MORTISE CYLINDER             | 1E74                 | 626    | BES |
| 2       | EA       | FLUSH PULL                   | BY DOOR MANUFACTURER |        |     |
| 2       | EA       | SURFACE CLOSER               | 4111 HCUSH           | 689    | LCN |
| 1       | EA       | PERIMETER GASKETING          | BY DOOR MANUFACTURER |        |     |
| 1       | EA       | THRESHOLD                    | SEE BELOW            |        | PEM |
| NOTE:   | THRES    | SHOLD:                       |                      |        |     |
| FOR L   | EVEL F   | LOOR USE: 2548A              |                      |        |     |

FOR LEVEL FLOOR USE: 2548A FOR 3/8" OFFSET USE: 200A X 228 A FOR 1/2" OFFSET USE: R.50.SMRAK FOR 3/4" OFFSET USE: R.75.SMRAK OVER 3/4" OFFSET USE: R.VARI/AK

# END OF SECTION

# Bedford CSD Phase 2 - Fox Lane HS

| Door    | HwSet#    |
|---------|-----------|
| Numbers | nwSet#    |
| 100A    | 14A       |
| 100F    | 14A       |
| 100C    | 14A       |
| 102     | 05A       |
| 102     | 08        |
| 104     | 08        |
| 105     | 08        |
| 106     | 06A       |
| 100     | 06A       |
| 108     | 05        |
| 100     | 02        |
| 109     | 02        |
| 111     | 02        |
| 112     | 06        |
| 112     | 06        |
| 113     | 00<br>04A |
|         |           |
| 115     | 04A       |
| 116     | 06        |
| 117     | 02A       |
| 118     | 02A       |
| 119     | 20        |
| 120     | 02        |
| 121     | 02        |
| 122     | 06        |
| 123     | 01        |
| 124     | 20        |
| 125     | 04        |
| 126     | 10        |
| 128     | 04        |
| 129     | 04        |
| 130     | 04        |
| 131     | 04        |
| 132     | 04        |
| 133     | 04        |
| 134     | 04        |
| 135     | 04        |
| 136     | 04        |
| 137     | 04        |
| 138     | 08B       |
| 139     | 08        |
| 140     | 06        |
| 141     | 06A       |
| 142     | 15        |
| 143     | 15        |
| 144     | 17        |
| 145     | 08C       |
|         |           |

| Door    | HwSet# |
|---------|--------|
| Numbers |        |
| 145A    | 05A    |
| 146     | 08C    |
| 147     | 05A    |
| 148     | 05E    |
| 149     | 05E    |
| 150     | 17     |
| 151     | 17     |
| 152     | 05E    |
| 153     | 05E    |
| 154     | 05A    |
| 155     | 06     |
| 156     | 06A    |
| 157     | 14     |
| 158     | 16     |
| 159     | 13     |
| 160     | 20     |
| 161     | 19     |
| 162     | 08D    |
| 163     | 05     |
| 164     | 05B    |
| 165     | 08A    |
| 166     | 04     |
| 167     | 05     |
| 168     | 07     |
| 168A    | 09     |
| 170     |        |
|         | 05C    |
| 171     | 08E    |
| 172     | 03B    |
| 173     | 03B    |
| 174     | 05C    |
| 175     | 08G    |
| 200     | 20     |
| 201     | 15A    |
| 202     | 12A    |
| 203     | 05B    |
| 204     | 03     |
| 205     | 05A    |
| 206     | 05     |
| 207     | 18     |
| 208     | 08     |
| 209     | 12A    |
| 210     | 05B    |
| 211     | 03     |
| 212     | 08     |
| 213     | 05B    |
| 214     | 05     |
| L - · · | 1      |

| Numbers |     |
|---------|-----|
|         |     |
| 215     | 18  |
|         | 11  |
| 217     | 08D |
|         | 08E |
| 219     | 08E |
| 220     | 08E |
| 221     | 05D |
| 222     | 05B |
| 223     | 05B |
| 224     | 05F |
| 225     | 03B |
| 226     | 05D |
| 227     | 05  |
| 228     | 05  |
| 229     | 05A |
| 230     | 08E |
| 231     | 08E |
| 232     | 08G |
| 233     | 11  |
| 234     | 03A |
| 235     | 09B |
| 236     | 03A |
| 237     | 05  |
| 238     | 08C |
| 239     | 08C |
| 240     | 19  |
| 241     | 15B |
| 242     | 15B |
| 243     | 15B |
| 244     | 09A |
| 245     | 09A |
| 246     | 09A |
| 247     | 09A |

# SECTION 087100.2 - FOX LANE MIDDLE SCHOOL DOOR HARDWARE

A. Hardware Sets:

110668 OPT0369479 Version 2

# HARDWARE SET NO. 01 - SINGLE PASSAGE

Provide each SGL door(s) with the following:

| QTY |    | DESCRIPTION | CATALOG NUMBER  | FINISH | MFR |
|-----|----|-------------|---|--------|-----|
| 1   | EA | CONT. HINGE | 224XY   | 628    | IVE |
| 1   | EA | PASSAGE SET | ND10D RHO 13-247                                      | 626    | SCH |
| 1   | EA | WALL STOP   | WS406/407CVX  | 630    | IVE |
| 3   | EA | SILENCER    | SR64<br>(OMIT WHERE SMOKE/FIRE<br>SEALS ARE PROVIDED) | GRY    | IVE |

# HARDWARE SET NO. 01A - SINGLE PASSAGE

Provide each SGL door(s) with the following:

| Q                | γτς             | DESCRIPTION                           | CATALOG NUMBER  | FINISH    | MFR |
|------------------|-----------------|---------------------------------------|---|-----------|-----|
| 1                | EA              | CONT. HINGE                           | 224XY   | 628       | IVE |
| 1                | EA              | PASSAGE SET                           | ND10S RHO 14-010  | 626       | SCH |
| 1                | EA              | OH STOP                               | 90S   | 630       | GLY |
| 1                | EA              | WALL STOP                             | WS406/407CVX  | 630       | IVE |
| 1                | SET             | GASKETING                             | 870AA-S   | AA        | ZER |
| 1                | EA              | DOOR BOTTOM                           | 364AA   | AA        | ZER |
| 1                | EA              | MOUNTING BRACKET                      | 870SPB<br>FOR RIM STRIKE AND/OR<br>CLOSER                           |           | ZER |
| 1<br>1<br>1<br>1 | EA<br>SET<br>EA | WALL STOP<br>GASKETING<br>DOOR BOTTOM | WS406/407CVX<br>870AA-S<br>364AA<br>870SPB<br>FOR RIM STRIKE AND/OR | 630<br>AA |     |

# HARDWARE SET NO. 02 - SINGLE RESTROOM

Provide each SGL door(s) with the following:

| QTY  | DESCRIPTION                          | CATALOG NUMBER         | FINISH | MFR |
|------|--------------------------------------|------------------------|--------|-----|
| 1 EA | CONT. HINGE                          | 224XY                  | 628    | IVE |
| 1 EA | PRIVACY LOCK W/<br>OUTSIDE INDICATOR | ND40S RHO OS-OCC       | 626    | SCH |
| 1 EA | SURFACE CLOSER                       | 4011                   | 689    | LCN |
| 1 EA | KICK PLATE                           | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1 EA | WALL STOP                            | WS406/407CVX           | 630    | IVE |
| 1 EA | GASKETING                            | 188SBK PSA             | BK     | ZER |

HARDWARE SET NO. 03 - SINGLE OFFICE

| QTY |    | DESCRIPTION          | CATALOG NUMBER         | FINISH | MFR |
|-----|----|----------------------|------------------------|--------|-----|
| 1   | EA | CONT. HINGE          | 224XY                  | 628    | IVE |
| 1   | EA | ENTRANCE/OFFICE LOCK | ND50BDC RHO            | 626    | SCH |
| 1   | EA | WALL STOP            | WS406/407CVX           | 630    | IVE |
| 3   | EA | SILENCER             | SR64                   | GRY    | IVE |
|     |    |                      | (OMIT WHERE SMOKE/FIRE |        |     |
|     |    |                      | SEALS ARE PROVIDED)    |        |     |

HARDWARE SET NO. 04 - SINGLE CLASSROOM SECURITY Provide each SGL door(s) with the following:

| 110 |    | SOE door(0) with the following. |                          |        |     |
|-----|----|---------------------------------|--------------------------|--------|-----|
| Q   | TY | DESCRIPTION                     | CATALOG NUMBER           | FINISH | MFR |
| 1   | EA | CONT. HINGE                     | 224XY                    | 628    | IVE |
| 1   | EA | CLASSROOM SECURITY 0            | ND78BDC RHO IS-CRS       | 626    | SCH |
| 2   | EA | SFIC CORE                       | BEST - TO MATCH EXISTING | 626    | BES |
|     |    |                                 | SYSTEM                   |        |     |
| 1   | EA | SURFACE CLOSER                  | 4011                     | 689    | LCN |
| 1   | EA | KICK PLATE                      | 8400 10" X 2" LDW B-CS   | 630    | IVE |
| 1   | EA | WALL STOP                       | WS406/407CVX             | 630    | IVE |
| 1   | EA | GASKETING                       | 188SBK PSA               | BK     | ZER |

HARDWARE SET NO. 04A - SINGLE CLASSROOM SECURITY

Provide each SGL door(s) with the following:

| QTY |    | DESCRIPTION          | CATALOG NUMBER                     | FINISH | MFR |
|-----|----|----------------------|------------------------------------|--------|-----|
| 1   | EA | CONT. HINGE          | 224XY                              | 628    | IVE |
| 1   | EA | CLASSROOM SECURITY 0 | ND78BDC RHO IS-CRS                 | 626    | SCH |
| 2   | EA | SFIC CORE            | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1   | EA | SURFACE CLOSER       | 4111 EDA                           | 689    | LCN |
| 1   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1   | EA | WALL STOP            | WS406/407CVX                       | 630    | IVE |
| 1   | EA | GASKETING            | 188SBK PSA                         | BK     | ZER |

HARDWARE SET NO. 04B - SINGLE CLASSROOM SECURITY - SOUND SEALS Provide each SGL door(s) with the following:

| 1100100 | ouon o | OF door(o) with the following. |   |        |     |
|---------|--------|--------------------------------|---|--------|-----|
| QTY     |        | DESCRIPTION                    | CATALOG NUMBER                            | FINISH | MFR |
| 1       | EA     | CONT. HINGE                    | 224XY                                     | 628    | IVE |
| 1       | EA     | CLASSROOM SECURITY 0           | ND78BDC RHO 14-028 IS-CRS                 | 626    | SCH |
| 2       | EA     | SFIC CORE                      | BEST - TO MATCH EXISTING<br>SYSTEM        | 626    | BES |
| 1       | EA     | SURFACE CLOSER                 | 4111 EDA                                  | 689    | LCN |
| 1       | EA     | KICK PLATE                     | 8400 10" X 2" LDW B-CS                    | 630    | IVE |
| 1       | EA     | WALL STOP                      | WS406/407CVX                              | 630    | IVE |
| 1       | SET    | GASKETING                      | 870AA-S                                   | AA     | ZER |
| 1       | EA     | DOOR BOTTOM                    | 364AA                                     | AA     | ZER |
| 1       | EA     | MOUNTING BRACKET               | 870SPB<br>FOR RIM STRIKE AND/OR<br>CLOSER |        | ZER |
|         |        |                                |   |        |     |

HARDWARE SET NO. 04C - SINGLE CLASSROOM SECURITY Provide each SGL door(s) with the following:

| Provide | e each S | GL door(s) with the following:                              |                                    |        |     |
|---------|----------|---|------------------------------------|--------|-----|
| QTY     |          | DESCRIPTION   | CATALOG NUMBER                     | FINISH | MFR |
| 1       | EA       | CONT. HINGE   | 224XY                              | 628    | IVE |
| 1       | EA       | CLASSROOM SECURITY 0  | ND78BDC RHO IS-CRS                 | 626    | SCH |
| 2       | EA       | SFIC CORE   | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1       | EA       | SURFACE CLOSER  | 4111 CUSH                          | 689    | LCN |
| 1       | EA       | KICK PLATE  | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1       | EA       | GASKETING   | 188SBK PSA                         | BK     | ZER |
|         |          | ET NO. 04D - SINGLE CLASS                                   | ROOM SECURITY                      |        |     |
|         | e each S | GL door(s) with the following:                              |                                    |        |     |
| QTY     |          | DESCRIPTION   | CATALOG NUMBER                     | FINISH | MFR |
| 1       | EA       | CONT. HINGE   | 224XY                              | 628    | IVE |
| 1       | EA       | CLASSROOM SECURITY 0  | ND78BDC RHO IS-CRS                 | 626    | SCH |
| 2       | EA       | SFIC CORE   | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1       | EA       | OH STOP   | 90S                                | 630    | GLY |
| 1       | EA       | SURFACE CLOSER  | 4011                               | 689    | LCN |
| 1       | EA       | KICK PLATE  | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1       | EA       | GASKETING   | 188SBK PSA                         | BK     | ZER |
|         |          | ET NO. 05 - SINGLE CLASSR<br>GL door(s) with the following: | OOM SECURITY - A/G DOOR            |        |     |
| QTY     |          | DESCRIPTION   | CATALOG NUMBER                     | FINISH | MFR |
| 1       | EA       | CONT. HINGE   | 112XY                              | 628    | IVE |
| 1       | EA       | CLASSROOM SECURITY 0  | ND78BDC RHO 14-047 IS-CRS          | 626    | SCH |
| 2       | EA       | SFIC CORE   | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1       | EA       | SURFACE CLOSER  | 4021T                              | 689    | LCN |
| 1       | EA       | MOUNTING PLATE  | 4020T-18 SRT                       | 689    | LCN |
| 1       | EA       | WALL STOP   | WS406/407CVX                       | 630    | IVE |
| 4       |          |   |                                    |        |     |

1 EA PERIMETER GASKETING BY DOOR MANUFACTURER

HARDWARE SET NO. 06 - PAIR CLASSROOM SECURITY

| Provide | e each P | R door(s) with the following:                               |  |            |     |
|---------|----------|---|--|------------|-----|
| QTY     |          | DESCRIPTION   | CATALOG NUMBER                               | FINISH     | MFR |
| 2       | EA       | CONT. HINGE   | 224XY  | 628        | IVE |
| 1       | EA       | AUTO FLUSH BOLT   | FB41P  | 630        | IVE |
| 1       | EA       | DUST PROOF STRIKE   | DP2  | 626        | IVE |
| 1       | EA       | CLASSROOM SECURITY 0  | ND78BDC RHO IS-CRS                           | 626        | SCH |
| 2       | EA       | SFIC CORE   | BEST - TO MATCH EXISTING<br>SYSTEM           | 626        | BES |
| 1       | EA       | COORDINATOR   | COR X FL                                     | 628        | IVE |
| 2       | EA       | MOUNTING BRACKET  | MB   | BLK        | IVE |
| 2       | EA       | SURFACE CLOSER  | 4111 CUSH                                    | 689        | LCN |
| 2       | EA       | KICK PLATE  | 8400 10" X 2" LDW B-CS                       | 630        | IVE |
| 1       | EA       | GASKETING   | 188SBK PSA                                   | BK         | ZER |
|         |          | ET NO. 07 - SINGLE STORER<br>GL door(s) with the following: | COOM   |            |     |
|         | e each o | DESCRIPTION   | CATALOG NUMBER                               | FINISH     | MFR |
| 1       | EA       | CONT. HINGE   | 224XY  | 628        | IVE |
| 1       | EA       | STOREROOM LOCK  | ND80BDC RHO                                  | 626        | SCH |
| 2       | EA       | SFIC CORE   | BEST - TO MATCH EXISTING                     | 626<br>626 | BES |
| Ζ       | EA       | SFIC CORE   | SYSTEM                                       | 020        | DEO |
| 1       | EA       | SURFACE CLOSER  | 4011   | 689        | LCN |
| 1       | EA       | KICK PLATE  | 8400 10" X 2" LDW B-CS                       | 630        | IVE |
| 1       | EA       | WALL STOP   | WS406/407CVX                                 | 630        | IVE |
| 1       | EA       | GASKETING   | 188SBK PSA                                   | BK         | ZER |
|         |          | ET NO. 08 - VAULT DOOR                                      |  |            |     |
|         | e each S | GL door(s) with the following:                              |  |            |     |
| QTY     |          | DESCRIPTION   | CATALOG NUMBER                               | FINISH     | MFR |
| 1       | EA       | CONT. HINGE   | 224XY  | 628        | IVE |
| 1       | EA       | ELEC CLASSROOM LOCK   | CO-200-CY-70-KP-RHO-B 4B<br>BATTERY OPERATED | 626        | SCE |
| 1       | EA       | SFIC CORE   | BEST - TO MATCH EXISTING<br>SYSTEM           | 626        | BES |
| 1       | EA       | SURFACE CLOSER  | 4011   | 689        | LCN |
| 1       | EA       | KICK PLATE  | 8400 10" X 2" LDW B-CS                       | 630        | IVE |
| 1       | EA       | WALL STOP   | WS406/407CVX                                 | 630        | IVE |
| 3       | EA       | SILENCER  | SR64   | GRY        | IVE |
|         |          |   | (OMIT WHERE SMOKE/FIRE                       |            |     |
|         |          |   | SEALS ARE PROVIDED)                          |            |     |
|         |          |   |  |            |     |

HARDWARE SET NO. 09 - PAIR EXITS

|     | odonii |  |   |        |     |
|-----|--------|--|---|--------|-----|
| QTY |        | DESCRIPTION  | CATALOG NUMBER  | FINISH | MFR |
| 2   | EA     | CONT. HINGE  | 224XY   | 628    | IVE |
| 2   | EA     | FIRE EXIT HARDWARE   | 9827-L-BE-F-LBRAFL-06-499F                                | 626    | VON |
| 2   | EA     | SURFACE CLOSER   | 4111 EDA  | 689    | LCN |
| 2   | EA     | KICK PLATE   | 8400 10" X 2" LDW B-CS                                    | 630    | IVE |
| 2   | EA     | WALL STOP  | WS406/407CVX  | 630    | IVE |
| 2   | EA     | MAGNET   | SEM7830 12V/24V/120V<br>PROVIDE EXTENSIONS AS<br>REQUIRED | 689    | LCN |
| 1   | EA     | GASKETING  | 188SBK PSA  | BK     | ZER |
|     |        | SET NO. 10 - PAIR DOUBLE E<br>PR door(s) with the following: | GRESS   |        |     |
| QTY |        | DESCRIPTION  | CATALOG NUMBER  | FINISH | MFR |
| 2   | EA     | CONT. HINGE  | 224XY   | 628    | IVE |
| 1   | EA     | FIRE EXIT HARDWARE   | 9827-EO-F-LBRAFL-499F                                     | 630    | VON |
| 2   | EA     | SURFACE CLOSER   | 4111 EDA  | 689    | LCN |
| 4   | EA     | KICK PLATE   | 8400 10" X 1" LDW B-CS                                    | 630    | IVE |
| 2   | EA     | MAGNET   | SEM7830 12V/24V/120V<br>PROVIDE EXTENSIONS AS<br>REQUIRED | 689    | LCN |
| 1   | EA     | GASKETING  | 188SBK PSA  | BK     | ZER |

HARDWARE SET NO. 11 - PAIR EXTERIOR ALUMINUM AND GLASS - SECURITY Provide each PR door(s) with the following:

| 1 101140 |       | reactive, mar are renorming. |   |             |     |
|----------|-------|------------------------------|---|-------------|-----|
| QTY      |       | DESCRIPTION                  | CATALOG NUMBER                                    | FINISH      | MFR |
| 2        | EA    | CONT. HINGE                  | 112XY   | 628         | IVE |
| 1        | EA    | REMOVABLE MULLION            | KR4854  | 689         | VON |
| 1        | EA    | PANIC HARDWARE               | CD-35A-EO   | 626         | VON |
| 1        | EA    | PANIC HARDWARE               | CD-35A-NL-OP-388                                  | 626         | VON |
| 1        | EA    | RIM CYLINDER                 | 1E72  | 626         | BES |
| 3        | EA    | MORTISE CYLINDER             | 1E74  | 626         | BES |
| 1        | EA    | ELECTRIC STRIKE              | 6111 FSE CON 12/24 VAC/VDC                        | 630         | VON |
| 2        | EA    | 90 DEG OFFSET PULL           | 8190EZHD 10" STD                                  | 630-<br>316 | IVE |
| 2        | EA    | OH STOP & HOLDER             | 90H   | 630         | GLY |
| 2        | EA    | SURFACE CLOSER               | 4021  | 689         | LCN |
| 2        | EA    | FLUSH CEILNG MTG<br>PLATE    | 4020-18G SRT                                      | 689         | LCN |
| 1        | EA    | PERIMETER GASKETING          | BY DOOR MANUFACTURER                              |             |     |
| 1        | EA    | THRESHOLD                    | SEE BELOW   |             | PEM |
| 2        | EA    | WIRE HARNESS                 | CON-50<br>FOR USE INSIDE MULLION                  |             | SCH |
| 2        | EA    | WIRE HARNESS                 | CON-6W<br>(WIRE LEADS FOR<br>CONNECTION TO POWER) |             | SCH |
| NOTE     | THRES | HOI D.                       |   |             |     |

NOTE: THRESHOLD: FOR LEVEL FLOOR USE: 2548A FOR 3/8" OFFSET USE: 200A X 228 A FOR 1/2" OFFSET USE: R.50.SMRAK FOR 3/4" OFFSET USE: R.75.SMRAK OVER 3/4" OFFSET USE: R.VARI/AK HARDWARE SET NO. 11A - PAIR VESTIBULE ALUMINUM AND GLASS - SECURITY Provide each PR door(s) with the following:

| 1 101140 |    | reacer(e) mar are renewing. |                                  |        |      |
|----------|----|-----------------------------|----------------------------------|--------|------|
| QTY      |    | DESCRIPTION                 | CATALOG NUMBER                   | FINISH | MFR  |
| 2        | EA | CONT. HINGE                 | 112XY                            | 628    | IVE  |
| 1        | EA | REMOVABLE MULLION           | KR4854                           | 689    | VON  |
| 1        | EA | PANIC HARDWARE              | CD-35A-EO                        | 626    | VON  |
| 1        | EA | PANIC HARDWARE              | CD-35A-NL-OP-388                 | 626    | VON  |
| 1        | EA | RIM CYLINDER                | 1E72                             | 626    | BES  |
| 3        | EA | MORTISE CYLINDER            | 1E74                             | 626    | BES  |
| 1        | EA | ELECTRIC STRIKE             | 6111 FSE CON 12/24 VAC/VDC       | 630    | VON  |
| 2        | EA | 90 DEG OFFSET PULL          | 8190EZHD 10" STD                 | 630-   | IVE  |
|          |    |                             |                                  | 316    |      |
| 2        | EA | OH STOP & HOLDER            | 90H                              | 630    | GLY  |
| 2        | EA | SURFACE CLOSER              | 4021                             | 689    | LCN  |
| 2        | EA | FLUSH CEILNG MTG<br>PLATE   | 4020-18G SRT                     | 689    | LCN  |
| 1        | EA | PERIMETER GASKETING         | BY DOOR MANUFACTURER             |        |      |
|          |    |                             |                                  |        | 0011 |
| 2        | EA | WIRE HARNESS                | CON-50<br>FOR USE INSIDE MULLION |        | SCH  |
| 2        | EA | WIRE HARNESS                | CON-6W                           |        | SCH  |
|          |    |                             | (WIRE LEADS FOR                  |        |      |
|          |    |                             | CONNECTION TO POWER)             |        |      |

# HARDWARE SET NO. 12 - SINGLE EXTERIOR ALUMINUM AND GLASS - SECURITY

| 1100100                           | cuon o  | OF door(o) with the following. |                            |  |        |     |  |  |
|-----------------------------------|---|--------------------------------|----------------------------|--|--------|-----|--|--|
| QTY                               |   | DESCRIPTION                    | CATALOG NUMBER             |  | FINISH | MFR |  |  |
| 1                                 | EA  | CONT. HINGE                    | 112XY                      |  | 628    | IVE |  |  |
| 1                                 | EA  | PANIC HARDWARE                 | CD-35A-NL-OP-388           |  | 626    | VON |  |  |
| 1                                 | EA  | RIM CYLINDER                   | 1E72                       |  | 626    | BES |  |  |
| 1                                 | EA  | MORTISE CYLINDER               | 1E74                       |  | 626    | BES |  |  |
| 1                                 | EA  | ELECTRIC STRIKE                | 6111 FSE CON 12/24 VAC/VDC |  | 630    | VON |  |  |
| 1                                 | EA  | 90 DEG OFFSET PULL             | 8190EZHD 10" STD           |  | 630-   | IVE |  |  |
|                                   |   |                                |                            |  | 316    |     |  |  |
| 1                                 | EA  | FLUSH PULL                     | BY DOOR MANUFACTURER       |  |        |     |  |  |
| 1                                 | EA  | OH STOP & HOLDER               | 90H                        |  | 630    | GLY |  |  |
| 1                                 | EA  | SURFACE CLOSER                 | 4021                       |  | 689    | LCN |  |  |
| 1                                 | EA  | FLUSH CEILNG MTG               | 4020-18G SRT               |  | 689    | LCN |  |  |
|                                   |   | PLATE                          |                            |  |        |     |  |  |
| 1                                 | EA  | PERIMETER GASKETING            | BY DOOR MANUFACTURER       |  |        |     |  |  |
| 1                                 | EA  | THRESHOLD                      | SEE BELOW                  |  |        | PEM |  |  |
| NOTE: THRESHOLD:                  |   |                                |                            |  |        |     |  |  |
| FOR LEVEL FLOOR USE: 2548A        |   |                                |                            |  |        |     |  |  |
| FOR 3/8" OFFSET USE: 200A X 228 A |   |                                |                            |  |        |     |  |  |
| FOR 1/2                           | 2" OFFS   | SET USE: R.50.SMRAK            |                            |  |        |     |  |  |
| FOR 3/                            | FOR 3/4" OFFSET USE: R.75.SMRAK OVER 3/4" OFFSET USE: R.VARI/AK |                                |                            |  |        |     |  |  |
|                                   |   |                                |                            |  |        |     |  |  |

HARDWARE SET NO. 12A - SINGLE VESTIBULE ALUMINUM AND GLASS - SECURITY Provide each SGL door(s) with the following:

|        |  | OE door(3) with the following.               |                            |   |             |     |  |  |
|--------|--|--|----------------------------|---|-------------|-----|--|--|
| QTY    |  | DESCRIPTION                                  | CATALOG NUMBER             |   | FINISH      | MFR |  |  |
| 1      | EA   | CONT. HINGE                                  | 112XY                      |   | 628         | IVE |  |  |
| 1      | EA   | PANIC HARDWARE                               | CD-35A-NL-OP-388           |   | 626         | VON |  |  |
| 1      | EA   | RIM CYLINDER                                 | 1E72                       |   | 626         | BES |  |  |
| 1      | EA   | MORTISE CYLINDER                             | 1E74                       |   | 626         | BES |  |  |
| 1      | EA   | ELECTRIC STRIKE                              | 6111 FSE CON 12/24 VAC/VDC |   | 630         | VON |  |  |
| 1      | EA   | 90 DEG OFFSET PULL                           | 8190EZHD 10" STD           |   | 630-<br>316 | IVE |  |  |
| 1      | EA   | FLUSH PULL                                   | BY DOOR MANUFACTURER       |   |             |     |  |  |
| 1      | EA   | OH STOP & HOLDER                             | 90H                        |   | 630         | GLY |  |  |
| 1      | EA   | SURFACE CLOSER                               | 4021                       |   | 689         | LCN |  |  |
| 1      | EA   | FLUSH CEILNG MTG<br>PLATE                    | 4020-18G SRT               |   | 689         | LCN |  |  |
| 1      | EA   | PERIMETER GASKETING                          | BY DOOR MANUFACTURER       |   |             |     |  |  |
| 1      | EA   | THRESHOLD                                    | SEE BELOW                  |   |             | PEM |  |  |
| Provid | HARDWARE SET NO. 13 - SINGLE EXTERIOR ALUMINUM AND GLASS<br>Provide each SGL door(s) with the following: |  |                            |   |             |     |  |  |
| QTY    |  | DESCRIPTION                                  | CATALOG NUMBER             | _ | FINISH      | MFR |  |  |
| 1      | EA   | CONT. HINGE                                  | 112XY                      |   | 628         | IVE |  |  |
| 1      | EA   | PANIC HARDWARE                               | CD-35A-NL-OP-388           |   | 626         | VON |  |  |
| 1      | EA   | RIM CYLINDER                                 | 1E72                       |   | 626         | BES |  |  |
| 1      | EA   | MORTISE CYLINDER                             | 1E74                       |   | 626         | BES |  |  |
| 1      | EA   | 90 DEG OFFSET PULL                           | 8190EZHD 10" STD           |   | 630-<br>316 | IVE |  |  |
| 1      | EA   | FLUSH PULL                                   | BY DOOR MANUFACTURER       |   |             |     |  |  |
| 1      | EA   | OH STOP & HOLDER                             | 90H                        |   | 630         | GLY |  |  |
| 1      | EA   | SURFACE CLOSER                               | 4021                       |   | 689         | LCN |  |  |
| 1      | EA   | FLUSH CEILNG MTG<br>PLATE                    | 4020-18G SRT               |   | 689         | LCN |  |  |
| 1      | EA   | PERIMETER GASKETING                          | BY DOOR MANUFACTURER       |   |             |     |  |  |
| 1      | EA   | THRESHOLD                                    | SEE BELOW                  |   |             | PEM |  |  |
|        | : THRES  |  |                            |   |             |     |  |  |
|        |  | OOR USE: 2548A                               |                            |   |             |     |  |  |
|        |  | SET USE: 200A X 228 A<br>SET USE: R.50.SMRAK |                            |   |             |     |  |  |
|        |  |  | 3/4" OFFSET USE: R.VARI/AK |   |             |     |  |  |
|        |  |  |                            |   |             |     |  |  |

END OF SECTION

| Door    | HwSet# |
|---------|--------|
| Numbers | 11     |
| 101     |        |
| 102     | 12     |
| 103     | 11A    |
| 104     | 12A    |
| 105     | 05     |
| 106     | 04     |
| 107     | 13     |
| 108     | 09     |
| 109     | 04     |
| 110     | 04C    |
| 111     | 01     |
| 112     | 03     |
| 113     | 01     |
| 114     | 03     |
| 115     | 02     |
| 116     | 03     |
| 117     | 02     |
| 118     | 08     |
| 119     | 07     |
| 120     | 07     |
| 121     | 03     |
| 122     | 02     |
| 123     | 03     |
| 124     | 03     |
| 125     | 04A    |
| 126     | 04D    |
| 201     | 10     |
| 202     | 04B    |
| 203     | 04B    |
| 204     | 01A    |
| 301     | 06     |
| 302     | 04C    |
| 303     | 07     |
| 304     | 04C    |
| 305     | 06     |
| 306     | 06     |
| 307     | 10     |
| '       | -      |

# SECTION 087100.3 - ADMINISTRATION BUILDING DOOR HARDWARE

A. Hardware Sets:

118937 OPT0388651 Version 1

HARDWARE SET NO. 01 - SINGLE STOREROOM Provide each SGL door(s) with the following:

| 1 101140 | 000110 |                |                                    |        |     |
|----------|--------|----------------|------------------------------------|--------|-----|
| QTY      |        | DESCRIPTION    | CATALOG NUMBER                     | FINISH | MFR |
| 1        | EA     | CONT. HINGE    | 224XY                              | 628    | IVE |
| 1        | EA     | STOREROOM LOCK | ND80BDC RHO                        | 626    | SCH |
| 1        | EA     | SFIC CORE      | BEST - TO MATCH EXISTING<br>SYSTEM | 626    | BES |
| 1        | EA     | SURFACE CLOSER | 4011                               | 689    | LCN |
| 1        | EA     | KICK PLATE     | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1        | EA     | WALL STOP      | WS406/407CVX                       | 630    | IVE |
| 1        | EA     | GASKETING      | 188SBK PSA                         | BK     | ZER |
|          |        |                |                                    |        |     |

HARDWARE SET NO. 02 - BATHROOM PRIVACY

Provide each SGL door(s) with the following:

| QTY |    | DESCRIPTION                          | CATALOG NUMBER         | FINISH | MFR |
|-----|----|--------------------------------------|------------------------|--------|-----|
| 1   | EA | CONT. HINGE                          | 224XY                  | 628    | IVE |
| 1   | EA | PRIVACY LOCK W/<br>OUTSIDE INDICATOR | ND40S RHO OS-OCC       | 626    | SCH |
| 1   | EA | SURFACE CLOSER                       | 4111 CUSH              | 689    | LCN |
| 1   | EA | KICK PLATE                           | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1   | EA | MOP PLATE                            | 8400 4" X 1" LDW B-CS  | 630    | IVE |
| 1   | EA | GASKETING                            | 188SBK PSA             | BK     | ZER |
| 1   | EA | COAT AND HAT HOOK                    | 508                    | 626    | IVE |

HARDWARE SET NO. 03 - VESTIBULE DEADLOCK

Provide each SGL door(s) with the following:

|   |      |    | ()   |                      |        |     |
|---|------|----|--|----------------------|--------|-----|
|   | QTY  |    | DESCRIPTION  | CATALOG NUMBER       | FINISH | MFR |
|   | 1    | EA | CONT. HINGE  | 112XY                | 628    | IVE |
|   | 1    | EA | CLASSROOM DEAD LOCK<br>W/ OUTSIDE INDICATOR<br>W/ INSIDE INDICATOR | L463T OS-LOC IS-LOC  | 630    | SCH |
|   | 1    | EA | FSIC CORE  | 23-030               | 626    | SCH |
|   | 1    | EA | FLUSH PULL   | BY DOOR MANUFACTURER |        |     |
|   | 1    | EA | OH STOP  | 100S                 | 689    | GLY |
|   | 1    | EA | SURFACE CLOSER   | 4011                 | 689    | LCN |
|   | 1    | EA | PERIMETER GASKETING  | BY DOOR MANUFACTURER |        |     |
| Ν | OTE: |    |  |                      |        |     |

FOR LEVEL FLOOR USE: 2548A FOR 3/8" OFFSET USE: 200A X 228A FOR 1/2" OFFSET USE: R.50.SMRAK FOR 3/4" OFFSET USE: R.75.SMRAK OVER 3/4" OFFSET USE: R.VARI/AK

**END OF SECTION** 

| Door<br>Numbers | HwSet# |
|-----------------|--------|
| 101             | 03     |
| 102             | 02     |
| 103             | 02     |
| 104             | 01     |
| 105             | 01     |
| 106             | 01     |

#### **DIVISION 23-MECHANICAL**

#### 238239.1 – HYDRONIC CABINET UNIT HEATERS

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Cabinet unit heaters with centrifugal fans and hot-water coils.

#### 1.3 DEFINITIONS

- A. BAS: Building automation system.
- B. CWP: Cold working pressure.
- C. PTFE: Polytetrafluoroethylene plastic.
- D. TFE: Tetrafluoroethylene plastic.

#### 1.4 SUBMITTALS

- A. Product Data: Include rated capacities, operating characteristics, furnished specialties, and accessories for each product indicated.
- B. LEED Submittal:
  - 1. Product Data for Credit EA 4: Documentation required by Credit EA 4 indicating that equipment complies.
  - 2. Product Data for Prerequisite EQ 1: Documentation indicating that units comply with ASHRAE 62.1-2004, Section 5 "Systems and Equipment."
- C. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
  - 1. Plans, elevations, sections, and details.
  - 2. Location and size of each field connection.
  - 3. Details of anchorages and attachments to structure and to supported equipment.
  - 4. Equipment schedules to include rated capacities, operating characteristics, furnished specialties, and accessories.
  - 5. Location and arrangement of piping valves and specialties.

- 6. Location and arrangement of integral controls.
- 7. Wiring Diagrams: Power, signal, and control wiring.
- D. Coordination Drawings: Floor plans, reflected ceiling plans, and other details, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:
  - 1. Suspended ceiling components.
  - 2. Structural members to which unit heaters will be attached.
  - 3. Method of attaching hangers to building structure.
  - 4. Size and location of initial access modules for acoustical tile.
  - 5. Items penetrating finished ceiling, including the following:
    - a. Lighting fixtures.
    - b. Air outlets and inlets.
    - c. Speakers.
    - d. Sprinklers.
    - e. Access panels.
    - f. Ceiling Security Cameras
  - 6. Perimeter moldings for exposed or partially exposed cabinets.
- E. Field quality-control test reports.
- F. Operation and Maintenance Data: For unit heaters to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:
  - 1. Maintenance schedules and repair part lists for motors, coils, integral controls, and filters (where applicable).
- G. Warranty: 2 Year manufacturer's standard warranty from date of shipment.

#### 1.5 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. ASHRAE Compliance: Applicable requirements in ASHRAE 62.1-2004, Section 5 "Systems and Equipment" and Section 7 "Construction and Startup."
- C. ASHRAE/IESNA 90.1-2004 Compliance: Applicable requirements in ASHRAE/IESNA 90.1-2004, Section 6 "Heating, Ventilating, and Air-Conditioning."
- D. Equipment manufacturer shall be ISO 9001:2008 certified.

#### 1.6 COORDINATION

- A. Coordinate layout and installation of fan-coil units and mounting system components with other construction that penetrates or is supported by walls and partition assemblies.
- B. Coordinate size and location of wall sleeves for outdoor-air intake.

#### 1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of units that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Motor failure.
    - b. Coil leak.
  - 2. Warranty Period: Two years from date of Shipment.
  - 3. Warranty Period (Motor Only): Two years from date of Shipment.
  - 4. Warranty Period (Coil Only): Two years from date of Shipment.

#### 1.8 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
- B. In the Cabinet Unit Heater Schedule where titles below are column or row headings that introduce lists, the following requirements apply to product selection:
  - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.
  - 2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.
  - 3. Basis-of-Design Product: The design for each cabinet unit heater is based on the product named. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.

#### 2.2 CABINET UNIT HEATERS

A. Basis-of-Design Product: Zehnder Rittling or a comparable product by one of the following:

#### B. Manufacturers:

- 1. Zehnder Rittling
- C. Description: Factory-packaged and -tested units rated according to ASHRAE 33 and UL 1995.
- D. Insulation: ½" thick elastomeric closed cell foam insulation complying with ASTM C 1071 and attached with adhesive complying with ASTM C 916.

- 1. Fire-Hazard Classification: Insulation and adhesive shall have a combined maximum flame-spread index of 25 and smoke-developed index of 50 when tested according to ASTM E 84 and UL 723.
- 2. Airstream Surfaces: Surfaces in contact with the airstream shall comply with requirements in ASHRAE 62.1-2004.
- 3. Antimicrobial Performance Rating of 0, no observed growth, per ASTM G-21 and ASTM G-22.
- E. Chassis: 20 gauge galvannealed steel where exposed to moisture.
- F. Cabinet: 16 gauge steel baked epoxy powder coating in manufacturer's standard paint color as selected by Architect.
  - 1. Horizontal Units:
    - a. The front panel shall be hinged, 16 gauge steel providing full swing through 90° including removable safety chain(s) to prevent the panel from swinging fully open accidentally. Includes channel-formed edges and ¼-turn allen-head cam fasteners.
  - 2. End pockets shall be no less than 8" in width, located on both sides of the unit.
  - 3. Steel recessing flanges for recessing fan-coil units into wall or ceiling.
  - 4. All concealed units shall have a minimum 1" duct collar on the discharge.
- G. Filters: Minimum arresta nce according to ASHRAE 52.1, and a minimum efficiency reporting value (MERV) according to ASHRAE 52.2.
  - 1. 1" Reinforced Non-woven Media Throwaway: 95 percent arrestance and 13 MERV.
- H. Hydronic Coils: Copper tube, with mechanically bonded aluminum fins spaced no closer than 0.083 inch (2.1 mm), rated for a minimum working pressure of 300 psig (2067 kPa) and a maximum entering-water temperature of 220 deg F (104 deg C). Minimum copper tube thickness shall be 0.016". Minimum fin thickness shall be 0.0045". Lanced fins shall not be acceptable. Coils shall be circuited for counter flow to maximize unit efficiency. Coil casing shall be fabricated from galvanized steel. Include manual air vent and drain valve.
- I. Fan and Motor Board: Constructed from 18 gauge galvannealed steel.
  - 1. Fan: Forward curved, double width, centrifugal; directly connected to motor. galvanizedsteel wheels and fan scrolls.
  - Motor: Electronically commutated high-efficiency, programmable brushless DC motor; resiliently mounted on motor board. Shaded pole motors are not acceptable. Single speed motors are not acceptable. Comply with requirements in Division 23 Section "Common Motor Requirements for HVAC Equipment."
- J. Control devices and operational sequences are specified in Division 23 Sections "Instrumentation and Control for HVAC" and "Sequence of Operations for HVAC Controls."
- K. Basic Unit Controls:
  - 1. Control voltage transformer.
  - 2. 24V Relay
- L. Electrical Connection: Factory wire motors and controls for a single electrical connection.
  - 1. Provide a service disconnect switch to isolate power from the unit during maintenance.

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine areas to receive unit heaters for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Examine roughing-in for [piping and] electrical connections to verify actual locations before unit heater installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION

- A. Install wall boxes in finished wall assembly; seal and weatherproof. Joint-sealant materials and applications are specified in Division 07 Section "Joint Sealants."
- B. Install cabinet unit heaters to comply with NFPA 90A.
- C. Install cabinet unit heaters and propeller unit heaters level and plumb.
- D. Suspend cabinet unit heaters from structure with elastomeric hangers Vibration isolatorsare specified in Division 23 Section "Vibration and Seismic Controls for HVAC Piping and Equipment."
- E. Suspend propeller unit heaters from structure with all-thread hanger rods. Hanger rods and attachments to structure are specified in Division 23 Section "Hangers and Supports for HVAC Piping and Equipment." Vibration hangers are specified in Division 23 Section "Vibration and Seismic Controls for HVAC Piping and Equipment."
- F. Install wall-mounting thermostats and switch controls in electrical outlet boxes at heights to match lighting controls. Verify location of thermostats and other exposed control sensors with Drawings and room details before installation.
- G. Install new filters in each cabinet unit heater within two weeks of Substantial Completion.

#### 3.3 CONNECTIONS

- A. Piping installation requirements are specified in other Division 23 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Install piping adjacent to machine to allow service and maintenance.
- C. Connect piping to cabinet unit heater's factory, hot-water piping package. Install the piping package if shipped loose.
- D. Connect supply and return ducts to cabinet unit heaters with flexible duct connectors specified in Division 23 Section "Air Duct Accessories."
- E. Comply with safety requirements in UL 1995.

- F. Unless otherwise indicated, install union and gate or ball valve on supply-water connection and union and calibrated balancing valve on return-water connection of unit heater. Hydronic specialties are specified in Division 23 Section "Hydronic Piping."
- G. Unless otherwise indicated, install union and gate or ball valve on steam-supply connection and union, strainer, steam trap, and gate or ball valve on condensate-return connection of unit heater. Steam specialties are specified in Division 23 Section "Steam and Condensate Heating Piping."
- H. Ground equipment according to Division 26 Section "Grounding and Bonding for Electrical Systems."
- I. Connect wiring according to Division 26 Section "Low-Voltage Electrical Power Conductors and Cables."

#### 3.4 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust field-assembled components and equipment installation, including connections. Report results in writing.
- B. Perform the following field tests and inspections and prepare test reports:
  - 1. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
  - 2. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.
- C. Remove and replace malfunctioning units and retest as specified above.

#### 3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain cabinet unit heaters or propeller unit heaters. Refer to Division 01 Section "Demonstration and Training."

#### END OF SECTION 238239

#### Part 1 General

#### 1.1 SECTION INCLUDES

A. Electric cabinet unit heaters.

#### 1.2 RELATED SECTIONS

- A. Division 23 Specifications Motors.
- B. Division 23 Specifications Automatic Temperature Control Systems.
- C. Division 26 Specifications Electrical

#### 1.3 REFERENCES

- A. CSA-US.
- B. UL (Underwriters Laboratories Inc.).

#### 1.4 SUBMITTALS FOR REVIEW

- A. Division 1 and 23 Specifications: Submission procedures.
- B. Product Data: Provide typical catalogue of information including arrangements.
- C. Shop Drawings:
  - 1. Indicate cross sections of cabinets, grilles, bracing and reinforcing, and typical elevations.
  - 2. Submit schedules of equipment and enclosures typically indicating length and number of pieces of element and enclosure, corner pieces, end caps, cap strips, access doors, pilaster covers, and comparison of specified heat required to actual heat output provided.
  - 3. Indicate mechanical and electrical service locations and requirements.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Division 1 and 23 Specifications: Submission procedures.
- B. Operation and Maintenance Data: Include manufacturer's descriptive literature, operating instructions, installation instructions, maintenance and repair data, and parts listings.
- C. Warranty Documentation: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.
- D. Record Documentation: Record actual locations of components and locations of access doors in radiation cabinets required for access or valving.

### 1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum thirty (30) years documented experience.

### 1.7 REGULATORY REQUIREMENTS

A. Products Requiring Electrical Connection: Listed and classified by UL.

### 1.8 WARRANTY

- A. Division 1 Specifications: Warranties.
- B. Provide three (3) year manufacturer's warranty.

# Part 2 Products

# 2.1 CABINET HEATERS

- A. Manufacturers:
  - 1. Stelpro
  - 2. Approved Equivalent
- B. Assembly: listed and labelled assembly with terminal box and cover, and controls.
- C. Heating Elements: Instant-heating, nichrome, open type.
- D. Cabinet: Epoxy polyester powder coat finish, [color by architect] with fixed louvres. Fieldadaptable airflow configurations.
  - 1. Material: 18 gauge satin coat steel, 16 gauge front panel.
  - 2. Width: 24 inch. Or 36 inch.
  - 3. Back panel: Factory finished, with knockouts.
- E. Mounting: Recessed wall or recessed ceiling (as scheduled).
- F. Element Hangers: Steel, porcelain enamelled.
- G. Fan: Direct drive centrifugal type, statically and dynamically balanced.
- H. Motor: 50 W, 1/15 hp size, permanently lubricated, totally enclosed sleeve bearing type.
- I. Control: Factory wired switches installed behind cover. Provide easy access junction box.
  - 1. Thermostat: Built-in (or by others, as scheduled)
    - a. Built-in thermostats shall be factory mounted and wired.
  - 2. Optional Disconnect Switch: Factory mounted.
  - 3. Thermal overload protection, automatic reset.
- J. Electrical Characteristics:
  - 1. Capacity: As per schedule
  - 2. Control circuit: 24 VAC for stats by others and line-voltage for built-in.
  - 3. Power: 208 volts, three-phase, 60 Hz.
  - 4. Refer to Division 23 Electrical Specifications.

## 2.2 ACCESSORIES

A. Recess trim kit, where required

### Part 3 Execution

### 3.1 INSTALLATION

A. Install equipment exposed to finished areas after walls and ceiling are finished and painted. Avoid damage.

- B. Protection: Provide finished cabinet units with protective covers during balance of construction.
- C. Install electric heating equipment including devices provided by manufacturer but not factorymounted. Provide copy of manufacturer's wiring diagram submittal. Install electrical wiring to manufacturer's submittals and Section 26 05 80.

# 3.2 CLEANING

- A. Division 1 Specifications: Cleaning installed work.
- B. After construction is completed, including painting, clean exposed surfaces of units. Vacuum clean coils and inside of cabinets.
- C. Touch-up marred or scratched surfaces of factory-finished cabinets, using finish materials provided by manufacturer.

# END OF SECTION

- I. Various AV Systems
  - a. GENERAL REQUIREMENTS
    - i. The work specified in this Section shall be in accordance with the requirements of the Contract Documents.
  - b. SUMMARY
    - i. Audiovisual system specification includes systems located at the Bedford School District It is the intent of this specification system to provide a full turn-key audio system with cabling, conduit, mounting, and testing as required
    - ii. Types of work in this section include (but are not necessarily limited to):
      - 1. Sound reinforcement equipment.
      - 2. Racks and consoles.
      - 3. Portable and accessory equipment.
      - 4. Verification of dimensions and conditions at the job site.
      - 5. Submission of shop drawings for review prior to fabrication.
      - 6. Fabrication and assembly shall be in accordance with these specifications: Equipment manufacturer recommendations, all applicable code requirements.
      - 7. Inspection, alignment, final adjustment of completed installation, demonstration for acceptance and instruction of operating personnel.
      - 8. Coordination with other trades of adjoining work.
  - c. DEFINITION OF TERMS
    - i. The term Contractor or Audiovisual Contractor as used herein refers to the party responsible for supplying all services and equipment covered herein and on related electrical drawings.
    - ii. The terms Owner, Consultant is used herein to refer to organizations, individuals and their representatives as typically defined.
  - d. INDUSTRY STANDARDS
    - i. Regulatory Agencies: Work shall be carried out in conformance with applicable Building and Electrical Codes, the requirements of OSHA and the applicable provisions of Underwriter's Laboratories, ANSI, Electronic Industries Association and National Fire Protection Association.
  - e. QUALITY ASSURANCE
    - i. The system shall be comprised of components that are of professional quality. Approved manufacturers shall be as specified herein.
    - ii. This Contractor shall be an authorized direct representative of the manufacturer of the specified loudspeakers, preamplifiers and amplifiers selected by the Consultant.
    - iii. The Contractor shall have all required manufacturer's certificates where required (i.e. Digital Media Certified Engineering DMC-E and Design DMC-D)
    - iv. The Contractor shall have on staff, individuals that have received ANSI Certification through the ISO/IEC 17024 General Requirements as a "Certified Technical Specialist"
    - v. The Contractor shall have on staff, individuals that have been trained on OSHA Safety regulations receiving OSHA-30 Certification
    - vi. This Contractor shall have successfully provided installation and engineering services over completed installations for a period of five years or more and shall

# SECTION 274116 - AUDIO-VISUAL SYSTEMS

have completed at least five major sound system installations of this type. The Owner and Consultant shall be the final judge of suitability of experience.

- f. SUBMITTALS
  - i. Shop Drawings and Samples:
  - ii. The following scaled drawings shall be provided for review prior to fabrication:
    - 1. Equipment rack layouts showing equipment layout, rack accessories and modifications (min. 1.5"=1'-0" scale).
    - 2. Installation details (min. 1"= 1'-0" scale).
    - 3. Block schematics of all system equipment, internal wiring and system element interconnection (as necessary). Include pictorial of all patching panels and include proposed patch point legend.
    - 4. Major dimensions components and finishes of all equipment and accessories.
    - 5. Catalog or data sheets shall be used where applicable.
    - 6. Suspension arrangement for the loudspeakers. This drawing shall indicate hanging details and orientation of loudspeakers as required for proper coverage as specified. Shop drawings shall be sealed by a structural engineer licensed in the State of New York.
    - 7. All shop drawings shall be executed on CAD and in conformity with the best modern practice.
    - 8. A 3" x 5" space shall be reserved in the lower right comer of each drawing for the Consultant's review stamp.
    - 9. Drawings used in the fabrication and installation of the systems specified herein shall bear the Consultant's stamp.
    - 10. Review of shop drawings shall not be considered as a guarantee of measurements of building conditions. Where drawings are indicated as having been reviewed, said review does not mean that drawings have been checked in detail, and said review does not in any way relieve this Contractor from his responsibility or necessity of furnishing material or performing work as required by the Contract Specifications.
  - iii. Manuals:
    - 1. Within thirty days of the Acceptance Tests, this Contractor shall furnish the following:
      - a. Four copies of block diagram of the system giving the essentials of the installation and their functional relations. Another copy of the diagram(s) shall be wall-mounted behind glass at the equipment rack location.
      - b. Four copies of a complete instruction, operation and maintenance book, including all block and schematic diagrams, wiring diagrams, sizes, and manufacturer technical descriptions of components.
- g. DELIVERY, STORAGE AND HANDLING
  - i. The equipment to be furnished hereunder shall be delivered to the building upon receipt of written notice from the Owner to do. Delivering hereunder shall include unloading the vehicle, transportation to final destination within the building.
  - ii. Fabricated and assembled equipment shall be wrapped and sealed in polyethylene and substantially boxed for shipment. Standard components shall be shipped in

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manufacturer's original packing. Boxes shall clearly indicate equipment contained, "front", "top", "fragile", nature of components and site location.

- iii. Liaison shall be made between this Contractor and the Owner for the delivery schedules of components being shipped. The requirements for safe handling and storage of these components shall be coordinated between these two parties.
- iv. The Contractor shall be solely responsible for the security of equipment at the project site until final acceptance by the Owner and Consultant.

# h. ALTERNATES

- i. Alternate Equipment:
  - 1. Alternate equipment is that which has been determined to have substantially similar characteristics to that specified and has been judged suitable for use in the system.
  - 2. Where alternate equipment is used changes or modifications to contingent work and equipment may be required to maintain the integrity of the system. This Contractor shall be responsible for maintaining the overall performance of the system when alternates are employed.
- ii. Substitutions:
  - 1. Substitute equipment is that which may or may not have been reviewed for inclusion in the system design, or which may have become available following issuance of the Contract Documents.
  - 2. Whenever any product is specified by brand name, manufacturer's or supplier's name or trade name and catalog or model number or name, the intent is not to limit competition but to establish the standard of quality and functional performance of the system and its components.
  - 3. Substitution requests shall be made during submittals. This Contractor shall have the burden of proving at his own cost and expense to the satisfaction of the Consultant that the proposed product is equal to the named product. The Consultant has the right to establish criteria for a product approval. Criteria may include laboratory test data as provided by an independent accredited laboratory approved by the Consultant. If no such testing has been carried out, this Contractor shall instigate such testing at his own cost. In addition, the Consultant will inspect and test any proposed substitution prior to acceptance. This Contractor shall ship, prepaid by UPS (or other carrier as agreeable by the Consultant) the substitution with all shipping costs paid by the Contractor. If the Consultant deems that the item is too large to ship or if, for other reasons, it is deemed that a field inspection is preferred, this Contractor shall pay for the time and reimbursable costs of the Consultant and Owner to conduct the field inspection at the Consultant's and Owner's convenience.
  - 4. If this Contractor fails to comply with the provisions of this Article, or if the Consultant determines that the proposed product is not equal to that named, the Contractor shall supply the product named.
  - 5. This Contractor shall have and make no claim for the extension of time or for damages because the Consultant requires a reasonable period of time to consider a product proposed by this Contractor or because the Consultant disapproves such a product.

- 6. Where optional materials or methods are specified and/or approved, this Contractor shall make all adjustments to contingent work necessary to accommodate the option he selects.
- 7. The unit costs of the substitution shall be included with the submittal.
- iii. New Products:
  - 1. Minimum performance requirements for individual components specified herein shall be as detailed in the latest published Manufacturers data sheets.
  - 2. In the event that one or more of the products specified herein is unavailable, this Contractor shall make recommendations to the Consultant as to what substitutions are available to meet the intent of the Specification. The Consultant shall then determine what product; either from the Contractors' recommendations, or from the Consultant's own research, may be substituted.
  - 3. The Consultant reserves the right to substitute a new product that may have become available following the issuance of the Contract Documents. Such substitutions shall be made prior to final review of the equipment list.
  - 4. A change order resulting from such substitutions shall not result in an increase or decrease to the Project cost in excess of the difference between the list price of the specified product and the substitute price.
- i. GUARANTEE AND SERVICE
  - i. Contractor shall warrant systems and equipment to be free of defective components, faulty workmanship or improper adjustment for a period of one year from the date of Owner's acceptance. Paint and exterior finishes and fuses are excluded.
  - ii. Warranties on manufactured equipment shall be designated to the Owner on the date of system acceptance.
  - iii. This Contractor shall provide at his expense maintenance service for a period of one year after final acceptance of the installation. The service shall consist of at least two (2) visits to the site for checking and adjusting of equipment.
  - iv. This Contractor shall be required to answer all service calls within twenty-four hours of a request being made.
  - v. The Contractor shall provide a price per year for years two through five for a standard preventative maintenance agreement
- II. PERFORMANCE REQUIREMENTS
  - a. SOUND SYSTEM
    - i. Certain overall performance requirements of the sound amplification system shall be checked by measurement. Each system as designed meets the following requirements based upon available data and the manufacturer's published specifications. The Contractor shall be responsible for use of the equipment specified in the manner specified, and each component's conformance with its manufacturer's specifications.
    - ii. Overall system frequency response shall be +/-3 dB, 250-8,000 Hz when measured in 1/3 octave bands at any seat. Frequency response shall be measured using Time Delay Spectrometry or 1/3 Octave Real Time Analyzer.

- iii. Overall system noise shall be at least 60 dB below +40 dBm (10 watts) output in a frequency range of 20 to 20K Hz measured from the microphone matched input to the speaker terminals.
- iv. Residual noise and hum shall be below the masking noise levels produced by the air conditioning system, for an overall signal-to-noise ratio of 68 dB for the entire system.
- v. System Electronics Characteristics:
  - 1. Frequency Response: 20-20,000Hz +1-0.5 dB
  - 2. Signal to Noise: Better than -75 dB
  - 3. Distortion: 0.1% THD maximum
  - 4. OPL (Operating Level): +4 dBm
- b. SYSTEM EQUIPMENT
  - i. Microphone System and Accessories:
    - Outputs of all microphones shall be 150-250 ohms, balanced with respect to ground. Microphone mounts and holders shall be supplied by the microphone manufacturer. The term "sensitivity" as used herein for microphones and expressed in dBm (dB referenced to .001 W) is the microphones available electrical input power level, when driven by a sound pressure of 10 dynes/cm2.
  - ii. Microphone System Installation and Accessories:
    - Cable indicated on the drawings for interconnection between system receptacles equipment shall be provided by the Contractor using existing or new conduit as needed. Contractor shall verify conduit is reusable for new system requirements.
    - 2. Microphone extension cables shall be supplied as specified herein. Each flexible extension cable shall be fitted at one end with a Neutrik NC3MX-B connector, the other end shall be fitted with a Neutrik NC3FX-B connector, Flexible cables shall be Canare L-4E6S.
  - iii. Rack-Mounted Control and Amplification Equipment:
    - Permanent rack shall be constructed of 12 gauge steel top and bottom and 16 gauge sides. Panel mounting channels shall be provided with holes on E.I.A. spacing. Dimensions shall be 22" wide by 25" deep by the height necessary to accommodate the specified equipment or as shown on the drawings.
    - 2. Unused panel space shall be filled with blank solid panels or ventilating panels. Provide all accessories indicated on the drawings.
    - 3. All racks shall have black baked enamel finish.
    - 4. Rack mounted equipment shall be provided with security covers where indicated in the equipment list to avoid tampering with preset levels. If manufacturer does not provide suitable security covers for a specified device, Contractor shall provide alternate such as Middle Atlantic SF series.
    - 5. All rack mounted equipment shall be utilize security screws such as Middle Atlantic H-T.
    - 6. All internal rack wiring of microphone and line level cable shall be Belden #8451.
  - iv. Loudspeakers and Associated Equipment:
    - 1. All loudspeakers shall be phased together 12 AWG cable to each speaker.

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- v. Loudspeaker:
  - 1. Layout and mounting arrangements of loudspeakers shall be as required to provide specified coverage of the seating area.
  - 2. Loudspeakers shall be easily removable and replaceable in the same position shall have safety cable attachment to framework.
  - 3. There shall be resilient mounting between the loudspeaker and support structure in the form of #W30N neoprene hangers, as manufactured by Mason Industries, or equal. Isolators shall provide a minimum of 90% Isolation at 20Hz.
  - 4. Design of the suspension arrangement, exact mounting details and aiming shall be indicated on the shop drawing submitted to the Consultant for review prior to installation. Coordinate scaffolding or moveable lift requirements for access to the speaker location with the General Contractor.
- vi. Receptacle Plates
  - 1. Receptacle plates shall be provided as indicated on the drawings. Coordinate exact sizes and orientation with Electrical Contractor who shall provide back- boxes.
  - 2. Receptacle plates shall be provided with terminal strips wired to receptacles to facilitate termination to cable in conduit. Field soldering shall not be permitted unless specifically approved by the Consultant.
  - 3. Finish for all wall mounted receptacle plates shall be 1/8" thick anodized black aluminum with engraved white lettering.

### c. MAJOR EQUIPMENT ITEMS

#### Fitness Center - Fitness Center AV

| Part #         | Item   | Quantity |
|----------------|--|----------|
| LWR-1223       | Rack-Sectional Wall Mount-12U, 23inD, 1pr Adj Rails, Blk   | 1.00     |
| LFD-12FV       | Door-Fully Vented Front-12U, Locking, Blk  | 1.00     |
| PDX-920R       | 20A 9 OUT MULTI-STAGE SURGE W/CTRL   | 1.00     |
| AZMP4-D        | Atmosphere 4-Zone Signal Processor with 600-Watt Amplifier and Dante   | 1.00     |
| A-XLR-US       | Atmosphere Remote XLR Input (White)  | 1.00     |
| A-BT-US        | Atmosphere Remote Bluetooth Audio Input (White)  | 1.00     |
| Control 60PS/T | Control 60PS/T High Impact Direct Radiating Pendant Subwoofer with Built-In<br>Crossover, 8" (200 mm) long-excursion driver, 150W cont. pink noise (300W<br>program) power handling (100hr), 88dB sensitivity, 42Hz - 350Hz frequency<br>range, 110W 70V/100V multi-tap transformer with 8â,, ¦ direct. Includes<br>suspension hardware with 2x15' (4.5m) galvanized steel cables and easy to<br>adjust clamps, IP44 rated, UL listed (speaker and hanging cable system), black<br>(Priced as each; sold in pairs) | 2.00     |

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| Part #            | Item   | Quantity |
|-------------------|--|----------|
| Control 67HC/T    | Control 67HC/T Narrow-Coverage High Ceiling Premium RBI Pendant<br>Loudspeaker with 6.5" (165mm) woofer and 1" (25mm) Tweeter, 75W cont. pink<br>noise (300W peak) power handling (100hr), 93dB sensitivity, 75Hz - 17kHz<br>frequency range, narrow 75 conical coverage featuring JBL's Radiation Boundary<br>Integrator (RBI) technology, 60W 70V/100V multi-tap transformer with 8 direct.<br>Includes suspension hardware with 2x15' (4.5m) galvanized steel cables and<br>easy to adjust clamps, IP44 rated, UL listed (speaker and hanging cable system),<br>black (Priced as each; sold in pairs) | 8.00     |
| SLXD24D/B58-G58   | Dual Wireless Vocal System with BETA 58  | 1.00     |
| SLXD1=-G58        | Bodypack Transmitter   | 1.00     |
| SM31FH-TQG        | SM31FH Fitness Headset Condenser Microphone  | 1.00     |
| AC-CX-84          | 8x4 ConferX Auto Switching Matrix w/ HDBaseT Inputs and Outputs.?<br>Microphone, Volume and Line Level Audio   | 1.00     |
| AC-CXWP-HDMO-T    | HDMI Single Gang, Decora Wall Plate HDBaseT Transmitter ONLY (100M HD, 70M 4K) Color: White  | 2.00     |
| AC-EX70-444-RNE-P | HDBaseT (CAT6) RECEIVER ONLY. ICT 18G, 70m 4K (100m HD) Slim Extender<br>with I-Pass, Bi-Directional Power, RS232, IR - ICT for full HDR/HDMI Pass-<br>Through. Full HDR, 4K60 4:4:4. INCLUDES PSU   | 2.00     |
|                   | Philips 86BDL4650D/00 86" 3840 x 2160 UHD, 500nits, 24/7, OPS Slot, Android SoC Display  | 2.00     |
| FPIWMS            | Tempo Flat Panel In-Wall Mount System  | 2.00     |
| CP4N              | 4-Series Control System  | 1.00     |
| TSW-770-B-S       | 7 in. Wall Mount Touch Screen, Black Smooth  | 1.00     |
| 254346ABK1000     | 4P 23G CAT6A UTP CMP   | 2.00     |
| 25226BGY1000      | 1P 14G STRD UNSHLD PLENII  | 1.00     |
| 254246EZGN1000    | 4P 23G SLD CAT 6 PLENUM  | 2.00     |

#### AV Systems - Large Cafeteria Room 144

| Part #            | Item   | Quantity |
|-------------------|--|----------|
| LWR-2423          | Rack-Sectional Wall Mount-24U, 23inD, 1pr Adj Rails, Blk   | 1.00     |
| LFD-24FV          | Door-Fully Vented Front-24U, Locking, Blk  | 1.00     |
| PDX-920R          | 20A 9 OUT MULTI-STAGE SURGE W/CTRL   | 1.00     |
| GSM4230P-100-NAS  | M4250-26G4F-POE+ MNGD SWITCH PERP  | 1.00     |
| CP4N              | 4-Series Control System  | 1.00     |
| TSW-770-B-S       | 7 in. Wall Mount Touch Screen, Black Smooth  | 1.00     |
| AC-MXNET-CBOX-B   | Control Box for MXNET System   | 1.00     |
| AC-MXNET-1G-R15   | MXnet 1G rack mount solution, able to hold 15 products, takes up 6U in the rack  | 1.00     |
| AC-MXNET-1G-EV2WP | MXnet Evolution II AV-over-IP wall plate encoder with switchable HDMI and USB-<br>C inputsNot Compatible with V1 Systems | 2.00     |
| AC-MXNET-1G-EV2   | MXNet 1G Evolution II Encoder Not Compatible with V1 Systems   | 2.00     |
| AC-MXNET-1G-DV2   | MXNet 1G Evolution II DecoderNot Compatible with V1 Systems  | 5.00     |
| FPIWMS            | Tempo Flat Panel In-Wall Mount System  | 4.00     |
|                   | Philips/65BDL4650D/00 65" 3840 x 2160 UHD, 500nit, 24/7, Android SoC<br>Display, OPS slot                                | 3.00     |
|                   | Philips 75BDL4650D/00 75" 3840 x 2160 UHD, 500nits, 24/7, OPS slot, Android SoC Display                                  | 1.00     |

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| Part #          | Item  | Quantity |
|-----------------|---|----------|
| D3LK            | 3SP ANOD DRAWER W/LOCK  | 1.00     |
| Prism 8x8 Dante | Programmable DSP, 8 mic/line in, 8 line out, 64x64 Dante, ARC | 1.00     |
| SLXD24D/B58-G58 | Dual Wireless Vocal System with BETA 58                       | 2.00     |
| DISTRO4         | 4-Channel UHF Antenna Distribution System (470 to 952 MHz)    | 1.00     |
| DCi4x300D       | DCI4300 DANTE   | 1.00     |
| FC-6T           | 6" Premium Ceiling Speaker (Blind Mount)                      | 16.00    |
| 254346ABK1000   | 4P 23G CAT6A UTP CMP  | 1.00     |
| 25226BGY1000    | 1P 14G STRD UNSHLD PLENII                                     | 2.00     |
| 254246EZGN1000  | 4P 23G SLD CAT 6 PLENUM                                       | 2.00     |

#### Small Cafeteria Room 158

#### NOTE: Connects to Rack in Large Cafeteria

| Part #            | Item   | Quantity |
|-------------------|--|----------|
| TSW-770-B-S       | 7 in. Wall Mount Touch Screen, Black Smooth  | 1.00     |
| AC-MXNET-1G-EV2WP | MXnet Evolution II AV-over-IP wall plate encoder with switchable HDMI and USB-C inputsNot Compatible with V1 Systems | 2.00     |
| AC-MXNET-1G-EV2   | MXNet 1G Evolution II Encoder Not Compatible with V1 Systems   | 2.00     |
| AC-MXNET-1G-DV2   | MXNet 1G Evolution II DecoderNot Compatible with V1 Systems  | 3.00     |
| FPIWMS            | Tempo Flat Panel In-Wall Mount System  | 2.00     |
|                   | Philips 75BDL4650D/00 75" 3840 x 2160 UHD, 500nits, 24/7, OPS slot, Android SoC Display                              | 2.00     |
| FC-6T             | 6" Premium Ceiling Speaker (Blind Mount)   | 14.00    |
| 254346ABK1000     | 4P 23G CAT6A UTP CMP   | 1.00     |
| 25226BGY1000      | 1P 14G STRD UNSHLD PLENII  | 2.00     |
| 254246EZGN1000    | 4P 23G SLD CAT 6 PLENUM  | 2.00     |

#### Classroom 102

| Part #          | Item   | Quantity |
|-----------------|--|----------|
| LWR-1223        | Rack-Sectional Wall Mount-12U, 23inD, 1pr Adj Rails, Blk   | 1.00     |
| LFD-12FV        | Door-Fully Vented Front-12U, Locking, Blk  | 1.00     |
| PDX-920R        | 20A 9 OUT MULTI-STAGE SURGE W/CTRL   | 1.00     |
| AZMP4-D         | Atmosphere 4-Zone Signal Processor with 600-Watt Amplifier and Dante   | 1.00     |
| A-XLR-US        | Atmosphere Remote XLR Input (White)  | 1.00     |
| A-BT-US         | Atmosphere Remote Bluetooth Audio Input (White)  | 1.00     |
| FC-6T           | 6" Premium Ceiling Speaker (Blind Mount)   | 4.00     |
| AC-CX-84        | 8x4 ConferX Auto Switching Matrix w/ HDBaseT Inputs and Outputs.?<br>Microphone, Volume and Line Level Audio | 1.00     |
| SLXD24D/B58-G58 | Dual Wireless Vocal System with BETA 58  | 1.00     |
| SLXD1=-G58      | Bodypack Transmitter   | 1.00     |
| MX153B/O-TQG    | Omnidirectional Earset Headworn Microphone, Black  | 1.00     |
| AC-CXWP-HDMO-T  | HDMI Single Gang, Decora Wall Plate HDBaseT Transmitter ONLY (100M HD, 70M 4K) Color: White                  | 2.00     |
| CP4N            | 4-Series Control System  | 1.00     |
| TSW-770-B-S     | 7 in. Wall Mount Touch Screen, Black Smooth  | 1.00     |
| 254236FBK1000   | 4PR 23G SHLD CAT6 CMP  | 1.00     |
| 25226BGY1000    | 1P 14G STRD UNSHLD PLENII  | 2.00     |
| 254246EZGN1000  | 4P 23G SLD CAT 6 PLENUM  | 1.00     |
| L5-TURFR-33LDW  | L5 TURRET FRAME,LD,LW33W   | 1.00     |

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| Part #           | Item                     | Quantity |
|------------------|--------------------------|----------|
| L5KBB2SEHC8ZP002 | L5K,33W,TUR,SOT,H,C8,DZP | 1.00     |
| L5-SD7           | L5 STORAGE DRAWER,7 IN   | 1.00     |
| L5-DCD23         | L5 DOC CAM DRAWER,23IN   | 1.00     |

#### Classroom 106

| Part #         | Item  | Quantity |
|----------------|---|----------|
| FPIWMS         | Tempo Flat Panel In-Wall Mount System   | 4.00     |
|                | Philips 50BDL4650D/00 50" 3840 x 2160 UHD, 500nits, 24/7, Android SoC Display       | 4.00     |
| 254346ABL1000  | 4P 23G CAT6A UTP CMP  | 2.00     |
| KJ458MT-C6A-GN | Category 6A MT-Series High-Density Keystone Jack, T568A/B, Green                    | 8.00     |
|                | SP-8000-E5-AL Solstice Pod Gen3 Unlimited with 5 years Active Learning Subscription | 4.00     |
| CG41042        | HDMI Decora Passthrough WP Aluminum   | 4.00     |
| AC-BT02-AUHD   | Bullet Train 2 Meter HDMI Cable (6.5FT) - 18Gbps Ultra High Speed                   | 8.00     |

#### Classroom 107

| Part #           | Item   | Quantity |
|------------------|--|----------|
| 254346ABL1000    | 4P 23G CAT6A UTP CMP   | 2.00     |
| KJ458MT-C6A-GN   | Category 6A MT-Series High-Density Keystone Jack, T568A/B, Green   | 4.00     |
| CG41042          | HDMI Decora Passthrough WP Aluminum  | 1.00     |
| AC-EX100-444-KIT | HDBaseT (CAT6) Extender Kit. ICT 18G, 100m 4K (100m HD) Extender with I-<br>Pass, Bi-Directional Power, RS232, IR - ICT for full HDR/HDMI Pass-Through. Full<br>HDR, 4K60 4:4:4. PLUS - ARC & Host/Device USB 2.0 (KVM); Has bi-directional<br>USB host. | 1.00     |
| AC-BT02-AUHD     | Bullet Train 2 Meter HDMI Cable (6.5FT) - 18Gbps Ultra High Speed  | 1.00     |

#### Conference Room 128

| Part #           | Item   | Quantity |
|------------------|--|----------|
| TC Bar M US      | TeamConnect Bar M all-in-one audio and video conferencing device for mid-<br>sized meeting rooms and collaboration spaces. Includes (1) TeamConnect Bar<br>S, (1) Mounting Bracket, (1) PSU or POE Power Supply, (1) IR Remote Control<br>with batteries, mounting bracket & storage, (1) Magnetic Lens Cap, (1) HDMI<br>Cable, (1) USB-C to USB-A cable, Dante audio input and output | 1.00     |
| 254346ABL1000    | 4P 23G CAT6A UTP CMP   | 2.00     |
| KJ458MT-C6A-GN   | Category 6A MT-Series High-Density Keystone Jack, T568A/B, Green   | 4.00     |
|                  | SP-8000-E5-AL Solstice Pod Gen3 Unlimited with 5 years Active Learning Subscription  | 1.00     |
| CG41042          | HDMI Decora Passthrough WP Aluminum  | 1.00     |
| AC-EX100-444-KIT | HDBaseT (CAT6) Extender Kit. ICT 18G, 100m 4K (100m HD) Extender with I-<br>Pass, Bi-Directional Power, RS232, IR - ICT for full HDR/HDMI Pass-Through. Full<br>HDR, 4K60 4:4:4. PLUS - ARC & Host/Device USB 2.0 (KVM); Has bi-directional<br>USB host.   | 1.00     |
| AC-BT02-AUHD     | Bullet Train 2 Meter HDMI Cable (6.5FT) - 18Gbps Ultra High Speed  | 1.00     |

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# College Career Center Room 137

| Part #           | Item   | Quantity |
|------------------|--|----------|
| TC Bar M US      | TeamConnect Bar M all-in-one audio and video conferencing device for mid-<br>sized meeting rooms and collaboration spaces. Includes (1) TeamConnect Bar<br>S, (1) Mounting Bracket, (1) PSU or POE Power Supply, (1) IR Remote Control<br>with batteries, mounting bracket & storage, (1) Magnetic Lens Cap, (1) HDMI<br>Cable, (1) USB-C to USB-A cable, Dante audio input and output | 1.00     |
| 254346ABL1000    | 4P 23G CAT6A UTP CMP   | 2.00     |
| KJ458MT-C6A-GN   | Category 6A MT-Series High-Density Keystone Jack, T568A/B, Green   | 4.00     |
|                  | SP-8000-E5-AL Solstice Pod Gen3 Unlimited with 5 years Active Learning Subscription  | 1.00     |
| CG41042          | HDMI Decora Passthrough WP Aluminum  | 1.00     |
| AC-EX100-444-KIT | HDBaseT (CAT6) Extender Kit. ICT 18G, 100m 4K (100m HD) Extender with I-<br>Pass, Bi-Directional Power, RS232, IR - ICT for full HDR/HDMI Pass-Through. Full<br>HDR, 4K60 4:4:4. PLUS - ARC & Host/Device USB 2.0 (KVM); Has bi-directional<br>USB host.   | 1.00     |
| AC-BT02-AUHD     | Bullet Train 2 Meter HDMI Cable (6.5FT) - 18Gbps Ultra High Speed  | 1.00     |

# Serving Line Rm 148 Digital Signage

| Part #         | Item  | Quantity |
|----------------|---|----------|
| FPIWMS         | Tempo Flat Panel In-Wall Mount System   | 2.00     |
|                | Philips 50BDL4650D/00 50" 3840 x 2160 UHD, 500nits, 24/7, Android SoC Display | 2.00     |
| 254346ABL1000  | 4P 23G CAT6A UTP CMP  | 2.00     |
| KJ458MT-C6A-GN | Category 6A MT-Series High-Density Keystone Jack, T568A/B, Green              | 4.00     |
| AC-BT02-AUHD   | Bullet Train 2 Meter HDMI Cable (6.5FT) - 18Gbps Ultra High Speed             | 2.00     |

# Art Gallery

| Part #  | Item  | Quantity |
|---|---|----------|
| LWR-1223  | Rack-Sectional Wall Mount-12U, 23inD, 1pr Adj Rails, Blk                                | 1.00     |
| LFD-12FV  | Door-Fully Vented Front-12U, Locking, Blk   | 1.00     |
| PDX-920R  | 20A 9 OUT MULTI-STAGE SURGE W/CTRL  | 1.00     |
| AZMP4-D   | Atmosphere 4-Zone Signal Processor with 600-Watt Amplifier and Dante                    | 1.00     |
| A-XLR-US  | Atmosphere Remote XLR Input (White)   | 1.00     |
| A-BT-US   | Atmosphere Remote Bluetooth Audio Input (White)   | 1.00     |
| FC-6T   | 6" Premium Ceiling Speaker (Blind Mount)  | 8.00     |
| FC-8ST  | 8" Premium Ceiling Subwoofer (Blind Mount)  | 2.00     |
| SLXD24D/B58-G58   | Dual Wireless Vocal System with BETA 58   | 1.00     |
| AC-CX-84 8x4 ConferX Auto Switching Matrix w/ HDBaseT Inputs and Outputs.?<br>Microphone, Volume and Line Level Audio |   | 1.00     |
| AC-CXWP-HDMO-T HDMI Single Gang, Decora Wall Plate HDBaseT Transmitter ONLY (100M HD, 70M 4K) Color: White            |   | 2.00     |
|   | Philips/98BDL4650D/00 98" 3840 x 2160 UHD, 500nits, 24/7, OPS slot, Android SoC Display | 1.00     |
| KITXWXSM1U  | Micro-Adjust Wall Mount XX-Large  | 1.00     |
| CP4N  | 4-Series Control System   | 1.00     |
| TSW-770-B-S   | 7 in. Wall Mount Touch Screen, Black Smooth   | 1.00     |
| 254236FBK1000   | 4PR 23G SHLD CAT6 CMP   | 1.00     |
| 25226BGY1000  | 1P 14G STRD UNSHLD PLENII   | 2.00     |
| 254246EZGN1000  | 4P 23G SLD CAT 6 PLENUM   | 1.00     |

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#### Library Digital Signage

| Part #         | Item  | Quantity |
|----------------|---|----------|
| FPIWMS         | Tempo Flat Panel In-Wall Mount System   | 2.00     |
|                | Philips 50BDL4650D/00 50" 3840 x 2160 UHD, 500nits, 24/7, Android SoC Display | 2.00     |
| 254346ABL1000  | 4P 23G CAT6A UTP CMP  | 2.00     |
| KJ458MT-C6A-GN | Category 6A MT-Series High-Density Keystone Jack, T568A/B, Green              | 4.00     |
| AC-BT02-AUHD   | Bullet Train 2 Meter HDMI Cable (6.5FT) - 18Gbps Ultra High Speed             | 2.00     |

#### Conference Room 163

| Part #           | Item   | Quantity |
|------------------|--|----------|
| TC Bar M US      | TeamConnect Bar M all-in-one audio and video conferencing device for mid-<br>sized meeting rooms and collaboration spaces. Includes (1) TeamConnect Bar<br>S, (1) Mounting Bracket, (1) PSU or POE Power Supply, (1) IR Remote Control<br>with batteries, mounting bracket & storage, (1) Magnetic Lens Cap, (1) HDMI<br>Cable, (1) USB-C to USB-A cable, Dante audio input and output | 1.00     |
| 254346ABL1000    | 4P 23G CAT6A UTP CMP   | 2.00     |
| KJ458MT-C6A-GN   | Category 6A MT-Series High-Density Keystone Jack, T568A/B, Green   | 4.00     |
|                  | SP-8000-E5-AL Solstice Pod Gen3 Unlimited with 5 years Active Learning Subscription  | 1.00     |
| CG41042          | HDMI Decora Passthrough WP Aluminum  | 1.00     |
| AC-EX100-444-KIT | HDBaseT (CAT6) Extender Kit. ICT 18G, 100m 4K (100m HD) Extender with I-<br>Pass, Bi-Directional Power, RS232, IR - ICT for full HDR/HDMI Pass-Through. Full<br>HDR, 4K60 4:4:4. PLUS - ARC & Host/Device USB 2.0 (KVM); Has bi-directional<br>USB host.   | 1.00     |
| AC-BT02-AUHD     | Bullet Train 2 Meter HDMI Cable (6.5FT) - 18Gbps Ultra High Speed  | 1.00     |

#### Guidance Office Digital Signage

| Part #         | Item  | Quantity |
|----------------|---|----------|
| FPIWMS         | Tempo Flat Panel In-Wall Mount System   | 1.00     |
|                | Philips 50BDL4650D/00 50" 3840 x 2160 UHD, 500nits, 24/7, Android SoC Display | 1.00     |
| 254346ABL1000  | 4P 23G CAT6A UTP CMP  | 2.00     |
| KJ458MT-C6A-GN | Category 6A MT-Series High-Density Keystone Jack, T568A/B, Green              | 2.00     |
| AC-BT02-AUHD   | Bullet Train 2 Meter HDMI Cable (6.5FT) - 18Gbps Ultra High Speed             | 1.00     |

### III. EXECUTION

- a. INSPECTION
  - i. Examine all work prepared by others to receive work of this Section and report any defects affecting installation to the Owner for correction. Commencement of work will be construed as complete acceptance of existing conditions.
- b. INSTALLATION GENERAL
  - i. The Contractor shall supply all racks, furniture, consoles, etc., required for the installation, and needed to provide completed systems. Only to the extent that such ancillary equipment is specified elsewhere is it excluded from these system specifications.
  - ii. All conduits and high-voltage power to be run by District retained electrical contractor

- iii. All equipment except portable equipment shall be held firmly in place. This shall include loudspeakers, cables, control equipment, rack equipment, etc. Mountings shall be rigid except where resilient isolation is required, such as with loudspeaker clusters. Fastenings and supports shall be adequate to support their loads with a safety factor of at least five (5).
- iv. All switches, jacks, outlets, cables, etc., shall be clearly, logically and permanently marked during installation. All cables shall be marked with standard alphanumeric markers at each end. These markers codes shall be identical to those noted on the shop drawings.
- v. The Contractor shall take such precautions as are necessary to prevent and guard against electromagnetic/electrostatic/radio frequency interference.
- vi. Care shall be exercised in wiring, so as to avoid damage to the cables and to the equipment. Between racks, cabinets, consoles or modules all cables shall be well supported and shall be neatly laced and dressed. All joints and connections shall be made with rosin-core solder or with mechanical connectors approved by the Consultant. Between racks, cabinets, consoles or modules, all cable shall terminate in terminal connectors, strips, blocks or boards.
- vii. All audio wiring shall be executed in strict adherence to standard broadcast practices as detailed in "Sound System Engineering" 2nd Edition, by Don and Carol Davis.
- viii. All power level circuits shall be run on the right side of the rack or cabinet as viewed from the rear. All other circuits shall be run on the left side as viewed from the rear.
- ix. Microphone and 600-ohm line conduits shall be mechanically and electrically connected to receptacles boxes, and electrically grounded to the ground bus in the power panel.
- x. Microphone line shields shall be grounded only at the end that terminates at the equipment rack(s) and shall be grounded only to the common ground of the equipment rack. All audio grounds in the equipment rack(s) shall be connected to a common point on the rack. All racks then shall be grounded to a single point at the power panel buss bar by means of a minimum AWG #4 insulated conductor. The grounding conductor conduit shall be totally electrically isolated from the equipment racks and from the ground panel by means of plastic bushings or other similar approved means.
- xi. The total resistance of the ground system from the equipment racks to the power panel ground shall not exceed .1 ohm.
- xii. Other shields shall be grounded only at the power amplifier inputs or the console outputs, and shall be terminated at the "floating" end with "wedge on" collars, or with plastic tape. Continuity of shield shall be preserved at connecting points. Under no circumstances shall the AC neutral be used as a reference ground. As stated above, audio shields shall be connected to ground at a common point.
- xiii. Final location of all equipment shall be located as shown on the drawings, or as located in the field or as shown on supplementary drawings prepared by the Consultant.
- xiv. Drawings are diagrammatic and indicate general arrangement of systems and work included. Follow drawings in laying out work and check drawings of other trades relating to work to verify spaces in which work will be installed. Maintain headroom and space conditions to all points.

- xv. Provide a framed functional diagram for system equipment that reflects the final asbuilt systems at each rack location.
- xvi. Equipment racks shall be pre-wire in Contractor's shop and thoroughly tested for proper signal flow and equipment function prior to delivery of racks to the job site.
- xvii. Between racks, cabinets, remote receptacles, all speaker level cable shall terminate in terminal strips.
- xviii. A punch block shall be dedicated for use with each audio patch panel. Any audio circuit terminating in a patch panel shall interface through a punch block. Patch panels shall be wired so all signal sources (outputs from equipment), shall be connected to the bottom row. Any efficient combination of top and bottom rows shall be used for multiples.
- xix. Drawings are diagrammatic and indicate general arrangement of systems and work included. Follow drawings in laying out work and check drawings of other trades relating to work to verify spaces in which work will be installed. Maintain headroom and space conditions to all points.
- xx. Final location of all equipment shall be located as shown on reviewed shop drawings, or as located in the field by the Consultant
- c. WORKMANSHIP
  - i. The installation of all work shall be neat. All work, equipment, etc., shall be plumb and square.
  - ii. The Contractor shall keep the job adequately staffed at all times. Unless illness, loss of personnel, or other circumstances beyond the control of the Contractor intervene, he shall keep the same individual in charge throughout its execution and shall exercise engineering supervision over the entire installation and shall inspect the installation at least twice prior to acceptance testing.
  - iii. Following installation, all soiled, abraded or discolored surfaces of work installed herein will be cleaned and left free from blemishes or defects
  - iv. Work that is damaged or improperly installed will be removed and replaced and the entire installation left in complete satisfactory condition.
  - v. Any damage to the facility, of any kind, brought about by Contractor's work shall be repaired at no cost to the Owner.
  - vi. It shall be the responsibility of the Contractor to cooperate with other trades. In order to achieve well-coordinated progress and satisfactory final results. He shall watch for conflicts with work of other contractors on the job and execute, without claim for extra payment, moves or changes as are necessary to accommodate other equipment or preserve symmetry and pleasing appearance.
- d. CLEANING
  - i. The Contractor shall remove from the job site all rubbish and refuse at the end of each day and shall keep his work area clean.
  - ii. Following Installation, all soiled, abraded or discolored surfaces of work installed herein shall be cleaned and left free from blemishes or defects.
  - iii. Work that is damaged or improperly installed shall be removed and replaced and the entire installation left in complete satisfactory condition.
  - iv. Clean the areas affected by the Work to a level of operational cleanliness.
  - v. Uncover all areas protected during fabrication. Dispose of covering material and debris accordingly.
- e. ACCEPTANCE TESTING GENERAL

- i. Upon completion and wiring checkout and initial tests of the systems by Contractor, notify Owner and Consultant in writing that systems are ready for inspection.
- ii. Contractor shall demonstrate the operation of each component of the system to the Consultant and Owner's representative.
- iii. In case the need for further adjustments becomes evident during the demonstration and testing, Contractor's work shall be continued until the systems operate properly.
- f. SYSTEM TESTS AND ADJUSTMENTS
  - i. Initial tests and adjustments shall be performed by this Contractor who shall include the cost of these tests in his bid proposal. He shall furnish all equipment necessary and perform all work required to determine or modify the performance of the system in accordance with the specifications. Prior to equalization of the sound system, he shall carry out the following inspections of the sound system and submit to the Consultant the written results at each inspection for inclusion on the permanent records of the sound system.
    - 1. Verify signal flow through the entire system.
    - 2. Measure and record polarity, distortion, and parasitic oscillation, by use of an oscilloscope and oscillator. Begin by applying signal to the systems input; (usually a mixer), and observe the devices output. Once the first device has been tested and is operating correctly, connect oscilloscope and oscillator to the next device down the line, and proceed with each device until all have been checked.
    - 3. Measure and record the frequency response of each mixer/preamp in the system.
    - 4. Measure and record the impedance of each loudspeaker line before connecting it to the output of its respective amplifier, and confirm that it is equal to or above the rated impedance.
    - 5. Measure and record, with an oscilloscope, the output of each power amplifier. The input source to each amplifier being measured shall be a sine-wave oscillator with less than 0.5% frequency accuracy and adjusted to 10 dB less than fall power output of the amplifier. Ascertain that full voltage for rated power can be reached without noticeable deformation of the wave form. Inspect the output sine-wave appearing on the oscilloscope for complete freedom from spurious oscillation, hum, noise, radio frequency interference, or other unexpected additional outputs.
    - 6. Measure and record Z (in), Z(load), E(in), and E(out) for each of the power amplifiers.
    - 7. Measure and record input Z(in) and output Z(out) circuit voltage impedances, open circuit voltage E(o), and input E(in) of all speech or music equipment, line amplifiers, and signal processors.
    - 8. Measure and record the phasing of all loudspeakers.
    - 9. Measure and record the polarity of all microphones to be used in the system.
    - 10. Check all microphone lines and other interconnecting cable for correct wiring and shorts to ground.

- 11. The remote control shall be checked out for specified operation function requirements. "Remote" shall include operation of the portable system in conjunction with the fixed systems
- 12. Balance the levels of the loudspeaker units driven by different amplifiers in the same system to assure adequate coverage and level of sound from all loudspeakers.
- 13. Establish the normal settings for all level controls. All level controls on rack-mounted equipment shall be adjusted for optimum signal to noise ratio and signal balance and shall then be capped to prevent tampering. Response shall not vary more than +/- 3dB at any location on the field house floor or at the seating area
- 14. Prior to equalization of the system use a sweeping sine wave at the systems input to check loudspeaker cluster for extraneous noise. Even coverage of system should be confirmed by use of pink noise and handheld 1/3 octave real time analyzer. Observe variations in both level and spectrum shape while walking the seating area. If coverage problems are evident, improve coverage by re-aiming the loudspeakers. Provide all required scaffolding to access the clusters during the testing adjustment.
- ii. Equalization:
  - Provide the following minimal standard laboratory test equipment. Sound level meter and calibrator, 1/3 and 1/10 octave band analyzer, sine and square wave generator, impedance (CRL) bridge, distortion analyzer, calibrated microphone, audio oscilloscope or real-time spectrum analyzer, TEF System 20 (TDS) or SIMM, pink noise generator. This instrumentation shall be the product of Crown, Meyer, General Radio, Bruel & Kjaer, Tektronix, Hewlett-Packard or other approved national manufacturers.
  - 2. Using a calibrated measuring microphone located in the seating area at twice the critical distance (at which direct sound from the source and reverberant sound are in a ratio of 1: 1), establish the un-equalized acoustic amplitude response to a pink noise source. Bring the observed acoustic amplitude to within +/- 3dB uniformity (flat) from 63 to 8,000 Hz. Initially, the roll off at the low frequency end shall be set at 24dB/octave below 31.5 Hz. Initially, the roll off at the high frequency end shall be 3 dB/octave above 16kHz. Adjustments to these settings may be required following initial listening tests.
  - 3. Adjust the sound system gain until it reaches regeneration (feedback). The frequency of regeneration shall be determined by oscilloscope or real-time spectrum analyzer. Adjust the appropriate filter until the observed regeneration ceases.
- iii. The following test documentation shall be provided:
  - 1. List of personnel and certified test equipment used.
  - 2. Impedance of all loudspeaker lines.
  - 3. The input and output impedance of all active devices used to terminate passive devices and the value of any termination resistor used.
  - 4. The variation of acoustic distribution throughout the field house floor area above and below a reference level at each 1/3 octave center frequency from 63- 8,000 Hz.

# SECTION 274116 - AUDIO-VISUAL SYSTEMS

- 5. The recorded polarity and phase measurements of the loudspeakers.
- 6. The recorded inspection results observed for hum, noise, parasitic oscillation, and RF interference from the output of each power amplifier.
- 7. Normal settings of all system electronics.
- iv. Equipment Tests:
  - 1. All equipment will be tested for proper operation. If any equipment does not appear to be functioning properly, further tests may be performed to determine whether it meets the pertinent specifications. Any measurements deemed necessary by the Consultant may be made to determine proper function.
- g. COMPLETION AND NOTIFICATION
  - i. Upon completion of installation of equipment, wiring checkout notify Consultant.
- h. ACCEPTANCE TESTING
  - i. Contractor shall demonstrate operation of each component of the systems to the Consultant and Owner's representative. Written notice shall be at least ten days prior to that date.
  - ii. In case the need for further adjustments becomes evident during the demonstration and testing, Contractor's work shall be continued until the systems operate properly. In case the need for further adjustments becomes evident during the demonstration and testing, the Contractor's work shall be continued until the systems operate properly.
  - iii. When Final Acceptance testing has concluded to the Owner and Consultant's satisfaction, Contractor shall submit a written request for Final Acceptance. Guarantees, warranties and service contracts will continence upon written notification of Final Acceptance by the Consultant.
- i. INSTRUCTION
  - i. Within two working weeks of system acceptance, the Contractor shall commence a series of training sessions for persons designated by the Owner. A total of eight (8) hours of training, at mutually acceptable times, shall be provided during a four week period. Contractor shall submit names and period of attendance of those instructed.

END OF SECTION

# FOX LANE HIGH SCHOOL

632 SOUTH BEDFORD ROAD, BEDFORD, NY 10506

SED No.: 66-01-02-06-0-003-024 (23-131a)

# FOX LANE HIGH SCHOOL

| CIP0.01<br>CIP0.02 | SITE PLAN - CONTRACTOR ACCESS and TEMPORARY FACILITIES CONSTRUCTION IMPLEMENTATION PLANS |
|--------------------|--|
| CIVIL              |  |
| CS0.01             | FLHS FIELD #4 TOPOGRAPHIC SURVEY   |
| CS2.01             | SITE ALIGNMENT and SCHEDULE PLAN   |
| CS2.02             | SITE PLAN - FIELD No. 4 RESTROOM BUILDING  |
| RCHITECTU          | RAL  |
| 40.01              | FIRST FLOOR CODE COMPLIANCE KEY PLAN   |
| A0.02              | BASEMENT CODE COMPLIANCE KEY PLAN  |
|                    |  |

| A0.01    | FIRST FLOOR CODE COMPLIANCE KEY PLAN                     |
|----------|--|
| A0.02    | BASEMENT CODE COMPLIANCE KEY PLAN                        |
| A0.03    | SECOND FLOOR CODE COMPLIANCE KEY PLAN                    |
| A1.01    | DEMOLITION PLAN - AREA 'A'                               |
| A1.02    | DEMOLITION PLAN - AREA 'B'                               |
| A1.03    | DEMOLITION PLAN - AREA 'C'                               |
| A1.04    | DEMOLITION ROOF PLAN - AREA 'A' and AREA 'B'             |
| A1.05    | DEMOLITION ROOF PLAN - AREA 'C'                          |
| A1.06    | DEMOLITION SECTIONS                                      |
| A1.07    | DEMOLITION SECTIONS                                      |
| A1.08    | DEMOLITION DETAILS                                       |
| A2.00    | PART IT ION TYPES  |
| A2.01    | PROPOSED PLAN - AREA 'A'                                 |
| A2.02    | PROPOSED PLAN - AREA 'B'                                 |
| A2.03    | PROPOSED PLAN - AREA 'C'                                 |
| A2.04    | PLAN DET AILS  |
| A2.05    | PLAN DET AILS  |
| A3.01    | ROOF PLAN - AREA 'A' and AREA 'B'                        |
| A3.02    | ROOF PLAN - AREA 'C'                                     |
| A3.03    | ROOF DETAILS   |
| A5.01    | BUILDING SECTIONS  |
| A5.02    | BUILDING SECTIONS  |
| A6.01    | WALL SECTIONS and DETAILS                                |
| A6.02    | WALL SECTIONS and DETAILS                                |
| A6.03    | WALL SECTIONS and DETAILS                                |
| A6.04    | WALL SECTIONS and DETAILS                                |
| A7.01    | ENLARGED STAIR PLAN and DETAILS                          |
| A8.01    | DOOR SCHEDULE  |
| A8.02    | DOOR SCHEDULE and STOREFRONT ELEVATIONS                  |
| A8.03    | DOOR DETAILS   |
| A8.04    | DOOR DETAILS   |
| A8.05    | VISION-LITE ELEVATIONS and DETAILS                       |
| A9.00    | FINISH SCHEDULE  |
| A9.01    | FINISH FLOOR PLAN - AREA 'A'                             |
| A9.02    | FINISH FLOOR PLAN - AREA 'B'                             |
| A9.03    | FINISH FLOOR PLAN - AREA 'C'                             |
| A9.04    | INTERIOR ELEVATIONS                                      |
| A9.05    | INTERIOR ELEVATIONS                                      |
| A9.06    | INTERIOR ELEVATIONS                                      |
| A9.07    | FINISH DETAILS   |
| A10.01   | REFLECTED CEILING PLAN - AREA 'A'                        |
| A10.02   | REFLECTED CEILING PLAN - AREA 'B'                        |
| A10.03   | REFLECTED CEILING PLAN - AREA 'C'                        |
| A10.04   | CEILING DETAILS  |
| A10.05   | CEILING DETAILS  |
| A11.01   | ENLARGED TOILET ROOM PLANS and DETAILS                   |
| A11.02   | ENLARGED LOCKER ROOM PLANS and DETAILS                   |
| A11.03   | ENLARGED LOCKER ROOM PLANS and DET AILS                  |
| A11.04   | CASEWORK and FURNITURE PLAN                              |
| A11.05   | CASEWORK ELEVATIONS                                      |
| A11.06   | FITNESS CENTER PLAN and ELEVATIONS                       |
| A12.01   | MISCELLANEOUS DET AILS                                   |
| STRUCTUR | <u>AL</u>  |
| 00.04    |  |
| S0.01    | DESIGN DATA and GENERAL NOTES                            |
| S0.02    | GENERAL NOTES, SCHEDULES and DETAILS                     |
| S0.03    | SPECIAL INSPECTION NOTES and SCHEDULE                    |
| S1.00    | PARTIAL ROOF FRAMING PLAN at LIBRARY                     |
| S1.01    | PARTIAL ROOF FRAMING PLANS - AREAS 'A', 'B', 'C'         |
| S1.02    | PARTIAL ROOF FRAMING PLAN - AREA 'A'                     |
| S1.03    | STAIR FOUNDATION and FRAMING PLANS - SECTIONS and DETAIL |
| S3.00    | FOUNDATION SECTIONS and DETAILS                          |

# FOX LANE HIGH SCHOOL (CONT.)

MECHANICAL

|   | M0.01          | GENERAL NOTES, SYMBOLS and LEGENDS  |
|---|----------------|---|
|   | M1.01          | FIRST FLOOR DUCT WORK and EQUIPMENT DEMOLITION PLAN - AREA  |
|   | M1.02          | BASEMENT HYDRONIC PIPING DEMOLIIT ON PLAN - AREA 'A'  |
|   | M1.03          | FIRST FLOOR DUCT WORK and EQUIPMENT DEMOLITION PLAN - AREA  |
|   | M1.04          | FIRST FLOOR HYDRONIC PIPING DEMOLITION PLAN - AREA 'B'  |
|   | M1.05          | ROOF DEMOLITION PLAN - AREAS 'A and B'  |
|   | M1.06          | BASEMENT DUCT WORK and EQUIPMENT DEMOLITION PLAN - AREA 'C  |
|   | M1.07          | BASEMENT HYDRONIC PIPING DEMOLITON PLAN - AREA 'C'  |
|   | M1.08          | FIRST FLOOR DUCT WORK and EQUIPMENT DEMOLITION PLAN - AREA  |
|   | M1.09          | ROOF DEMOLITION PLAN - AREA 'C'   |
|   | M2.01          | FIRST FLOOR DUCT WORK LAYOUT PLAN - AREA 'A'  |
|   | M2.02          | FIRST FLOOR HYDRONIC PIPING PLAN - AREA'A'  |
|   | M2.03          | FIRST FLOOR VRF and CONDENSATE PIPING PLAN - AREAS 'A and B'                                      |
|   | M2.04          | FIRST FLOOR DUCT WORK LAYOUT PLAN - AREA 'B'  |
|   | M2.05          | FIRST FLOOR HYDRONIC PIPING PLAN - AREA'B'  |
|   | M2.06          | FIRST FLOOR VRF and CONDENSATE PIPING PLAN - AREA 'B'   |
|   | M2.07          | FIRST FLOOR DUCT WORK LAYOUT PLAN - AREAS 'A and B'   |
|   | M2.08<br>M2.09 | BASEMENT DUCTWORK LAYOUT PLAN - AREA 'C'<br>BASEMENT HYDRONIC PIPING PLAN - AREA 'C'              |
|   | M2.09<br>M2.10 | FIRST FLOOR DUCT WORK LAYOUT PLAN - AREA 'C'  |
|   | M2.10<br>M2.11 | FIRST FLOOR HYDRONIC PIPING PLAN - AREA 'C'   |
|   | M2.12          | ROOF PLAN - AREA'C'   |
|   | M6.01          | MECHANICAL DETAILS  |
|   | M6.02          | ROOFTOP UNIT and DOAS UNIT SCHEDULES and DETAILS  |
|   | M6.03          | ROOFTOP UNIT SCHEDULES and DETAILS  |
|   | M6.04          | ROOFTOP UNIT SCHEDULES and DETAILS  |
|   | M6.05          | HOT WATER COIL SCHEDULES  |
|   | M6.06          | HEAT ING and VENT ILAT ING SCHEDULES  |
|   | M6.07          | CABINET HEATER and UNIT HEATER SCHEDULES and DETAILS  |
|   | M6.08          | FIN TUBE and ELECTRIC CABINET HEATER SCHEDULES and DETAILS  |
|   | M6.09          | OUT DOOR AIR DEMAND CALCULATIONS  |
|   | M6.10          | GRILLE SCHEDULES  |
|   | M6.11          | VRF SYSTEMS, PIPING SCHEMATICS, SCHEDULES and DETAILS   |
|   | M6.12          | VRF SYSTEMS, EQUIPMENT and CUT SHEETS   |
|   |                |   |
|   | PLUMBING       |   |
|   |                |   |
|   | P0.01          | GENERAL NOTES, LEGENDS, ETC.  |
|   | P1.01          | DOMESTIC WATER DEMOLITION PLANS   |
|   | P1.02          | SANITARY WASTE, VENT and STORM WATER DEMOLITION PLANS   |
|   | P2.01          | PROPOSED DOMESTIC WATER PIPING PLANS  |
|   | P2.02          | PROPOSED SANITARY, VENT and STORM WATER PLANS   |
|   | P3.01          | ROOF DRAIN PLAN - ROOF PLAN AREAS 'A' AND 'B'<br>SCHEDULES and DETAILS                            |
|   | P6.01          | SCHEDOLES and DETAILS   |
|   | ELECTRICAL     |   |
|   |                |   |
|   | E0.01          | GENERAL NOTES, LEGENDS and ABBREVIATIONS  |
|   | E0.02          | SWITCHGEAR, PANELS and RISER DIAGRAMS   |
|   | E1.01          | DEMOLITION PLAN - AREA'A'   |
|   | E1.02          | DEMOLITION PLAN - AREA'B'   |
|   | E1.03          | DEMOLITION PLAN - AREA'C'   |
|   | E1.04          | DEMOLITION PLAN - AREAS 'A','B','C'   |
|   | E2.01          | SITE PLAN - FIELD #4 RESTROOM BUILDING  |
|   | E3.01          | PROPOSED LIGHT ING PLAN - AREA 'A'  |
|   | E3.02          | PROPOSED LIGHTING PLAN - AREA 'B'   |
|   | E3.03          | PROPOSED LIGHTING PLAN - AREA 'C'   |
|   | E4.01          | PROPOSED POWER PLAN - AREA 'A'  |
|   | E4.02          | PROPOSED POWER PLAN - AREA 'B'  |
|   | E4.03          | PROPOSED POWER PLAN - AREA 'C'  |
|   | E4.04          | PROPOSED MECHANICAL POWER PLAN - AREA 'A'   |
|   | E4.05          | PROPOSED MECHANICAL POWER PLAN - AREA 'B'   |
|   | E4.06          | PROPOSED MECHANICAL POWER PLAN - AREA'C'  |
|   | E4.07          | PROPOSED MECHANICAL POWER PLAN - ROOF AREAS 'A' and 'B'   |
|   | E4.08          | PROPOSED MECHANICAL POWER PLAN - ROOF AREA 'C'  |
|   | E4.09          | PROPOSED MECHANICAL POWER PLAN - BASEMENT AREA 'C'<br>PROPOSED SMOKE DAMPER POWER PLAN - AREA 'A' |
|   | E4.10<br>E5.01 | PROPOSED SMOKE DAMPER POWER PLAN - AREA 'A'<br>PROPOSED SPECIAL SYSTEMS PLAN - AREA 'A'           |
|   | E5.01<br>E5.02 | PROPOSED SPECIAL SYSTEMS PLAN - AREA 'A'<br>PROPOSED SPECIAL SYSTEMS PLAN - AREA 'B'              |
|   | E5.02<br>E5.03 | PROPOSED SPECIAL SYSTEMS PLAN - AREA 'B'<br>PROPOSED SPECIAL SYSTEMS PLAN - AREA 'C'              |
|   | E5.03<br>E5.04 | PROPOSED SPECIAL SYSTEMS PLAN - AREA 'C'<br>PROPOSED SPECIAL SYSTEMS ROOF PLAN - AREA S'A', 'B'   |
|   | E5.04<br>E5.05 | PROPOSED SPECIAL SYSTEMS ROOF PLAN - AREA'S A, B<br>PROPOSED SPECIAL SYSTEMS ROOF PLAN - AREA'C'  |
|   | E5.06          | PROPOSED SPECIAL STSTEMS ROOF PLAN - AREA C   |
|   | E7.01          | DETAILS   |
|   | E7.02          | DETAILS   |
|   | E8.01          | PANEL SCHEDULES   |
|   | E8.02          | PANEL SCHEDULES   |
| - |                |   |

# **BEDFORD CENTRAL DISTRICT** DISTRICT ADMINISTRATION OFFICES

632 SOUTH BEDFORD ROAD, BEDFORD, NY 10506

# PHASE 2 - BOND IMPROVEMENTS

AT

# FOX LANE MIDDLE SCHOOL

SOUTH BEDFORD ROAD BEDFORD, NY 10506

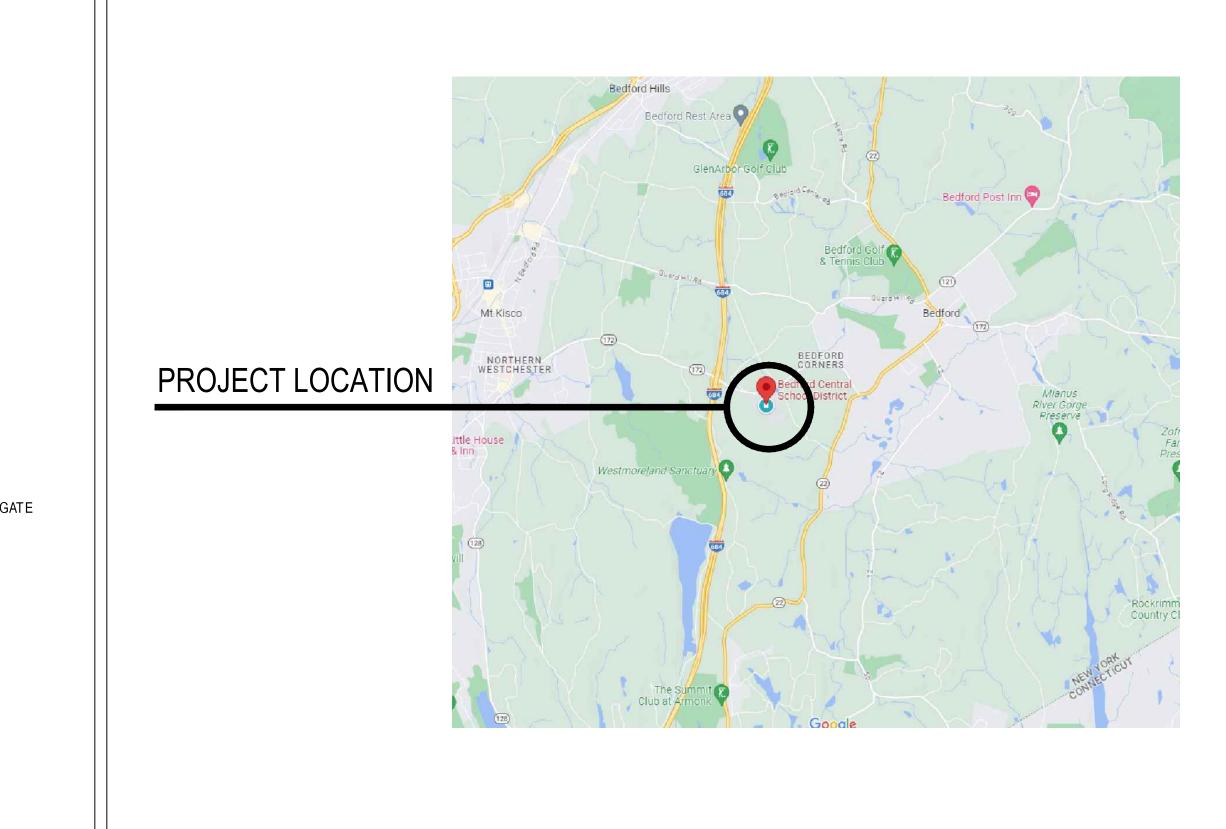
SED No.: 66-01-02-06-0-007-013 (23-131b)

|                                       |          |  | FOX LANE M | IDDLE SCHOOL (CONT.)   |
|---------------------------------------|----------|--|------------|--|
|                                       | TECHNOL  | OGY  | MECHANICAL | <u>.</u>   |
|                                       | E9.00    | GENERAL NOTES, LEGENDS and ABBREVIATIONS                         | M0.01      | GENERAL NOTES, LEGENDS, ETC.                                 |
| N - AREA 'A'                          | E9.01    | FIRST FLOOR TECHNOLOGY PLANS                                     | M1.01      | DEMOLITION PLANS   |
|                                       | E9.02    | FIRST FLOOR SECURITY PLANS                                       | M2.01      | PROPOSED FIRST and SECOND FLOOR PLANS                        |
| N - AREA 'B'                          | E9.03    | FIRST FLOOR TECHNOLOGY PLAN - AREA'C'                            | M2.02      | PROPOSED FIRST and SECOND FLOOR PLANS                        |
| · · · · · · · · · · · · · · · · · · · | E10.01   | TECHNOLOGY DETAILS   | M2.03      | PROPOSED THIRD FLOOR and ROOF PLANS                          |
|                                       | E10.02   | SECURITY DET AILS  | M6.01      | SCHEDULES and DET AILS                                       |
| - AREA 'C'                            | E10.02   |  | M6.02      | SCHEDULES and DETAILS  |
|                                       |          | MIDDLESCHOOL   | M6.02      | SCHEDULES and DETAILS  |
| N - AREA 'C'                          |          |  | M6.04      | SCHEDULES and DETAILS  |
|                                       | CIVIL    |  | M6.05      | SCHEDULES and DETAILS  |
|                                       | CS0.01   | FLMS T OPOGRAPHIC SURVEY   | PLUMBING   |  |
| and B'                                | CS0.02   | EROSION and SEDIMENT CONTROL PLAN - NEW ADDITION AREA            |            |  |
|                                       | CS1.01   | EXISTING CONDITIONS and DEMOLITION PLANS                         | P0.01      | GENERAL NOTES, LEGENDS, ETC.                                 |
|                                       | CS1.02   | EXISTING CONDITIONS and DEMOLITION PLANS - SOFTBALL PARKING AREA | P1.01      | DEMOLITION PLANS   |
|                                       | CS1.02   | ALIGNMENT and SCHEDULE PLAN                                      | P2.01      | PROPOSED PLANS   |
|                                       |          |  |            |  |
|                                       | CS2.02   | ALIGNMENT and SCHEDULE PLAN - SOFTBALL PARKING AREA ACCESS       | P6.01      | SCHEDULES and DET AILS                                       |
|                                       | CS2.03   | SITE PLAN - SOFTBALL FIELD RESTROOM BUILDING                     |            |  |
|                                       | CS3.01   | ENLARGED PLANS - NEW ADDITION and NORTH SIDE SECURITY FENCING    | ELECTRICAL |  |
|                                       | CS3.02   | ENLARGED PLANS - COURT YARD AMPIT HEATER and WALKWAY RAMP        |            |  |
|                                       | CS3.03   | GRADING, DRAINAGE and SEWER ENLARGEMEMT PLANS                    | E0.01      | GENERAL NOTES, LEGENDS and ABBREVIATIONS                     |
|                                       | CS3.04   | GRADING, DRAINAGE ENLARGEMEMT PLANS - COURTYARD AMPITHEATER      | E0.02      | SWIT CHGEAR, PANELS and RISER DIAGRAMS                       |
|                                       | CA6.01   | SITE DETAILS   | E1.01      | DEMOLITION PLANS   |
|                                       | CS6.02   | SITEDETAILS  | E1.02      | DEMOLITION PLAN - WALKWAY CANOPY                             |
|                                       | CS6.03   | SITE DETAILS   | E2.01      | SITE PLAN - SOFT BALL FIELD RESTROOM BUILDING and TRAFFIC GA |
|                                       | CS6.04   | SITE DETAILS   | E3.01      | PROPOSED LIGHTING PLANS                                      |
|                                       | 030.04   | SHEDETALS  |            |  |
|                                       |          |  | E3.02      | PROPOSED LIGHTING PLAN - WALKWAY CANOPY                      |
|                                       | ARCHITEC | TURAL  | E4.01      | PROPOSED POWER PLANS   |
| 6                                     |          |  | E4.02      | PROPOSED POWER PLANS - COURT YARD AMPIT HEAT ER              |
| ETAILS                                | A0.01    | LOWER LEVEL CODE COMPLIANCE KEY PLAN                             | E4.03      | PROPOSED MECHANICAL POWER PLANS                              |
|                                       | A0.02    | FIRST FLOOR CODE COMPLIANCE KEY PLAN                             | E4.04      | PROPOSED ROOF PLANS  |
|                                       | A0.03    | SECOND FLOOR CODE COMPLIANCE KEY PLAN                            | E5.01      | PROPOSED SPECIAL SYSTEMS PLANS                               |
| S                                     | A0.04    | THIRD AND FOURTH FLOOR CODE COMPLIANCE KEY PLANS                 | E7.01      | DETAILS  |
|                                       | A1.01    | DEMOLITION FLOOR PLANS   | E7.02      | DETAILS  |
|                                       | A2.00    | PART IT ION TYPES  | E8.01      | PANEL SCHEDULES  |
|                                       | A2.01    | PROPOSED FLOOR PLANS   |            |  |
|                                       | A2.02    | ENLARGED ADDITION PROPOSED FLOOR PLAN and PLAN DETAILS           | TECHNOLOG  | <u> YY</u>   |
|                                       | A2.03    | PLAN DETAILS   |            |  |
|                                       | A3.01    | ROOF PLAN and DETAILS  | E9.00      | GENERAL NOTES, LEGENDS and ABBREVIATIONS                     |
| ANS                                   | A3.02    | TAPERED INSULATION PLAN  | E9.01      | DATA and SECURITY PLANS                                      |
|                                       | A4.01    | EXTERIOR ELEVATIONS  | E9.02      | TECHNOLOGY PLAN - SECURITY GATE                              |
|                                       | A5.01    | BUILDING SECTIONS  | E10.01     | T ECHNOLOGY DET AILS   |
|                                       | A6.01    | WALL SECTIONS and DETAILS  | E10.02     | SECURITYDETAILS  |
|                                       | A6.02    | WALL SECTIONS and DETAILS  |            |  |
|                                       | A6.03    | WALL SECTIONS and DETAILS  |            | TION BUILDING  |
|                                       | A6.04    | WALL SECTIONS and DETAILS  |            |  |
|                                       |          |  |            |  |
|                                       | A6.05    | WALL SECTIONS and DETAILS  | CIVIL      |  |
|                                       | A7.01    | ENLARGED RAMP and WALKWAY CANOPY PLANS                           |            |  |
|                                       | A7.02    | RAMP and CANOPY SECTIONS and DETAILS                             | CS0.01     | ADMINIST RATION BUILDING TOPOGRAPHIC SURVEY                  |
|                                       | A8.01    | DOOR SCHEDULE and ELEVATIONS                                     | CS4.01     | SIT E SEWER PLAN   |
|                                       | A8.02    | DOOR DETAILS   |            |  |
|                                       | A9.00    | FINISH SCHEDULE and DETAILS                                      | ARCHITECTU | JRAL   |
|                                       | A9.01    | FINISH FLOOR PLANS   |            |  |
|                                       | A10.01   | REFLECTED CEILING PLANS  | A2.00      | OVERALL KEY PLANS and PART IT ION TYPE DETAILS               |
|                                       | A11.01   | ENLARGED TOILET ROOM PLANS and DETAILS                           | A2.01      | TOILET ROOM PLANS and DETAILS                                |
|                                       | A11.02   | CASEWORK PLANS   | A8.01      | DOOR SCHEDULE and DETAILS                                    |
|                                       | A11.03   | CASEWORK ELEVATIONS  | A9.01      | REFLECTED CEILING PLAN and FINISH FLOOR PLAN                 |
|                                       | A12.01   | MISCELLANEUOUS DETAILS   | A0.01      |  |
|                                       | 712.01   |  | MECHANICAL | <u>.</u>   |
|                                       | STRUCTU  | RAL  |            |  |
|                                       |          |  | M2.01      | LOWER LEVEL MECHANICAL PLAN                                  |
|                                       | S0.01    | DESIGN DATA and GENERAL NOTES                                    | M4.01      | BOILER ROOM DEMOLITION PLAN and NEW BOILER ROOM LAYOUT       |
|                                       | S0.02    | DESIGN DATA and GENERAL NOTES                                    | M4.02      | BOILER ROOM DETAILS  |
| B'                                    | S0.03    | SPECIAL INSPECTION NOTES and SCHEDULE                            |            |  |
|                                       | S1.00    | FOUNDATION PLAN  | PLUMBING   |  |
|                                       | S1.01    | CANOPY FOUNDATION and ROOF FRAMING PLANS                         |            |  |
|                                       | S2.00    | HIGH and LOW ROOF FRAMING PLANS                                  | P2.01      | TOILET ROOM PLANS and DETAILS                                |
|                                       | S3.00    | FOUNDATION SECTIONS and DETAILS                                  | P6.01      | PLUMBING DEMOLITION / NEW PLUMBING WORK                      |
|                                       | S3.00    | FOUNDATION SECTIONS, PIER and BASEPLATE DETAILS                  |            |  |
|                                       |          |  |            |  |
|                                       | S3.02    | CANOPY FOUNDATION SECTIONS, PIER and BASEPLATE DETAILS           | ELECTRICAL |  |
|                                       | S4.00    | MASONRY ELEVATIONS, SECTIONS and DETAILS                         |            |  |
|                                       | S5.00    | STEEL FRAMING SECTIONS and DETAILS                               | E0.01      | GENERAL NOTES, SYMBOLS and ABBREVIATIONS                     |
|                                       | S5.01    | STEEL FRAMING SECTIONS and DETAILS                               | E1.01      | PROPOSED FLOOR PLAN  |
|                                       | S5.01    | STEEL FRAMING SECTIONS and DETAILS                               | E6.01      | SCHEDULES  |
|                                       |          |  |            |  |
|                                       |          |  |            |  |

# ADMINISTRATION BUILDING

632 SOUTH BEDFORD ROAD BEDFORD, NY 10506 SED No.: 66-01-02-06-1-008-014 (23-131c)

# LOCATION MAP

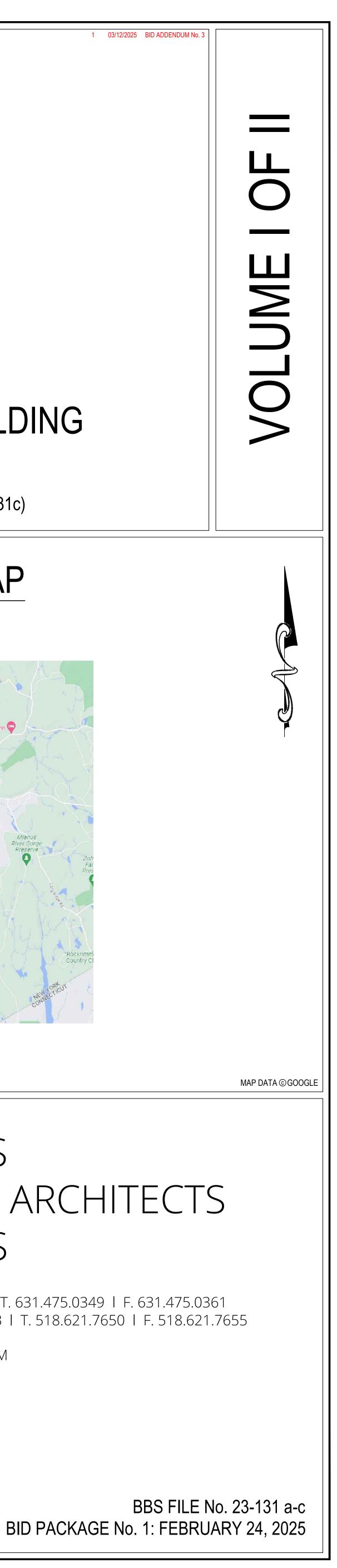


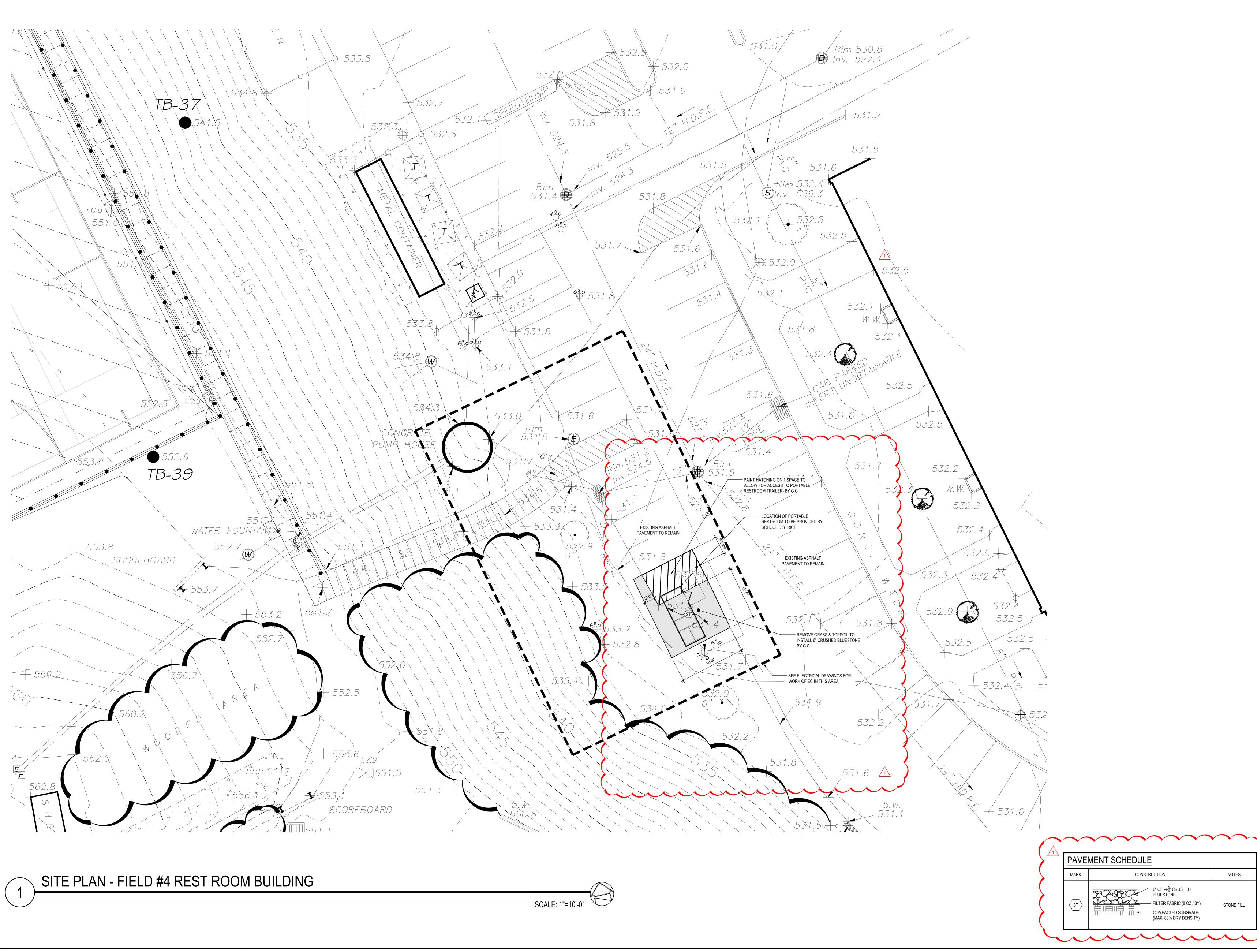
# ARCHITECTS LANDSCAPE ARCHITECTS ENGINEERS

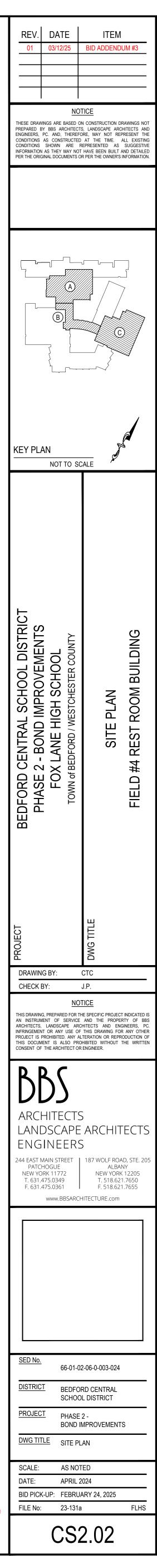
244 EAST MAIN STREET | PATCHOGUE | NEW YORK 11772 | T. 631.475.0349 | F. 631.475.0361 100 GREAT OAKS BLVD., SUITE 115 | ALBANY | NEW YORK 12203 | T. 518.621.7650 | F. 518.621.7655

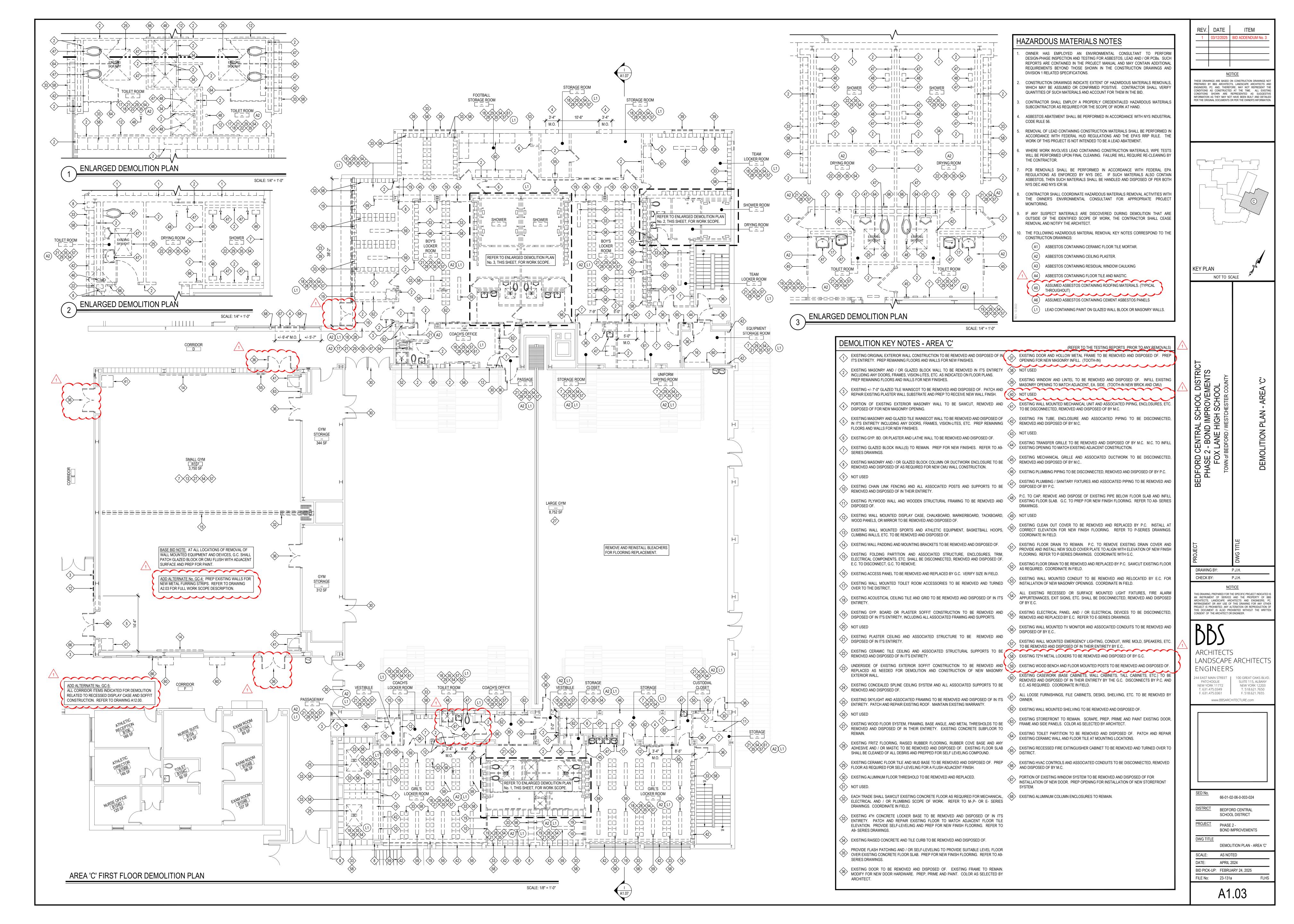
www.BBSARCHITECTURE.COM

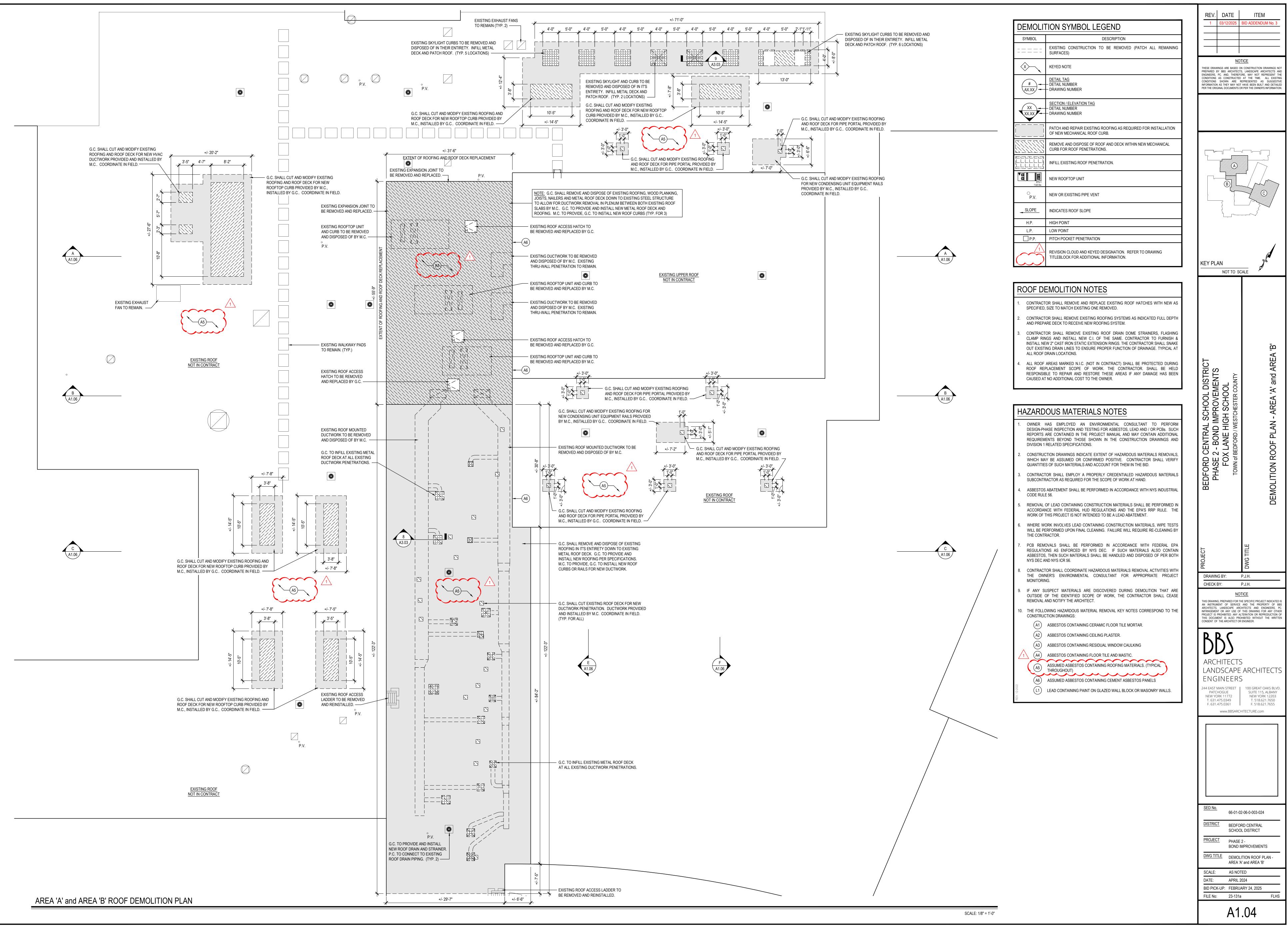
ARCHITECTS CERTIFICATION THE UNDERSIGNED CERTIFIES THAT TO THE BEST OF HIS KNOWLEDGE, INFORMATION, AND BELIEF, THE PLANS AND SPECIFICATIONS ARE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE, THE CONSTRUCTION STANDARDS OF THE EDUCATION DEPARTMENT, NEW YORK STATE DEPARTMENT OF LABOR RULE 56, EPA AND AHERA REQUIREMENTS.

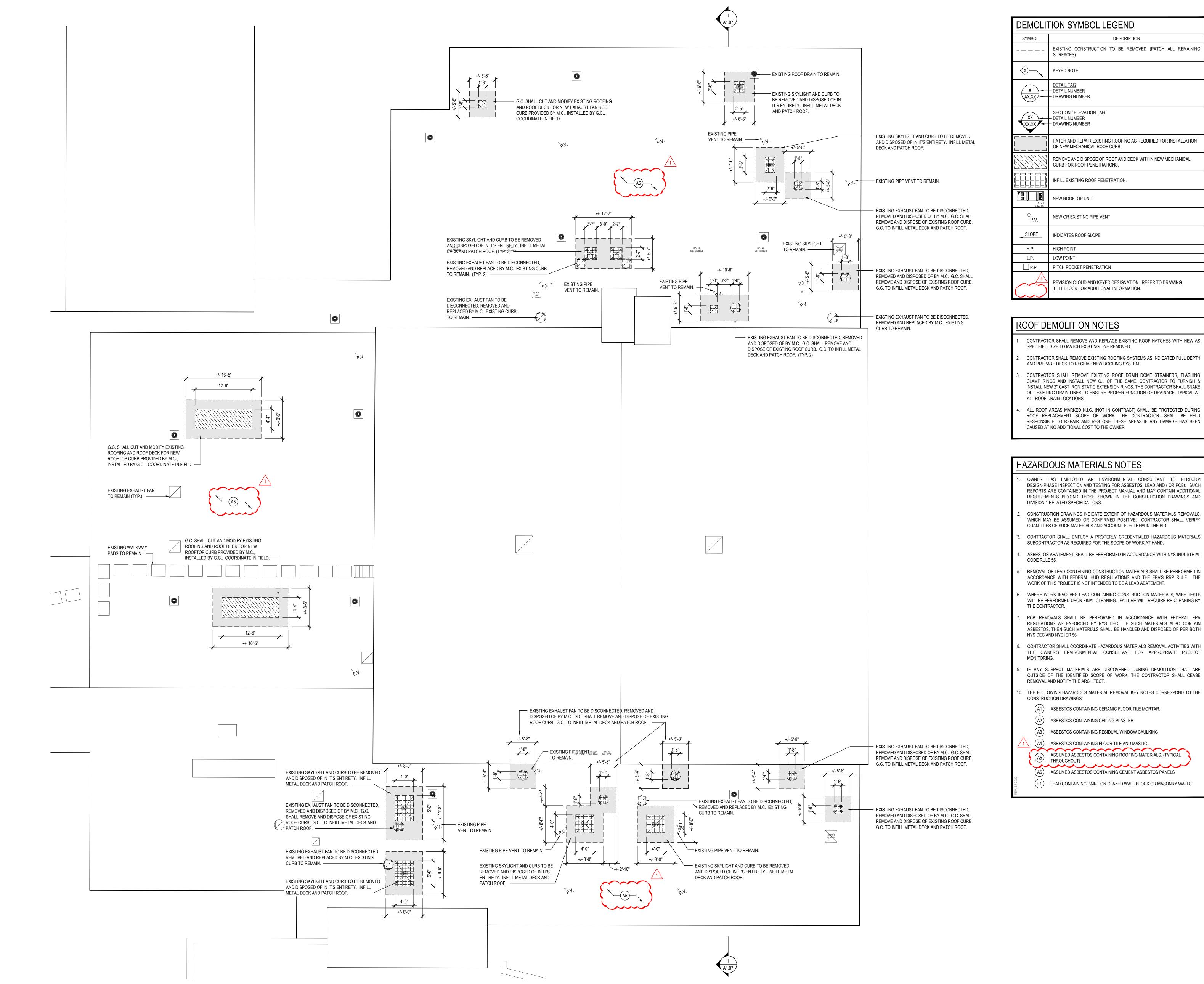


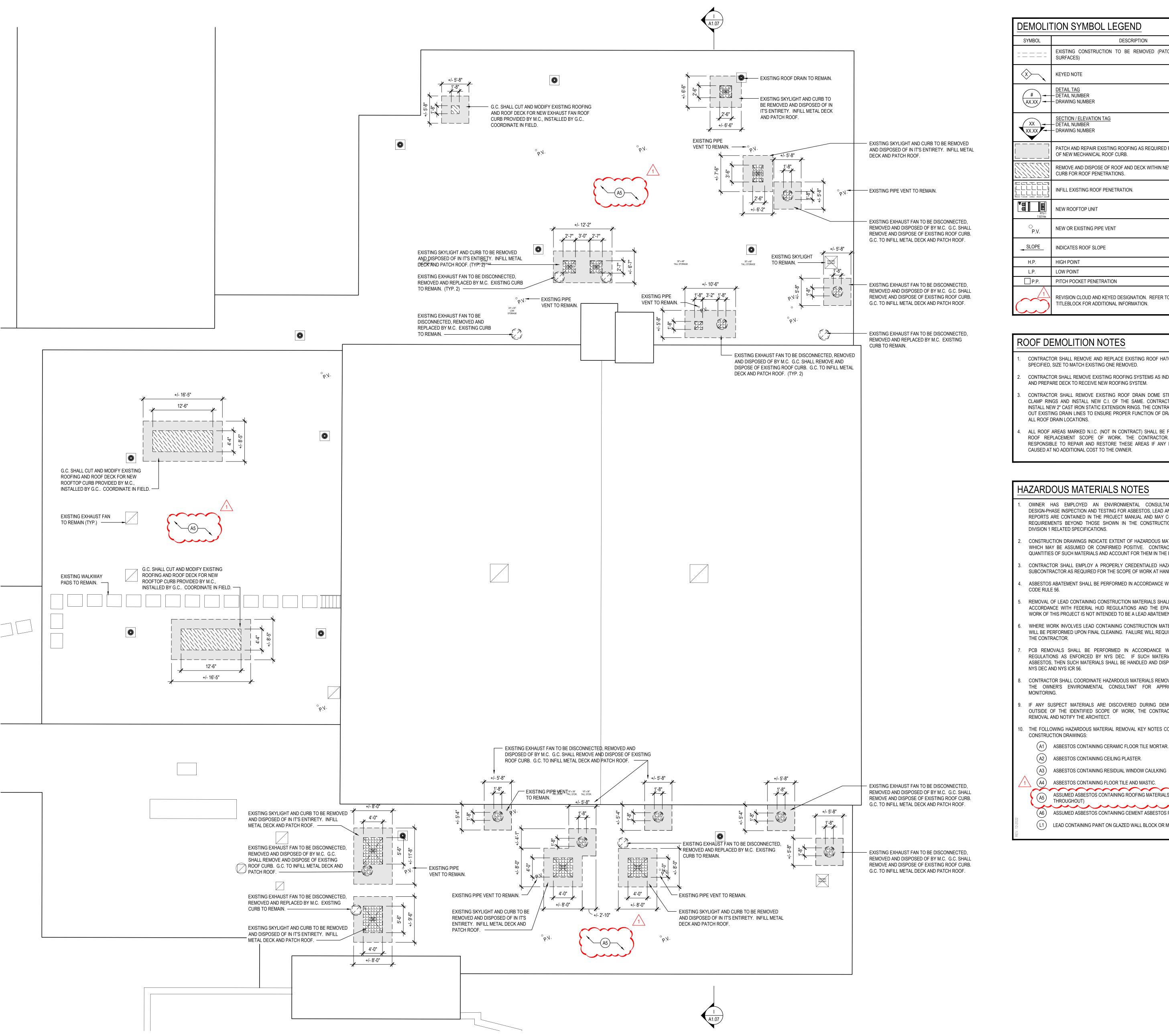




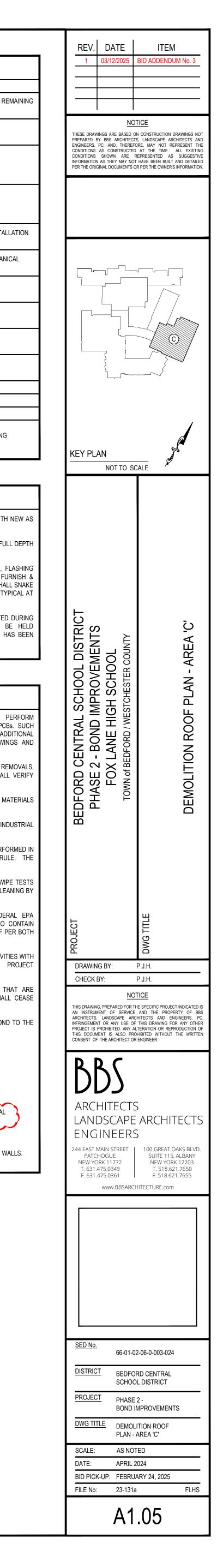


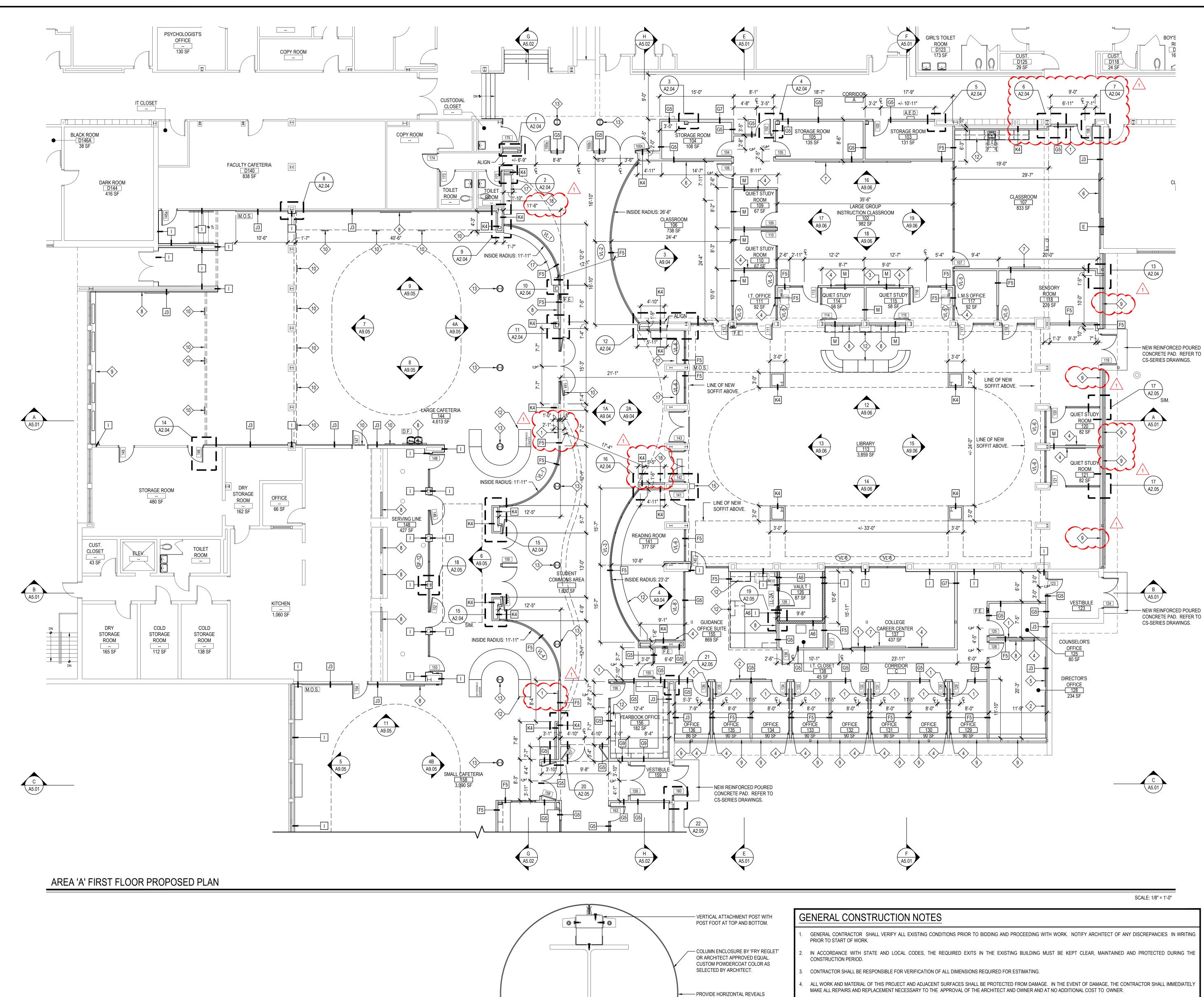






AREA 'C' ROOF DEMOLITION PLAN





- CONTRACTOR SHALL PROTECT ALL AREAS OF WORK FROM INCLEMENT WEATHER DURING AND AT THE END OF DAILY WORK OPERATIONS.
- ALL INTERIOR SURFACES DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED TO MATCH EXISTING CONDITIONS TO THE APPROVAL OF THE ARCHITECT AND OWNER.
- CLEANLINESS THAT EXISTED PRIOR TO COMMENCEMENT OF WORK.
- UNTIL WRITTEN APPROVAL HAS BEEN OBTAINED FROM OWNER.
- AND WORK PERFORMED BY THE OWNER'S VENDOR(S).

CONSTRUCTION.

TYPICAL COLUMN ENCLOSURE DETAIL NOTE: PROVIDE COLUMN ENCLOSURE MODEL 'E : ECONOMICAL' BY 'FRY REGLET' OR ARCHITECT APPROVED EQUAL. SCALE: 3" = 1'-0"

🛥 O

TO ALIGN WITH DECORATIVE

PANELS ON ADJACENT WALLS.

- PROVIDE METAL FRAMING TO

TO EXISTING STEEL COLUMN.

- SERIES 'E' ATTACHMENT CLIP.

SECURE NEW COLUMN COVER

|              | ECTURAL SYMBOL LEGEND<br>DESCRIPTION   |
|--------------|--|
|              | KEYED NOTE   |
| [XXX]        | DOOR NUMBER  |
| <wx></wx>    | WINDOW DESIGNATION   |
| XXXX -       | ROOM TAG<br>– ROOM NAME<br>– ROOM NUMBER<br>– ROOM AREA  |
| #<br>AX.XX   | DETAIL TAG<br>— DETAIL NUMBER<br>— DRAWING NUMBER  |
|              | SECTION / ELEVATION TAG<br>— DETAIL NUMBER<br>— DRAWING NUMBER                                   |
| <b>—</b> XX  | DENOTES INTERIOR PARTITION TYPE - REFER TO PARTITION TYPES FOR<br>ADDITIONAL INFORMATION.        |
| F. <u>E.</u> | DENOTES LOCATION OF RECESSED FIRE EXTINGUISHER<br>WITH FIRE RATED CABINET.                       |
| D.F.         | DENOTES LOCATION OF DRINKING FOUNTAIN.   |
| LL-XX        | DENOTES LOCATION AND DESIGNATION OF NEW LINTEL.  |
| A.E.D.       | DENOTES LOCATION OF AUTOMATED EXTERNAL DEFIBRILLATOR.  |
| M.O.S.       | DENOTES LOCATION OF ASSEMBLY SPACE MAXIMUM OCCUPANCY SIGN.                                       |
| M            | DENOTES DOOR ON MAGNETIC AUTOMATIC HOLD OPEN DEVICE,<br>CONNECTED TO FIRE ALARM SYSTEM.          |
| ð            | DENOTES ACCESSIBLE ENTRANCE/EXIT, FIXTURE, ACCESSORY, DEVICE, OR<br>PARTICIPATION AREA.          |
|              | REVISION CLOUD AND KEYED DESIGNATION. REFER TO DRAWING<br>TITLEBLOCK FOR ADDITIONAL INFORMATION. |
|              | CMU WALL CONSTRUCTION  |
|              | BRICK VENEER CONSTRUCTION  |
|              | GYPSUM AND METAL STUD WALL CONSTRUCTION  |
|              | GYPSUM BOARD; PLASTER; MORTAR; SAND  |
|              |  |
|              |  |

|            | PR                  | OPOSED KEY NOTES  |
|------------|---------------------|---|
|            | $\langle 1 \rangle$ | 4'-0"H x 4'-0"W TACKBOARD PROVIDED AND INSTALLED BY G.C.  |
|            | $\langle 2 \rangle$ | 4'-0"H x 6'-0"W TACKBOARD PROVIDED AND INSTALLED BY G.C.  |
|            | 3                   | 6'-0"H x 12'-0"W TABLEAU MODULAR MARKERBOARD AND TACKBOARD SYSTEM BY 'CLARIE ARCHITECT APPROVED EQUAL. REFER TO A9-SERIES DRAWINGS.   |
|            | $\langle 4 \rangle$ | 4'-0"H x 4'-0"W GLASS MARKERBOARD BY 'CLARIDGE' OR ARCHITECT APPROVED EQUAL PR AND INSTALLED BY G.C.  |
|            | $\langle 5 \rangle$ | 4'-0"H x 6'-0"W GLASS MARKERBOARD BY 'CLARIDGE' OR ARCHITECT APPROVED EQUAL PR AND INSTALLED BY G.C.  |
| 1          | 6                   | 4'-0"H x 8'-0"W GLASS MARKERBOARD BY 'CLARIDGE' OR ARCHITECT APPROVED EQUAL PR<br>AND INSTALLED BY G.C.   |
| <u>' \</u> |                     | LARGE INTERACTIVE DISPLAY PROVIDED AND INSTALLED BY OWNER. G.C. TO PROVIDE BLO<br>E.C. TO PROVIDE ALL ELECTRICAL COMPONENTS. REFER TO E-SERIES DRAWINGS.  |
|            | 8                   | LCD MONITOR PROVIDED AND INSTALLED BY E.C. G.C. TO PROVIDE BLOCKING. COORDII FIELD. REFER TO E-SERIES DRAWINGS.   |
|            | <b>9</b>            | PROVIDE AND INSTALL PHENOLIC RESIN WINDOW SILLS. MATCH WIDTH OF EXISTING MA<br>OPENING. REFER TO A11- SERIES DRAWINGS.  |
|            | (10)                | NEW OR RELOCATED HVAC SUPPLY/RETURN/TRANSFER GRILLE PROVIDED BY M.C., INSTAL G.C. PROVIDE NEW LOOSE LINTEL WHERE SHOWN ON PLANS.  |
|            | $\langle 1 \rangle$ | 5'-0"H x 7'-0"W FRAMELESS $\frac{1}{4}$ " TEMPERED GLASS MIRROR BY G.C. REFER TO A9-SERIES DRAV   |
|            | < <u>12</u> >       | CASEWORK BY CASEWORK CONTRACTOR VIA SEPARATE PURCHASE ORDER. COORDIN<br>FIELD. REFER TO A11- SERIES DRAWINGS FOR REFERENCE.   |
|            | <13>                | PROVIDE AND INSTALL COLUMN ENCLOSURE AROUND EXISTING STEEL COLUMN. REFER TO 1, THIS SHEET.  |
|            | < <u>14</u> >       | RECESSED DISPLAY CASE AS MANUFACTURED BY 'CLARIDGE PRODUCTS' OR ARC APPROVED EQUAL. REFER TO A12- SERIES DRAWINGS.  |
|            |                     | ELECTRICAL OR TECHNOLOGY EQUIPMENT BY E.C. REFER TO E-SERIES DRAWINGS.  |
| ^          | (16)                | WALL MOUNTED MECHANICAL EQUIPMENT BY M.C. REFER TO M-SERIES DRAWINGS.   |
| 1          | 17                  | BUILT-IN CASEWORK BY G.C. REFER TO A12 SERIES DRAWINGS.   |
|            | (18)                | NEW CAST ALUMINUM GRAPHIC SIGNAGE BY 'METAL ARTS' OR ARCHITECT APPROVED EQUAL<br>GRAPHIC AND FONT AS SELECTED BY ARCHITECT. CUSTOM RAL COLOR- 2 COLORS MAX.<br>AS PER MANUFACTURER'S FASTENING METHOD PMS-3 WITH ALUMINUM TUBE SPAC<br>PROJECTION MOUNTING. |
|            |                     |   |
|            | GENE                | RAL NOTES:  |
|            | 1. (                | G.C. SHALL COORDINATE TACK BOARD / MARKERBOARD LOCATIONS AND ELEVATIONS IN EACH<br>CLASSROOM W/ PROPOSED MONITORS AND TECHNOLOGY ITEMS AND OTHER CLASSROOM / OF<br>EQUIPMENT AND FURNISHINGS.   |
|            |                     | MARKERBOARDS SHALL BE AS MANUFACTURED BY 'CLARIDGE PRODUCTS, INC.' OR ARCHITECT<br>APPROVED EQUAL WITH INVISI-MOUNT MOUNTING HARDWARE. COLOR: WHITE.  |

G.C. SHALL REFER TO M.E.P. SERIES DRAWINGS FOR ADDITIONAL WORK SCOPES NOT SHOWN ON THESE DRAWINGS AND COORDINATION OF WORK SCOPE BY OTHERS.

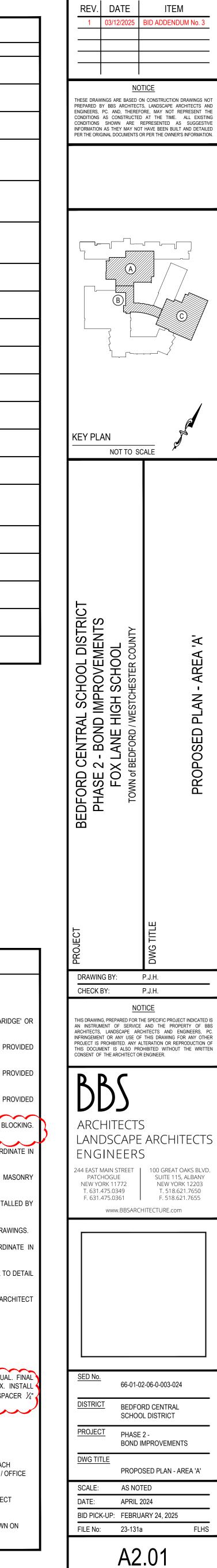
ALL PROJECT WASTE MATERIAL AND RUBBISH SHALL BE DISPOSED IN CONTAINERS PROVIDED BY THE CONTRACTOR FOR SUBSEQUENT LEGAL OFF-SITE DISPOSAL. CONTAINER LOCATION TO BE COORDINATED WITH THE OWNER & CONSTRUCTION MANAGER. OFF-SITE DISPOSAL TO BE ON A REGULAR BASIS.

ALL DEBRIS, DUST AND DIRT CAUSED BY WORK OF THIS CONTRACT SHALL BE REMOVED FROM SITE BY APPROPRIATE MEANS. RESTORE ALL CONDITIONS TO THE STATE OF

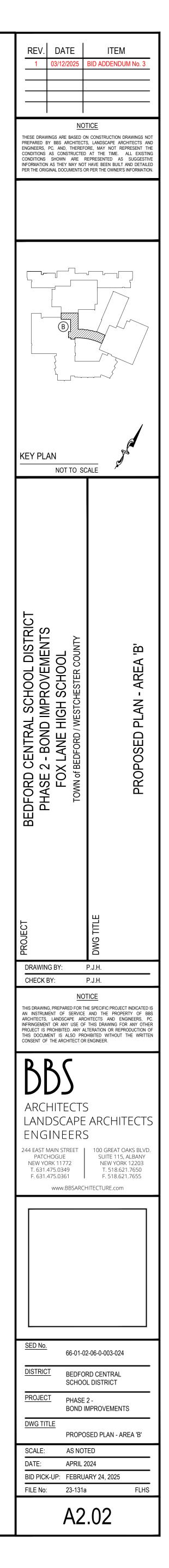
ALL DEMOLITION AND CONSTRUCTION WORK TO BE PERFORMED WITHOUT INTERRUPTION OF OWNER OPERATIONS. IF INTERRUPTION IS NECESSARY, WORK MUST NOT PROCEED

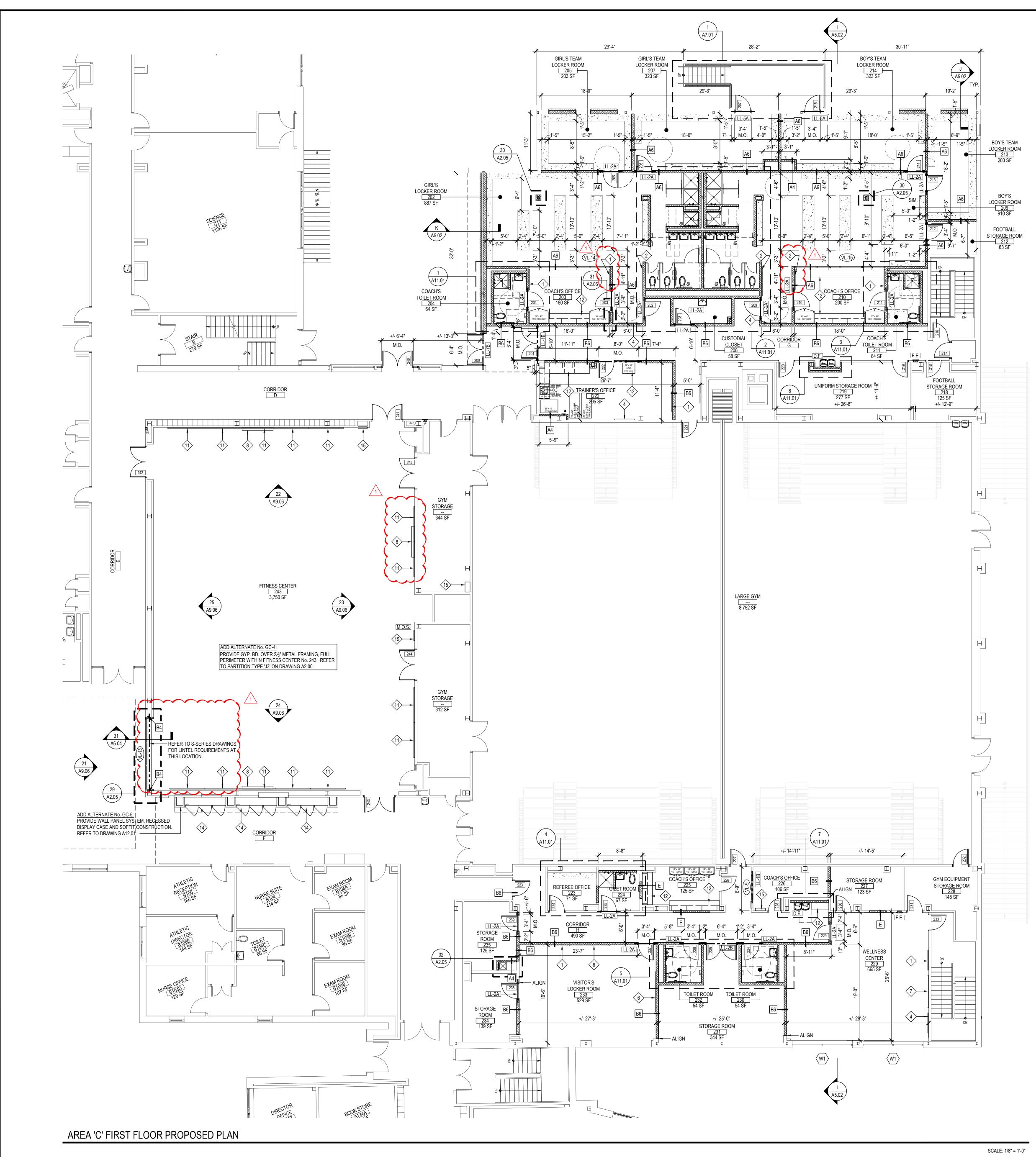
ALL CONTRACTORS ARE TO COORDINATE INSTALLATION OF THEIR WORK WITH EACH OTHER AND WITH THE WORK BEING PERFORMED UNDER SEPARATE CONTRACTS BY OTHERS

REFER TO CONSTRUCTION IMPLEMENTATION PLANS AND CONSTRUCTION SPECIAL PROVISIONS (PREPARED BY OTHERS, IF APPLICABLE) FOR ALL REQUIREMENTS FOR TEMPORARY



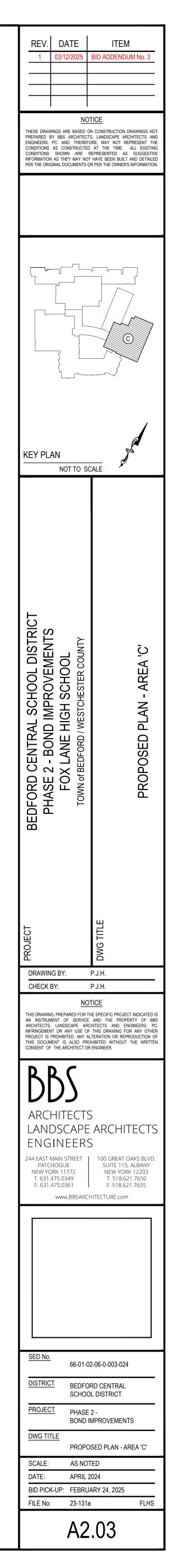




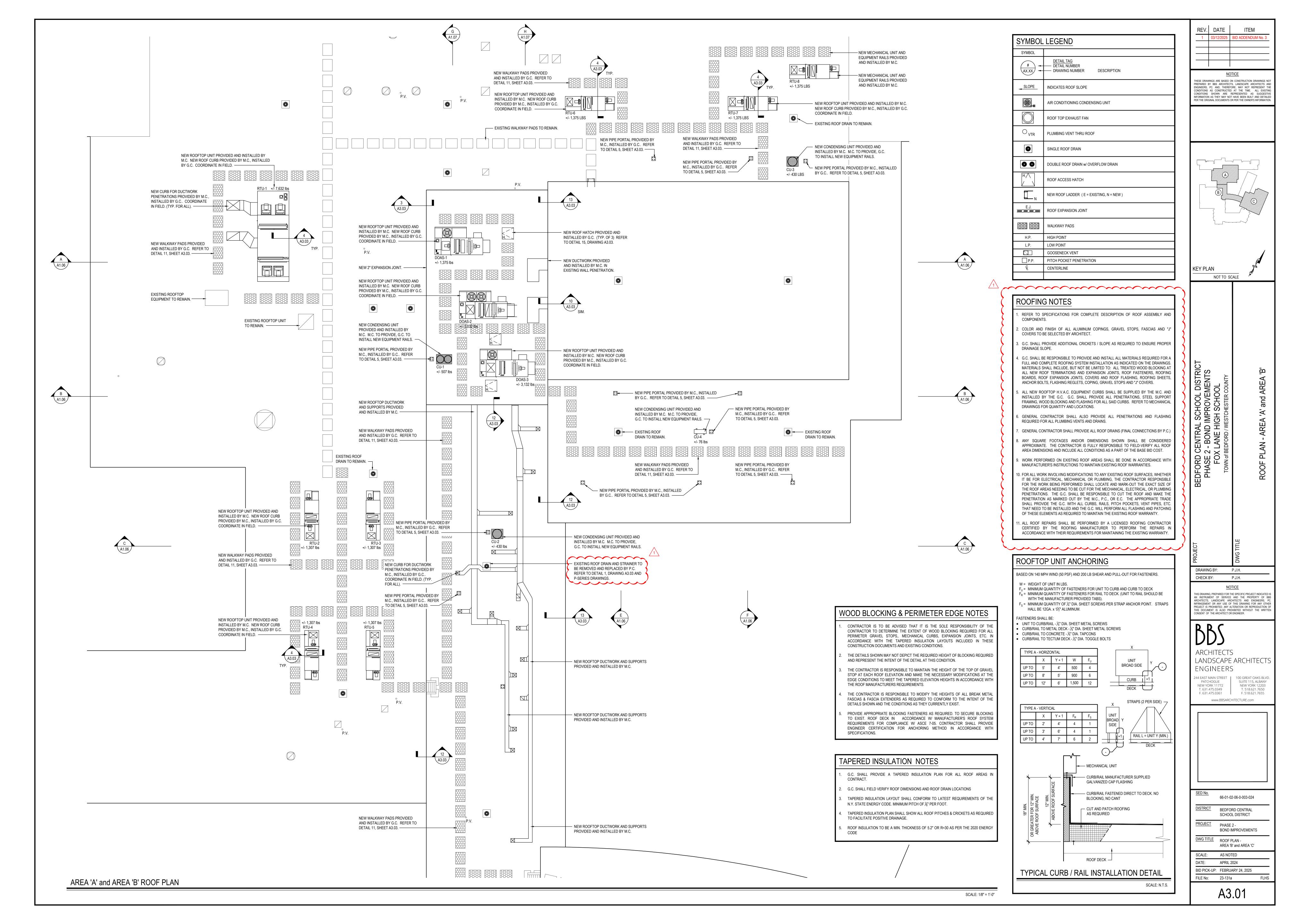


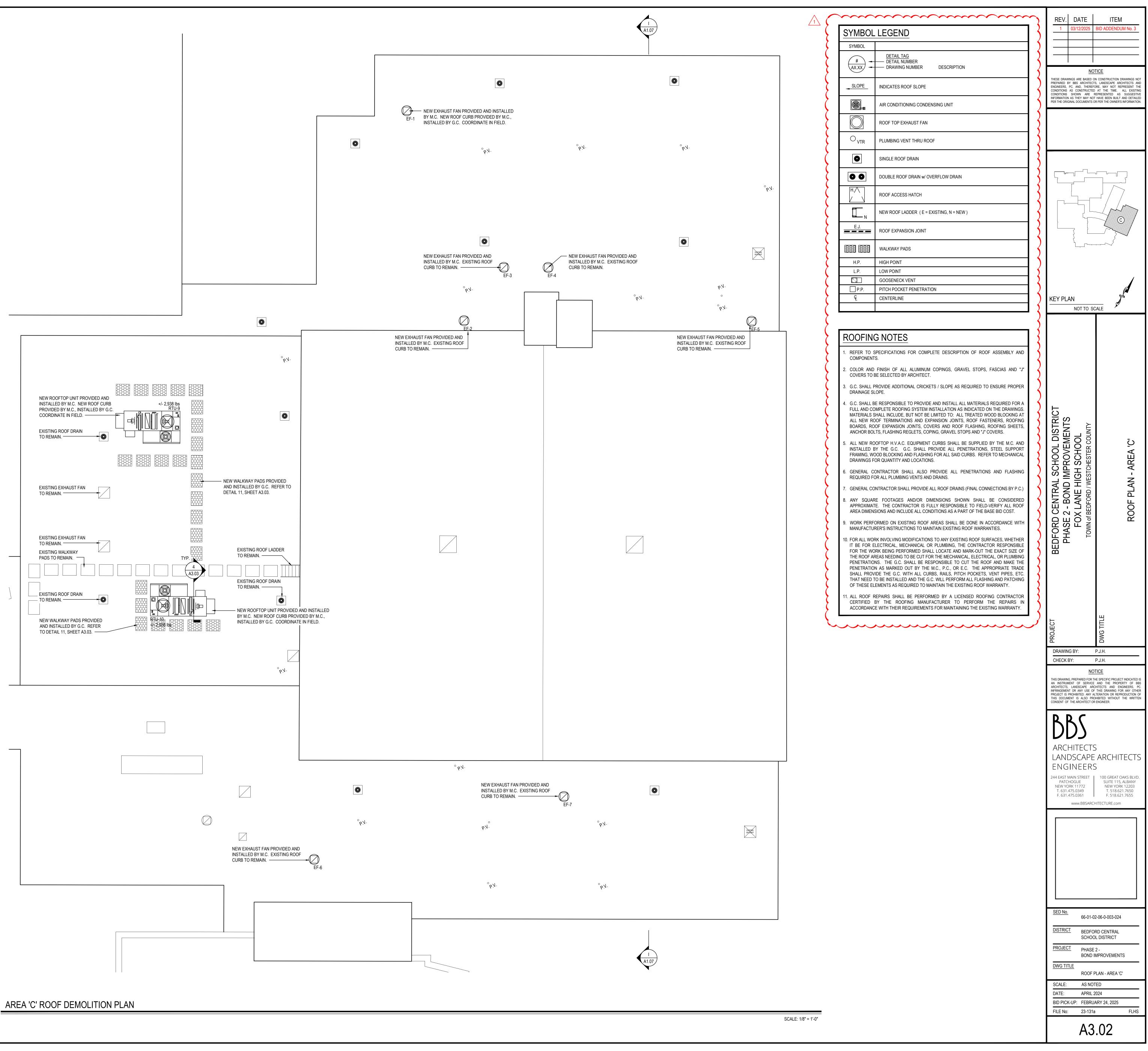
| SCALE: | 1/8" = | 1'-0" |
|--------|--------|-------|

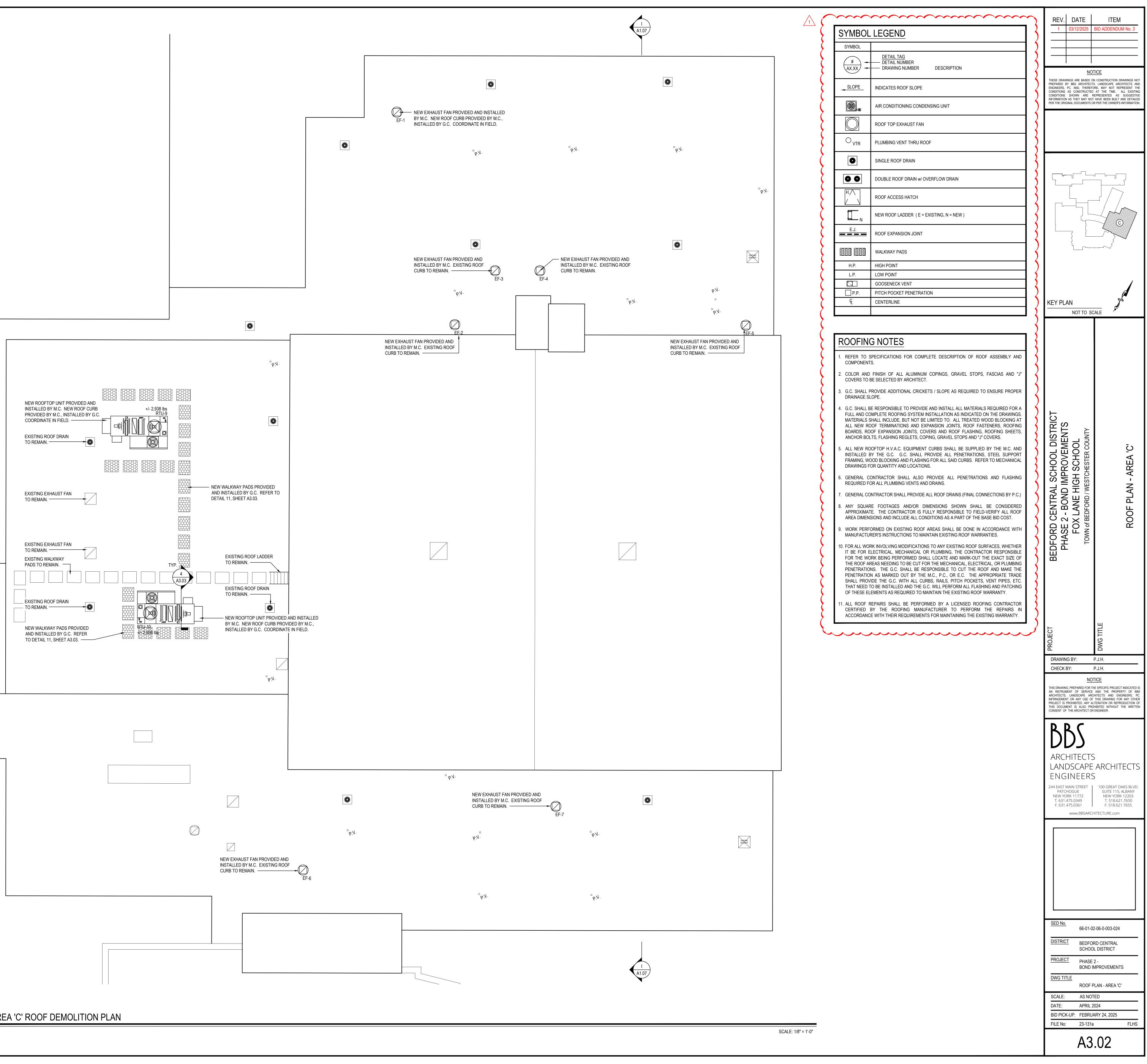
| WALL             | MARK     | ARK OPENINGS UP TO 4'-0" |          | MARK   | OPENINGS 4'-0" TO 7'-0" |  |
|------------------|----------|--------------------------|----------|--|-------------------------|--|
| THICKNESS        |          |                          |          |  |                         |  |
| 4" CMU           | LL-1A    | MT6 x 5.9                |          | LL-1B  | MT6 x 5.9               |  |
| 6" CMU           | LL-2A    | WT4 x 9                  |          | LL-2B  | WT4 x 10.5              |  |
| 8" CMU           | NOT USED |                          | NOT USED |  |                         |  |
| 12" CMU          | NOT USED |                          |          | NOT USED   |                         |  |
| 12"<br>COMPOSITE | LL-5A    | (3) 3½" x 3½" x 5½"      |          | NOT USED   |                         |  |
| 14" CAVITY       | NOT USED |                          | NOT USED |  |                         |  |
| 15" CAVITY       | NOT USED |                          | LL-7B    | (2) 5" x 3½" x 5½" (LLV) + (1) 7" x 4" x 3%" (LLH) |                         |  |
| 19" CAVITY       | NOT USED |                          |          | NOT USED   |                         |  |

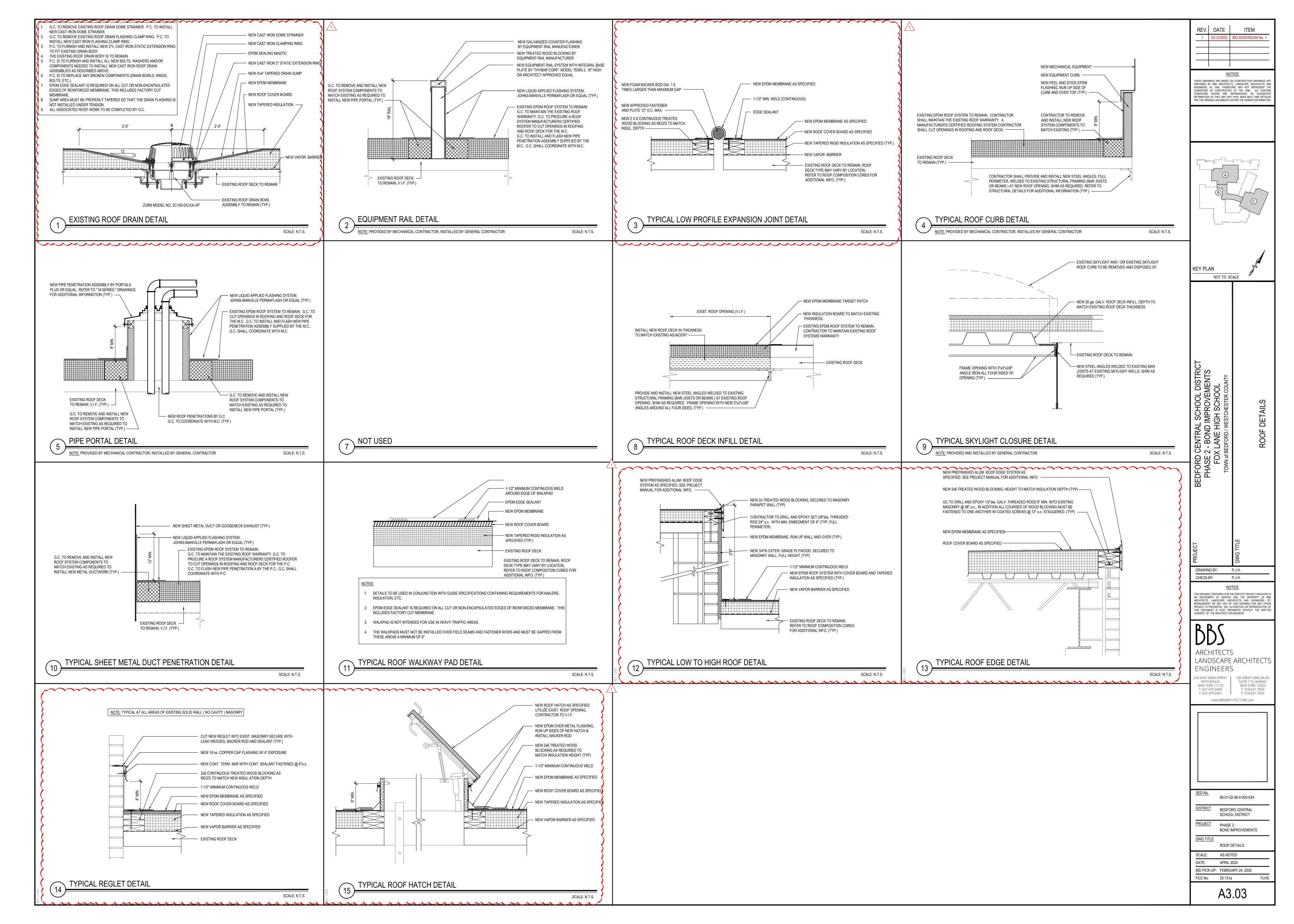


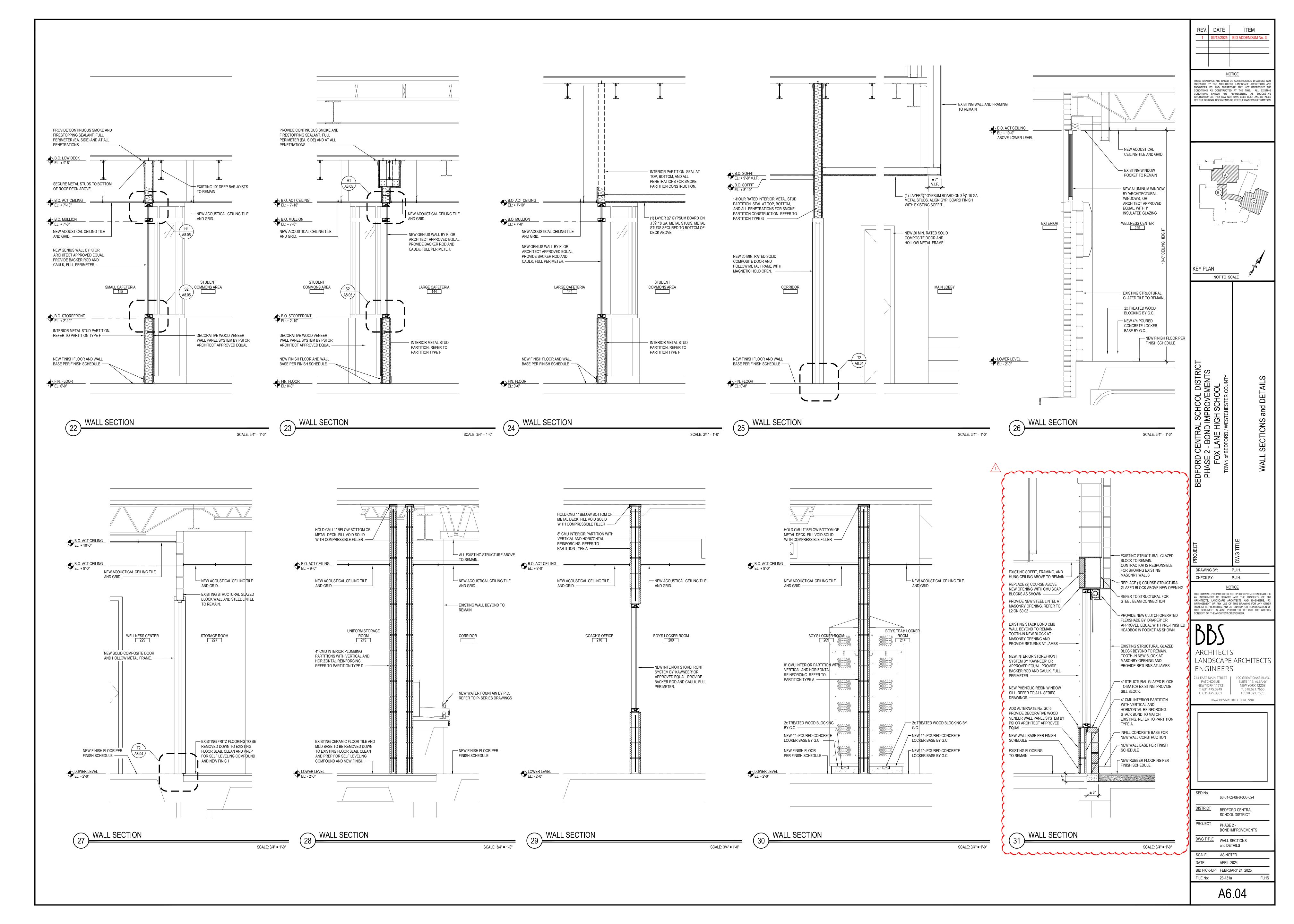




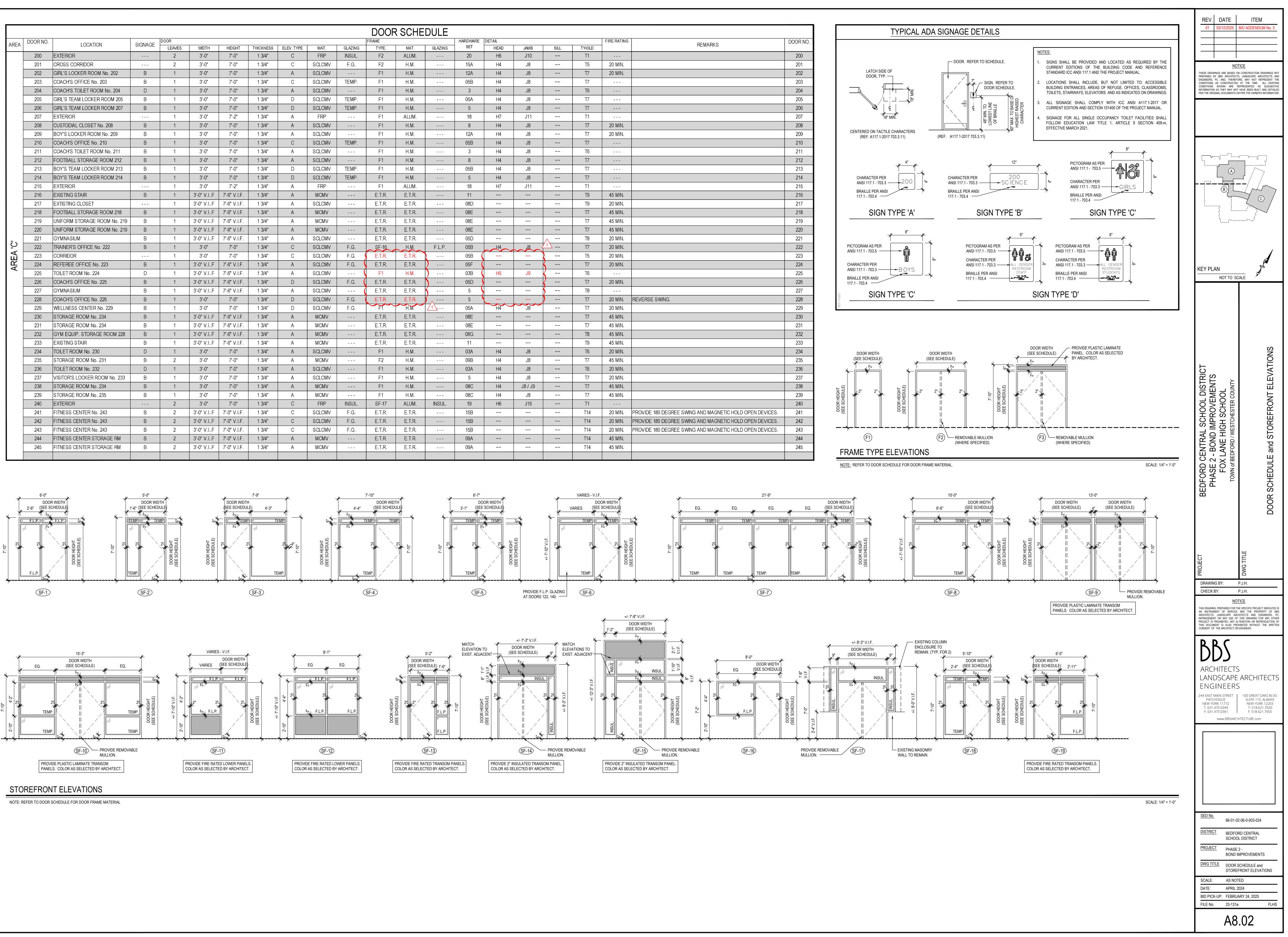


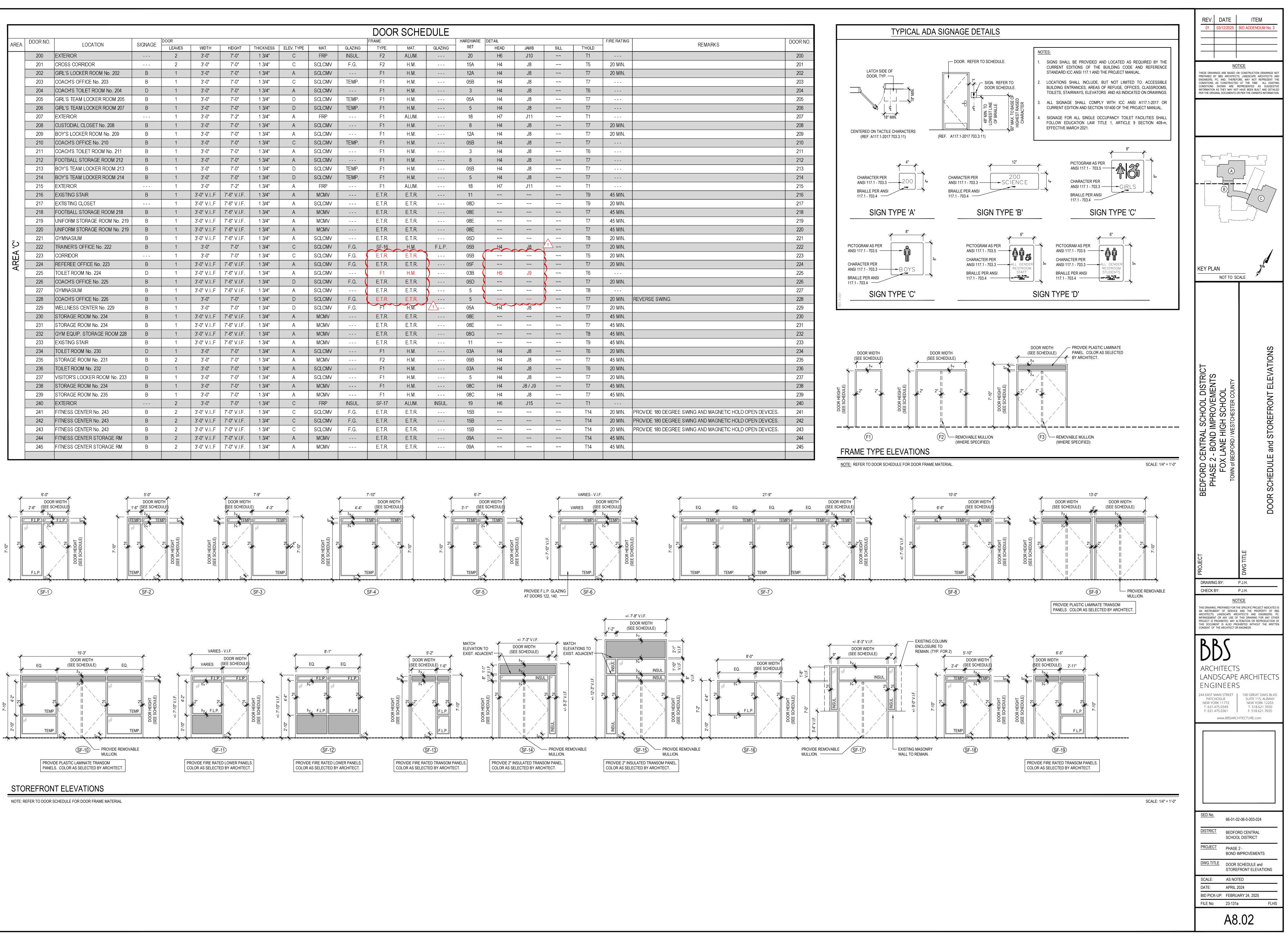






|              |                               |         |        |            |                     |           |            |        |              | DOOF             | R SCHE           | DULE    |           |        |            |       |          |             |   |
|--------------|-------------------------------|---------|--------|------------|---------------------|-----------|------------|--------|--------------|------------------|------------------|---------|-----------|--------|------------|-------|----------|-------------|---|
| REA DOOR NO. | LOCATION                      | SIGNAGE | DOOR   |            |                     |           |            |        |              | FRAME            |                  |         | HARDWARE  | DETAIL |            |       |          | FIRE RATING | REMARKS   |
|              |                               | JUNAUL  | LEAVES | WDTH       | HEIGHT              | THICKNESS | ELEV. TYPE |        | GLAZING      | TYPE.            | MAT.             | GLAZING | SET       | HEAD   | JAMB       | SILL  | T'HOLD   |             |   |
| 200          | EXTERIOR                      |         | 2      | 3'-0"      | 7'-0"               | 1 3/4"    | С          | FRP    | INSUL.       | F2               | ALUM.            |         | 20        | H6     | J10        | ~~    | T1       |             |   |
| 201          | CROSS CORRIDOR                |         | 2      | 3'-0"      | 7'-0"               | 1 3/4"    | С          | SCLCMV | F.G.         | F2               | H.M.             |         | 15A       | H4     | J8         | ~~    | T5       | 20 MIN.     |   |
| 202          | GIRL'S LOCKER ROOM No. 202    | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | A          | SCLCMV |              | F1               | H.M.             |         | 12A       | H4     | J8         | ~~    | T7       | 20 MIN.     |   |
| 203          | COACH'S OFFICE No. 203        | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | С          | SCLCMV | TEMP.        | F1               | H.M.             |         | 05B       | H4     | J8         | ~~    | T7       |             |   |
| 204          | COACH'S TOILET ROOM No. 204   | D       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | А          | SCLCMV |              | F1               | H.M.             |         | 3         | H4     | J8         | ~~    | T6       |             |   |
| 205          | GIRL'S TEAM LOCKER ROOM 205   | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | D          | SCLCMV | TEMP.        | F1               | H.M.             |         | 05A       | H4     | J8         | ~~    | T7       |             |   |
| 206          | GIRL'S TEAM LOCKER ROOM 207   | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | D          | SCLCMV | TEMP.        | F1               | H.M.             |         | 5         | H4     | J8         | ~~    | T7       |             |   |
| 207          | EXTERIOR                      |         | 1      | 3'-0"      | 7'-2"               | 1 3/4"    | Α          | FRP    |              | F1               | ALUM.            |         | 18        | H7     | J11        | ~~    | T1       |             |   |
| 208          | CUSTODIAL CLOSET No. 208      | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | А          | SCLCMV |              | F1               | H.M.             |         | 8         | H4     | J8         | ~~    | T7       | 20 MIN.     |   |
| 209          | BOY'S LOCKER ROOM No. 209     | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | Α          | SCLCMV |              | F1               | H.M.             |         | 12A       | H4     | J8         | ~~    | T7       | 20 MIN.     |   |
| 210          | COACH'S OFFICE No. 210        | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | С          | SCLCMV | TEMP.        | F1               | H.M.             |         | 05B       | H4     | J8         | ~~    | T7       |             |   |
| 211          | COACH'S TOILET ROOM No. 211   | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | А          | SCLCMV |              | F1               | H.M.             |         | 3         | H4     | J8         | ~~    | T6       |             |   |
| 212          | FOOTBALL STORAGE ROOM 212     | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | А          | SCLCMV |              | F1               | H.M.             |         | 8         | H4     | J8         | ~~    | T7       |             |   |
| 213          | BOY'S TEAM LOCKER ROOM 213    | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | D          | SCLCMV | TEMP.        | F1               | H.M.             |         | 05B       | H4     | J8         | ~     | T7       |             |   |
| 214          | BOY'S TEAM LOCKER ROOM 214    | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | D          | SCLCMV | TEMP.        | F1               | H.M.             |         | 5         | H4     | J8         | ~     | T7       |             |   |
| 215          | EXTERIOR                      |         | 1      | 3'-0"      | 7'-2"               | 1 3/4"    | А          | FRP    |              | F1               | ALUM.            |         | 18        | H7     | J11        | ~     | T1       |             |   |
| 216          | EXISTING STAIR                | В       | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | А          | MCMV   |              | E.T.R.           | E.T.R.           |         | 11        | ~~     | ~~         | ~     | Т9       | 45 MIN.     |   |
| 217          | EXTISTING CLOSET              |         | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | А          | SCLCMV |              | E.T.R.           | E.T.R.           |         | 08D       | ~~     | ~~         | ~~    | Т9       | 20 MIN.     |   |
| 218          | FOOTBALL STORAGE ROOM 218     | В       | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | А          | MCMV   |              | E.T.R.           | E.T.R.           |         | 08E       | ~~     | ~~         | ~~    | T7       | 45 MIN.     |   |
| 219          | UNIFORM STORAGE ROOM No. 219  | В       | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | А          | MCMV   |              | E.T.R.           | E.T.R.           |         | 08E       | ~~     | ~~         | ~     | T7       | 45 MIN.     |   |
| 220          | UNIFORM STORAGE ROOM No. 219  | В       | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | А          | MCMV   |              | E.T.R.           | E.T.R.           |         | 08E       | ~~     | ~~         | ~     | T7       | 45 MIN.     |   |
| 221          | GYMNASIUM                     | В       | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | А          | SCLCMV |              | E.T.R.           | E.T.R.           |         | 05D       | ~~     | ~~         | ~~    | T8       | 20 MIN.     |   |
|              | TRAINER'S OFFICE No. 222      | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | С          | SCLCMV | F.G.         | SF-16            | H.M.             | F.L.P.  | 05B       | H4     | J8 _       | /1 ~~ | T7       | 20 MIN.     |   |
| 223          | CORRIDOR                      |         | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | С          | SCLCMV | F.G.         | E.T.R.           | E.T.R.           |         | 05B       | ~~     | ~~         | ~~    | T5       | 20 MIN.     |   |
| 223<br>224   | REFEREE OFFICE No. 223        | В       | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | А          | SCLCMV | F.G.         | E.T.R.           | E.T.R.           |         | 05F       | ~~     | ~~         | ~~    | T7       | 20 MIN.     |   |
| <b>L</b> 225 | TOILET ROOM No. 224           | D       | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | A          | SCLCMV |              | F1               | H.M.             |         | 03B       | H5     | J9         | ~~    | T6       |             |   |
| 226          | COACH'S OFFICE No. 225        | В       | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | D          | SCLCMV | F.G.         | E.T.R.           | E.T.R.           |         | 05D       | ~~     | ~~         | ~~    | T7       | 20 MIN.     |   |
| 227          | GYMNASIUM                     | В       | 1      | 3'-0" V.IF |                     | 1 3/4"    | A          | SCLCMV |              | E.T.R.           | E.T.R.           | K       | 5         | ~~     | ~~         | ~~    | T8       |             |   |
| 228          | COACH'S OFFICE No. 226        | В       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | D          | SCLCMV | F.G.         | E.T.R.           | E.T.R.           |         | 5         | ~~     | ~~         | ~~    | T7       | 20 MIN.     | REVERSE SWING.                                  |
| 229          | WELLNESS CENTER No. 229       | B       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | <br>D      | SCLCMV | F.G.         | F1               | H.M.             | 1/1     | 05A       | H4     | J8         | ~~    | 17       | 20 MIN.     |   |
| 230          | STORAGE ROOM No. 234          | B       | 1      | 3'-0" V.IF |                     | 1 3/4"    | A          | MCMV   |              | E.T.R.           | E.T.R.           |         | 08E       | ~~     | ~~         | ~~    | 17       | 45 MIN.     |   |
| 231          | STORAGE ROOM No. 234          | B       | 1      | 3'-0" V.IF |                     | 1 3/4"    | A          | MCMV   |              | E.T.R.           | E.T.R.           |         | 08E       | ~~     | ~~         | ~~    | <br>T7   | 45 MIN.     |   |
| 232          | GYM EQUIP. STORAGE ROOM 228   | B       | 1      | 3'-0" V.IF |                     | 1 3/4"    | A          | MCMV   |              | E.T.R.           | E.T.R.           |         | 08G       | ~~     | ~~         | ~~    | Т8       | 45 MIN.     |   |
| 233          | EXISTING STAIR                | B       | 1      | 3'-0" V.IF | 7'-6" V.I.F.        | 1 3/4"    | A          | MCMV   |              | E.T.R.           | E.T.R.           |         | 11        | ~~     | ~~         | ~~    | T9       | 45 MIN.     |   |
| 234          | TOILET ROOM No. 230           | D       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | A          | SCLCMV |              | F1               | H.M.             |         | 03A       | H4     | J8         | ~~    | T6       | 20 MIN.     |   |
| 235          | STORAGE ROOM No. 231          | B       | 2      | 3'-0"      | 7'-0"               | 1 3/4"    | A          | MCMV   |              | F2               | H.M.             |         | 09B       | H4     | J8         | ~~    | 10<br>T7 | 45 MIN.     |   |
| 236          | TOILET ROOM No. 232           | D       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | A          | SCLCMV |              | F1               | H.M.             |         | 03A       | H4     | J8         | ~~    | Тб       | 20 MIN.     |   |
| 237          | VISITOR'S LOCKER ROOM No. 233 | B       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | A          | SCLCMV |              | F1               | H.M.             |         | 5         | H4     | J8         | ~~    | 10<br>T7 | 20 MIN.     |   |
| 238          | STORAGE ROOM No. 234          | B       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | A          | MCMV   |              | F1               | H.M.             |         | 08C       | H4     | J8 / J9    | ~~    | T7       | 45 MIN.     |   |
| 239          | STORAGE ROOM No. 235          | B       | 1      | 3'-0"      | 7'-0"               | 1 3/4"    | Δ          | MCMV   |              | F1               | H.M.             |         | 080       | H4     | J8         | ~~    | T7       | 45 MIN.     |   |
| 239          | EXTERIOR                      |         | 2      | 3'-0"      | 7'-0"               | 1 3/4"    | A          | FRP    | INSUL.       | SF-17            | ALUM.            | INSUL.  | 19        | H6     | J15        | ~~    | T1       | 45 10/1111  |   |
| 240          | FITNESS CENTER No. 243        | B       | 2      |            | 7-0<br>7'-0" V.I.F. | 1 3/4"    | C          | SCLCMV | F.G.         | E.T.R.           | E.T.R.           | INSUL.  | 19<br>15B |        | J 15<br>~~ | ~~    | T14      |             | PROVIDE 180 DEGREE SWING AND MAGNETIC HOLD OPEN |
|              | FITNESS CENTER No. 243        | B       | 2      | 3-0 V.IF   |                     | 1 3/4"    | с<br>С     | SCLCMV | F.G.         | E.T.R.<br>E.T.R. | E.T.R.           |         | 15B       | ~~     | ~~         | ~ ~   | T14      |             | PROVIDE 180 DEGREE SWING AND MAGNETIC HOLD OPEN |
| 242          |                               | B       | 2      |            |                     | 1 3/4     | C          |        | F.G.<br>F.G. | E.T.R.<br>E.T.R. | E.T.R.<br>E.T.R. |         |           |        |            |       | T14      |             |   |
| 243          | FITNESS CENTER No. 243        | B       | 2      | 3'-0" V.IF |                     |           |            | SCLCMV |              |                  |                  |         | 15B       | ~~     | ~~         | ~~    |          |             | PROVIDE 180 DEGREE SWING AND MAGNETIC HOLD OPE  |
| 244          | FITNESS CENTER STORAGE RM     | В       | 2      | 3'-0" V.IF |                     | 1 3/4"    | A          |        |              | E.T.R.           | E.T.R.           |         | 09A       | ~~     | ~~         | ~~    | T14      | 45 MIN.     |   |
| 245          | FITNESS CENTER STORAGE RM     | В       | 2      | 3'-0" V.IF | 7'-0" V.I.F.        | 1 3/4"    | Α          | MCMV   |              | E.T.R.           | E.T.R.           |         | 09A       | ~~     | ~~         | ~     | T14      | 45 MIN.     |   |





| AREA    |                   | LOCATION  | FLOORS            |            |                                  | SH SC<br>WALLS |
|---------|-------------------|---|-------------------|------------|----------------------------------|----------------|
| AREA    | ROOM No.          | MAIN EXISTING CORRIDOR                            | FIELD ~~          | ACCENT ~~  | BASE ~~                          | TYPE.          |
|         | 102<br>103        | LARGE GROUP INSTRUCTION CLASSROOM<br>STORAGE ROOM | CPT2<br>SVT1      | ~~         | RCB2<br>RCB1                     |                |
|         | 104<br>105        | STORAGE ROOM<br>STORAGE ROOM                      | CPT2<br>CPT2      | ~~         | RCB1<br>RCB1                     |                |
|         | 106<br>107        | CLASSROOM<br>CLASSROOM                            | LVT1<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
|         | 108<br>109        | NOT USED<br>QUIET STUDY ROOM                      | CPT2              | ~~         | RCB2                             |                |
|         | 110<br>111        | QUIET STUDY ROOM                                  | CPT2<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
|         | 112<br>113        | NOT USED  | CPT2              | ~~         | RCB2                             |                |
|         | 114<br>115        | QUIET STUDY ROOM                                  | CPT2<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
|         | 110<br>116<br>117 | NOT USED  | CPT2              | ~~         | RCB2                             |                |
|         | 117<br>118<br>119 | SENSORY ROOM<br>NOT USED                          | CPT2              | ~~         | RCB2                             |                |
|         | 120<br>121        | QUIET STUDY ROOM                                  | CPT2<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
|         | 122               | NOT USED  | CPT1              | ~~         | RCB1                             |                |
|         | 123<br>124<br>125 | NOT USED<br>COUNSELOR'S OFFICE                    | CPT2              | ~~         | RCB2                             |                |
|         | 123<br>126<br>127 | VAULT<br>STORAGE ROOM                             | LVT1              |            | RCB2                             |                |
|         | 128               | DIRECTOR'S OFFICE                                 | CPT2              | ~~         | RCB2                             |                |
| Α.<br>Α | 129<br>130        | OFFICE<br>OFFICE                                  | CPT2<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
| AREA    | 131<br>132        | OFFICE<br>OFFICE                                  | CPT2<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
| ব       | 133<br>134        | OFFICE<br>OFFICE                                  | CPT2<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
|         | 135<br>136        | OFFICE<br>OFFICE                                  | CPT2<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
|         | 137<br>138        | COLLEGE CAREER CENTER<br>I.T. CLOSET              | LVT1<br>PCONC     | ~~         | RCB2<br>RCB2                     | GY             |
|         | 139<br>140        | NOT USED<br>NOT USED                              |                   |            |                                  |                |
|         | 141<br>142        | READING ROOM NOT USED                             | LVT1              | ~~         | RCB2                             |                |
|         | 143<br>144        | NOT USED  | SVT1              | SVT2       | RCB2                             |                |
|         | 145<br>146        | NOT USED<br>NOT USED                              |                   |            |                                  |                |
|         | 147<br>148        | NOT USED<br>SERVING LINE                          | SVT1              | ~~         | RCB2                             |                |
|         | 149<br>150        | NOT USED<br>NOT USED                              |                   |            |                                  |                |
|         | 151<br>152        | NOT USED<br>NOT USED                              |                   |            |                                  |                |
|         | 153<br>154        | NOT USED<br>NOT USED                              |                   |            |                                  |                |
|         | 155<br>156        | GUIDANCE OFFICE SUITE<br>YEARBOOK OFFICE          | LVT1<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
|         | 157<br>158        | NOT USED<br>SMALL CAFETERIA                       | SVT1              | SVT2       | RCB2                             |                |
|         | 159               | VESTIBULE<br>STUDENT COMMONS AREA                 | CPT1<br>SVT1      | ~~<br>SVT2 | RCB1<br>RCB2                     |                |
|         | 160               | NOT USED  |                   |            |                                  |                |
|         | 161<br>162        | NOT USED<br>NOT USED                              |                   |            |                                  |                |
| ā       | 163<br>164        | CONFERENCE ROOM<br>SECURITY OFFICE                | CPT2<br>CPT2      | ~~         | RCB2<br>RCB2                     |                |
| A'B'    | 165<br>166        | ART DIRECTOR'S OFFICE<br>NOT USED                 | CPT2              | ~~         | RCB2                             |                |
| AREA    | 167<br>168        | ART OFFICE<br>GALLERY                             | CPT2<br>SVT1      | ~~         | RCB2<br>RCB1                     |                |
|         | 168A              | GALLERY CLOSET<br>CORRIDOR                        | SVT1<br>SVT1      | ~~<br>SVT2 | RCB1<br>RCB2                     |                |
|         | ~~                | EXISTING COMMONS                                  | E.T.R.            | ~~         | E.T.R.                           |                |
|         | 201<br>202        | NOT USED<br>GIRL'S LOCKER ROOM                    | EP1               |            | INTEGRAL                         |                |
|         | 202<br>203<br>204 | COACH'S OFFICE<br>COACH'S TOILET ROOM             | EP1<br>PFT1       |            | INTEGRAL<br>SCHLUTER             |                |
|         | 204<br>205<br>206 | GIRL'S TEAM LOCKER ROOM<br>NOT USED               | EP1               |            | INTEGRAL                         |                |
|         | 200<br>207<br>208 | GIRL'S TEAM LOCKER ROOM                           | EP1<br>EP1        |            | INTEGRAL<br>INTEGRAL             |                |
|         | 209<br>210        | BOY'S LOCKER ROOM<br>COACH'S OFFICE               | EP1<br>EP1        |            | INTEGRAL                         |                |
|         | 210               | COACH'S TOILET ROOM<br>FOOTBALL STORAGE ROOM      | PFT1<br>EP1       |            | INTEGRAL<br>SCHLUTER<br>INTEGRAL |                |
|         | 212<br>213<br>214 | BOY'S TEAM LOCKER ROOM<br>BOY'S TEAM LOCKER ROOM  | EP1<br>EP1<br>EP1 |            | INTEGRAL<br>INTEGRAL<br>INTEGRAL |                |
|         | 215               | NOT USED  |                   |            |                                  |                |
|         | 216<br>217        | NOT USED<br>NOT USED                              |                   |            |                                  |                |
|         | 218<br>219        | FOOTBALL STORAGE ROOM<br>UNIFORM STORAGE ROOM     | EP1<br>EP1        |            | INTEGRAL<br>INTEGRAL             |                |
| Ū       | 220<br>221        | NOT USED<br>NOT USED                              |                   |            |                                  |                |
|         | 222               | TRAINER'S OFFICE CORRIDOR DEFENSE OFFICE          | EP1<br>SVT1       | SVT2       | INTEGRAL<br>RCB1                 |                |
| AREA    | 223<br>224        | REFEREE OFFICE<br>TOILET ROOM                     | EP1<br>PFT1       |            | INTEGRAL<br>SCHLUTER             |                |
|         | 225<br>226        | COACH'S OFFICE<br>COACH'S OFFICE                  | EP1<br>EP1        |            | INTEGRAL<br>INTEGRAL             |                |
|         | 227<br>228        | STORAGE ROOM<br>GYM EQUIPMENT STORAGE ROOM        | EP1<br>EP1        |            | INTEGRAL<br>INTEGRAL             |                |
|         | 229<br>230        | WELLNESS CENTER<br>TOILET ROOM                    | EP1<br>PFT1       |            | INTEGRAL<br>SCHLUTER             |                |
|         | 231<br>232        | STORAGE ROOM<br>TOILET ROOM                       | EP1<br>PFT1       |            | INTEGRAL<br>SCHLUTER             |                |
|         | 233<br>234        | VISITOR'S LOCKER ROOM<br>STORAGE ROOM             | EP1<br>EP1        |            | INTEGRAL<br>INTEGRAL             |                |
|         | 235<br>236        | STORAGE ROOM<br>NOT USED                          | EP1               |            | INTEGRAL                         |                |
|         | 230<br>237<br>238 | NOT USED<br>NOT USED<br>NOT USED                  |                   |            |                                  |                |
|         | 238<br>239<br>240 | NOT USED<br>NOT USED<br>NOT USED                  |                   |            |                                  |                |
|         | 240<br>241<br>242 | NOT USED<br>NOT USED<br>NOT USED                  |                   |            |                                  |                |
|         | 242               | FITNESS CENTER                                    | RSF1 / TURF1      |            | RCB3                             | GLAZED         |
|         |                   | LARGE GYM   | WOOD1             |            | RCB4                             |                |

| EA          |                   | LOCATION  | FLOORS<br>FIELD       | ACCENT     | BASE                             | SH SCHEDUL<br>WALLS<br>TYPE. | FINISH                           | CEILINGS                       | REMARKS   | ROOM No.          | VINYL:                |            |
|-------------|-------------------|---|-----------------------|------------|----------------------------------|------------------------------|----------------------------------|--------------------------------|---|-------------------|-----------------------|------------|
|             | 102               | MAIN EXISTING CORRIDOR<br>LARGE GROUP INSTRUCTION CLASSROOM | CPT2                  | ~~         | RCB2                             | GYP.                         | ~~<br>P1/P2                      | ACT3                           |   | ~~<br>102         | TYPE SVT1:            | :          |
|             | 103<br>104        | STORAGE ROOM<br>STORAGE ROOM                                | SVT1<br>CPT2          | ~~         | RCB1<br>RCB1                     | GYP.<br>GYP.                 | P1<br>P1                         |                                |   | 103<br>104        |                       |            |
|             | 105<br>106        | STORAGE ROOM<br>CLASSROOM                                   | CPT2<br>LVT1          | ~~         | RCB1<br>RCB2                     | GYP.<br>GYP.                 | P1<br>P1/P2                      | ACT3                           |   | 105<br>106        | TYPE SVT2:            | :          |
|             | 107<br>108        | CLASSROOM NOT USED  | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT3                           |   | 107<br>108        |                       |            |
|             | 109<br>110        | QUIET STUDY ROOM<br>QUIET STUDY ROOM                        | CPT2<br>CPT2          | ~~         | RCB2<br>RCB2                     | GYP.<br>GYP.                 | P1/P2<br>P1/P2                   | ACT3<br>ACT3                   |   | 109<br>110        | TYPE SVT3:            | :          |
|             | 111<br>112        | I.T. OFFICE NOT USED  | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT3                           |   | 111<br>112        |                       |            |
|             | 113<br>114        | LIBRARY<br>QUIET STUDY ROOM                                 | CPT2<br>CPT2          | ~~         | RCB2<br>RCB2                     | GYP.<br>GYP.                 | P1/P2<br>P1/P2                   | ACT3/ ACT2 / GYP.<br>ACT3      |   | 113<br>114        |                       |            |
| -           | 115<br>116        | QUIET STUDY ROOM<br>NOT USED                                | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT3                           |   | 115<br>116        | TYPE LVT1:            |            |
|             | 117<br>118        | LMS OFFICE<br>SENSORY ROOM                                  | CPT2<br>CPT2          | ~~         | RCB2<br>RCB2                     | GYP.<br>GYP.                 | P1/P2<br>P1/P2                   | ACT3<br>ACT3                   |   | 117<br>118        |                       |            |
|             | 119<br>120        | NOT USED<br>QUIET STUDY ROOM                                | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT3                           |   | 119<br>120        | SHEET VIN'            | IYL:       |
| _           | 121<br>122        | QUIET STUDY ROOM<br>NOT USED                                | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT3                           |   | 121               | TYPE ALTR             | :01:       |
| _           | 123<br>124        | VESTIBULE NOT USED  | CPT1                  | ~~         | RCB1                             | GYP.                         | P1                               | ACT1                           |   | 123               | 5                     |            |
|             |                   | COUNSELOR'S OFFICE  | CPT2<br>LVT1          | ~~         | RCB2<br>RCB2                     | GYP.<br>CMU                  | P1/P2<br>P1                      | ACT1                           |   | 125               |                       |            |
|             | 127<br>128        | STORAGE ROOM<br>DIRECTOR'S OFFICE                           | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT1                           |   | 120<br>127<br>128 | CARPET:<br>TYPE CPT1: | <br>1·     |
| < ∣         | 129<br>130        | OFFICE<br>OFFICE  | CPT2<br>CPT2<br>CPT2  | ~~         | RCB2<br>RCB2                     | GYP.<br>GYP.                 | P1/P2<br>P1/P2                   | ACT1<br>ACT1                   |   | 120<br>129<br>130 |                       | •          |
|             | 131<br>132        | OFFICE<br>OFFICE  | CPT2<br>CPT2<br>CPT2  | ~~         | RCB2<br>RCB2<br>RCB2             | GYP.<br>GYP.                 | P1/P2<br>P1/P2                   | ACT1<br>ACT1                   |   | 130<br>131<br>132 | TYPE CPT2             | ).         |
|             | 133<br>134        | OFFICE<br>OFFICE  | CPT2<br>CPT2<br>CPT2  | ~~         | RCB2<br>RCB2<br>RCB2             | GYP.<br>GYP.                 | P1/P2<br>P1/P2<br>P1/P2          | ACT1<br>ACT1                   |   | 132<br>133<br>134 |                       | •          |
|             | 135               | OFFICE  | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT1                           |   | 135               |                       |            |
| þ           | 136<br>137<br>138 | OFFICE<br>COLLEGE CAREER CENTER                             | CPT2<br>LVT1<br>PCONC | ~~         | RCB2<br>RCB2<br>RCB2             | GYP.                         | P1/P2<br>P1/P2                   | ACT1<br>ACT1                   |   | 136<br>137        | WOOD SPO              | )RIC       |
|             | 138<br>139        | I.T. CLOSET NOT USED  | PCONC                 | ~~         | RCB2                             | GYP. / CMU                   | P1                               | ACT1                           |   | 138<br>139        | TYPE WOOL             |            |
|             |                   | NOT USED READING ROOM NOT USED                              | LVT1                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT3                           |   | 140<br>141        |                       |            |
|             | 142<br>143        | NOT USED<br>NOT USED  |                       | 01/72      |                                  |                              |                                  | 1.075                          |   | 142<br>143        | RUBBER SP             |            |
| F           | 144<br>145        | LARGE CAFETERIA NOT USED                                    | SVT1                  | SVT2       | RCB2                             | GYP.                         | P1/P2/ HPL1                      | ACT3                           |   | 144<br>145        | TYPE RSF1:            | :          |
|             | 146<br>147        | NOT USED<br>NOT USED  |                       |            |                                  |                              |                                  |                                |   | 146<br>147        |                       |            |
|             | 148<br>149        | SERVING LINE NOT USED                                       | SVT1                  | ~~         | RCB2                             | GYP.                         | P1/P2/ HPL1                      | ACT3                           |   | 148<br>149        | TYPE TURF             | -1:        |
|             | 150<br>151        | NOT USED<br>NOT USED  |                       |            |                                  |                              |                                  |                                |   | 150<br>151        |                       |            |
|             | 152<br>153        | NOT USED<br>NOT USED  |                       |            |                                  |                              |                                  |                                |   | 152<br>153        |                       |            |
|             | 154<br>155        | NOT USED<br>GUIDANCE OFFICE SUITE                           | LVT1                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT1                           |   | 154<br>155        | RUBBER:               |            |
|             | 156<br>157        | YEARBOOK OFFICE<br>NOT USED                                 | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT1                           |   | 156<br>157        | TYPE RUB1             | 1:         |
|             | 158<br>159        | SMALL CAFETERIA<br>VESTIBULE                                | SVT1<br>CPT1          | SVT2<br>~~ | RCB2<br>RCB1                     | GYP.<br>GYP.                 | P1/P2/ HPL1<br>P1                | ACT3<br>ACT1                   |   | 158<br>159        |                       |            |
|             | ~~                | STUDENT COMMONS AREA  | SVT1                  | SVT2       | RCB2                             | GYP.                         | P1/P2/ HPL1                      | ACT1 / ACT2 / GYP. /           |   | ~~                | 5                     |            |
|             | 160<br>161        | NOT USED<br>NOT USED  |                       |            |                                  |                              |                                  |                                |   | 160<br>161        | TYPE RUB2             | :          |
|             | 162<br>163        | NOT USED<br>CONFERENCE ROOM                                 | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT1                           |   | 162<br>163        |                       |            |
| ב           | 164<br>165        | SECURITY OFFICE<br>ART DIRECTOR'S OFFICE                    | CPT2<br>CPT2          | ~~         | RCB2<br>RCB2                     | GYP.<br>GYP.                 | P1/P2<br>P1/P2                   | ACT1<br>ACT1                   |   | 164<br>165        | CONCRETE              |            |
|             | 166<br>167        | ART OFFICE  | CPT2                  | ~~         | RCB2                             | GYP.                         | P1/P2                            | ACT1                           |   | 166<br>167        | TYPE PCON             | 1C.:       |
|             | 168<br>168A       | GALLERY<br>GALLERY CLOSET                                   | SVT1<br>SVT1          | ~~         | RCB1<br>RCB1                     | GYP.<br>GYP.                 | P1/P2<br>P1                      | OPEN/ PAINTED<br>OPEN/ PAINTED |   | 168<br>168A       | EPOXY:                |            |
|             | ~~                | CORRIDOR<br>EXISTING COMMONS                                | SVT1<br>E.T.R.        | SVT2<br>~~ | RCB2<br>E.T.R.                   | GYP.                         | P1 / P2 / HPL1<br>P1 / P2 / HPL1 | ACT1 / GYP.                    | ALTRO-1 ON RAMP ONLY<br>WRAP ALL COLUMNS WITH HPL1 TO 6'A.F.F PAINT ABOVE | ~~                | TYPE EP1:             |            |
| _           | 201               | NOT USED  |                       |            |                                  |                              |                                  |                                |   | 201               |                       |            |
|             | 201<br>202<br>203 | GIRL'S LOCKER ROOM<br>COACH'S OFFICE                        | EP1<br>EP1            |            | INTEGRAL<br>INTEGRAL             | CMU<br>CMU                   | P1/P3<br>P1                      | ACT4/GYP.<br>ACT1              |   | 201<br>202<br>203 | }                     |            |
|             | 203<br>204<br>205 | COACH'S TOILET ROOM<br>GIRL'S TEAM LOCKER ROOM              | PFT1<br>EP1           |            | SCHLUTER<br>INTEGRAL             | CMU<br>CMU<br>CMU            | CWT1/CWT2<br>P1                  | ACT5<br>ACT5<br>ACT4           |   | 203<br>204<br>205 | }                     |            |
|             | 206               | NOT USED  |                       |            |                                  |                              | P1<br>                           |                                |   | 206               | 5                     |            |
|             | 207<br>208<br>200 | GIRL'S TEAM LOCKER ROOM<br>CUSTODIAL CLOSET                 | EP1<br>EP1            |            | INTEGRAL<br>INTEGRAL             | CMU<br>CMU                   | P1                               | ACT4<br>ACT6                   |   | 207<br>208        | PAINT                 | ГТ         |
|             | 210               | BOY'S LOCKER ROOM<br>COACH'S OFFICE                         | EP1<br>EP1            |            | INTEGRAL<br>INTEGRAL             | CMU<br>CMU                   | P1/P3<br>P1                      | ACT4<br>ACT1                   |   | 209<br>210        | TYPE P1:              |            |
|             | 212               | COACH'S TOILET ROOM<br>FOOTBALL STORAGE ROOM                | PFT1<br>EP1           |            | SCHLUTER<br>INTEGRAL             | CMU<br>CMU                   | CWT1/CWT2<br>P1                  | ACT5<br>ACT6                   |   | 211<br>212        |                       |            |
|             | 214               | BOY'S TEAM LOCKER ROOM<br>BOY'S TEAM LOCKER ROOM            | EP1<br>EP1            |            | INTEGRAL<br>INTEGRAL             | CMU<br>CMU                   | P1<br>P1                         | ACT4<br>ACT4                   |   | 213<br>214        | TYPE P2:              |            |
|             | 215<br>216        | NOT USED<br>NOT USED  |                       |            |                                  |                              |                                  |                                |   | 215<br>216        |                       |            |
|             | 217<br>218        | NOT USED<br>FOOTBALL STORAGE ROOM                           | EP1                   |            | INTEGRAL                         | CMU                          | P1                               | ACT6                           |   | 217<br>218        |                       |            |
|             | 219<br>220        | UNIFORM STORAGE ROOM<br>NOT USED                            | EP1                   |            | INTEGRAL                         | CMU                          | P1                               | ACT6                           |   | 219<br>220        | TYPE P3:              |            |
| <b>&gt;</b> | 221<br>222        | NOT USED<br>TRAINER'S OFFICE                                | EP1                   |            | INTEGRAL                         | CMU                          | P1/P3                            | ACT1                           |   | 221<br>222        |                       |            |
|             | ~~<br>223         | CORRIDOR<br>REFEREE OFFICE                                  | SVT1<br>EP1           | SVT2       | RCB1<br>INTEGRAL                 | CMU<br>CMU                   | P1/P3<br>P1                      | ACT1<br>ACT1                   |   | 223               | TYPE P4:              |            |
|             | 224<br>225        | TOILET ROOM<br>COACH'S OFFICE                               | PFT1<br>EP1           |            | SCHLUTER<br>INTEGRAL             | CMU<br>CMU                   | CWT1/CWT2<br>P1                  | ACT5<br>ACT1                   |   | 224<br>225        | }                     |            |
|             | 226<br>227        | COACH'S OFFICE<br>STORAGE ROOM                              | EP1<br>EP1            |            | INTEGRAL<br>INTEGRAL             | CMU<br>CMU<br>CMU            | P1<br>P1                         | ACT1<br>ACT6                   |   | 226<br>227        | TYPE P5:              |            |
| F           | 228<br>229        | GYM EQUIPMENT STORAGE ROOM<br>WELLNESS CENTER               | EP1<br>EP1            |            | INTEGRAL<br>INTEGRAL<br>INTEGRAL | CMU<br>CMU<br>CMU            | P1<br>P1/P3                      | ACT6<br>ACT1                   |   | 228<br>229        | }                     |            |
|             | 230<br>231        | TOILET ROOM<br>STORAGE ROOM                                 | PFT1<br>EP1           |            | INTEGRAL<br>SCHLUTER<br>INTEGRAL | CMU<br>CMU<br>CMU            | CWT1/CWT2<br>P1                  | ACT5<br>ACT6                   |   | 229<br>230<br>231 | TYPE P6:              |            |
|             | 232               | TOILET ROOM   | PFT1                  |            | SCHLUTER                         | CMU                          | CWT1/CWT2                        | ACT5                           |   | 232               |                       | <b>~</b> - |
|             | 233<br>234        | VISITOR'S LOCKER ROOM<br>STORAGE ROOM                       | EP1<br>EP1            |            | INTEGRAL<br>INTEGRAL             | CMU<br>CMU                   | P1<br>P1                         | ACT4<br>ACT6                   |   | 233<br>234        | TYPE P7:              |            |
|             | 235<br>236        | STORAGE ROOM NOT USED                                       | EP1                   |            | INTEGRAL                         | CMU                          | P1                               | ACT6                           |   | 235<br>236        | 321                   |            |
|             | 237<br>238        | NOT USED<br>NOT USED  |                       |            |                                  |                              |                                  |                                |   | 237<br>238        | TYPE P8:              |            |
|             | 239<br>240        | NOT USED<br>NOT USED  |                       |            |                                  |                              |                                  |                                |   | 239<br>240        | { }                   |            |
|             | 241<br>242        | NOT USED<br>NOT USED  |                       |            |                                  |                              |                                  |                                |   | 241<br>242        | TYPE P9:              |            |
|             | 243               | FITNESS CENTER<br>LARGE GYM                                 | RSF1 / TURF1<br>WOOD1 |            | RCB3<br>RCB4                     | GLAZED BLOCK/CMU<br>CMU      | P1/P2/P3<br>~~                   | OPEN/PAINT P11                 | SEE GLAZED BLOCK PREP NOTES. PAINT EXPOSED DUCT WORK P12                  | 243               | <u>}</u>              |            |
|             | ~~                |   |                       |            |                                  |                              |                                  |                                |   |                   | · · ·                 |            |

mm SOLID VINYL TILE AS MANUFACTURED BY PATCRAF NUMIX A FLECK

HOD: MONOLITHIC - GLUE DOWN , CAFETERIAS, GALLERY) mm SOLID VINYL TILE AS MANUFACTURED BY PATCRAFT

A SOLID HOD: MONOLITHIC - GLUE DOWN

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, CAFETERIAS, GALLERY) mm SOLID VINYL TILE AS MANUFACTURED BY PATCRAFT : NUMIX

HOD: MONOLITHIC - GLUE DOWN , CAFETERIAS, GALLERY)

JXURY VINYL TILE AS MANUFACTURED BY MANNINGTON L FLOORING : SPACIA- WOOD, 20 MIL NG MAPLE N: GLUE DOWN, ASHLAR

Y SLIP RESISTANT SHEET FLOORING AS MANUFACTURED : ALTRO RELIANCE 25

GE D2515 HOD: GLUE DOWN

PET TILE AS MANUFACTURED BY INTERFACE COLLECTION, SR899, MONOLITHIC INSTALLATION E SELECTED BY ARCHITECT

PET TILE AS MANUFACTURED BY MOHAWK GROUP : WILD HORIZON

SCARLET CREEPER STALLATION DANCE)

ON III FLOOR SYSTEM AS MANUFACTURED BY CONNOR RCHITECT APPROVED EQUAL.

W X CUSTOM LENGTH SQUARE EDGE ROLL RUBBER TIONAL/SPORTS FLOORING AS MANUFACTURED BY /E 14.5mm (2.5mm VCR + 12mm VCR BASE)

PRESS CS104 ETER SCHMITT (516)532-8952

AL TURF AS MANUFACTURED BY CENTAUR USTOM LENGTH ROLLS 5MM RUBBER BASE LAYER + 12MM TURF LAYER

AID LINES AND LOGO ETER SCHMITT (516)532-8952

NON SLIP RUBBER TREAD WITH INTEGRATED RISER VIDTH) : COLÓR SPLASH MMERED

ELECTED BY ARCHITECT NON SLIP COLORSPLASH RUBBER TILE

'X½" ELECTED BY ARCHITECT

PEC SECTION 09900. INISH: TO BE SELECTED BY ARCHITECT TO HEAVY DUTY)

100% SOLIDS, DECORATIVE VINYL CHIP EPOXY STEM AS MANUFACTURED BY DURAFLEX OR EQUAL. CHIP OM MULTICOLOR PREBLEND BY ARCHITECT-

TEGRAL COVE BASE ONLY WHERE NOTED.

ERWIN WILLIAMS: HELL ENAMEL FINISH E SELECTED BY ARCHITECT & GENERAL)

ERWIN WILLIAMS: HELL ENAMEL FINISH E SELECTED BY ARCHITECT

ERWIN WILLIAMS: HELL ENAMEL FINISH E SELECTED BY ARCHITECT

RWIN WILLIAMS: HELL ENAMEL FINISH E SELECTED BY ARCHITECT

ed for library) ERWIN WILLIAMS: GLOSS ENAMEL FINISH

E SELECTED BY ARCHITECT ERWIN WILLIAMS:

SEMI-GLOSS ENAMEL E SELECTED BY ARCHITECT RAMES) ERWIN WILLIAMS: ENAMEL FINISH

E SELECTED BY ARCHITECT FIT AND CEILINGS) ERWIN WILLIAMS:

ENAMEL FINISH FFIT AND CEILINGS)

ERWIN WILLIAMS: ACRYLIC DRYFALL FLAT ELECTED BY ARCH K & STRUCTURE AT NEW STUDENT COMMONS)

ERWIN WILLIAMS: ACRYLIC DRYFALL FLAT ELECTED BY ARCH K & STRUCTURE AT GALLERY)

ERWIN WILLIAMS: E ACRYLIC DRYFALL FLAT ELECTED BY ARCH RUCTURE AT SMALL FITNESS CENTER)

TYPE P12:

PAINT BY SHERWIN WILLIAMS: WATERBONE ACRYLIC DRYFALL FLAT COLOR: AS SELECTED BY ARCH (EXPOSED DUCT WORK AT SMALL FITNESS CENTER)

| ABBREVIATIONS             |                     |
|---------------------------|---------------------|
| ACT                       | VET                 |
| TILE                      | LVT LUXURY VINYL .T |
| PFT PORCELIAN FLOOR TILE  | GYP                 |
| CMU CONCRETE MASONRY UNIT | RUB                 |
| CTCB                      | RCB                 |
| CWT                       | TERR                |
| POXY                      | VCT                 |
|                           |                     |

# **FINISH NOTES**

- ALL FINISHED TYPES (STYLE/COLOR/PATTERN) SHALL BE OFF THE STANDARD OF QUALITY INDICATED BY THE PROJECT MANUAL. FINAL STYLE / COLOR / PATTERN TO BE SELECTED BY ARCHITECT.
- ALL C.M.U. SURFACES SHALL BE PRIMED WITH INTERIOR & EXTERIOR BLOCK FILLER M88 INDUSTRIAL MAINTENANCE BY BENJAMIN MOORE PRIOR TO FINISH PAINT APPLICATION.
- ALL NEW BRICK WALLS ARE TO REMAIN NATURAL, CLEANED AND SEALED, IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- CONTRACTOR SHALL PREP, PRIME AND PAINT ALL SHEET METAL PIPE ENCLOSURES (INSTALLED BY M.C.) COLOR AS SELECTED BY ARCHITECT.
- BEFORE PAINTING, CONCRETE SURFACES MUST CURE 30 DAYS, BLOCK AND PLASTER SURFACES MUST CURE FOR 30 DAYS. REFER TO REFLECTED CEILING PLANS AND FINISH FLOOR PLANS FOR ADDITIONAL INFORMATION.
- ALL INTERIOR FINISHES IN CORRIDOR SHALL BE 'CLASS A' RATED.
- PATCH, REPAIR AND FINISH CEILING, WALLS, AND FLOOR AT POINTS OF DEMOLITION TO MATCH EXISTING. EXISTING FINISHES TO REMAIN.
- SHOULD ANY FINISH MATERIALS BE DISCONTINUED BY MANUFACTURER, THE CONTRACTOR MUST REPLACE WITH CLOSEST MATCH AT NO ADDITIONAL COST, AND SUBMIT TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- . THE GENERAL CONTRACTOR IS SPECIFICALLY NOTIFIED THAT ALL FLOOR AREAS WILL RECEIVE SELF-LEVELING UNDERLAYMENT MINIMUM %" THICK. THICKNESS WILL VARY DUE TO VARYING FLOOR SLAB ELEVATIONS FROM ROOM TO ROOM, AREAS WHERE WALLS AND CHASES ARE REMOVED, CERAMIC TILE REMOVAL, FLOORING ABATEMENT, GRINDING OF HIGH SPOTS, ETC. G.C. WILL CLOSELY REVIEW AND BID ACCORDINGLY TO ACHIEVE A CONSISTENT FLAT AND LEVEL FLOOR AT NO ADDITIONAL COST TO THE OWNER.
- HOLLOW METAL DOOR FRAMES, SIDE LIGHTS AND WINDOW FRAMES SHALL BE PREPPED AND PAINTED AS PER PAINTING SPECIFICATION 099000. (ALL COLORS AS SELECTED BY ARCHITECT.)
- 2. CONTRACTOR SHALL PREP, PRIME AND PAINT SHEETROCK CEILINGS UNLESS OTHERWISE NOTED.
- . REFER TO FINISH FLOOR PLANS FOR TILE PATTERNS THE TILE PATTERNS MAY NOT REPRESENT THE FINAL PATTERNS TO BE DESIGNED, INSTALLED AND TURNED OVER TO OWNER. THE BID SHALL BE BASED ON THE TILE MIX AND PERCENTAGES AS INDICATED IN THE PROJECT MANUAL.
- 4. ALL FINISHES SHALL BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR UNLESS OTHERWISE NOTED.
- 5. REFER TO REFLECTED CEILING PLANS, TOILET ROOM TILE PLANS AND FINISHED FLOOR PLANS FOR ADDITIONAL FINISH INFORMATION. 5. NEW TOILET AND URINAL PARTITIONS SHALL BE 1" THICK HDPE AS MANUFACTURED BY SCRANTON, ASI GLOBAL PARTITIONS, OR APPROVED EQUAL. (COLOR AND
- FINISH TO BE SELECTED BY ARCHITECT). 7. GENERAL CONTRACTOR SHALL PERFORM A BOND TEST IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS PRIOR TO INSTALLATION OF NEW FLOORING.
- 18. PROVIDE NEW BEVELED MARBLE SADDLE AT ALL TOILET ROOM DOORS TO MEET ADA REQUIREMENTS.
- 9. GENERAL CONTRACTOR TO PROVIDE ALL REQUIRED SADDLES, THRESHOLDS, REDUCER STRIPS, TRANSITION STRIPS AND OR FLAT PLATES AS REQUIRED TO PROVIDE. A FINISHED, ADA COMPLIANT TRANSITION AT NUMEROUS FLOORING TRANSITIONS AND TERMINATIONS. PROVIDE CUTS AND COLOR OPTIONS FOR ARCHITECTS REVIEW AND APPROVAL.

# **GYPSUM BOARD FINISHING**

- GENERAL CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF GYPSUM ASSOCIATION TRADE PUBLICATION GA-214-96 'RECOMMENDED LEVELS OF GYPSUM BOARD FINISH' AND SPECIFICATION SECTION 092900.
- A. LEVEL 0 FOR USE IN TEMPORARY CONSTRUCTION, OR WHERE FINAL FINISH/DECORATION HAS NOT BEEN DETERMINED.
- LEVEL 1 FOR USE AT PLENUM AREAS, ABOVE CEILING, IN ATTICS & IN AREAS WHERE THE ASSEMBLY WOULD GENERALLY BE CONCEALED OR IN BUILDING CORRIDORS & OTHER AREAS NOT NORMALLY OPEN TO THE PUBLIC VIEW.
- LEVEL 2 FOR USE AT LOCATIONS WHERE WATER-RESISTANT GYPSUM BACKING BOARD IS INSTALLED AS A TILE SUBSTRATE AND FOR USE IN GARAGES, WAREHOUSE STORAGE OR OTHER SIMILAR AREAS WHERE SURFACE APPEARANCES ARE NOT OF PRIMARY CONCERN.
- LEVEL 3 FOR USE IN APPEARANCE AREAS THAT ARE TO RECEIVE HEAVY OR MEDIUM TEXTURE FINISHES BEFORE FINAL PAINTING, OR WHERE HEAVY GRADE WALL COVERINGS ARE TO BE APPLIED AS THE FINAL DECORATION.
- LEVEL 4 FOR USE WHERE LIGHT TEXTURE OR WALL COVERINGS ARE TO BE APPLIED, OR WHERE ECONOMY IS OF THE ARCHITECT'S CONCERN.
- LEVEL 5 FOR USE WHERE GLOSS, SEMI-GLOSS, ENAMEL OR NON-TEXTURED FLAT PAINTS ARE SPECIFIED, OR WHERE SEVERE LIGHTING CONDITIONS OCCUR (IN THE OPTION OF THE ARCHITECT.)

|                       | LAIN/CERAMIC TILE TYPES   | R        | RUBBER                | R BASE TYPES  |
|-----------------------|---|----------|-----------------------|---|
| FLOORS:<br>TYPE PFT1: | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)  |          | TYPE RCB1:            | 4" RUBBER COVE BASE BY "JOHNSONITE"<br>COLOR: TO BE SELECTED BY ARCHITECT<br>(CORRIDORS)<br>4" RUBBER COVE BASE BY "JOHNSONITE"           |
| ALLS:                 | · · · · · · · · · · · · · · · · · · ·   | - 3      | ITFE RODZ.            | COLOR: TO BE SELECTED BY ARCHITECT<br>(GENERAL)   |
| PE CWT1:              | 8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR<br>COLOR: MATTE BISCUIT<br>(BATHROOM WALL FIELD TILE)  |          | TYPE RCB3:            | 4" RUBBER COVE BASE BY "JOHNSONITE"<br>COLOR: TO BE SELECTED BY ARCHITECT<br>(SMALL FITNESS ROOM)   |
| CWT2:                 | 4"X12" CERAMIC WALL TILE BY FIRECLAY TILE<br>COLLECTION: ORIGINAL CERAMIC<br>COLOR: TOMATO RED<br>(BATHROOM WALL ACCENT TILE)   |          | TYPE RCB4:            | 4" HEAVY DUTY RUBBER VENTED COVE BASE BY<br>"JOHNSONITE" WITH PRE-MOLDEDED OUTSIDE C<br>COLOR: TO BE SELECTED BY ARCHITECT<br>(LARGE GYM) |
| SCHLUTER TRA          | NSITIONS:   | <u> </u> |                       |   |
| PE SCH1:<br>PE SCH2:  | PROVIDE SCHLUTER DILEX-AHK SANITARY COVE TRANSITION,<br>INCLUDE ALL INSIDE CORNERS, CONNECTORS AND END CAPS AS<br>REQUIRED BY LAYOUT. ANODIZED ALUMINUM FINISH<br>(COVE BASE)<br>PROVIDE SCHLUTER FINEC AT OUTSIDE CORNERS AS REQUIRED BY<br>LAYOUT. ANODIZED ALUMINUM FINISH |          | WS1: DRAPEF<br>PHIFER | W TREATMENTS<br>CLUTCH OPERATED FLEXSHADE,<br>SHEARWEAVE PW 2500, 1% OPEN<br>AS SELECTED BY ARCHITECT                                     |
| ROUT                  | TYPES   |          | NOTED                 | TERIOR WINDOWS IN WORK SCOPE- INTERIOR LOCA<br>ON FINISH PLANS)<br>TREATMENTS SHALL NOT BE REQUIRED AT THE<br>DCATIONS:                   |
| LOOR GROUT            | AS MANUFACTURED BY LATICRETE OR MAPEI, SANDED, COLOR: TO BE SELECTED BY ARCHITECT   |          |                       | TAIRS, BATHROOMS, BOILER ROOMS, STORAGE.  |
| ALL GROUT:            | AS MANUFACTURED BY LATICRETE OR MAPEI, UNSANDED,<br>COLOR: TO BE SELECTED BY ARCHITECT  |          |                       | R CLUTCH OPERATED FLEXSHADE,<br>SHEARWEAVE SW 7100 BLACKOUT FABRIC  |

AS PER SPECIFICATION SECTION, SCRANTON OR ASI GLOBAL PARTITIONS SHALL BE PROVIDED - CLASS B MIN OR NFPA RATED. COLOR AS SELECTED BY ARCHITECT FROM FULL RANGE OF COLORS.

TYPE BOYS: COLOR: SHALE TYPE GIRLS: COLOR: SHALE

ACT

PFT:

CPT:

RUBBER:

PAINT:

 $\cdots$ 

# ATTIC STOCK INFORMATION

1. LIGHTLY SAND/ABRADE USING 80 OR 100 GRIT 2. PERFORM D3359 X-CUT TAPE TEST OR CROSS-HATCH TAPE TEST 3. PRIME WITH SW EXTREME BOND INTERIOR-EXTERIOR BONDING PRIMER (1 COAT) 4. SW PRO INDUSTRIAL PRE-CATALIZED WATERBADED EPOXY K46 (1 COAT) 5. SW PRO IDUSTIAL PRE-CATALIZED WATERVASED EPOXY K46 (1 COAT)

WORK BY G.C. UNDER BASE BID. PROVIDE INSIDE/OUTSIDE CORNER TRIM,

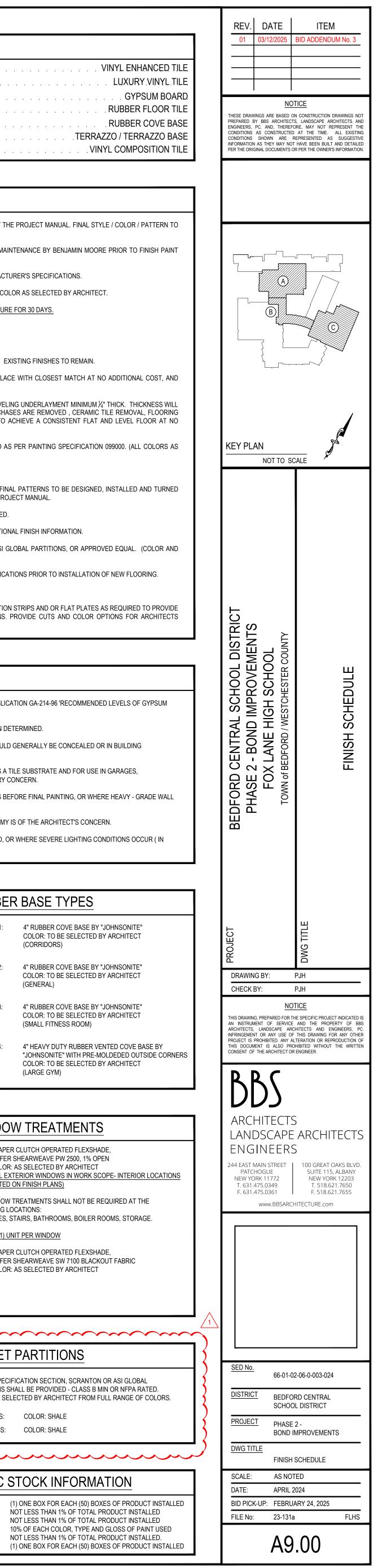
TOP AND BASE TERMINATION TRIM, AND AT ALL INTERSECTION REVEALS-

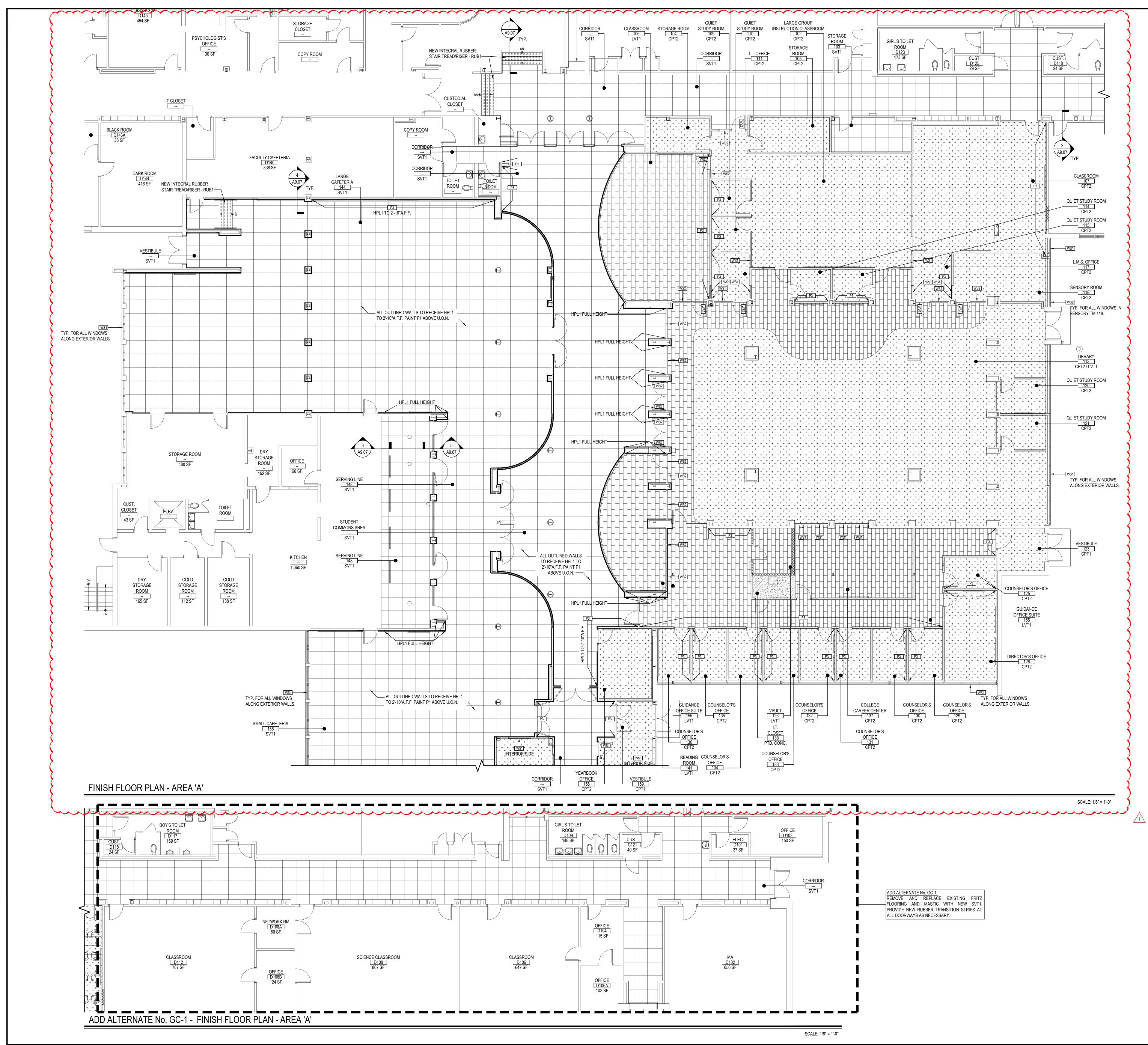
\*G.C. SHALL FIELD MEASURE AND PROVIDE SHOP DRAWINGS FOR FINAL

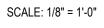
BLACK FINISH.

APPROVAL.

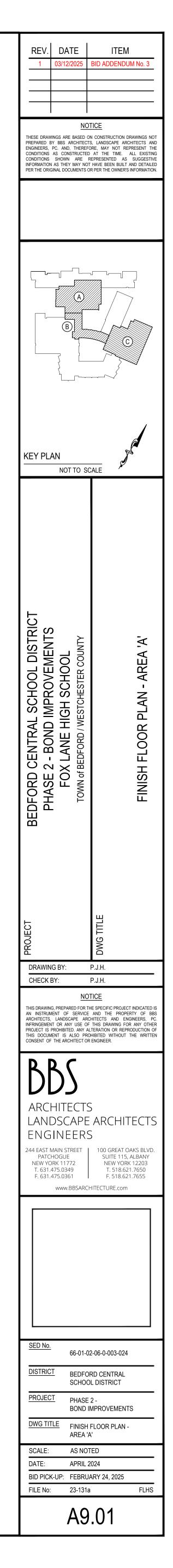
GLAZED BLOCK PREP NOTES

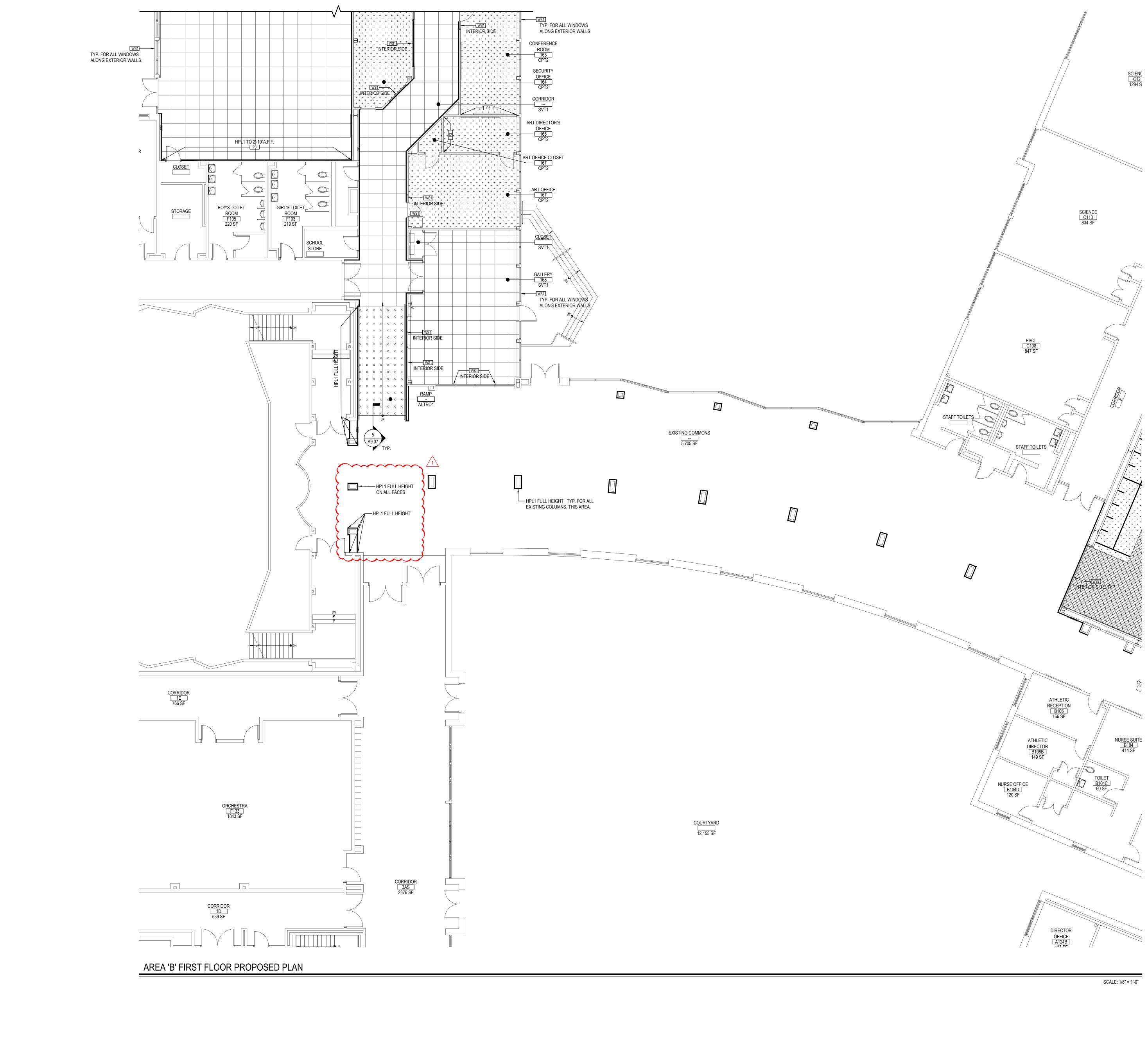




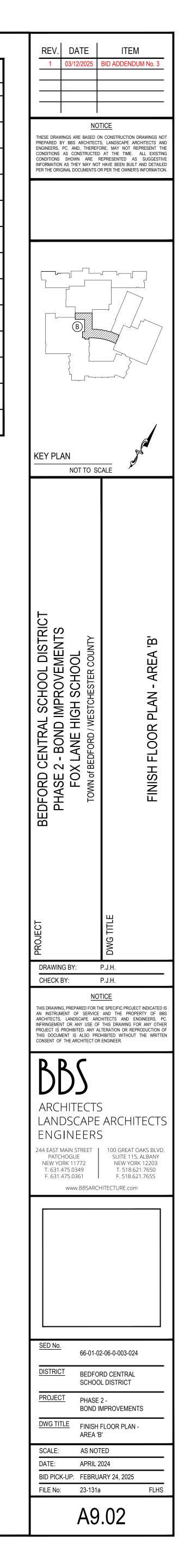


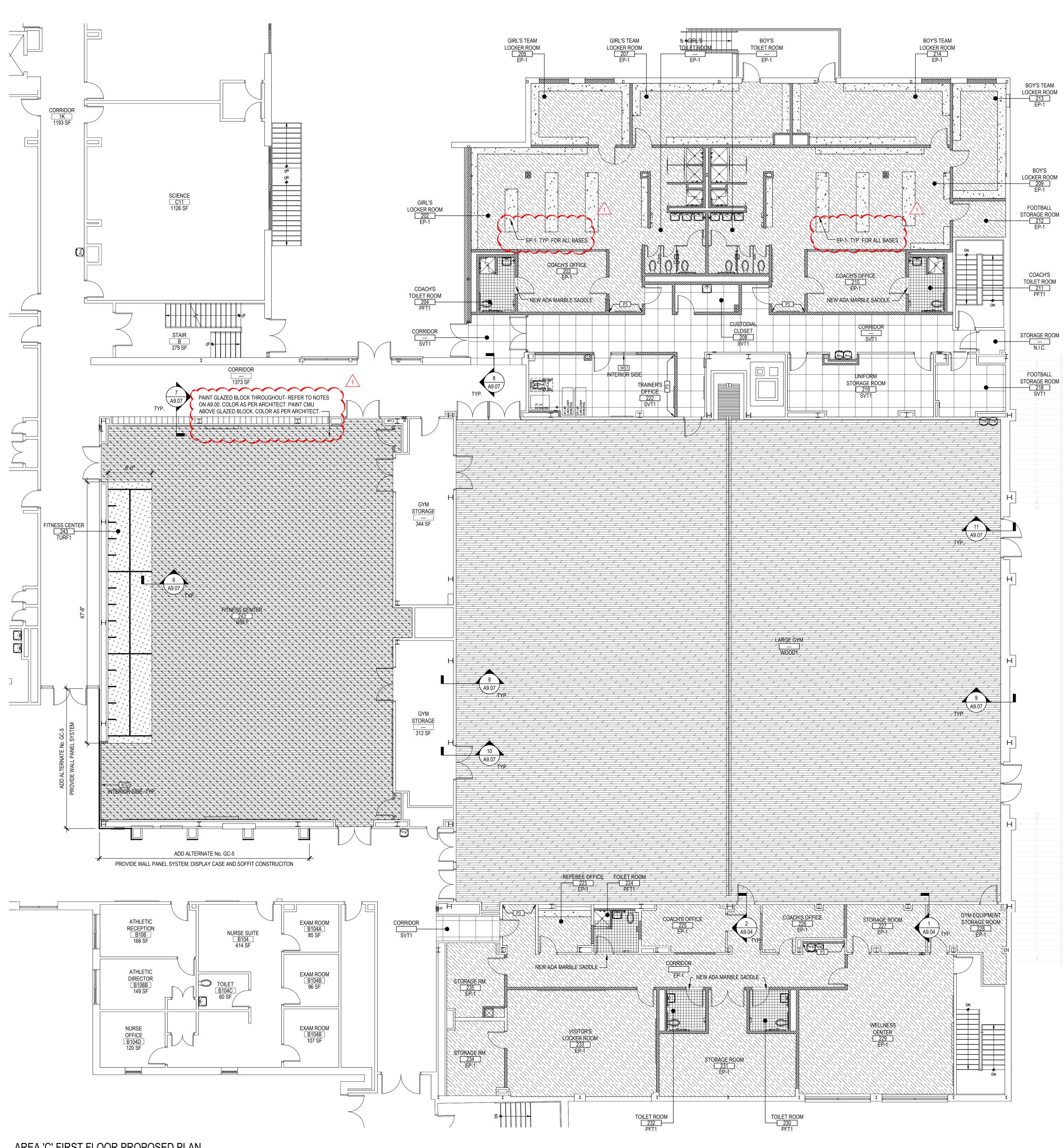
| SYMBOL  | DESCRIPTION                         |  |  |  |  |  |  |
|---|-------------------------------------|--|--|--|--|--|--|
|   | CARPET TILE                         |  |  |  |  |  |  |
|   | SOLID VINYL TILE                    |  |  |  |  |  |  |
|   | LUXURY VINYL TILE                   |  |  |  |  |  |  |
| x         x | RUBBER STAIR TREAD                  |  |  |  |  |  |  |
|   | PORCELAIN FLOOR TILE                |  |  |  |  |  |  |
| De D  | PAINTED CONCRETE                    |  |  |  |  |  |  |
|   | EPOXY BROADCAST                     |  |  |  |  |  |  |
|   | WOOD                                |  |  |  |  |  |  |
| 11 11 11 11 11<br>11 11 11 11 11<br>11 11 11 1  | RUBBER SPORTS FLOORING              |  |  |  |  |  |  |
| * * * *<br>* * *<br>* * *   | TURF FLOORING                       |  |  |  |  |  |  |
|   | LOCATION OF WALL PANEL INSTALLATION |  |  |  |  |  |  |





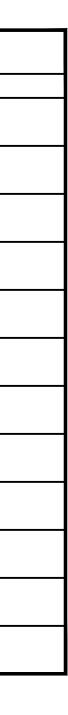
| SYMBOL  | S LEGEND                            |  |  |  |  |
|---|-------------------------------------|--|--|--|--|
| SYMBOL  | DESCRIPTION                         |  |  |  |  |
| * * * * * * * * * * * * * * * * * * *   | CARPET TILE                         |  |  |  |  |
|   | SOLID VINYL TILE                    |  |  |  |  |
|   | LUXURY VINYL TILE                   |  |  |  |  |
|   | RUBBER STAIR TREAD                  |  |  |  |  |
|   | PORCELAIN FLOOR TILE                |  |  |  |  |
|   | PAINTED CONCRETE                    |  |  |  |  |
|   | EPOXY BROADCAST                     |  |  |  |  |
|   | WOOD                                |  |  |  |  |
| 11 - 11 - 11 - 11<br>- 11 - 11 - 11 - 11<br>- 11 - 11 - 11 - 11   | RUBBER SPORTS FLOORING              |  |  |  |  |
| +         +         +         +           +         +         +         +           +         +         +         +           +         +         +         +           +         +         +         + | TURF FLOORING                       |  |  |  |  |
|   | SHEET VINYL- ALTRO1                 |  |  |  |  |
|   | LOCATION OF WALL PANEL INSTALLATION |  |  |  |  |
|   |                                     |  |  |  |  |

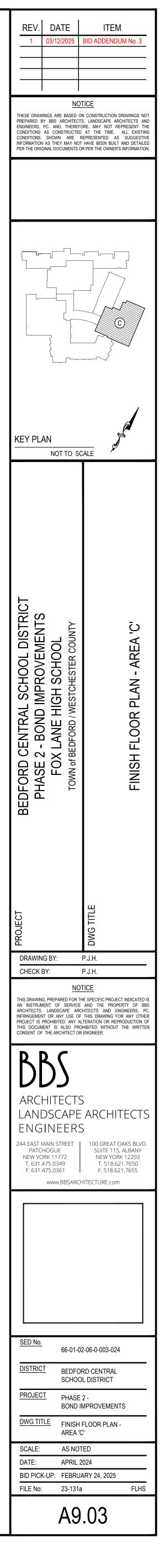


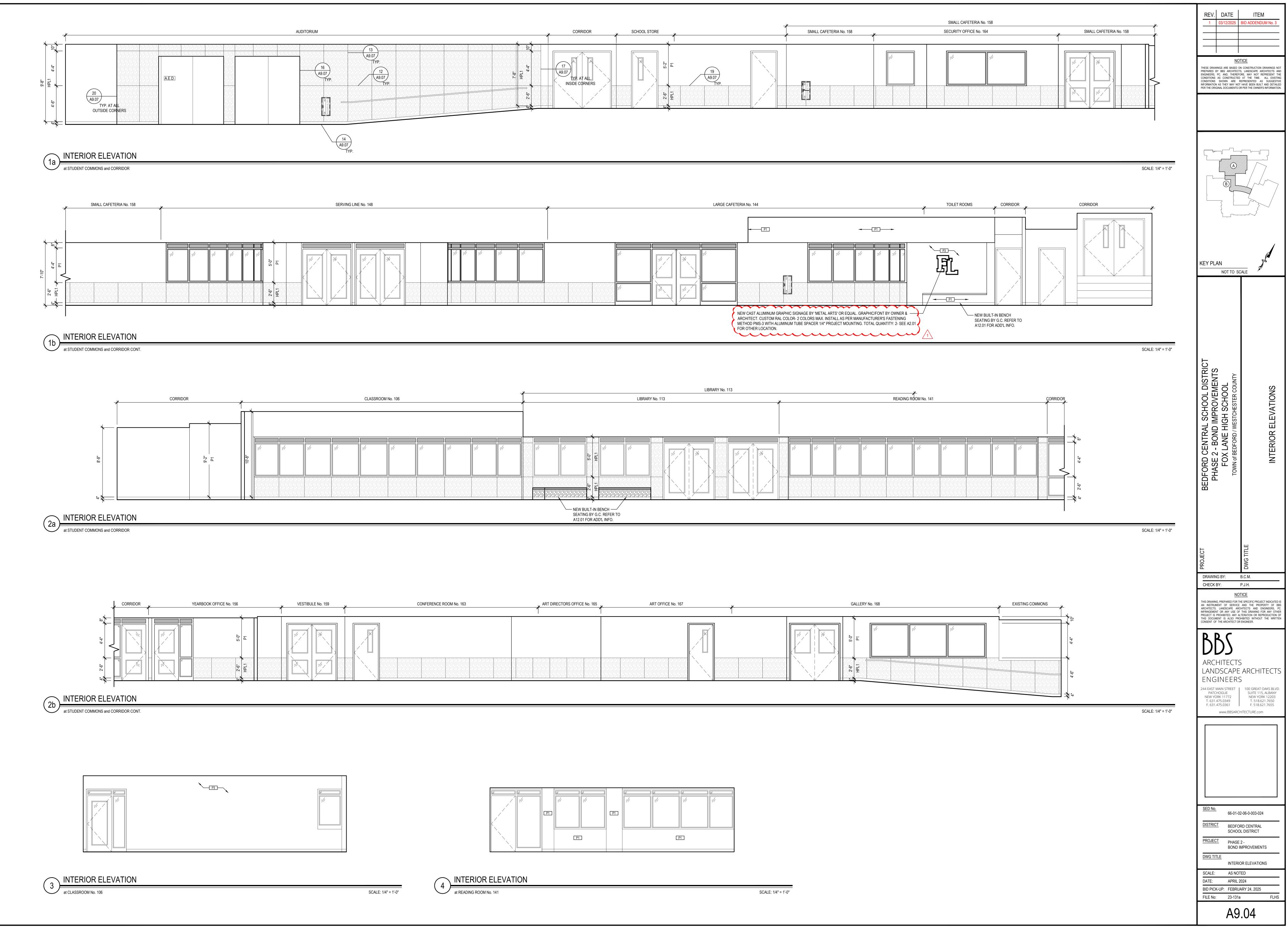


AREA 'C' FIRST FLOOR PROPOSED PLAN

| SYMBOL  | S LEGEND                            |
|---|-------------------------------------|
| SYMBOL  | DESCRIPTION                         |
|   | CARPET TILE                         |
|   | SOLID VINYL TILE                    |
|   | LUXURY VINYL TILE                   |
|   | RUBBER STAIR TREAD                  |
|   | PORCELAIN FLOOR TILE                |
| D. D  | PAINTED CONCRETE                    |
|   | EPOXY BROADCAST                     |
|   | WOOD                                |
| H H H<br>H H H<br>H H H   | RUBBER SPORTS FLOORING              |
| +         +         +           +         +         +           +         +         +           +         +         + | TURF FLOORING                       |
|   | LOCATION OF WALL PANEL INSTALLATION |
|   |                                     |



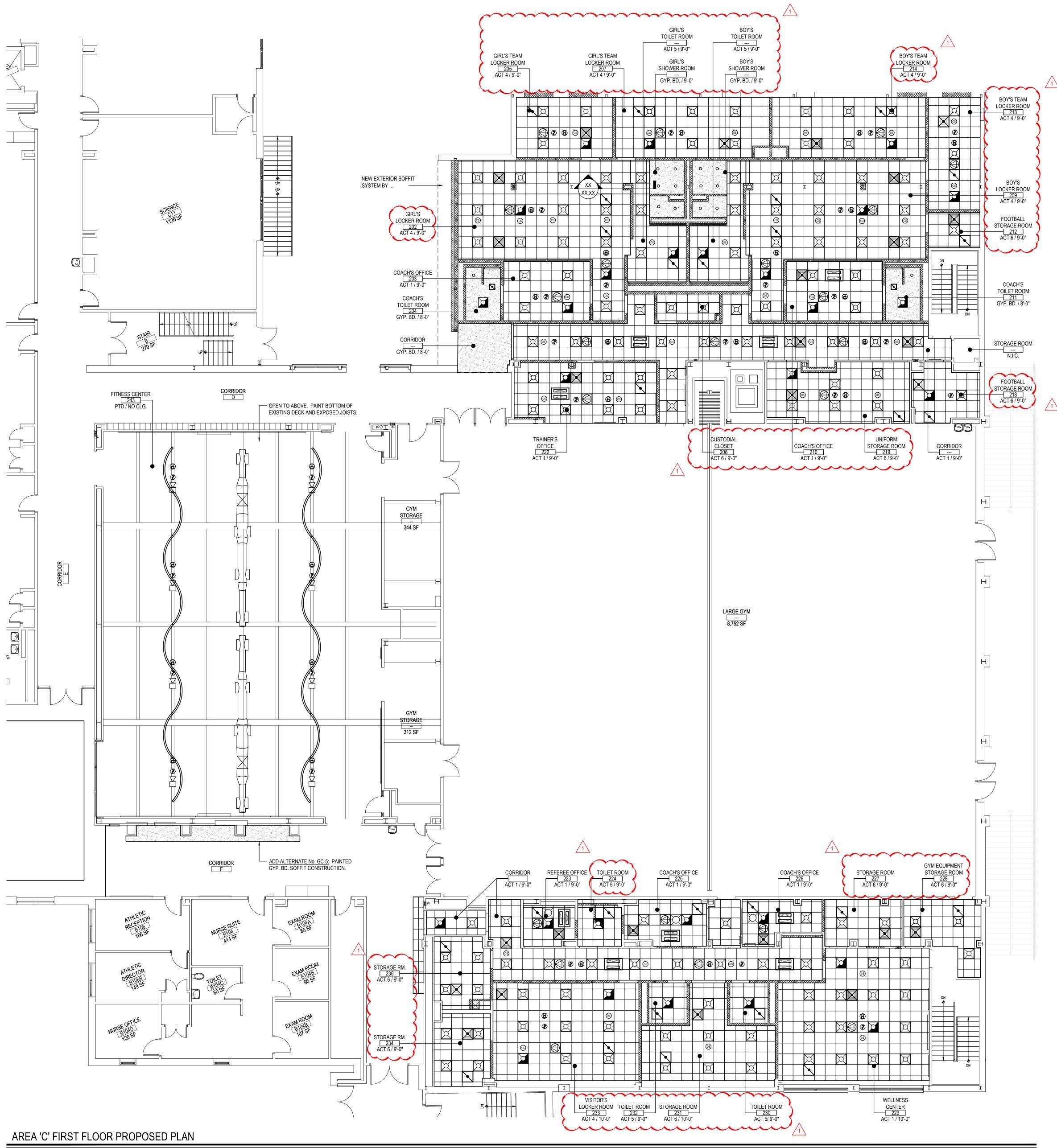




| CONFERENCE ROOM No. 163 | ART DIRECTORS OFFICE No. 165 | ART OFFICE No. 167 |  |
|-------------------------|------------------------------|--------------------|--|
|                         |                              |                    |  |

|    |    | ]               | ·// | //  |          | ] [// |
|----|----|-----------------|-----|-----|----------|-------|
| P1 | P1 | []         [P1] |     | ·// | 21]      |       |
|    |    |                 |     |     | <u> </u> |       |

| SMALL CAFETERIA No. 158 | <br>SECURITY OFFICE No. 164 | SMALL CAFETERIA No. 158 |
|-------------------------|-----------------------------|-------------------------|
|                         |                             |                         |



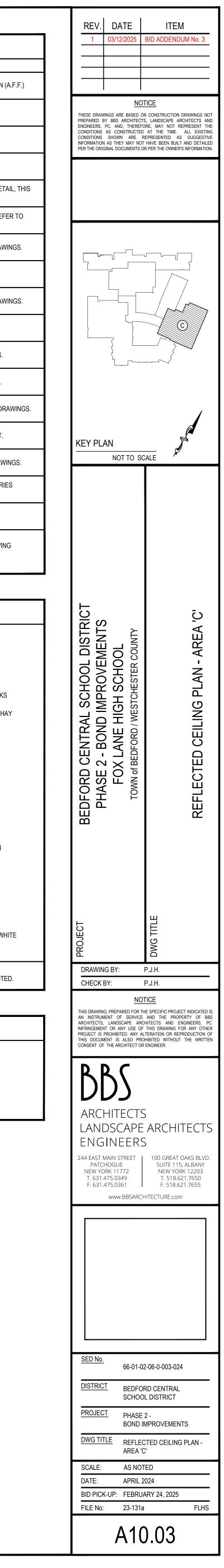
| SYMBOL                                 | S LEGEND  |
|--|---|
| SYMBOL                                 | DESCRIPTION   |
| ROOM NAME<br>XXX<br>CLG. HEIGHT / TYPE | ROOM TAG, CEILING TILE TYPE AND FINISH CEILING ELEVATION (A.F   |
| NO CLG.                                | OPEN TO STRUCTURE AND DECK ABOVE (PAINT)  |
|  | SUSPENDED ACOUSTICAL CEILING TILE AND GRID  |
|  | SUSPENDED ACOUSTICAL CEILING TILE AND GRID  |
|  | GYPSUM BOARD SOFFIT OVER METAL FRAMING. REFER TO DETAIL, SHEET. TAPE, SPACKLE AND PAINT.  |
|  | RECESSED OR SURFACE MOUNTED LIGHT FIXTURE BY E.C. REFER E-SERIES DRAWINGS.  |
| HUB                                    | LIGHTING CONTROL SYSTEM BY E.C. REFER TO E-SERIES DRAWING   |
| $\bigcirc$                             | EXIT SIGN BY E.C. REFER TO E-SERIES DRAWINGS.   |
|  | CEILING MOUNTED SPEAKER BY E.C. REFER TO E-SERIES DRAWING   |
| < <u>&gt;</u>                          | SMOKE DETECTOR BY E.C. REFER TO E-SERIES DRAWINGS.  |
| OS                                     | OCCUPANCY SENSOR BY E.C. REFER TO E-SERIES DRAWINGS.  |
|  | FIRE ALARM DEVICES BY E.C. REFER TO E-SERIES DRAWINGS.  |
| PROJECTOR                              | CEILING MOUNTED PROJECTOR BY E.C. REFER TO E-SERIES DRAW  |
| SP                                     | EXISTING SPRINKLER HEAD. EXTEND TO NEW CEILING HEIGHT.  |
|  | CEILING GRILLE / REGISTER BY M.C. REFER TO M-SERIES DRAWING   |
|  | CEILING MOUNTED CABINET HEATER BY M.C. REFER TO M-SERIES DRAWINGS.  |
|  | CEILING CASSETTE BY M.C. REFER TO M-SERIES DRAWINGS.  |
|  | REVISION CLOUD AND KEYED DESIGNATION. REFER TO DRAWING<br>TITLEBLOCK FOR ADDITIONAL INFORMATION.  |
|  |   |
| CEILING                                | TYPES   |
| TYPE ACT1:                             | ACOUSTIC CEILING TILE BY "ARMSTRONG"<br>SIZE: 24" X 24" X 3/4"<br>STYLE: #1910 ULTIMA SQUARE LAY-IN<br>(CORRIDORS, CLASSROOMS, OFFICES) |

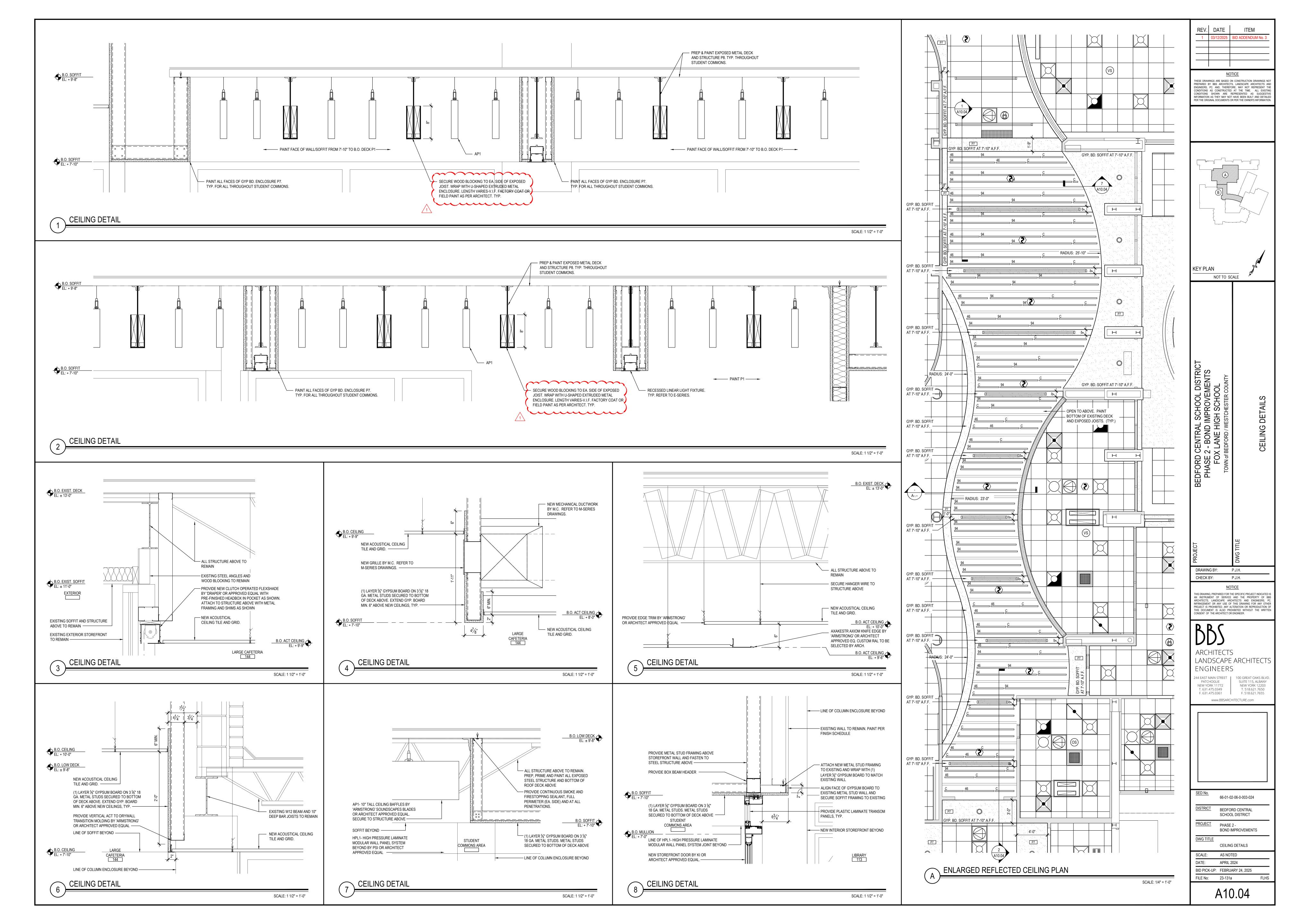
|            | SIZE: 24" X 24" X 3/4"<br>STYLE: #1910 ULTIMA SQUARE LAY-IN<br>(CORRIDORS, CLASSROOMS, OFFICES)   |
|------------|---|
| TYPE ACT2: | ACOUSTIC CEILING TILE BY "ARMSTRONG"<br>SIZE: 24" X 48" X 1", NRC RATING .95<br>STYLE: #8357PBWVA LYRBA PB SQUARE TEGULAR- WOOD LOOKS<br>**TILE EDGE TO BE FACTORY PAINTED SW9096<br>**INCLUDE %16" SUPRAFINE XL SUSPENSION SYSTEM IN COLOR HAY<br>(ACCENT IN LIBRARY/CAFETERIA/CORRIDOR) |
| TYPE ACT3: | ACOUSTIC CEILING TILE BY "ARMSTRONG"<br>SIZE: 24" X 24" X 1", NRC RATING .95<br>STYLE: #3250 OPTIMA SQUARE TEGULAR<br>(LIBRARY, CAFETERIA)  |
| TYPE ACT4: | ACOUSTIC TECTUM CEILING TILE BY "ARMSTRONG"<br>SIZE: 24" X 24" X 1 ½" WITH HOLD DOWN CLIPS 8178T20<br>STYLE: TECTUM SQUARE TEGULAR<br>(LOCKER ROOMS)  |
| TYPE ACT5: | ACOUSTIC CEILING TILE BY "ARMSTRONG"<br>SIZE: 24" X 24" X 7/8", NRC RATING .80<br>STYLE: #1445 ULTIMA HEALTH ZONE HIGH NRC, SQUARE LAY IN<br>(TOILET ROOMS, KITCHENS)   |
| TYPE ACT6: | ACOUSTIC CEILING TILE BY "ARMSTRONG"<br>SIZE: 24" X 24" X 5/8"<br>STYLE: 1772 DUNE SQUARE LAY-IN<br>(CUSTODIAL, STORAGE)  |
| TYPE ACT7: | GYPSUM WALLBOARD, SQUARE EDGE LAY-IN.<br>SIZE: 24"X24"X5/8" PRIME & PAINT WALLBOARD BM READY-MIX WHITE<br>PRIOR TO INSTALLING.  |
|            | "ARMSTRONG", 15/16" PRELUDE, U.O.N.<br>G TILE & GRID TO BE STANDARD WHITE UNLESS OTHERWISE NOTED.   |
|            |   |

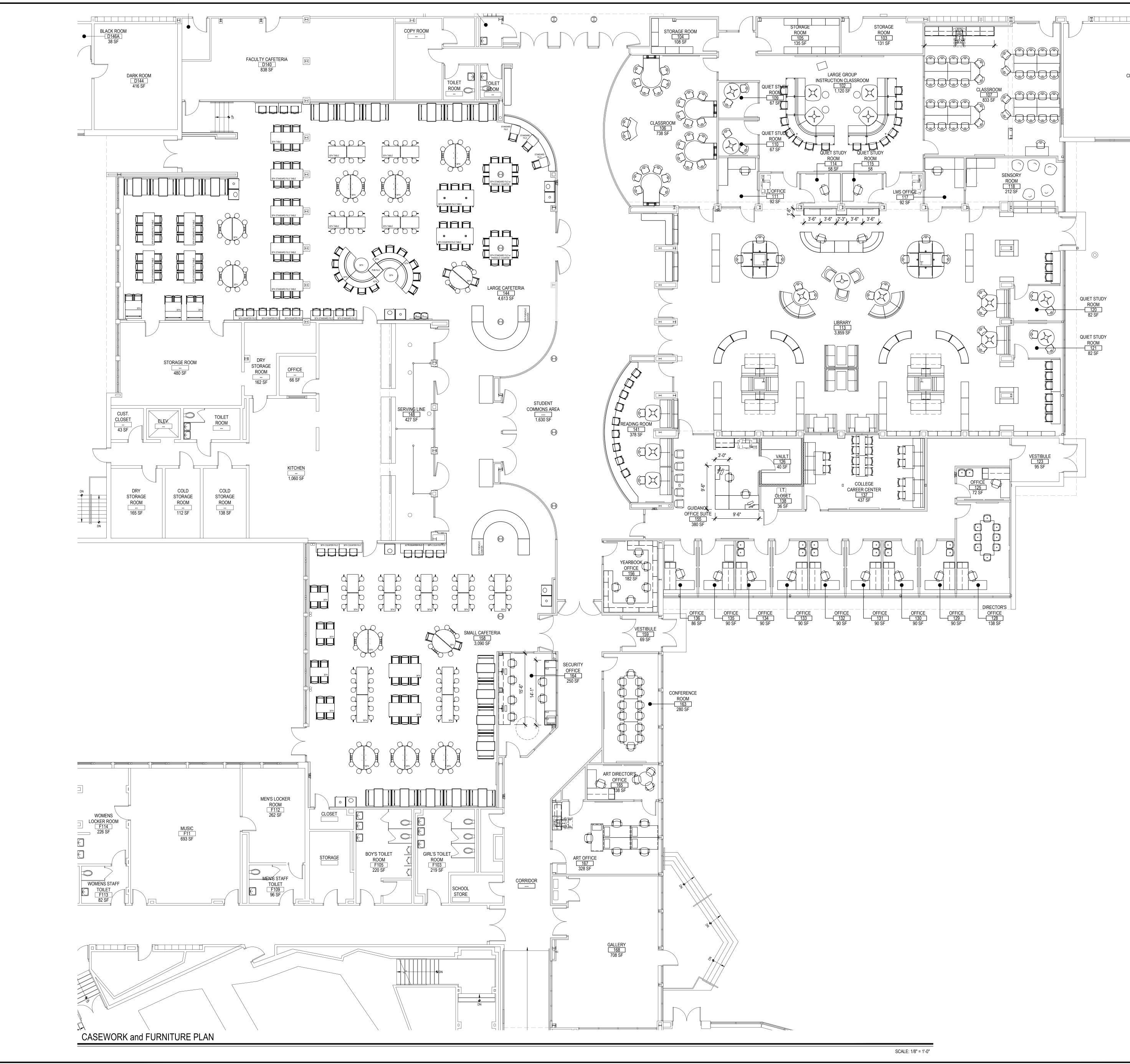
|--|

TYPE AP1:

RECTANGULAR VERTICAL LINEAR ACOUSTICAL PANELS AS MANUFACTURED BY "ARMSTRONG" COLLECTION: SOUNDSCAPES BLADES - WOOD LOOKS SIZE: 10"D X 46"L X 1 3/4" THICK OR 10"D X 94"L X 1 3/4" THICK \*LENGTH VARIES\* \*SOME CUSTOM LENGTHS REQUIRED\* \*\*INDIVIDUAL SUSPENSION HANGING METHOD REQUIRED -HANGING KIT 6655L8CR EVERY 2' 0.C. TYP.







# GENERAL FURNITURE NOTE

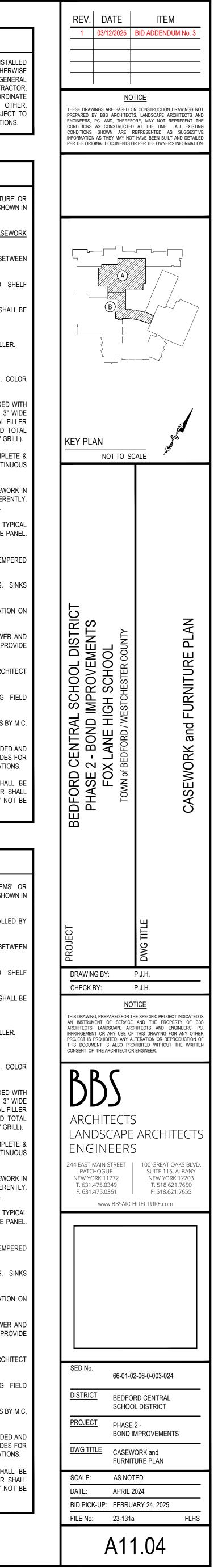
ALL LOOSE FURNISHINGS, CASEWORK AND SHELVING SHALL BE FURNISHED AND INSTALLED UNDER A SEPARATE CONTRACT BY THE OWNER'S CASEWORK CONTRACTOR UNLESS OTHERWISE NOTED AND DETAILED. THIS LAYOUT IS PROVIDED FOR REFERENCE AND GENERAL INFORMATIONAL PURPOSES (ONLY). THE GENERAL CONTRACTOR, CASEWORK CONTRACTOR, ELECTRICAL CONTRACTOR AND PLUMBING/MECHANICAL CONTRACTOR(S) SHALL COORDINATE ROUGH-IN, LOCATIONS, INSTALLATION AND FINAL CONNECTIONS WITH EACH OTHER. INFORMATION SHOWN HEREWITH IS FOR INFORMATIONAL PURPOSES ONLY AND SUBJECT TO CHANGE. SHOP DRAWINGS SHALL BE PROVIDED BY THE ARCHITECT FOR ALL FINAL LOCATIONS.

### WOOD CASEWORK CONSTRUCTION NOTES

- WOOD CASEWORK SHALL BE MANUFACTURED BY 'CAMPBELL RHEA' STYLE 'SIGNATURE' OR ARCHITECT APPROVED EQUAL AND SHALL MATCH THE CABINET CONFIGURATIONS SHOWN IN THE CASEWORK PLANS AND ELEVATIONS.
- ALL WOOD CASEWORK / COUNTERS SHALL BE PROVIDED AND INSTALLED BY CASEWORK CONTRACTOR UNLESS OTHERWISE NOTED.
- GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL CONTINUOUS BLOCKING BETWEEN COLD FORMED FRAMING AT ALL CASEWORK LOCATIONS.
- REFER TO SPECIFICATIONS FOR TYPICAL FRAME, DRAWER, DOOR AND SHELF CONSTRUCTION FOR ALL CASEWORK.
- UNLESS OTHERWISE NOTED OR SPECIFIED, FINISH HARDWARE FOR ALL CABINETS SHALL BE AS FOLLOWS: - ALL HINGES SHALL BE STANDARD FIVE KNUCKLE. - ALL DOOR AND DRAWER PULLS SHALL BE WIRE TYPE.
  - ALL DOOR CATCHES SHALL BE ADJUSTABLE SPRING ACTUATED NYLON ROLLER. - ALL DRAWER SLIDES SHALL BE FULL EXTENSION TYPE. - ALL SHELF CLIPS SHALL BE PLASTIC TWIN PIN TYPE THROUGHOUT
- ALL COUNTER TOPS SHALL BE 1" PHENOLIC RESIN UNLESS OTHERWISE INDICATED. COLOR AS SELECTED BY ARCHITECT.
- ALL BASE CABINETS TO BE INSTALLED ALONG A WINDOW WALL SHALL BE PROVIDED WITH TOE SPACE GRILLS. ALL SAID BASE CABINETS SHALL ALSO BE INSTALLED WITH 3" WIDE ALUMINUM GRILLS AT TOP OF CABINET TO BE CUT INTO COUNTER (OR HORIZONTAL FILLER AT TALL CABINETS). GRILLS SHALL BE CENTERED BEHIND EACH CABINET AND TOTAL LENGTHS SHALL BE 6" LESS THAN SAID CABINET WIDTH. (IE: 47" CABINET YIELDS 41" GRILL).
- FURNISH AND INSTALL FILLER PANELS, WHERE NECESSARY, TO PROVIDE A COMPLETE & FINISHED INSTALLATION. FILLER PANELS SHALL BE USED TO FORM CONTINUOUS CABINETRY BETWEEN ALL UNITS AND / OR ADJACENT SURFACES.
- ALL DRAWERS AND DOORS SHALL BE SUPPLIED WITH SPECIFIED LOCKS. ALL CASEWORK IN EACH ROOM SHALL BE KEYED ALIKE, AND EACH ROOM SHALL BE KEYED DIFFERENTLY. UPPER WALL CABINETS IN PREP ROOMS SHALL BE PROVIDED WITH LABEL HOLDERS.
- REMOVABLE BACK PANELS SHALL BE PROVIDED AT ALL SINK BASE CABINETS. TYPICAL THROUGHOUT. ALL SLOPED KNEE SPACES SHALL BE PROVIDED WITH REMOVABLE PANEL. PROVIDE SECURITY TYPE FASTENERS AT ALL EXPOSED LOCATIONS.
- 2. DOOR GLASS FOR EITHER TALL CABINETS OR WALL CABINETS SHALL BE  $\slashed{4}$ " TEMPERED SAFETY GLASS. PROVIDE GLAZING LABEL ON ALL PIECES.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL ALL SINKS AND FAUCETS. SINKS SHALL BE DROP-IN TYPE. REFER T P-SERIES DRAWINGS.
- REFER TO ELECTRICAL AND TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION ON SURFACE MOUNTED OR RECESSED WALL BOXES AND / OR SURFACE RACEWAY.
- 15. ELECTRICAL CONTRACTOR SHALL COORDINATE MOUNTING LOCATIONS FOR POWER AND DATA MANAGEMENT SYSTEM TO UNDERSIDE OF CASEWORK WHERE REQUIRED. PROVIDE ALL CUTOUTS IN PANELS AS REQUIRED FOR CABLE PASSAGE BETWEEN UNITS.
- 6. G.C. SHALL SUBMIT SHOP DRAWINGS AND COLOR SAMPLES FOR APPROVAL BY ARCHITECT ACCORDING TO SPECIFICATIONS PRIOR TO FABRICATION.
- CASEWORK CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH EXISTING FIELD CONDITIONS PRIOR TO FINAL FABRICATION OF ALL CASEWORK AND BUILD TO SUIT.
- 18. ALL FINAL PLUMBING CONNECTIONS BY P.C. ALL FINAL MECHANICAL CONNECTIONS BY M.C. ALL FINAL ELECTRICAL CONNECTIONS BY E.C.
- UNLESS OTHERWISE NOTED ALL TACK BOARDS, MARKER BOARDS SHALL BE PROVIDED AND INSTALLED BY G.C. CASEWORK CONTRACTOR SHALL COORDINATE WITH ALL TRADES FOR WALL MOUNTED COMPONENTS WHICH MAY NOT BE SHOWN THESE PLANS OR ELEVATIONS.
- UNLESS OTHERWISE NOTED ALL SMARTBOARDS AND / OR LCD SCREENS SHALL BE PROVIDED BY THE OWNER, INSTALLED BY THE E.C. CASEWORK CONTRACTOR SHALL COORDINATE WITH ALL TRADES FOR WALL MOUNTED COMPONENTS WHICH MAY NOT BE SHOWN THESE PLANS OR ELEVATIONS.

## PLASTIC LAMINATE CASEWORK NOTES

- PLASTIC LAMINATE CASEWORK SHALL BE MANUFACTURED BY 'CASE SYSTEMS' OR ARCHITECT APPROVED EQUAL AND SHALL MATCH THE CABINET CONFIGURATIONS SHOWN IN THE CASEWORK PLANS AND ELEVATIONS.
- ALL PLASTIC LAMINATE CASEWORK / COUNTERS SHALL BE PROVIDED AND INSTALLED BY
- CASEWORK CONTRACTOR UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL CONTINUOUS BLOCKING BETWEEN
- COLD FORMED FRAMING AT ALL CASEWORK LOCATIONS. REFER TO SPECIFICATIONS FOR TYPICAL FRAME, DRAWER, DOOR AND SHELF
- CONSTRUCTION FOR ALL CASEWORK. UNLESS OTHERWISE NOTED OR SPECIFIED, FINISH HARDWARE FOR ALL CABINETS SHALL BE
- AS FOLLOWS: - ALL HINGES SHALL BE CONCEALED.
- ALL DOOR AND DRAWER PULLS SHALL BE WIRE TYPE. - ALL DOOR CATCHES SHALL BE ADJUSTABLE SPRING ACTUATED NYLON ROLLER.
- ALL DRAWER SLIDES SHALL BE FULL EXTENSION TYPE. - ALL SHELF CLIPS SHALL BE PLASTIC TWIN PIN TYPE THROUGHOUT.
- ALL COUNTER TOPS SHALL BE PLASTIC LAMINATE UNLESS OTHERWISE INDICATED. COLOR AND FINISH AS SELECTED BY ARCHITECT.
- ALL BASE CABINETS TO BE INSTALLED ALONG A WINDOW WALL SHALL BE PROVIDED WITH TOE SPACE GRILLS. ALL SAID BASE CABINETS SHALL ALSO BE INSTALLED WITH 3" WIDE ALUMINUM GRILLS AT TOP OF CABINET TO BE CUT INTO COUNTER (OR HORIZONTAL FILLER AT TALL CABINETS). GRILLS SHALL BE CENTERED BEHIND EACH CABINET AND TOTAL LENGTHS SHALL BE 6" LESS THAN SAID CABINET WIDTH. (IE: 47" CABINET YIELDS 41" GRILL).
- FURNISH AND INSTALL FILLER PANELS, WHERE NECESSARY, TO PROVIDE A COMPLETE & FINISHED INSTALLATION. FILLER PANELS SHALL BE USED TO FORM CONTINUOUS CABINETRY BETWEEN ALL UNITS AND / OR ADJACENT SURFACES.
- ALL DRAWERS AND DOORS SHALL BE SUPPLIED WITH SPECIFIED LOCKS. ALL CASEWORK IN EACH ROOM SHALL BE KEYED ALIKE, AND EACH ROOM SHALL BE KEYED DIFFERENTLY UPPER WALL CABINETS IN PREP ROOMS SHALL BE PROVIDED WITH LABEL HOLDERS.
- REMOVABLE BACK PANELS SHALL BE PROVIDED AT ALL SINK BASE CABINETS. TYPICAL THROUGHOUT. ALL SLOPED KNEE SPACES SHALL BE PROVIDED WITH REMOVABLE PANEL. PROVIDE SECURITY TYPE FASTENERS AT ALL EXPOSED LOCATIONS.
- 2. DOOR GLASS FOR EITHER TALL CABINETS OR WALL CABINETS SHALL BE  $rac{1}{4}$ " TEMPERED SAFETY GLASS. PROVIDE GLAZING LABEL ON ALL PIECES.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL ALL SINKS AND FAUCETS. SINKS SHALL BE DROP-IN TYPE. REFER T P-SERIES DRAWINGS.
- 14. REFER TO ELECTRICAL AND TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION ON SURFACE MOUNTED OR RECESSED WALL BOXES AND / OR SURFACE RACEWAY.
- 15. ELECTRICAL CONTRACTOR SHALL COORDINATE MOUNTING LOCATIONS FOR POWER AND DATA MANAGEMENT SYSTEM TO UNDERSIDE OF CASEWORK WHERE REQUIRED. PROVIDE ALL CUTOUTS IN PANELS AS REQUIRED FOR CABLE PASSAGE BETWEEN UNITS.
- 16. G.C. SHALL SUBMIT SHOP DRAWINGS AND COLOR SAMPLES FOR APPROVAL BY ARCHITECT ACCORDING TO SPECIFICATIONS PRIOR TO FABRICATION.
- 7. CASEWORK CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH EXISTING FIELD CONDITIONS PRIOR TO FINAL FABRICATION OF ALL CASEWORK AND BUILD TO SUIT.
- 18. ALL FINAL PLUMBING CONNECTIONS BY P.C. ALL FINAL MECHANICAL CONNECTIONS BY M.C. ALL FINAL ELECTRICAL CONNECTIONS BY E.C.
- 19. UNLESS OTHERWISE NOTED ALL TACK BOARDS, MARKER BOARDS SHALL BE PROVIDED AND INSTALLED BY G.C. CASEWORK CONTRACTOR SHALL COORDINATE WITH ALL TRADES FOR WALL MOUNTED COMPONENTS WHICH MAY NOT BE SHOWN THESE PLANS OR ELEVATIONS.
- 20. UNLESS OTHERWISE NOTED ALL SMARTBOARDS AND / OR LCD SCREENS SHALL BE PROVIDED BY THE OWNER, INSTALLED BY THE E.C. CASEWORK CONTRACTOR SHALL COORDINATE WITH ALL TRADES FOR WALL MOUNTED COMPONENTS WHICH MAY NOT BE SHOWN THESE PLANS OR ELEVATIONS.



| CONCRETE COVER SCHEDULE |
|-------------------------|
|-------------------------|

| LOCATION   | COVER  |
|--|--------|
| CONCRETE CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND | 3"     |
|  |        |
| CONCRETE EXPOSED TO WEATHER OR IN CONTACT WITH GROUND        |        |
| #6 BARS AND LARGER   | 2"     |
| #5 BARS AND SMALLER  | 1 1/2" |
|  |        |
| CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND    |        |
| SLABS, WALLS, JOIST  | 3/4"   |
| BEAMS, GIRDERS, COLUMNS, AND PIERS                           | 1 1/2" |
|  |        |

|          | CL                | ASS B        | TENS   | ION LA | P SPLI   | ICE SC | HEDU          | LE     |        |
|----------|-------------------|--------------|--------|--------|----------|--------|---------------|--------|--------|
|          |                   | fc' =3,000 P | SI     |        |          | 1      | fc' = 4,000 P | SI     |        |
|          | TOP BAR OTHER BAR |              |        |        |          | TOP    | BAR           | OTHE   | R BAR  |
| BAR SIZE | CASE 1            | CASE 2       | CASE 1 | CASE 2 | BAR SIZE | CASE 1 | CASE 2        | CASE 1 | CASE 2 |
| #3       | 28                | 42           | 21     | 32     | #3       | 24     | 36            | 18     | 28     |
| #4       | 37                | 56           | 28     | 43     | #4       | 32     | 48            | 25     | 37     |
| #5       | 46                | 69           | 36     | 53     | #5       | 40     | 60            | 31     | 46     |
| #6       | 56                | 83           | 43     | 64     | #6       | 48     | 72            | 37     | 55     |
| #7       | 81                | 131          | 62     | 93     | #7       | 70     | 105           | 54     | 81     |
| #8       | 93                | 139          | 71     | 107    | #8       | 80     | 120           | 62     | 92     |
| #9       | 104               | 157          | 80     | 120    | #9       | 90     | 136           | 70     | 104    |
|          |                   |              |        |        |          |        |               |        |        |

1. TABULATED VALUES ARE IN INCHES. 2. TOP BARS ARE HORIZONTAL BARS PLACED WITH MORE THAN 12 INCHES OF FRESH CONCRETE PLACED BELOW THE DEVELOPMENT LENGTH OR SPLICE.

3. CASE 1 APPLIES TO CLEAR SPACING GREATER THAN OR EQUAL TO 2 BAR DIAMETERS AND COVER GREATER THAN OR EQUAL TO 1 DIAMETER.

4. CASE 2 APPLIES TO CLEAR SPACING LESS THAN 2 BAR DIAMETERS AND COVER LESS THAN 1 DIAMETER.

5. FOR VALUES OF COVER AND SPACING BETWEEN TABULATED VALUES USE THE LONGER LAP LENGTH. DO NOT INTERPOLATE.

6. CALCULATE CENTER TO CENTER SPACING OF BARS AT LAP SPLICE LOCATIONS. 7. FOR EPOXY COATED BARS INCREASE THE TABULATED VALUES AS FOLLOWS; TOP BARS MULTIPLY

TABULATED VALUE BY 1.3, FOR OTHER BARS MULTIPLY TABULATED VALUE BY 1.5. 8. FOR LIGHTWEIGHT CONCRETE MULTIPLY TABULATED VALUE BY 1.3

|                   | CC       | NCRE      | TE MIX                  | ,              |  |
|-------------------|----------|-----------|-------------------------|----------------|--|
| APPLICATION       | EXPOSURE | F'c       | MAXIMUM<br>W/C<br>RATIO | AIR<br>CONTENT | NOMINAL MAX.<br>AGGREGATE<br>SIZE (NOTE 4) |
| FOOTINGS          | F0       | 3,000 PSI | SEE NOTE 2              | 6% ± 1.0%      | -  |
| EXT SLAB ON GRADE | F1       | 4,500 PSI | 0.45                    | 6% ± 1.0%      | -  |
| SLAB ON GRADE     | F0       | 3,500 PSI | SEE NOTE 2              | SEE NOTE 3     | -  |
| SLABS AND BEAMS   | F0       | 4,500 PSI | 0.45                    | 6% ± 1.0%      | -  |
| PIERS             | F0       | 4,500 PSI | 0.45                    | 6% ± 1.0%      | -  |
|                   |          |           |                         |                |  |
|                   |          |           |                         |                |  |
|                   |          |           |                         |                |  |

NOTES: 1. EXPOSURE CATEGORIES AND CLASSES FOR SULFATES, PERMEABILITY AND CORROSION

PROTECTION OF REINFORCEMENT IS CLASS ZERO UNLESS NOTED OTHERWISE. 2. WHERE NO MAXIMUM WATER TO CEMENT RATIO IS NOTED, PROPORTION WATER TO CEMENT RATIO FOR SPECIFIED CONCRETE MIX DESIGN STRENGTH.

3. DO NOT AIR ENTRAIN INTERIOR SLABS ON GRADE OR SLABS ON METAL DECK. AIR ENTRAINMENT IS NOT PERMITTED FOR CONCRETE TO RECEIVE HARD TROWEL FINISH AND ENTRAPPED AIR SHALL NOT EXCEED 3%. SLABS SHALL BE FINISHED TO AVOID SURFACE IMPERFECTIONS, INCLUDING

BLISTERING AND DELAMINATION. 4. COARSE AGGREGATE SHALL BE AS INDICATED IN SPECIFICATIONS. MAXIMUM CONCRETE UNIT WEIGHT NOT TO EXCEED 150 POUNDS PER CUBIC FEET.

MASONRY REINFORCEMENT LAP SPLICE BAR LAP LENGTHS IN CMU WITH fm = 2,000 psi LOCATION (1) BAR AT CENTER OF 6" CMU CORE OR BOND BEAM 1) BAR AT CENTER OF 8" CMU CORE OR BOND BEAM 50" 1) BAR AT CENTER OF 12" CMU CORE OR BOND BEAM 73" (2) BARS IN 8" CMU CORE LOCATED 5" FROM EACH FACE SHELL 73" 23" 36" (2) BARS IN 12" CMU CORE LOCATED 9" FROM EACH FACE SHELL 23" 73" 36" (2) BARS IN 8", 10", 12" BOND BEAMS LOCATED 3/4" FOR 22" 22" 22" INSIDE FACE OF FACE SHELL

|      |                      | LINT | EL SCH   | EDULE  |
|------|----------------------|------|----------|--|
| MARK | MATERIAL             | TYPE | LENGTH   | REMARKS  |
| L1   | L5X31/2X5/16 (LLV)   | L    | 4'-8"±   | COORD LENGTH W/ DOOR SCHEDUE   |
| L2   | HSS12X8X1/4 W/ 3/8PL | а.   | SEE PLAN | SEE SECTION 4/S0.01, BEAR 12" ON<br>EXIST CMU AND CONN TO COL ONE<br>END, SEE 5/S0.01. |
|      |                      |      |          |  |

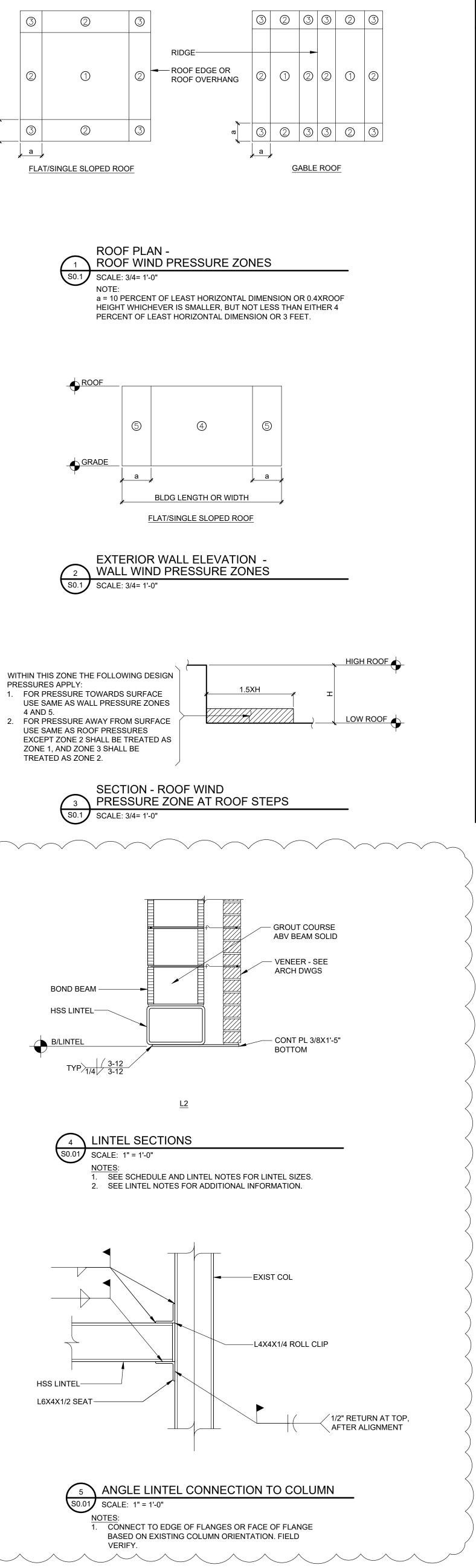
1. FOR OPENINGS NOT OTHERWISE DETAILED OR SCHEDULED, INCLUDING DOORS, WINDOWS, AND MECHANICAL OPENINGS, MINIMUM LINTELS SHALL BE (FOR EACH 4 INCHES OF MASONRY WIDTH), ONE L3 1/2 X3 1/2 X 5/16 FOR SPANS UP TO 4 FEET, ONE L4X3 1/2 X5/16 LLV FOR SPANS UP TO 6 FEET; ONE L5X3 1/2X5/16 LLV FOR SPANS UP TO 8 FEET. FOR SPANS LESS THAN 2 FEET, PROVIDE A 5/16 INCH PLATE. COORDINATE OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

FOR 10-INCH MASONRY WALLS, USE TWO L5X5X5/16 FOR SPANS UP TO 6 FEET AND TWO L6X6X5/16 FOR SPANS UP TO 8 FEET. TRIM HORIZONTAL LEG TO 4 1/2 INCHES WIDE.

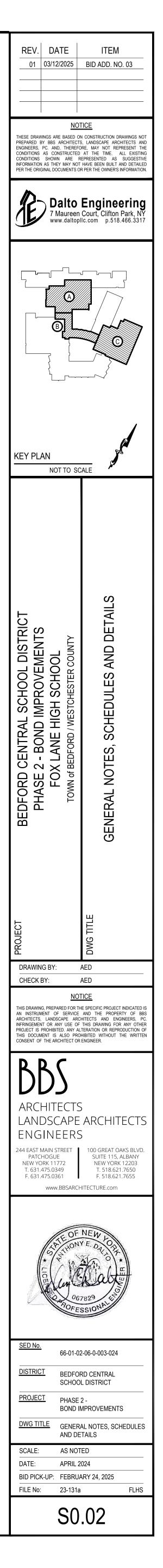
2. WELD TOGETHER BACK-TO-BACK LINTELS. MAXIMUM WELD SPACING SHALL NOT EXCEED 12 INCHES ON CENTER.

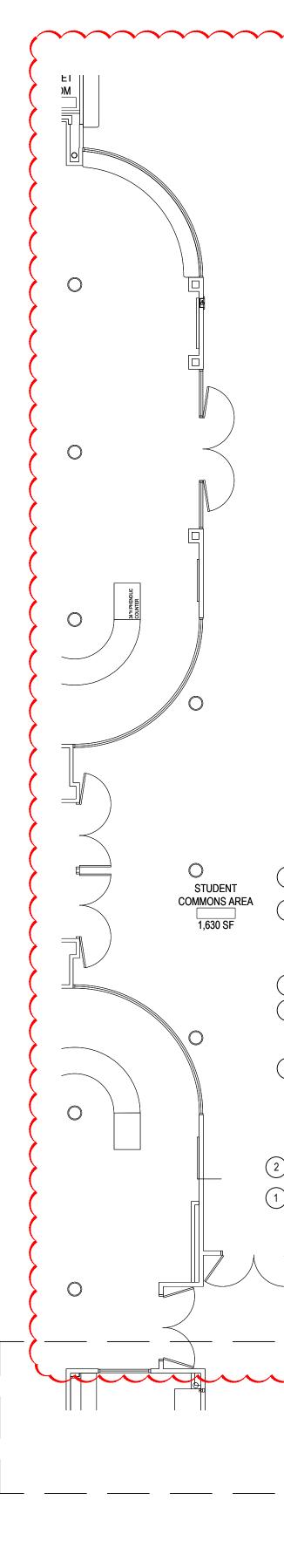
3. BEAR LINTELS A MINIMUM OF 8 INCHES EACH END UNLESS NOTED OTHERWISE. GROUT CMU CORES FULL HEIGHT BELOW LINTEL BEARING.

4. HOT-DIP GALVANIZE LINTELS IN EXTERIOR WALLS.

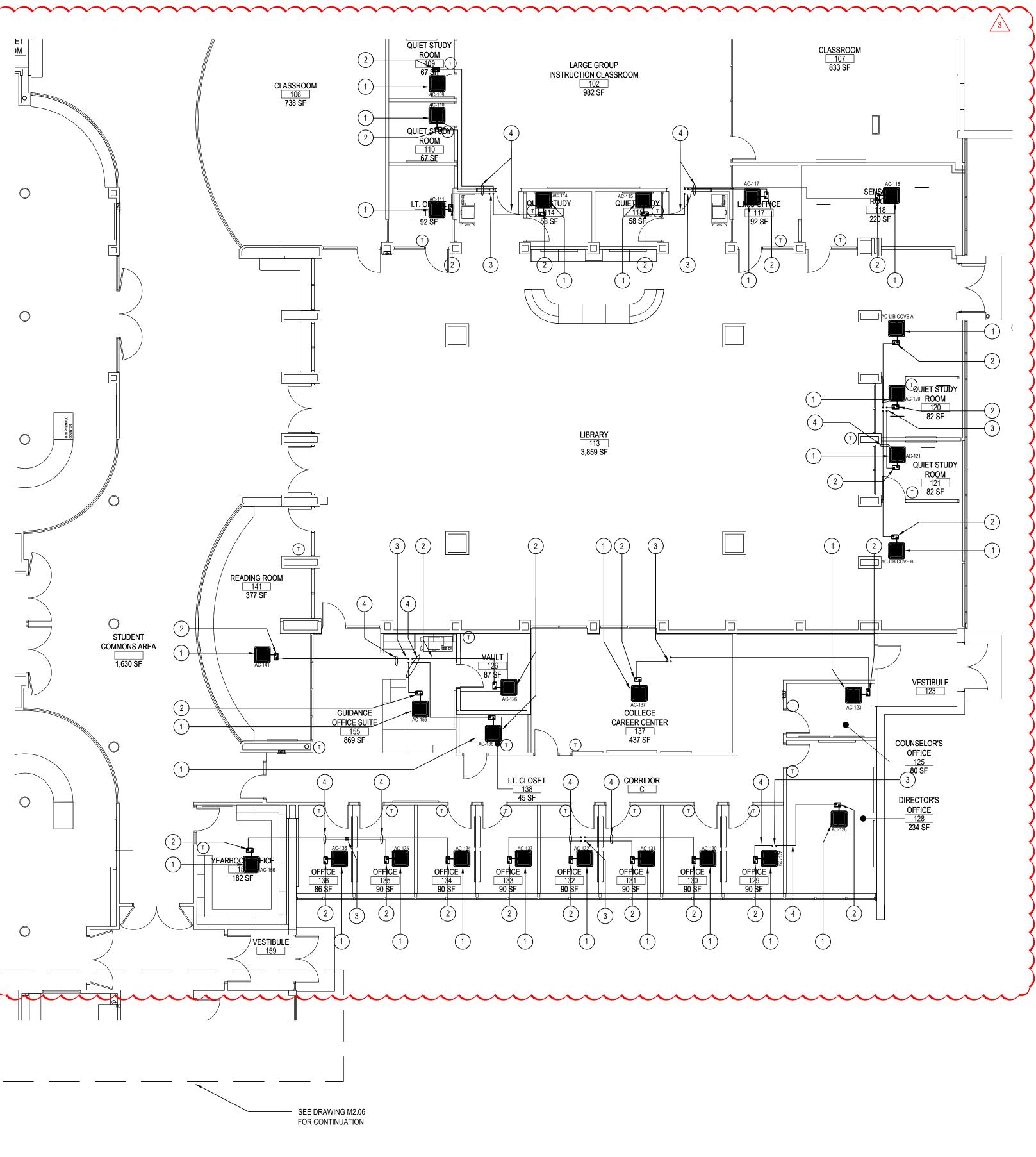


|              |  | VIND PRESSURE F                |  |   |  |
|--------------|--|--------------------------------|--|---|--|
| ROOF SLOPE   | SURFACE                                    | EFFECTIVE<br>WIND AREA<br>(sf) | WIND PRESSURE<br>TOWARD SURFACE<br>(psf) | WIND PRESSURE<br>AWAY FROM<br>SURFACE (psf) |  |
|              | ZONE 1<br>ROOF                             | 10<br>20<br>50<br>100          | 10<br>10<br>10<br>10                     | 17<br>16<br>16<br>15                        |  |
|              | ZONE 2<br>ROOF EDGES                       | 10<br>20<br>50<br>100          | 10<br>10<br>10<br>10                     | 28<br>25<br>21<br>18                        |  |
| 0° TO 7°     | ZONE 2<br>ROOF OVERHANG<br>AT ROOF EDGES   | 10<br>20<br>50<br>100          | 0<br>0<br>0<br>0                         | 24<br>24<br>23<br>23                        |  |
|              | ZONE 3<br>ROOF CORNERS                     | 10<br>20<br>50<br>100          | 10<br>10<br>10<br>10                     | 42<br>35<br>25<br>18                        |  |
|              | ZONE 3<br>ROOF OVERHANG<br>AT ROOF CORNERS | 10<br>20<br>50<br>100          | 0<br>0<br>0<br>0                         | 40<br>31<br>20<br>12                        |  |
|              | ZONE 1<br>ROOF                             | 10<br>20<br>50<br>100          | 10<br>10<br>10<br>10                     | 15<br>15<br>14<br>14                        |  |
|              | ZONE 2<br>ROOF EDGES                       | 10<br>20<br>50<br>100          | 10<br>10<br>10<br>10                     | 27<br>25<br>22<br>20                        |  |
| > 7° TO 27°  | ZONE 2<br>ROOF OVERHANG<br>AT ROOF EDGES   | 10<br>20<br>50<br>100          | 0<br>0<br>0<br>0                         | 31<br>31<br>31<br>31                        |  |
|              | ZONE 3<br>ROOF CORNERS                     | 10<br>20<br>50<br>100          | 10<br>10<br>10<br>10                     | 39<br>37<br>33<br>31                        |  |
|              | ZONE 3<br>ROOF OVERHANG<br>AT ROOF CORNERS | 10<br>20<br>50<br>100          | 0<br>0<br>0<br>0                         | 53<br>47<br>41<br>36                        |  |
|              | ZONE 1<br>ROOF                             | 10<br>20<br>50<br>100          | 15<br>15<br>14<br>14                     | 17<br>16<br>15<br>14                        |  |
| > 27° TO 45° | ZONE 2<br>ROOF EDGES                       | 10<br>20<br>50<br>100          | 15<br>15<br>14<br>14                     | 20<br>19<br>18<br>17                        |  |
|              | ZONE 2<br>ROOF OVERHANG<br>AT ROOF EDGES   | 10<br>20<br>50<br>100          | 0<br>0<br>0<br>0                         | 28<br>28<br>26<br>25                        |  |
|              | ZONE 3<br>ROOF CORNERS                     | 10<br>20<br>50<br>100          | 15<br>15<br>14<br>14                     | 20<br>19<br>18<br>17                        |  |
|              | ZONE 3<br>ROOF OVERHANG<br>AT ROOF CORNERS | 10<br>20<br>50<br>100          | 0<br>0<br>0<br>0                         | 28<br>28<br>26<br>26                        |  |
|              | ZONE 4<br>WALL                             | 10<br>20<br>50<br>100<br>500   | 17<br>16<br>15<br>14<br>13               | 18<br>17<br>16<br>16<br>14                  |  |
| NA           | ZONE 5<br>WALL CORNERS                     | 10<br>20<br>50<br>100<br>500   | 17<br>16<br>15<br>14<br>13               | 22<br>21<br>19<br>17<br>14                  |  |

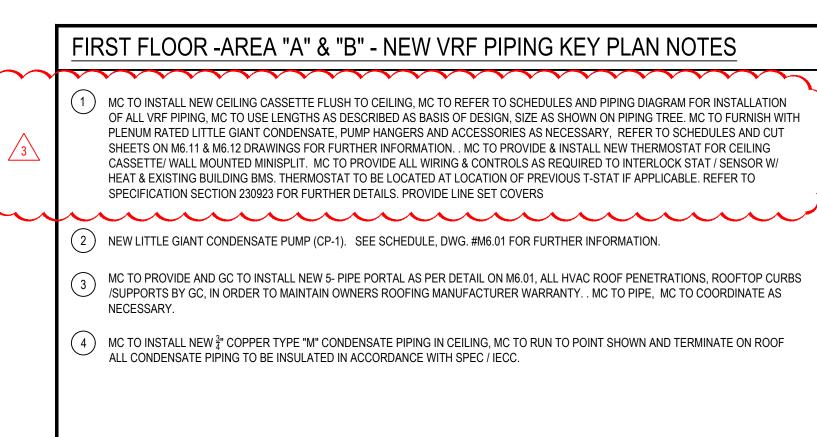


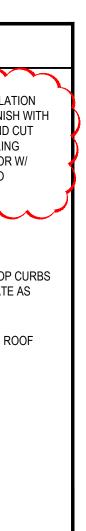


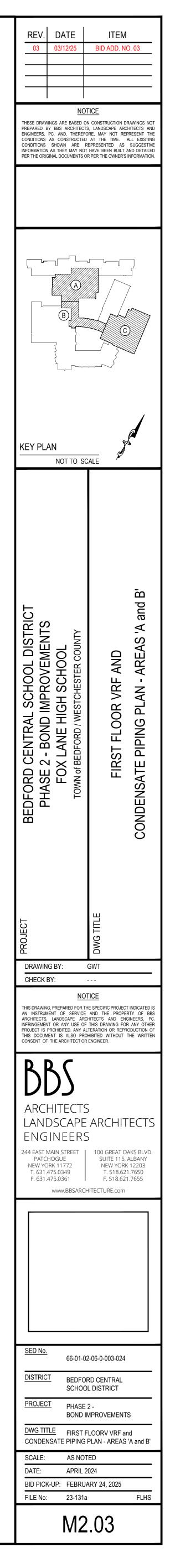
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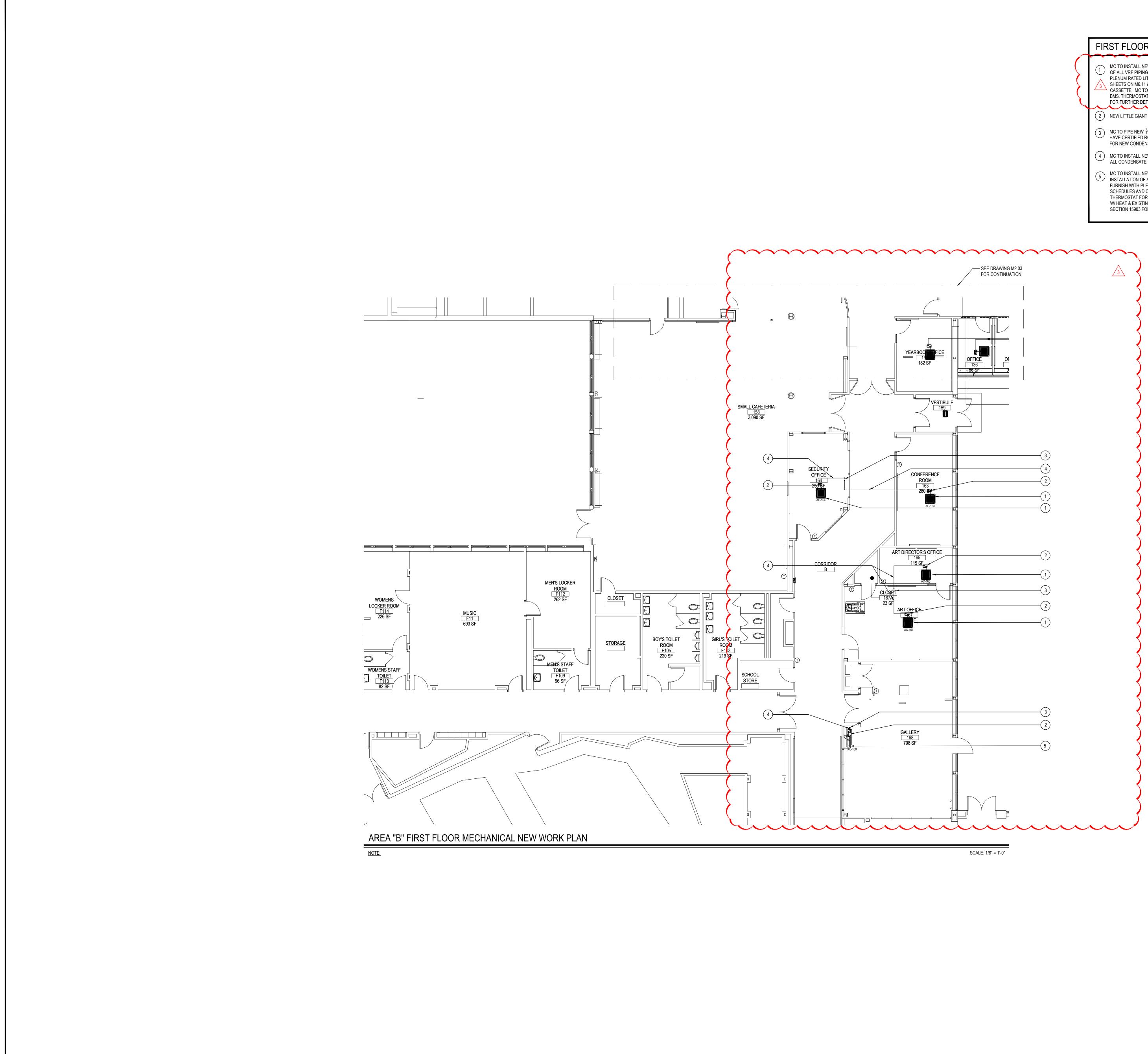


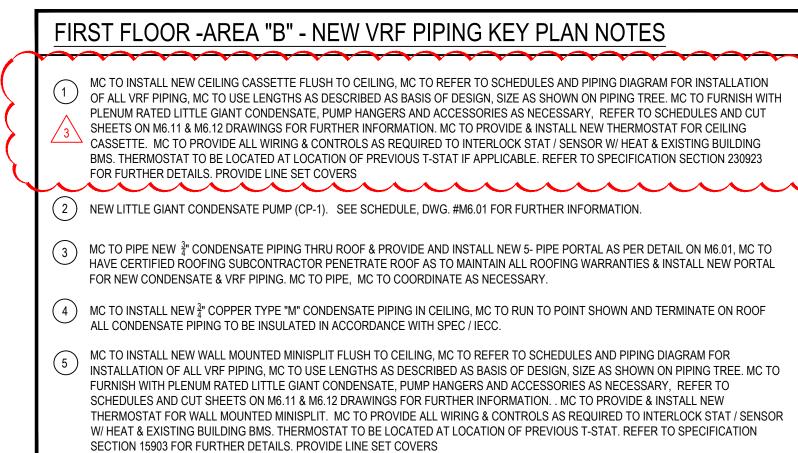
AREA "A"& "B" FIRST FLOOR MECHANICAL VRF NEW PLAN

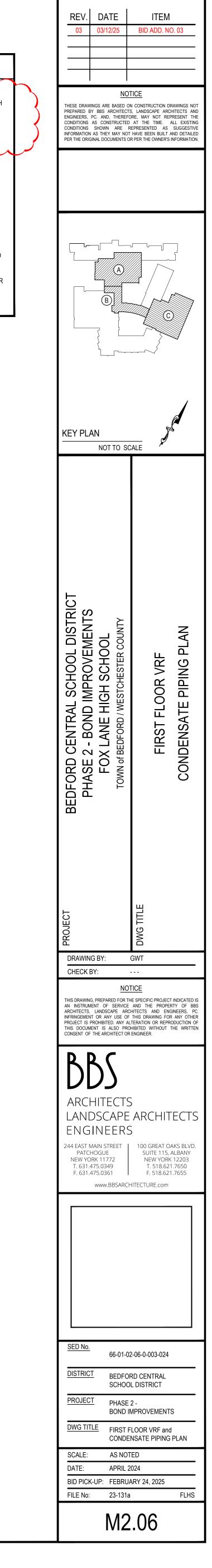


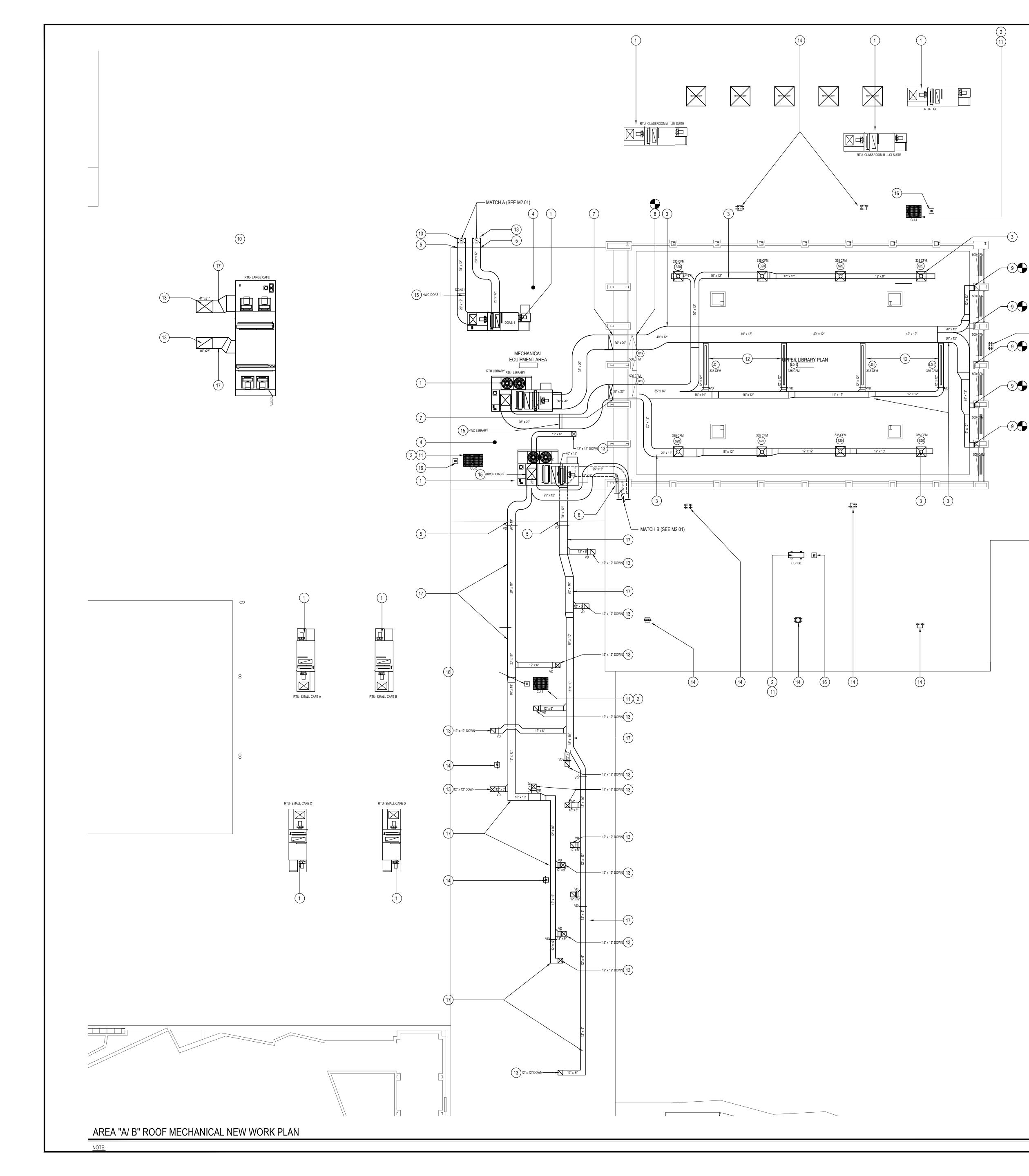


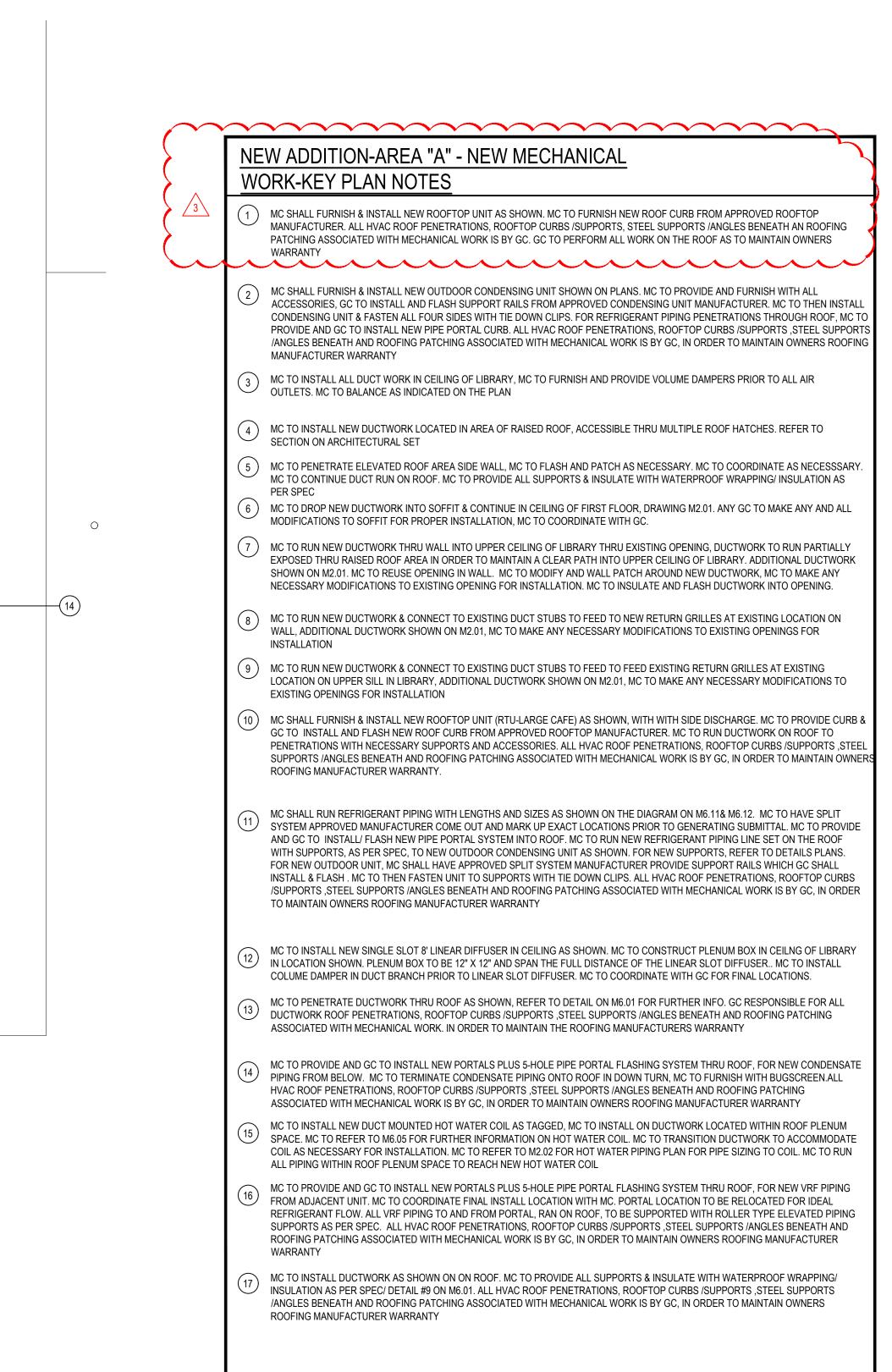








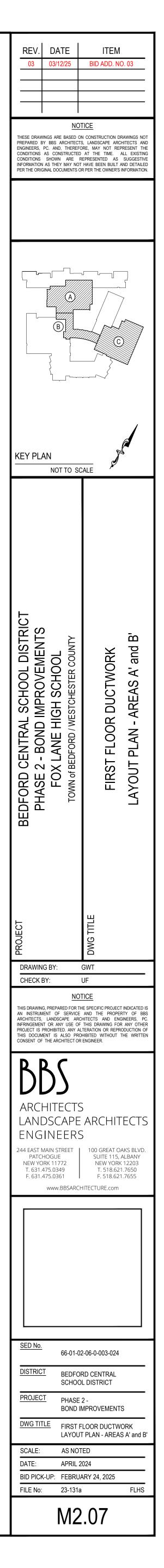


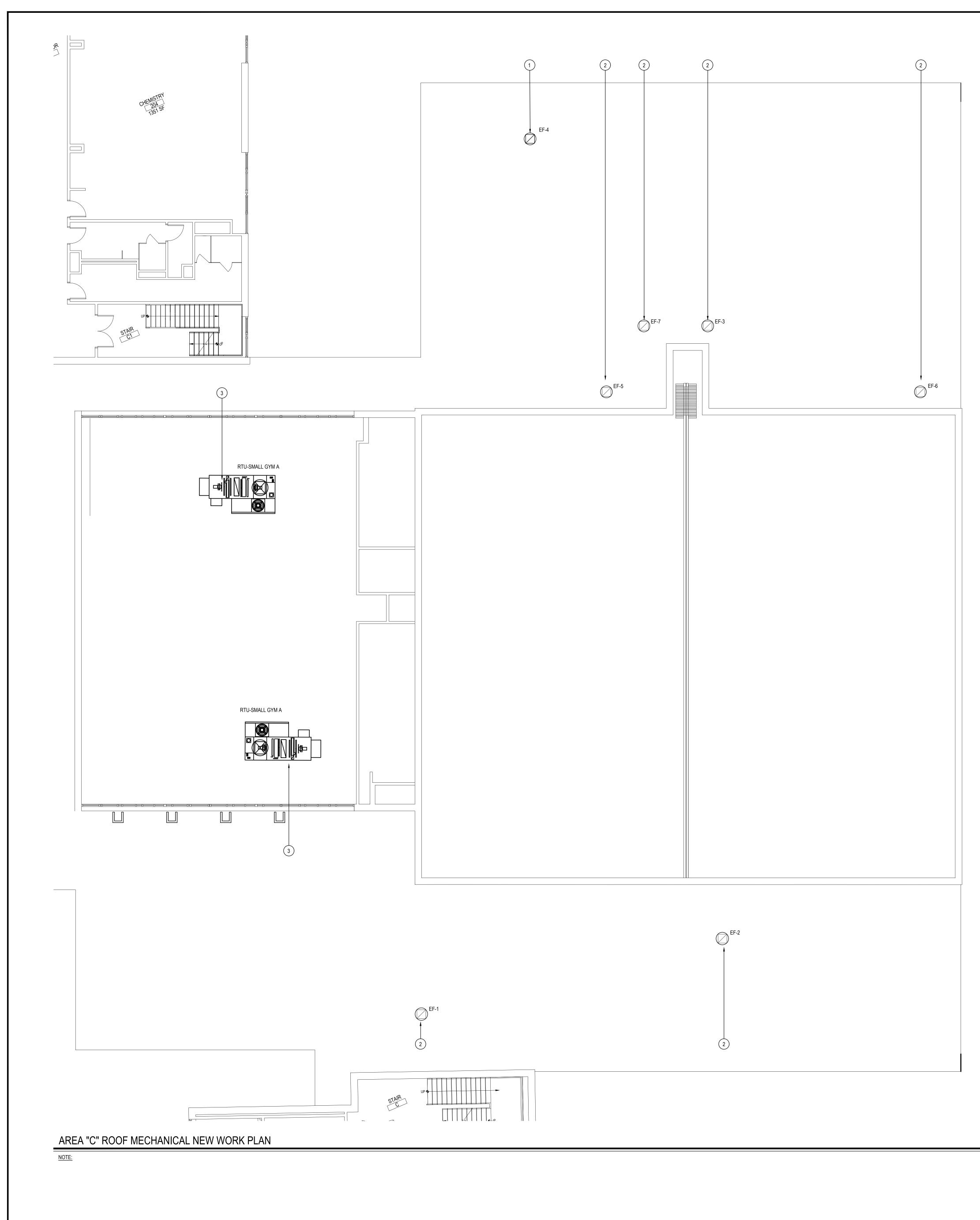


GENERAL NOTES:

FOR ALL NEW ROOFTOP (RTU) UNITS SHOWN, GC TO CUT SUPPLY AIR DUCTWORK OPENING & RETURN AIR OPENING IN ROOF. MC TO PROVIDE NEW ROOF CURB FOR EACH ROOFTOP FROM APPROVED ROOFTOP UNIT MANUFACTURER. GC TO INSTALL

- 2. ALL HVAC ROOF PENETRATIONS, ROOFTOP CURBS /SUPPORTS ,STEEL SUPPORTS /ANGLES BENEATH AND ROOFING PATCHING ASSOCIATED WITH MECHANICAL WORK IS BY GC, IN ORDER TO MAINTAIN OWNERS ROOFING MANUFACTURER WARRANTY
- 3. MC SHALL FURNISH & INSTALL NEW P-TRAPS ON NEW ROOFTOP UNITS PROVIDED FROM APPROVED ROOFTOP UNIT MANUFACTURER.
- 4. FOR NEW OUTDOOR CONDENSING UNIT (CU-138), MC TO HAVE APPROVED OUTDOOR CONDENSING UNIT MANUFACTURER PROVIDE SUPPORT RAILS FOR GC TO INSTALL & FLASH
- 5. FOR NEW OUTDOOR CONDENSING UNIT (CU-1, CU-2, CU-3), MC TO HAVE APPROVED OUTDOOR CONDENSING UNIT MANUFACTURER PROVIDE SUPPORT RAILS FOR GC TO INSTALL & FLASH







|                          |                        |               |              | EX            | HAUST       | FAN SCHE    | DULE    |         |             | GREENHECK AS |
|--------------------------|------------------------|---------------|--------------|---------------|-------------|-------------|---------|---------|-------------|--------------|
|                          |                        |               |              |               | MOTOR       |             |         | *WEIGHT | OPTIONS AND |              |
| TAG                      | MODEL                  | CFM           | ESP          | FAN RPM       | (HP)        | INLET SONES | VOLT/PH | (LBS)   | ACCESSORIES | NOTES        |
| EF-1                     | G-099-VG               | 744           | 0.50         | 1378          | 1/4         | 9.0         | 115/1   | 98.0    | 1,2,3,4,5,6 |              |
| EF-2                     | G-080-VG               | 278           | 0.50         | 1623          | 1/10        | 7.9         | 115/1   | 62.0    | 1,2,3,4,5,7 |              |
| EF-3                     | G-095-VG               | 560           | 0.50         | 1494          | 1/6         | 8.6         | 115/1   | 85.0    | 1,2,3,4,5,6 |              |
| EF-4                     | G-095-VG               | 550           | 0.50         | 1486          | 1/6         | 8.5         | 115/1   | 85.0    | 2,3,4,5,6,8 |              |
| EF-5                     | G-095-VG               | 585           | 0.50         | 1516          | 1/6         | 8.9         | 115/1   | 85.0    | 1,2,3,4,5,6 |              |
| EF-6                     | G-097-VG               | 115           | 0.50         | 1153          | 1/4         | 4.8         | 115/1   | 78.0    | 1,2,3,4,5,7 |              |
| EF-7                     | G-090-VG               | 510           | 0.50         | 1600          | 1/10        | 7.8         | 115/1   | 82.0    | 1,2,3,4,5,6 |              |
|                          |                        |               |              |               |             |             |         |         |             |              |
| Options / Accessories:   |                        |               |              |               |             |             |         |         |             |              |
| 1. Aluminum curb adapt   | er to fit existing roo | of curb (cont | tractor to v | erify existin | ng curb dir | nensions)   |         |         |             |              |
| 2. NEMA 1 disconnect sw  | itch factory mounte    | d and wire    | d            |               |             |             |         |         |             |              |
| 3. UL-705 Listing        |                        |               |              |               |             |             |         |         |             |              |
| 4. Varible speed motor   | w/soft start and the   | rmal overlo   | oad protec   | tion          |             |             |         |         |             |              |
| 5 Factory mounted spee   | ed dial                |               |              |               |             |             |         |         |             |              |
| 6. Motorized leakage cla | ass 1 damper w/115     | v actuator a  | and end sv   | vitches       |             |             |         |         |             |              |
| 7. Gravity backdraft dam | per                    |               |              |               |             |             |         |         |             |              |
| 8. New roof curb         |                        |               |              |               |             |             |         |         |             |              |
|                          |                        |               |              |               |             |             |         |         |             |              |
| General Notes:           |                        |               |              |               |             |             |         |         |             |              |
| *Weights include all ac  | cessories              |               |              |               |             |             |         |         |             |              |
|                          |                        |               |              |               |             |             |         |         |             |              |

# EXHAUST FAN SCHEDULE

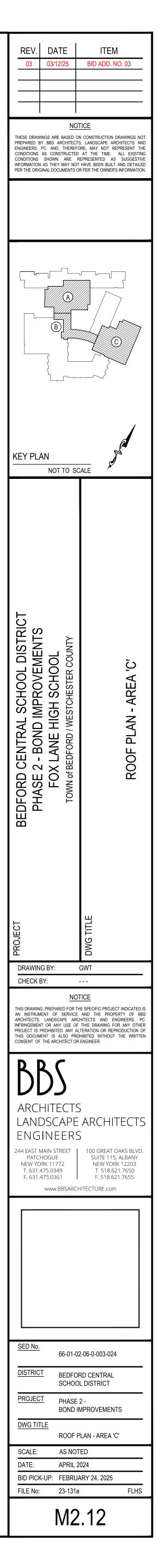
NOTE: <u>GENERAL SCHEDULE NOTES:</u> 1. REFER TO SPECIFICATIONS FOR SEQUENCE OF OPERATIONS FOR NEW UNIT.

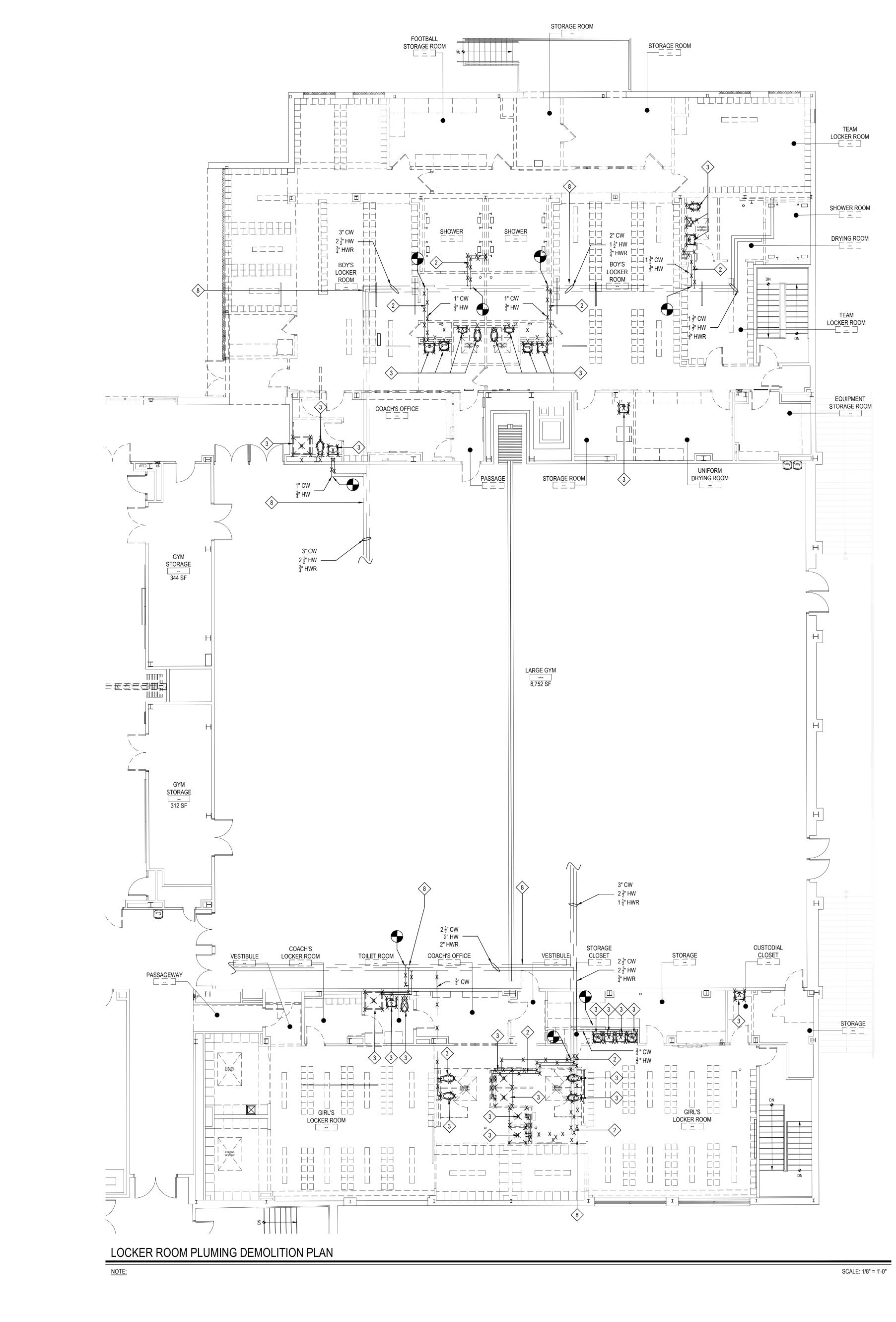
2. PROVIDE FACTORY-AUTHORIZED REPRESENTATIVE TO BE PRESENT FOR START-UP, COMMISSIONING, AND TRAINING OF EQUIPMENT TO OWNER'S PERSONNEL. 3. FACTORY-AUTHORIZED MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT FOR START-UP, COMMISSIONING, & TRAINING OF NEW EQUIPMENT TO OWNER'S DESIGNATED PERSONNEL.

4. PROVIDE A ROOF CURB AS NOTED IN NOTES ABOVE IN SCHEDULES. 5. PROVIDE BIRDSCREEN FOR EQUIPMENT.



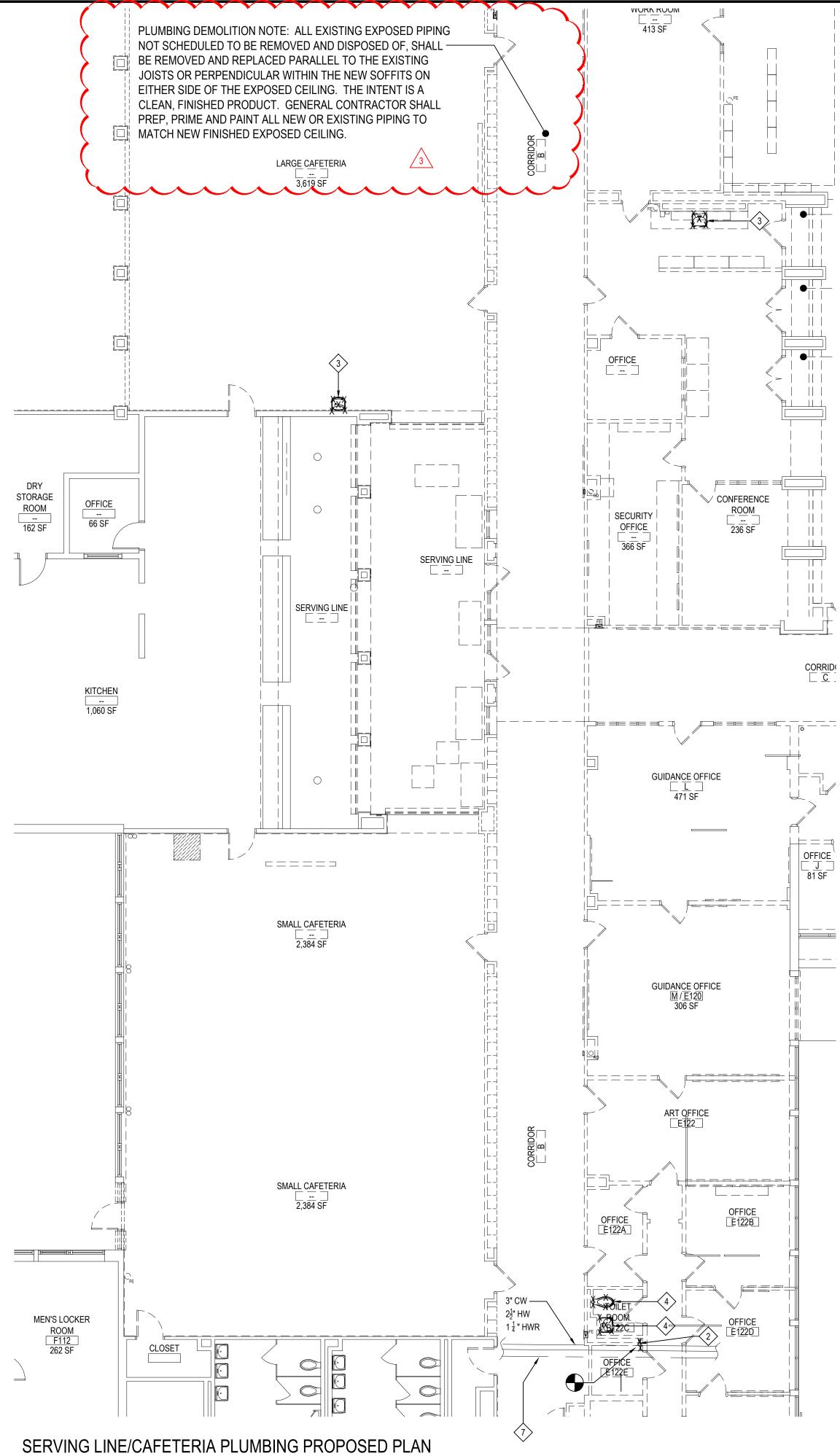




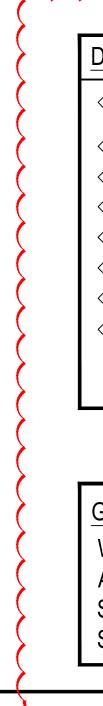


DRY STORAGE ROOM OFFICE --162 SF 66 SF





NOTE:



# DEMOLITION KEY NOTES

1 NA

 $\langle 2 
angle$  PC to demolish and remove existing HWS, HWR, CWS domestic water piping to the extents shown. PC to cap water lines in ceiling

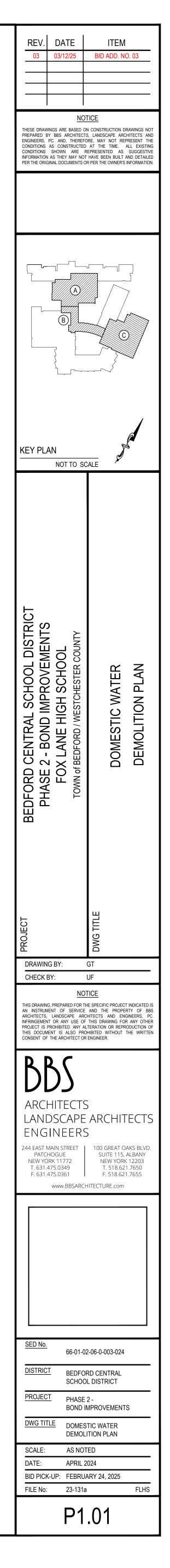
- 🖇 PC TO REMOVE EXISTING PLUMBING FIXTURES, HANGERS, ACCESSORIES AS SHOWN. PC TO REMOVE ALL PIPING TO FIXTURES & CAP IN BASEMENT BELOW, PIPE SIZE AS NOTED ON PLAN
- VEX PC TO REMOVE EXISTING PLUMBING FIXTURES, HANGERS, ACCESSORIES AS SHOWN. PC TO REMOVE ALL PIPING TO FIXTURES & CAP BELOW IN PIPE TUNNEL, PIPE SIZE AS NOTED ON PLAN
- (5) PC TO DEMO AND REMOVE EXISTING STORM WATER LINE TO EXTENTS SHOWN, PC PIPE SIZE AS NOTED ON PLAN
- 6 PC TO DEMO AND REMOVE EXISTING VENT LINE TO EXTENTS SHOWN, PIPE SIZE AS NOTED ON PLAN
- (7) CW/HW/HWR AND SANITARY WASTE PIPING LOCATED IN PIPE TUNNEL BELOW, PIPE SIZE AS NOTED ON PLAN
- (8) CW/HW/HWR AND SANITARY WASTE PIPING LOCATED IN BASEMENT BELOW, PIPE SIZE AS NOTED ON PLAN

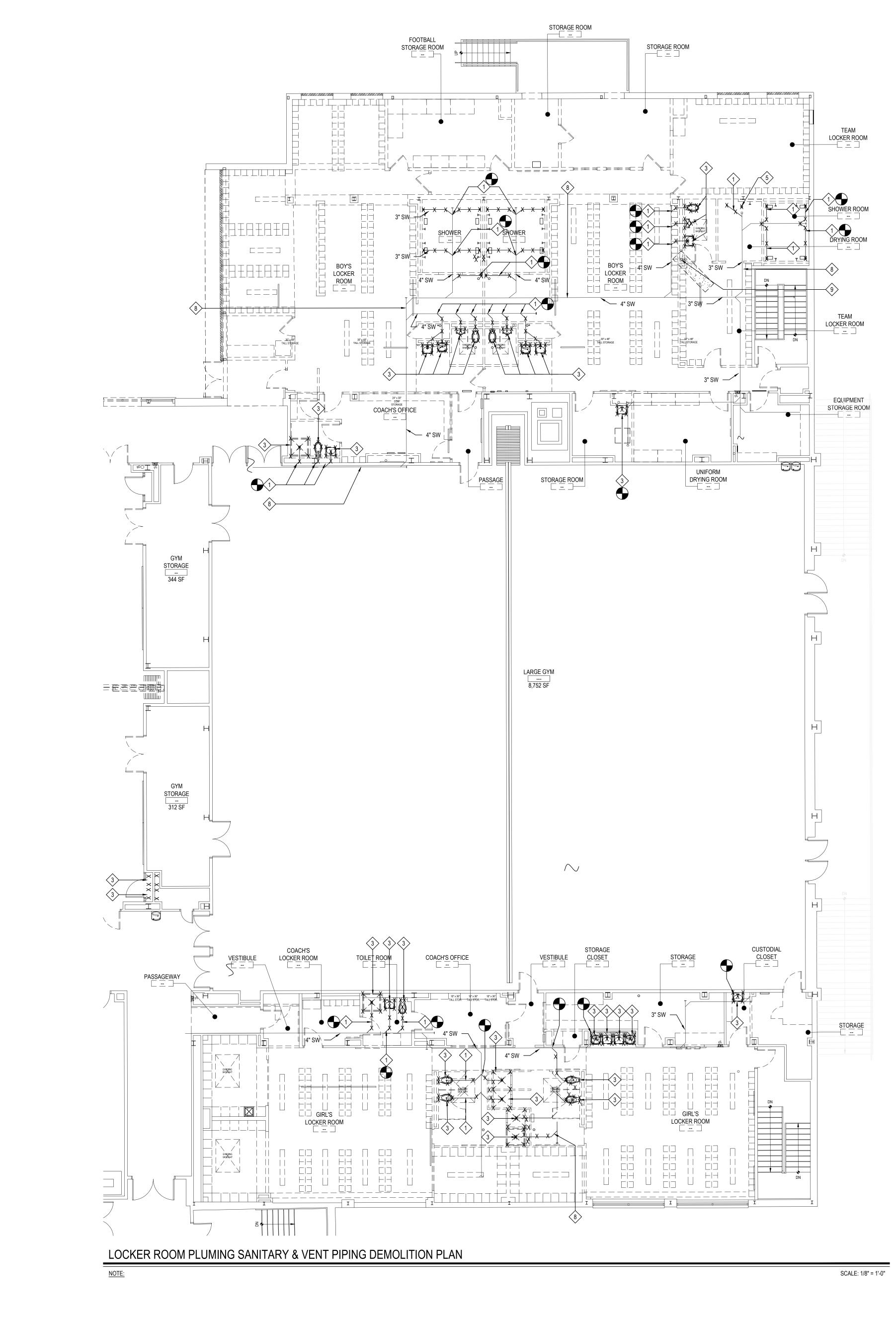
# GENERAL NOTE:

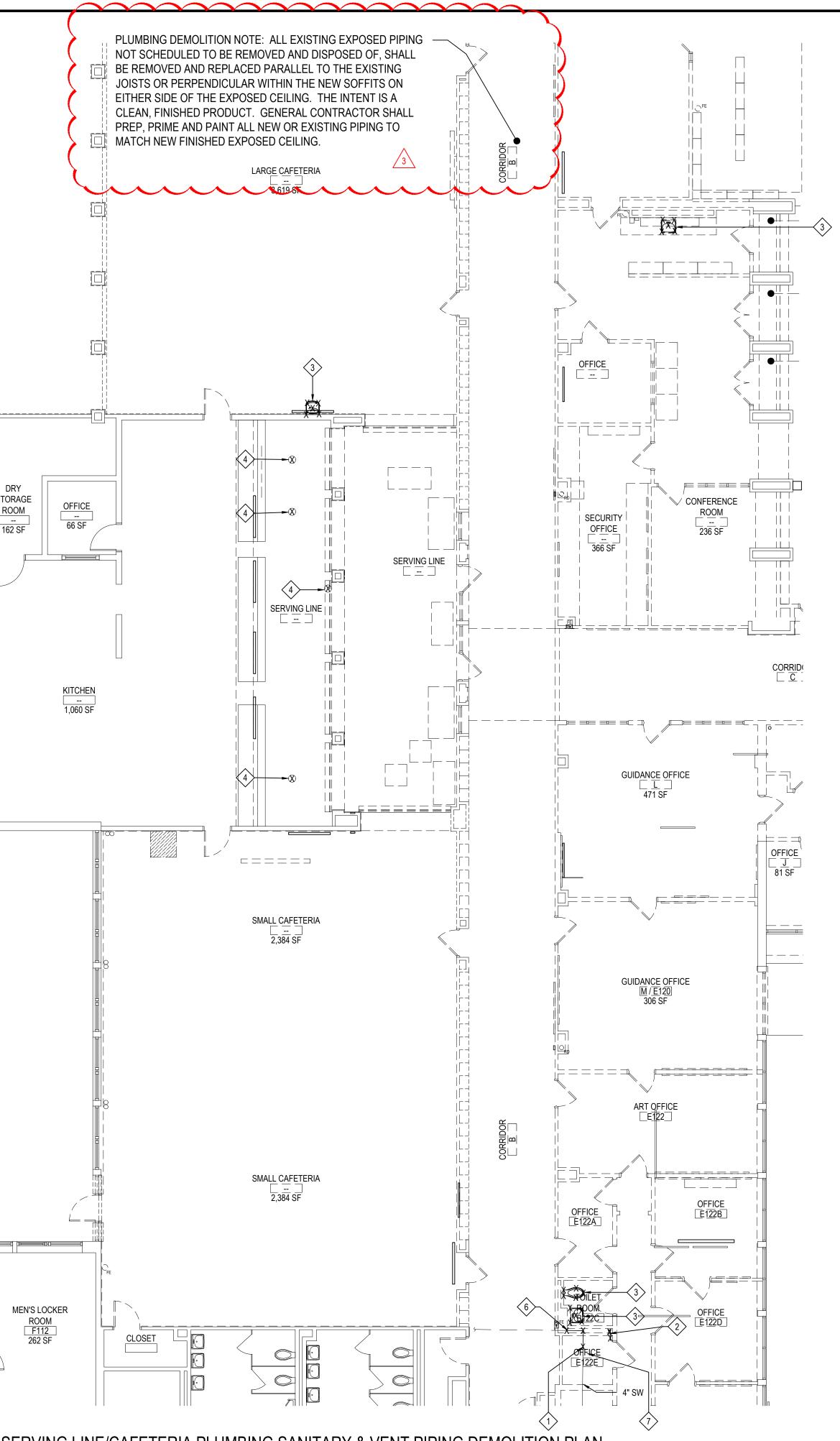
WHERE APPLICABLE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL EXISTING SLAB SAWCUT, CHOP OUT CONCRETE, EXCAVATION, SUBSLAB PIPING, BACKFILL WITH 3/8" PEA GRAVEL, NEW CONCRETE SLAB PATCH AS REQUIRED FOR SUBSLAB WORK.

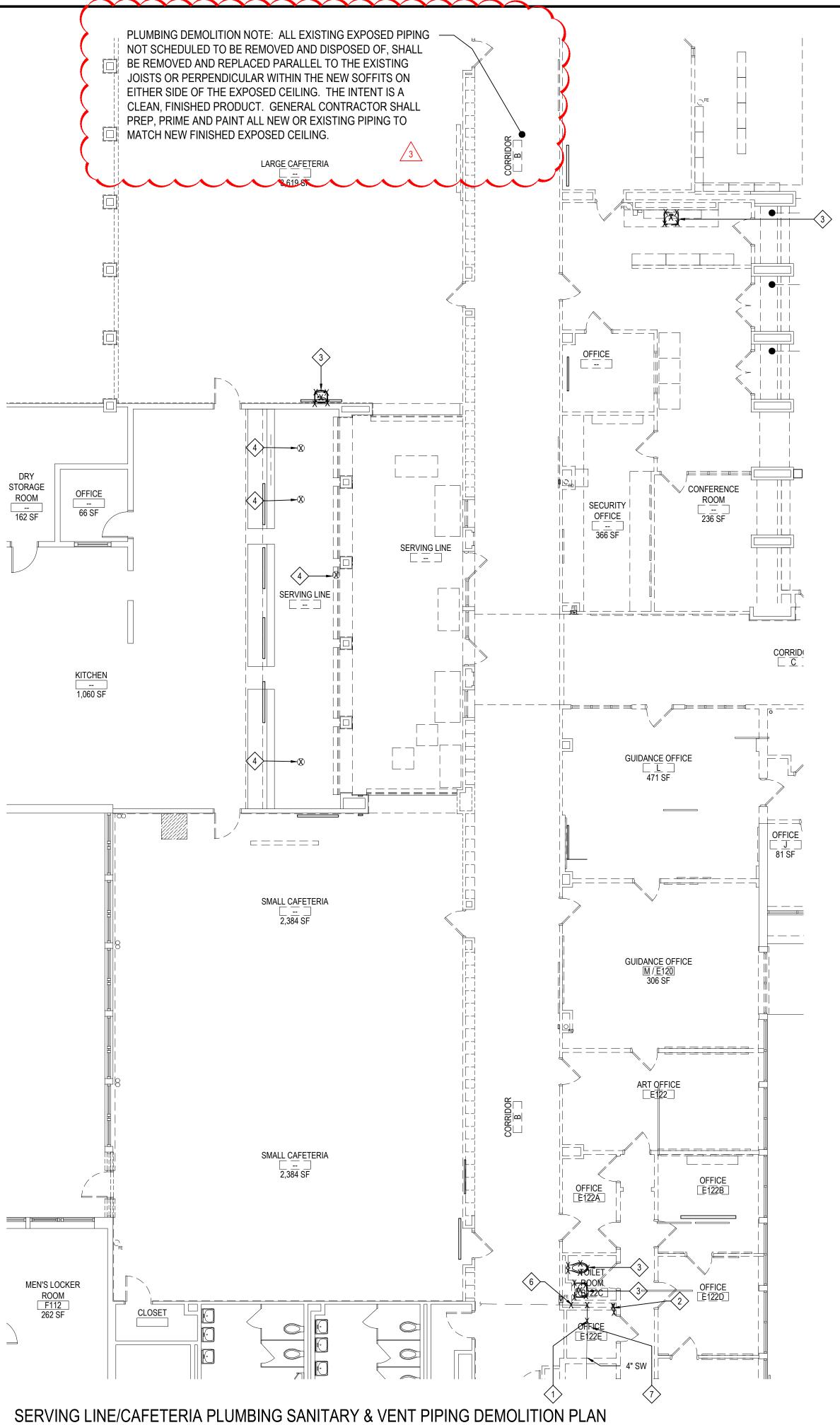
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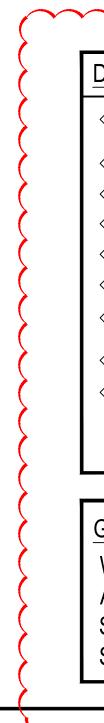
SCALE: 1/8" = 1'-0"











### SCALE: 1/8" = 1'-0"

## DEMOLITION KEY NOTES

1 PC TO DEMOLISH AND REMOVE EXISTING SANITARY WASTE LINES TO EXTENTS SHOWN. PC TO CAP EXISTING SANITARY LINE AT THE MAIN. PC TO VERIFY EXACT LOCATION IN FIELD PRIOR TO START OF WORK, PIPE SIZE AS NOTED ON PLAN

2 PC TO REMOVE EXISTING PLUMBING FIXTURES, HANGERS, ACCESSORIES AS SHOWN. PC TO LEAVE STUB UPS AT LOCATION FOR FUTURE CONNECTION IN NEW WORK PHASE, PC TO REFER TO P2.02 FOR NEW PHASE. YEC TO REMOVE EXISTING PLUMBING FIXTURES, HANGERS, ACCESSORIES AS SHOWN. PC TO REMOVE ALL PIPING TO FIXTURES AND CAP AT ENDS IN SPACE BELOW

4 PC to remove existing floor drains as shown, opening to be maintained for new floor drain in New Work Plan.

 $\langle 5 \rangle$  PC TO DEMO AND REMOVE EXISTING STORM WATER LINE TO EXTENTS SHOWN.

 $\langle 6 \rangle$  PC TO DEMO AND REMOVE EXISTING VENT LINE TO EXTENTS SHOWN.

2 EXISTING SANITARY WASTE PIPING LOCATED IN PIPE TUNNEL BELOW, SIZE AS NOTED ON PLAN.PC RESPONSIBLE FOR ANY AND ALL EXCAVATION OF PIPING. PC TO VERIFY EXACT LOCATION IN FIELD PRIOR TO START OF WORK , PIPE SIZE AS NOTED ON PLAN

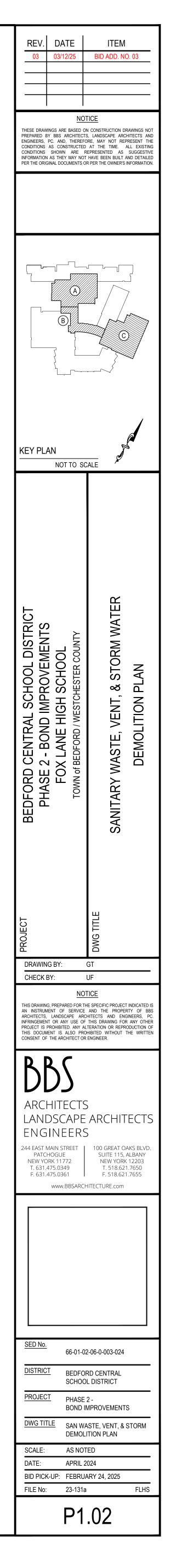
(8) EXISTING SANITARY WASTE PIPING LOCATED IN CEILING OF BASEMENT BELOW, SIZE AS NOTED ON PLAN

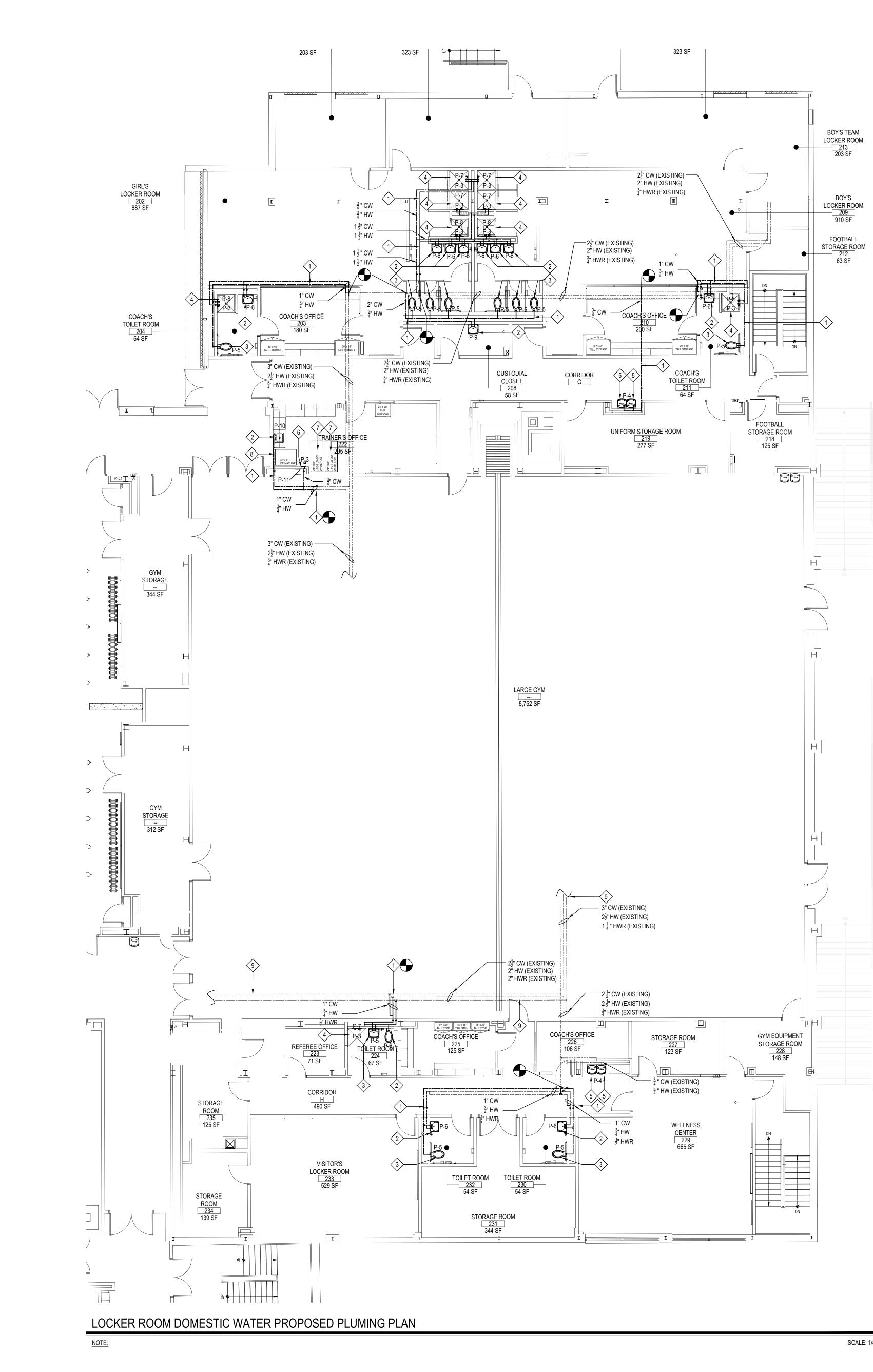
9 EXISTING STORM WATER PIPE TO BE DIVERTED, SEE P2.02 FOR ADDITIONAL INFORMATION

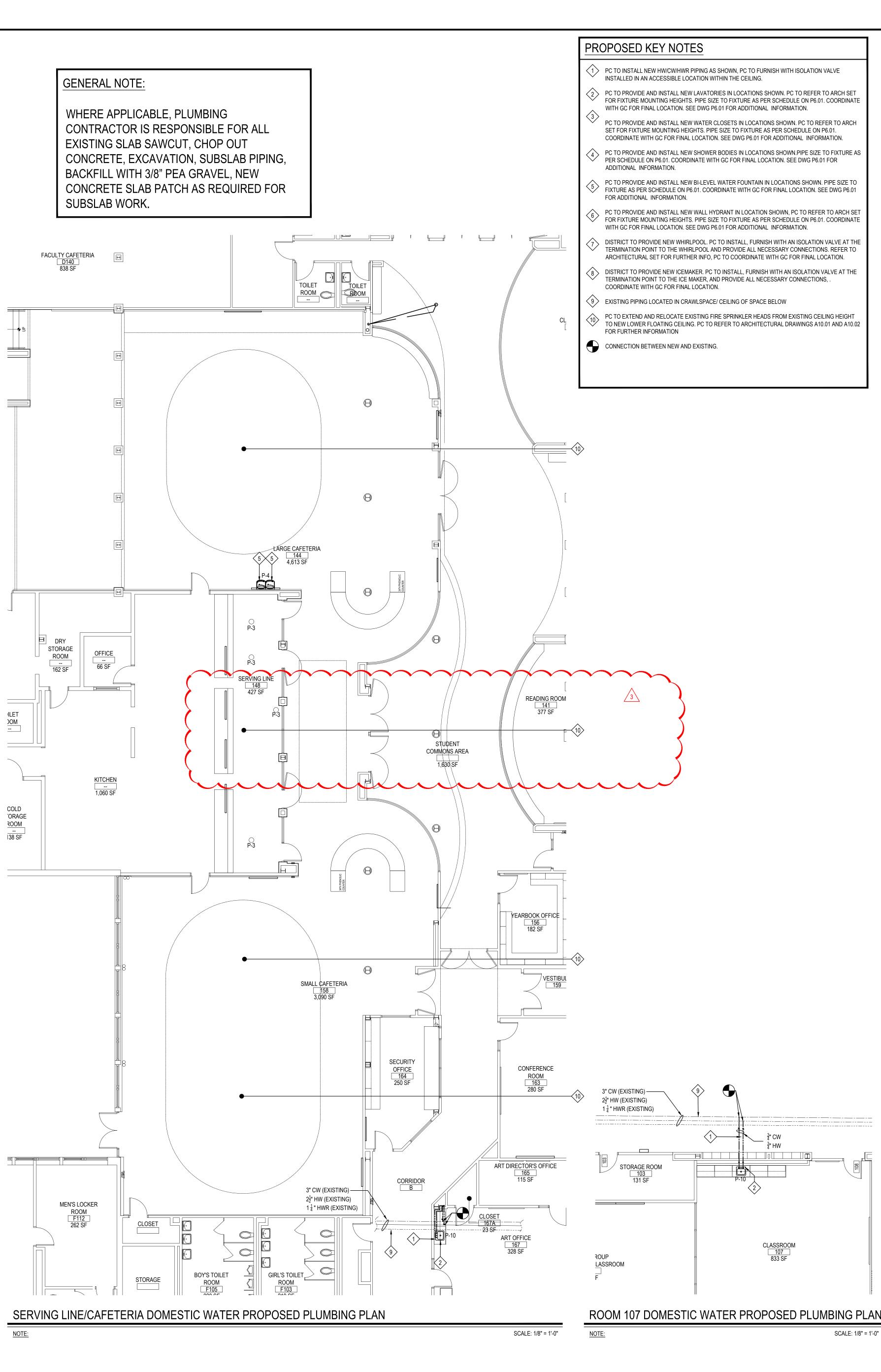
# GENERAL NOTE:

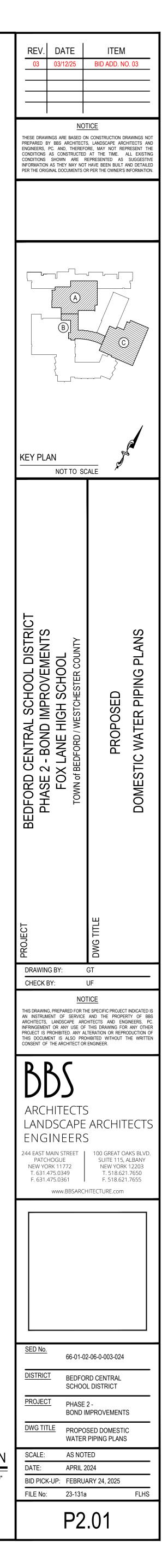
WHERE APPLICABLE, PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL EXISTING SLAB SAWCUT, CHOP OUT CONCRETE, EXCAVATION, SUBSLAB PIPING, BACKFILL WITH 3/8" PEA GRAVEL, NEW CONCRETE SLAB PATCH AS REQUIRED FOR SUBSLAB WORK.

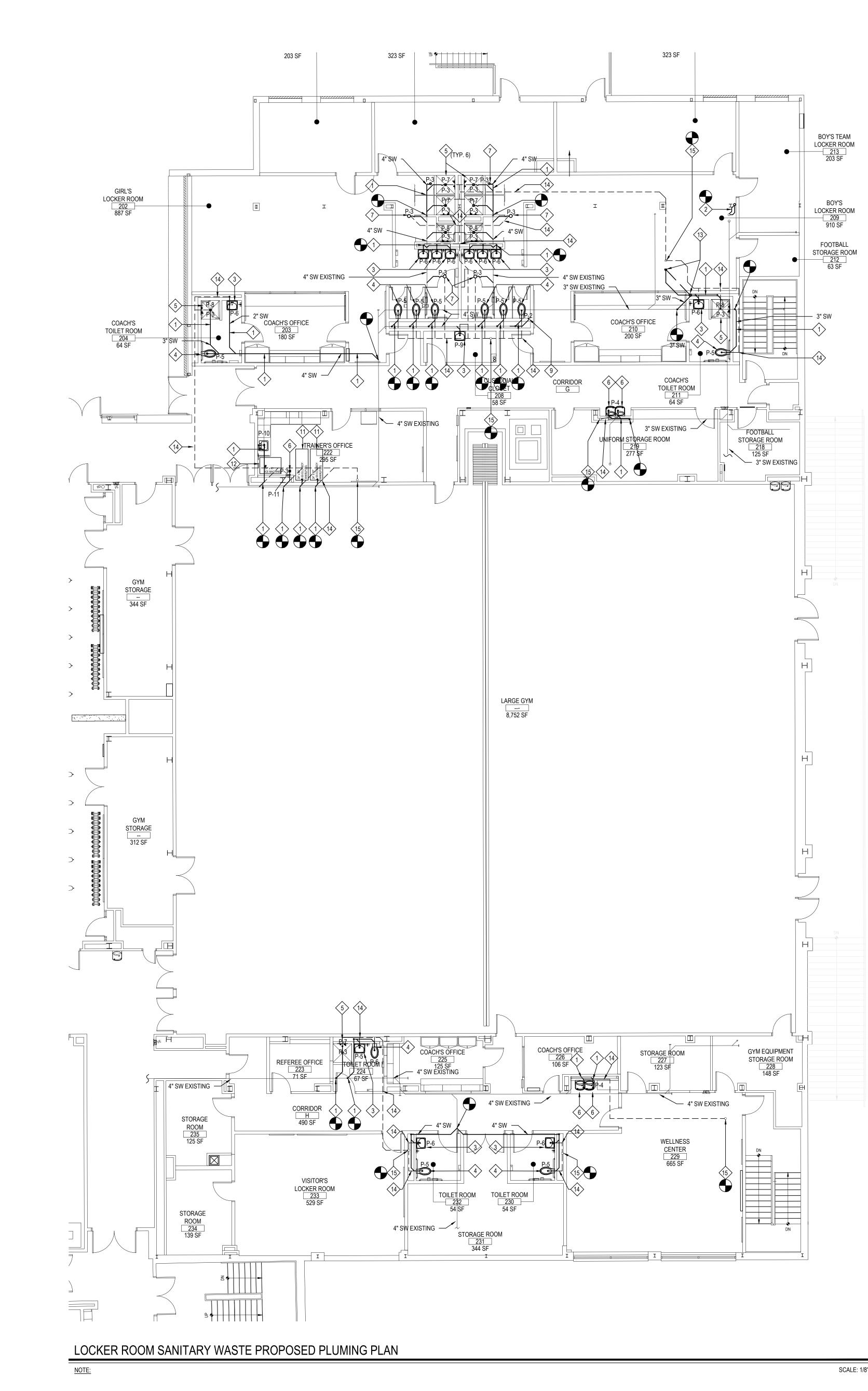
3

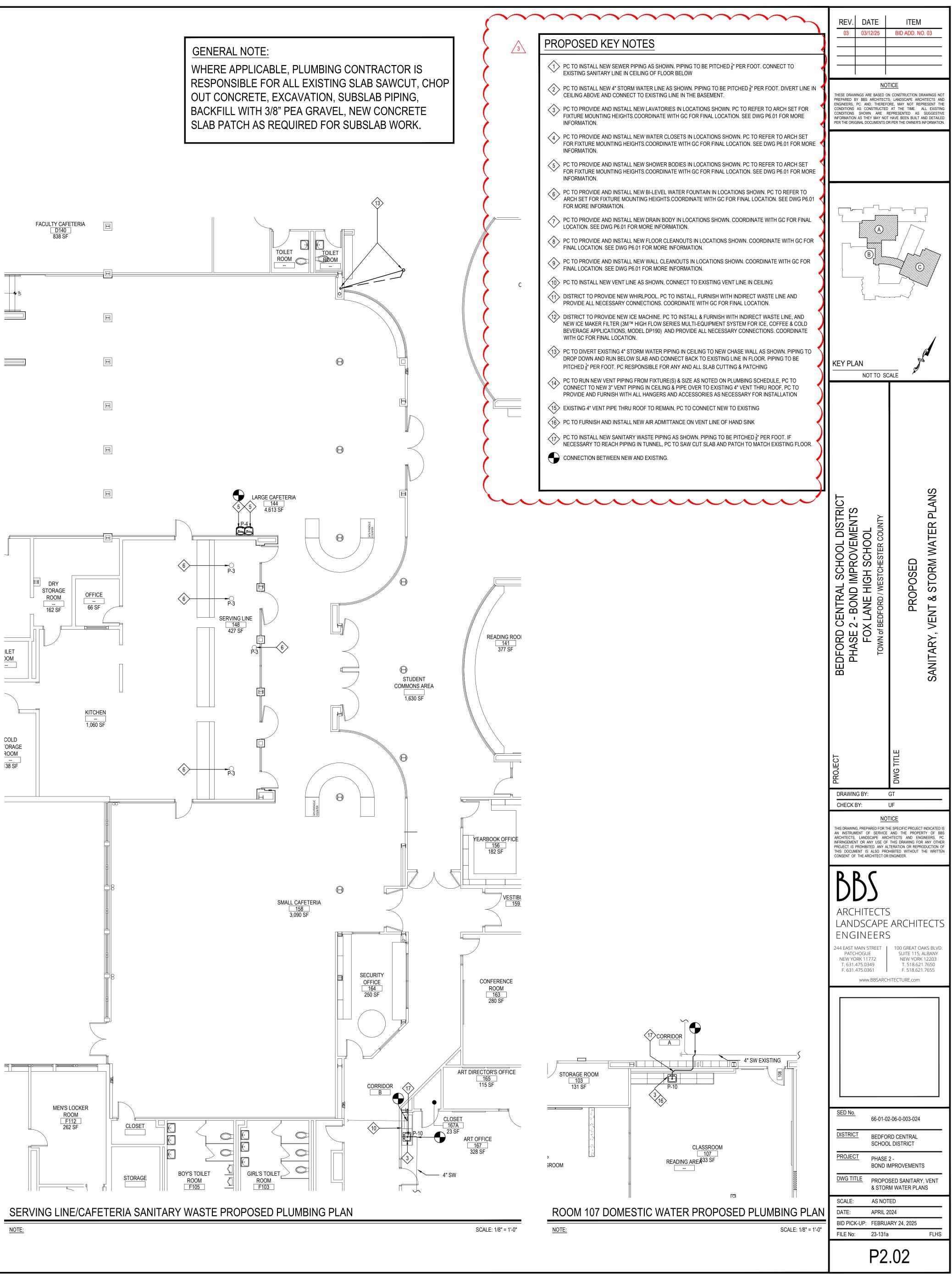


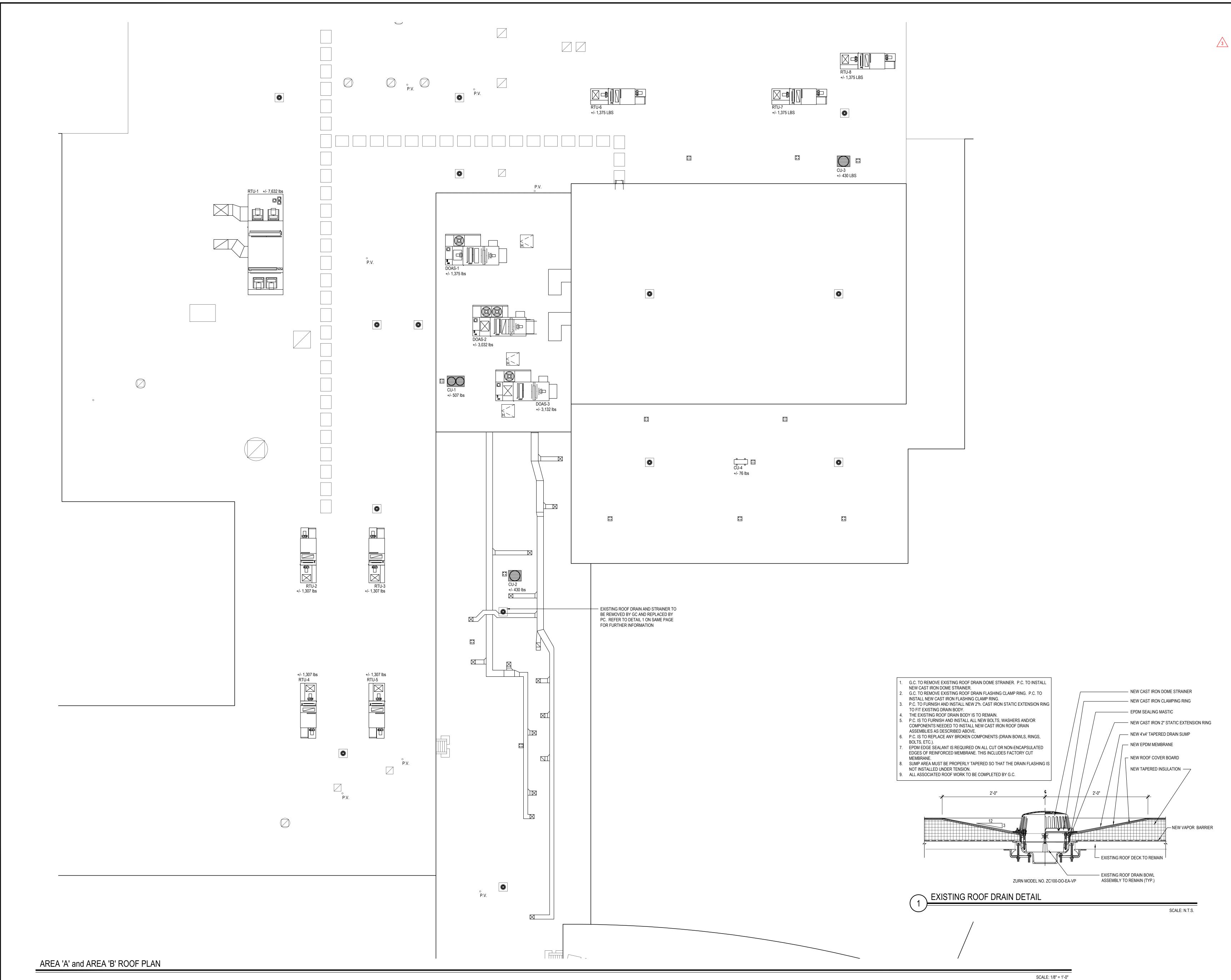


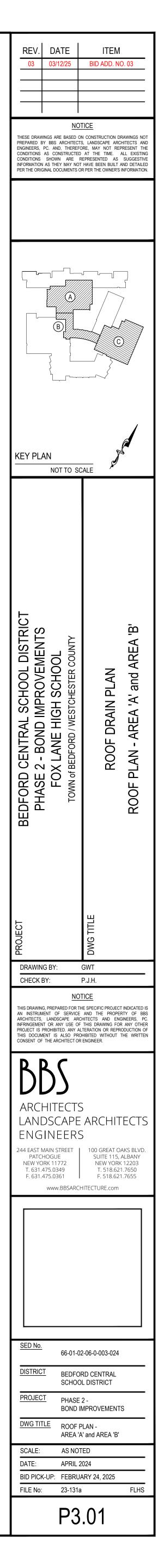


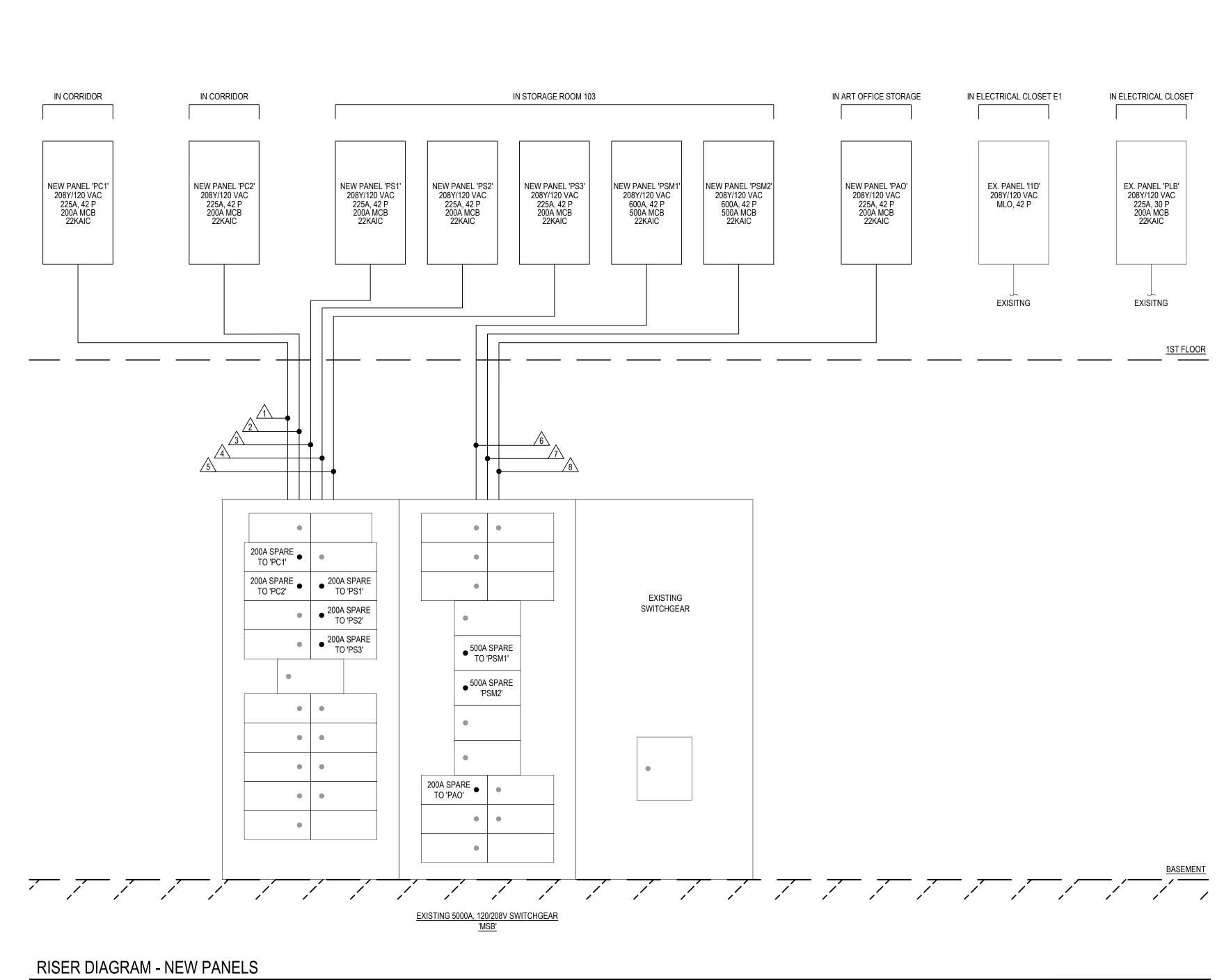






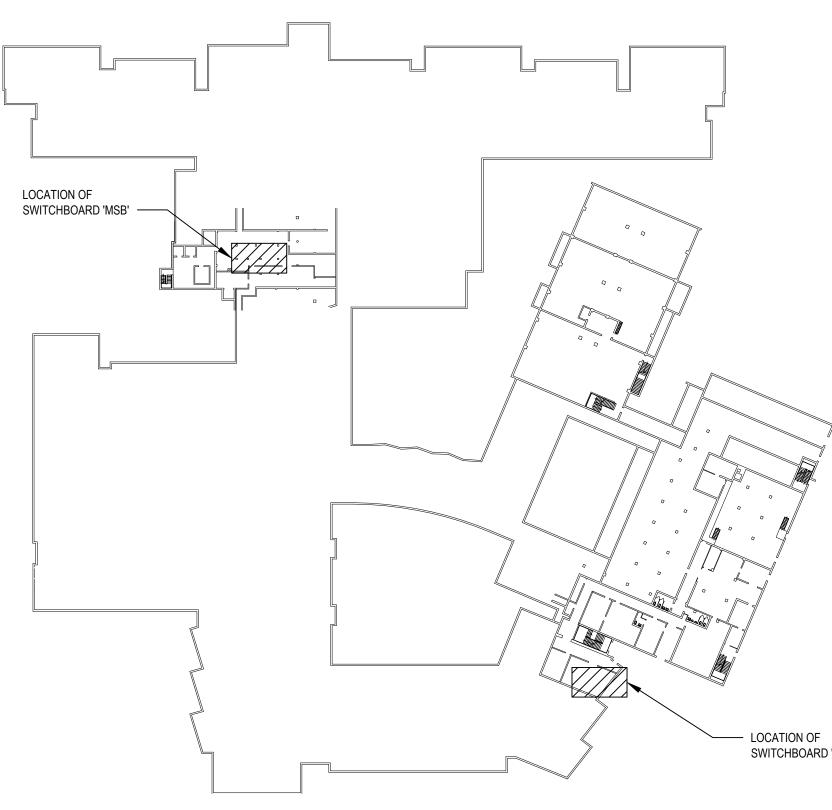




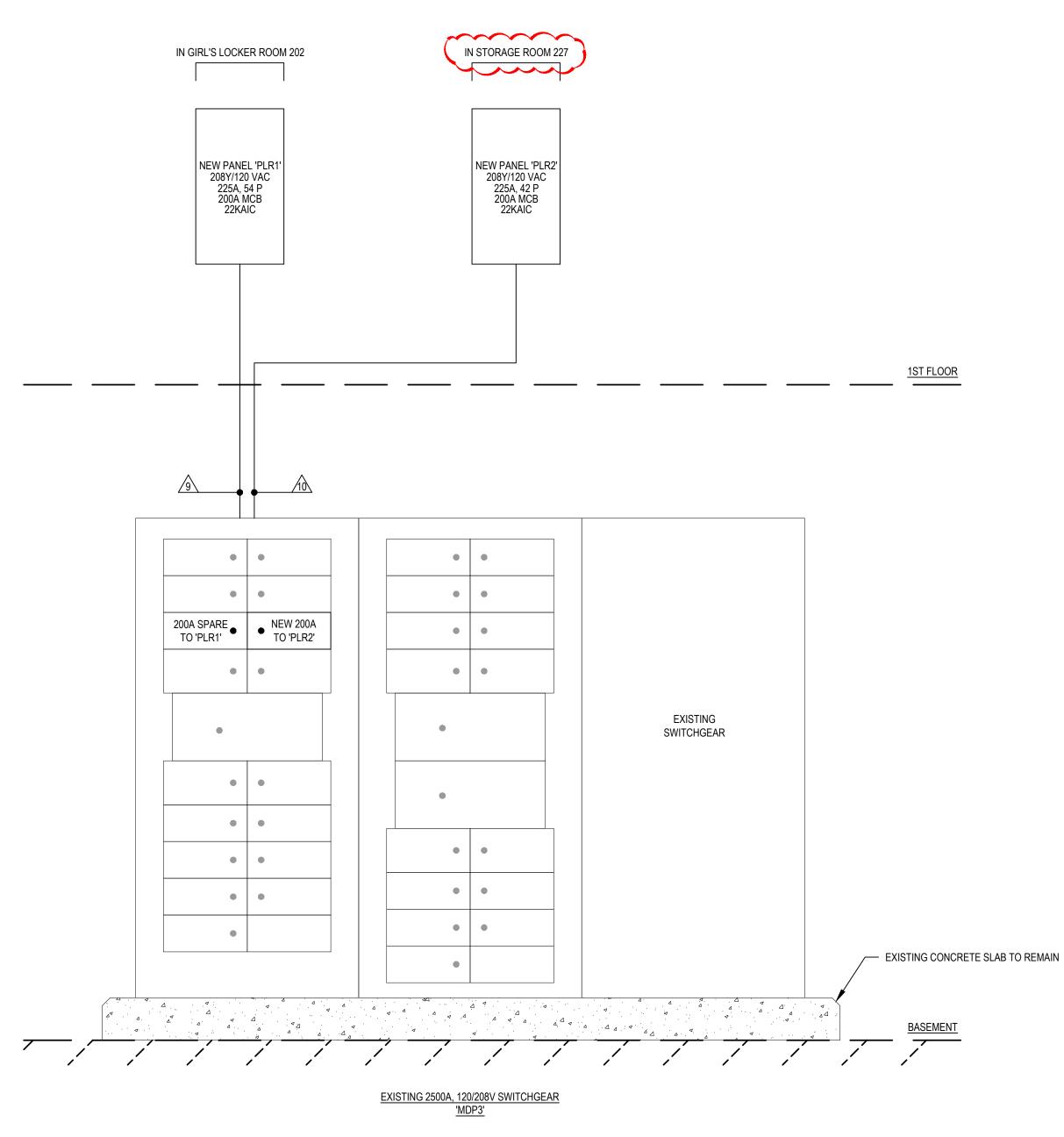


NOTE: PROVIDE AND INSTALL NEW PRINT CIRCUIT BREAKER NAME TAGS. HAND WRITING NOT ALLOWED.

|            | WIRING KEY NOTES:  |
|------------|--|
| $\Delta$   | 4#3/0, 1#6G - 2 1/2"C FROM<br>SPARE 200A, 3P BREAKER TO NEW PANEL 'PC1'                    |
| 2          | 4#4/0, 1#5G - 2 1/2"C FROM<br>SPARE 200A, 3P BREAKER TO NEW PANEL 'PC2'                    |
| 3          | 4#300KCMIL, 1#3G - 3"C FROM<br>SPARE 200A, 3P BREAKER TO NEW PANEL 'PS1'                   |
| 4          | 4#300KCMIL, 1#3G - 3"C FROM<br>SPARE 200A, 3P BREAKER TO NEW PANEL 'PS2'                   |
| <u>/</u> 5 | 4#300KCMIL, 1#3G - 3"C FROM<br>SPARE 200A, 3P BREAKER TO NEW PANEL 'PS3'                   |
| 6          | (2) SETS OF 4#500KCMIL, 1#1G - 3 1/2"C FROM<br>SPARE 500A, 3P BREAKER TO NEW PANEL 'PSM1'  |
| $\wedge$   | (2) SETS OF 4#500KCMIL, 1#1G - 3 1/2" C FROM<br>SPARE 500A, 3P BREAKER TO NEW PANEL 'PSM2' |
| 8          | 4#3/0, 1#6G - 2 1/2"C FROM<br>SPARE 200A, 3P BREAKER TO NEW PANEL 'PAO'                    |
| ß          | 4#300KCMIL, 1#3G - 2 1/2"C FROM<br>SPARE 200A, 3P BREAKER TO NEW PANEL 'PLR1'              |
| 10         | 4#3/0, 1#6G - 2 1/2"C FROM<br>NEW 200A, 3P BREAKER TO NEW PANEL 'PLR2'                     |



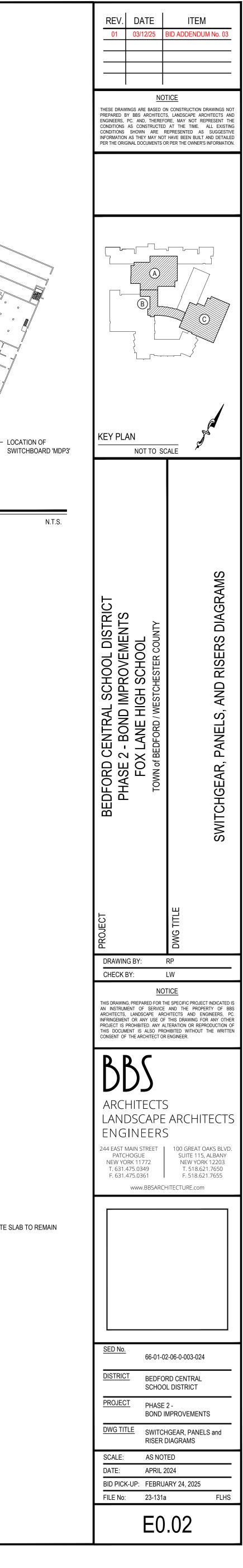


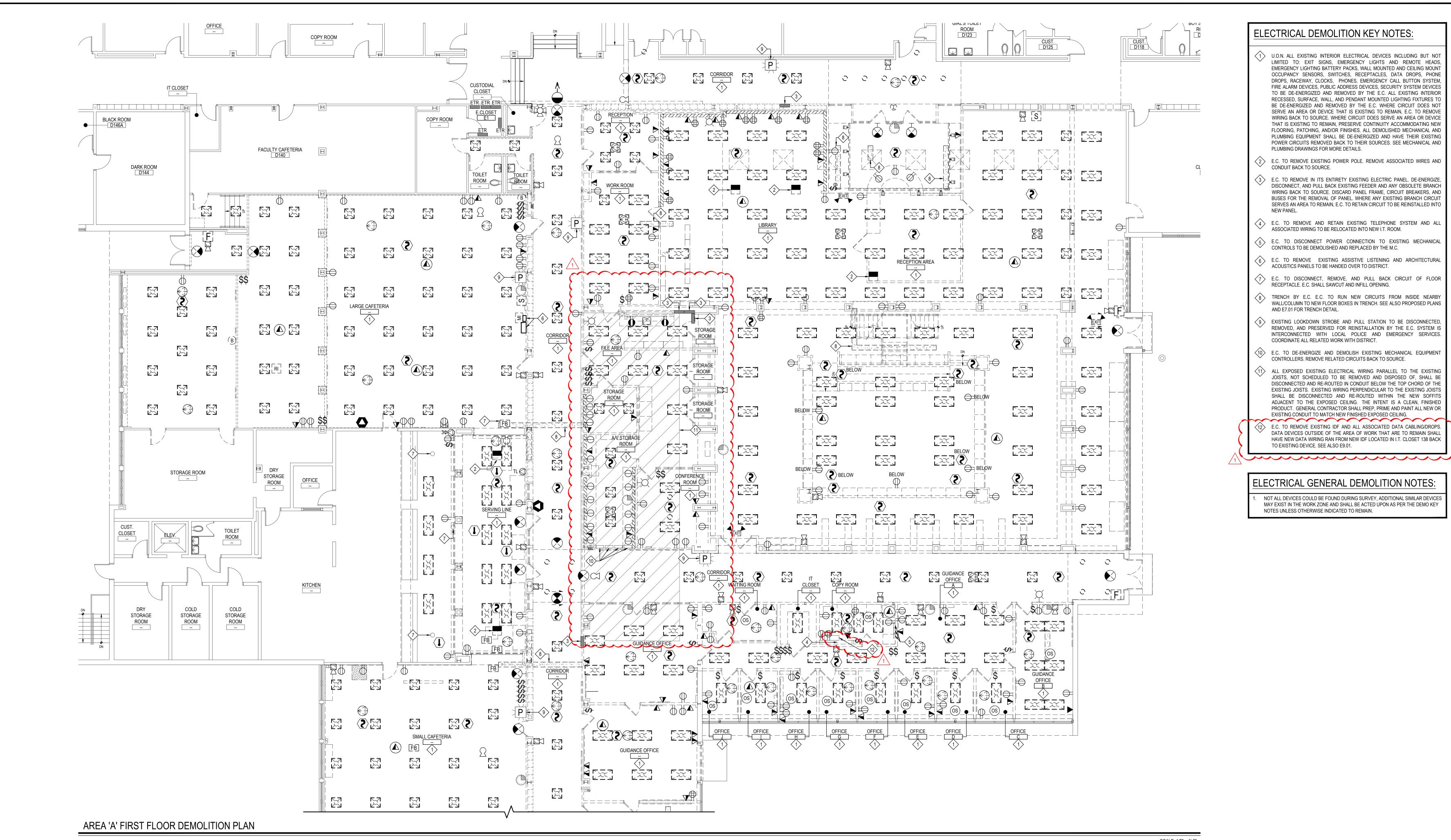


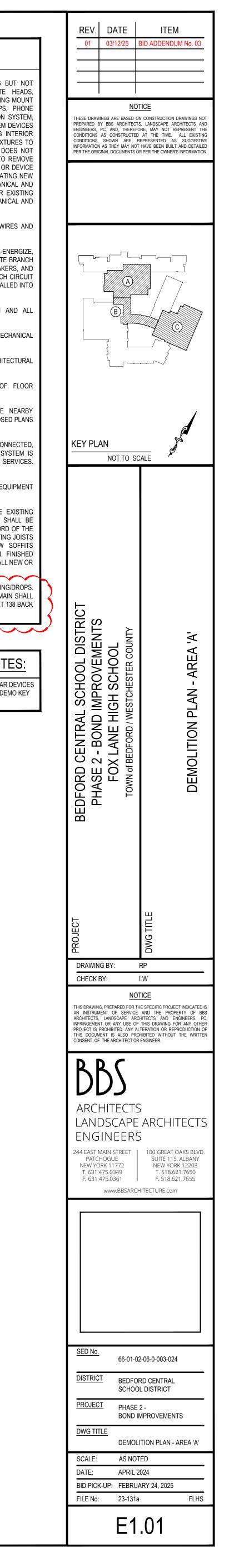
RISER DIAGRAM - E. SWITCH GEAR ROOM PLAN

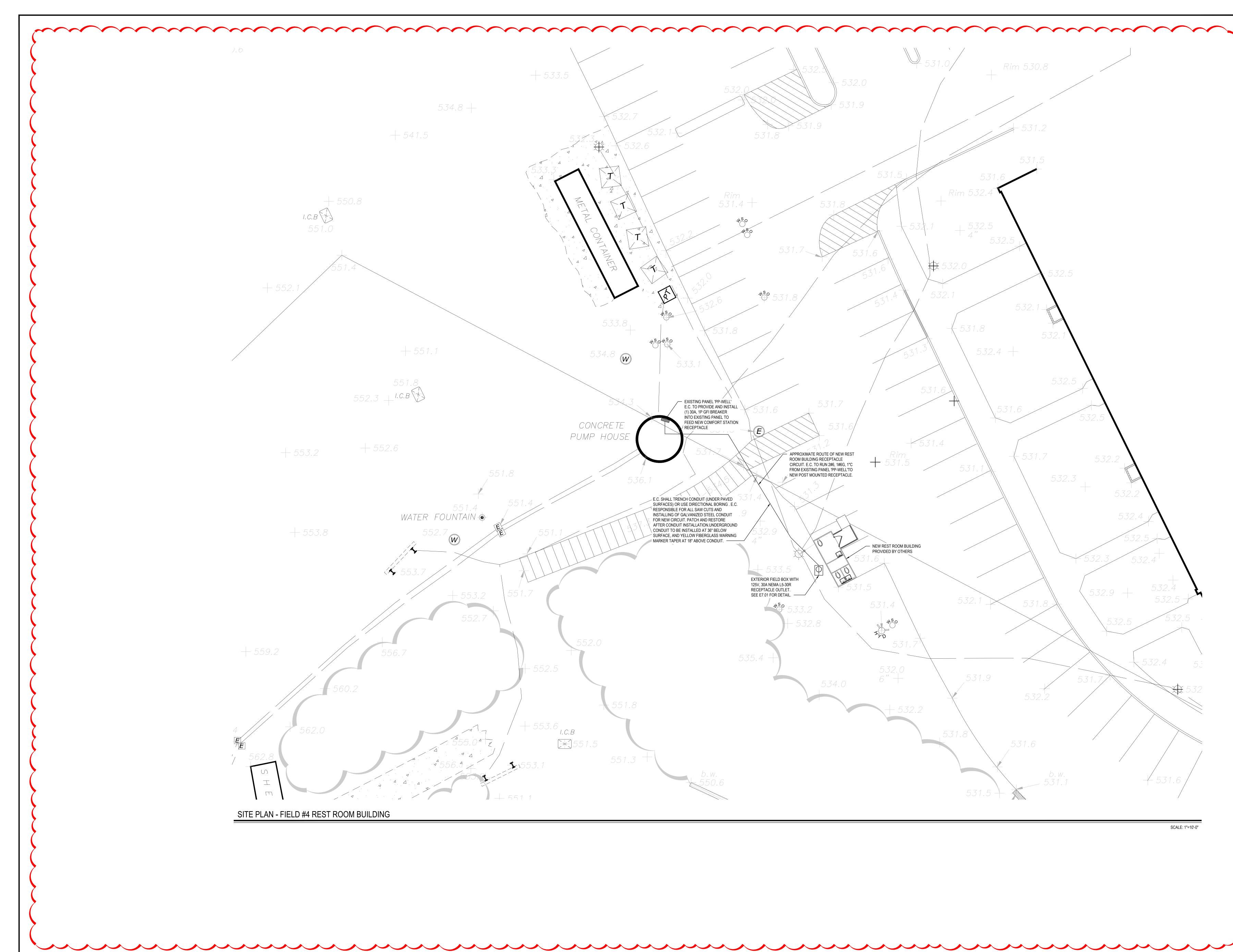
NOTE: PROVIDE AND INSTALL NEW PRINT CIRCUIT BREAKER NAME TAGS. HAND WRITING NOT ALLOWED.

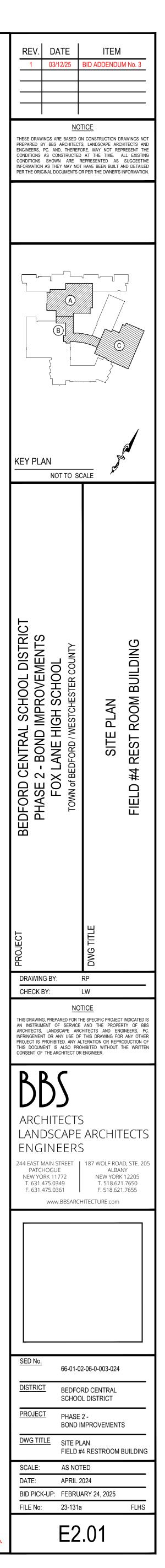
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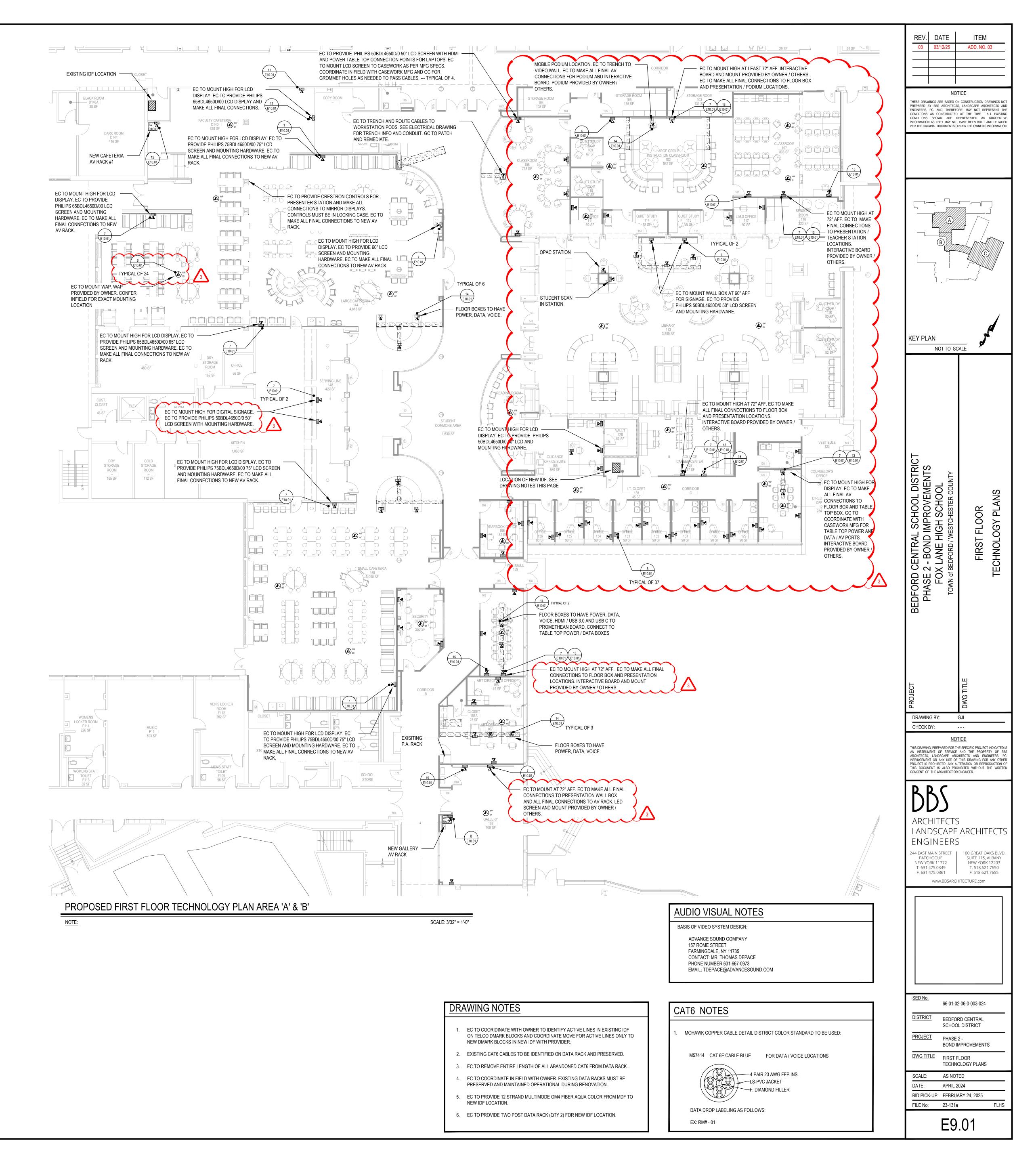












# FOX LANE HIGH SCHOOL

632 SOUTH BEDFORD ROAD, BEDFORD, NY 10506

SED No.: 66-01-02-06-0-003-024 (23-131a)

### FOX LANE HIGH SCHOOL

| CIP0.01<br>CIP0.02    | SITE PLAN - CONTRACTOR ACCESS and TEMPORARY FACILITIES CONSTRUCTION IMPLEMENTATION PLANS |
|-----------------------|--|
| CIVIL                 |  |
| CS0.01<br>CS2.01      | FLHS FIELD #4 TOPOGRAPHIC SURVEY<br>SITE ALIGNMENT and SCHEDULE PLAN                     |
| CS2.02<br>ARCHITECTUI | SITE PLAN - FIELD No. 4 RESTROOM BUILDING  |
| 40.01<br>40.02        | FIRST FLOOR CODE COMPLIANCE KEY PLAN<br>BASEMENT CODE COMPLIANCE KEY PLAN                |
|                       |  |

| A0.01    | FIRST FLOOR CODE COMPLIANCE KEY PLAN                     |
|----------|--|
| A0.02    | BASEMENT CODE COMPLIANCE KEY PLAN                        |
| A0.03    | SECOND FLOOR CODE COMPLIANCE KEY PLAN                    |
| A1.01    | DEMOLITION PLAN - AREA 'A'                               |
| A1.02    | DEMOLITION PLAN - AREA 'B'                               |
| A1.03    | DEMOLITION PLAN - AREA 'C'                               |
| A1.04    | DEMOLITION ROOF PLAN - AREA 'A' and AREA 'B'             |
| A1.05    | DEMOLITION ROOF PLAN - AREA 'C'                          |
| A1.06    | DEMOLITION SECTIONS                                      |
| A1.07    | DEMOLITION SECTIONS                                      |
| A1.08    | DEMOLITION DETAILS                                       |
| A2.00    | PART IT ION TYPES  |
| A2.01    | PROPOSED PLAN - AREA 'A'                                 |
| A2.02    | PROPOSED PLAN - AREA 'B'                                 |
| A2.03    | PROPOSED PLAN - AREA 'C'                                 |
| A2.04    | PLAN DET AILS  |
| A2.05    | PLAN DET AILS  |
| A3.01    | ROOF PLAN - AREA 'A' and AREA 'B'                        |
| A3.02    | ROOF PLAN - AREA 'C'                                     |
| A3.03    | ROOF DETAILS   |
| A5.01    | BUILDING SECTIONS  |
| A5.02    | BUILDING SECTIONS  |
| A6.01    | WALL SECTIONS and DETAILS                                |
| A6.02    | WALL SECTIONS and DETAILS                                |
| A6.03    | WALL SECTIONS and DETAILS                                |
| A6.04    | WALL SECTIONS and DETAILS                                |
| A7.01    | ENLARGED STAIR PLAN and DETAILS                          |
| A8.01    | DOOR SCHEDULE  |
| A8.02    | DOOR SCHEDULE and STOREFRONT ELEVATIONS                  |
| A8.03    | DOOR DETAILS   |
| A8.04    | DOOR DETAILS   |
| A8.05    | VISION-LITE ELEVATIONS and DETAILS                       |
| A9.00    | FINISH SCHEDULE  |
| A9.01    | FINISH FLOOR PLAN - AREA 'A'                             |
| A9.02    | FINISH FLOOR PLAN - AREA 'B'                             |
| A9.03    | FINISH FLOOR PLAN - AREA 'C'                             |
| A9.04    | INTERIOR ELEVATIONS                                      |
| A9.05    | INTERIOR ELEVATIONS                                      |
| A9.06    | INTERIOR ELEVATIONS                                      |
| A9.07    | FINISH DETAILS   |
| A10.01   | REFLECTED CEILING PLAN - AREA 'A'                        |
| A10.02   | REFLECTED CEILING PLAN - AREA 'B'                        |
| A10.03   | REFLECTED CEILING PLAN - AREA 'C'                        |
| A10.04   | CEILING DETAILS  |
| A10.05   | CEILING DETAILS  |
| A11.01   | ENLARGED TOILET ROOM PLANS and DETAILS                   |
| A11.02   | ENLARGED LOCKER ROOM PLANS and DETAILS                   |
| A11.03   | ENLARGED LOCKER ROOM PLANS and DET AILS                  |
| A11.04   | CASEWORK and FURNITURE PLAN                              |
| A11.05   | CASEWORK ELEVATIONS                                      |
| A11.06   | FITNESS CENTER PLAN and ELEVATIONS                       |
| A12.01   | MISCELLANEOUS DET AILS                                   |
| STRUCTUR | <u>AL</u>  |
| 00.04    |  |
| S0.01    | DESIGN DATA and GENERAL NOTES                            |
| S0.02    | GENERAL NOTES, SCHEDULES and DETAILS                     |
| S0.03    | SPECIAL INSPECTION NOTES and SCHEDULE                    |
| S1.00    | PARTIAL ROOF FRAMING PLAN at LIBRARY                     |
| S1.01    | PARTIAL ROOF FRAMING PLANS - AREAS 'A', 'B', 'C'         |
| S1.02    | PARTIAL ROOF FRAMING PLAN - AREA 'A'                     |
| S1.03    | STAIR FOUNDATION and FRAMING PLANS - SECTIONS and DETAIL |
| S3.00    | FOUNDATION SECTIONS and DETAILS                          |

### FOX LANE HIGH SCHOOL (CONT)

| FOX LANE H     | IGH SCHOOL (CONT.)   |                      | FOX LANE MIDDLE SCHOOL (CONT.)  |                |  |
|----------------|--|----------------------|---|----------------|--|
| MECHANICAL     |  | TECHNOLO             | DGY   | MECHANICAL     |  |
| M0.01          | GENERAL NOTES, SYMBOLS and LEGENDS   | E9.00                | GENERAL NOTES, LEGENDS and ABBREVIATIONS  | M0.01          | GENERAL NOTES, LEGENDS, ETC.                                   |
| M1.01          | FIRST FLOOR DUCT WORK and EQUIPMENT DEMOLITION PLAN - AREA 'A'   | E9.01                | FIRST FLOOR TECHNOLOGY PLANS  | M1.01          | DEMOLITION PLANS   |
| M1.02          | BASEMENT HYDRONIC PIPING DEMOLIIT ON PLAN - AREA 'A'   | E9.02                | FIRST FLOOR SECURITY PLANS  | M2.01          | PROPOSED FIRST and SECOND FLOOR PLANS                          |
| M1.03          | FIRST FLOOR DUCT WORK and EQUIPMENT DEMOLITION PLAN - AREA 'B'   | E9.03                | FIRST FLOOR TECHNOLOGY PLAN - AREA 'C'  | M2.02          | PROPOSED FIRST and SECOND FLOOR PLANS                          |
| M1.04          | FIRST FLOOR HYDRONIC PIPING DEMOLITION PLAN - AREA 'B'   | E10.01               | TECHNOLOGY DETAILS  | M2.03          | PROPOSED THIRD FLOOR and ROOF PLANS                            |
| M1.05          | ROOF DEMOLITION PLAN - AREAS 'A and B'   | E10.02               | SECURITYDETAILS   | M6.01          | SCHEDULES and DETAILS  |
| M1.06          | BASEMENT DUCT WORK and EQUIPMENT DEMOLITION PLAN - AREA 'C'  |                      |   | M6.02          | SCHEDULES and DETAILS  |
| M1.07          | BASEMENT HYDRONIC PIPING DEMOLIT ON PLAN - AREA 'C'  | FOXLANE              | MIDDLESCHOOL  | M6.03          | SCHEDULES and DETAILS  |
| M1.08          | FIRST FLOOR DUCT WORK and EQUIPMENT DEMOLITION PLAN - AREA 'C'   | <b>A</b> 11 <i>H</i> |   | M6.04          | SCHEDULES and DETAILS  |
| M1.09          | ROOF DEMOLITION PLAN - AREA 'C'  |                      |   | M6.05          | SCHEDULES and DETAILS  |
| M2.01          | FIRST FLOOR DUCT WORK LAYOUT PLAN - AREA 'A'   | 000.04               |   |                |  |
| M2.02          | FIRST FLOOR HYDRONIC PIPING PLAN - AREA'A'   | CS0.01               | FLMS TOPOGRAPHIC SURVEY   | PLUMBING       |  |
| M2.03<br>M2.04 | FIRST FLOOR VRF and CONDENSATE PIPING PLAN - AREAS 'A and B'<br>FIRST FLOOR DUCT WORK LAYOUT PLAN - AREA 'B' | CS0.02<br>CS1.01     | EROSION and SEDIMENT CONTROL PLAN - NEW ADDITION AREA<br>EXISTING CONDITIONS and DEMOLITION PLANS             | P0.01          | GENERAL NOTES, LEGENDS, ETC.                                   |
| M2.04<br>M2.05 | FIRST FLOOR HYDRONIC PIPING PLAN - AREA B  | CS1.01<br>CS1.02     | EXISTING CONDITIONS and DEMOLITION PLANS<br>EXISTING CONDITIONS and DEMOLITION PLANS - SOFT BALL PARKING AREA | P0.01<br>P1.01 | DEMOLITION PLANS   |
| M2.00          | FIRST FLOOR VRF and CONDENSATE PIPING PLAN - AREA 'B'  | CS1.02               | ALIGNMENT and SCHEDULE PLAN   | P2.01          | PROPOSED PLANS   |
| M2.00<br>M2.07 | FIRST FLOOR DUCT WORK LAYOUT PLAN - AREAS 'A and B'  | CS2.01               | ALIGNMENT and SCHEDULE PLAN - SOFT BALL PARKING AREA ACCESS   | P6.01          | SCHEDULES and DETAILS  |
| M2.08          | BASEMENT DUCTWORK LAYOUT PLAN - AREA 'C'   | CS2.02               | SITE PLAN - SOFTBALL FIELD RESTROOM BUILDING  | 1 0.01         |  |
| M2.09          | BASEMENT HYDRONIC PIPING PLAN - AREA'C'  | CS3.01               | ENLARGED PLANS - NEW ADDITION and NORTH SIDE SECURITY FENCING   | ELECTRICAL     |  |
| M2.10          | FIRST FLOOR DUCT WORK LAYOUT PLAN - AREA'C'  | CS3.02               | ENLARGED PLANS - COURT YARD AMPIT HEATER and WALKWAY RAMP   |                | -  |
| M2.11          | FIRST FLOOR HYDRONIC PIPING PLAN - AREA 'C'  | CS3.03               | GRADING, DRAINAGE and SEWER ENLARGEMEMT PLANS   | E0.01          | GENERAL NOTES, LEGENDS and ABBREVIATIONS                       |
| M2.12          | ROOF PLAN - AREA 'C'   | CS3.04               | GRADING, DRAINAGE ENLARGEMEMT PLANS - COURT YARD AMPIT HEAT ER  | E0.02          | SWIT CHGEAR, PANELS and RISER DIAGRAMS                         |
| M6.01          | MECHANICAL DET AILS  | CA6.01               | SITE DETAILS  | E1.01          | DEMOLITION PLANS   |
| M6.02          | ROOFT OP UNIT and DOAS UNIT SCHEDULES and DETAILS  | CS6.02               | SITEDETAILS   | E1.02          | DEMOLITION PLAN - WALKWAY CANOPY                               |
| M6.03          | ROOFTOP UNIT SCHEDULES and DETAILS   | CS6.03               | SITEDETAILS   | E2.01          | SITE PLAN - SOFT BALL FIELD REST ROOM BUILDING and TRAFFIC GAT |
| M6.04          | ROOFTOP UNIT SCHEDULES and DETAILS   | CS6.04               | SITEDETAILS   | E3.01          | PROPOSED LIGHTING PLANS  |
| M6.05          | HOT WATER COIL SCHEDULES   |                      |   | E3.02          | PROPOSED LIGHTING PLAN - WALKWAY CANOPY                        |
| M6.06          | HEAT ING and VENT ILAT ING SCHEDULES   | ARCHITECT            | ΓURAL   | E4.01          | PROPOSED POWER PLANS   |
| M6.07          | CABINET HEATER and UNIT HEATER SCHEDULES and DETAILS   |                      |   | E4.02          | PROPOSED POWER PLANS - COURT YARD AMPIT HEAT ER                |
| M6.08          | FIN TUBE and ELECTRIC CABINET HEATER SCHEDULES and DETAILS   | A0.01                | LOWER LEVEL CODE COMPLIANCE KEY PLAN  | E4.03          | PROPOSED MECHANICAL POWER PLANS                                |
| M6.09          | OUT DOOR AIR DEMAND CALCULATIONS   | A0.02                | FIRST FLOOR CODE COMPLIANCE KEY PLAN  | E4.04          | PROPOSED ROOF PLANS  |
| M6.10          | GRILLE SCHEDULES   | A0.03                | SECOND FLOOR CODE COMPLIANCE KEY PLAN   | E5.01          | PROPOSED SPECIAL SYSTEMS PLANS                                 |
| M6.11          | VRF SYSTEMS, PIPING SCHEMATICS, SCHEDULES and DETAILS  | A0.04                | THIRD AND FOURTH FLOOR CODE COMPLIANCE KEY PLANS  | E7.01          | DETAILS  |
| M6.12          | VRF SYSTEMS, EQUIPMENT and CUTSHEETS   | A1.01                | DEMOLITION FLOOR PLANS  | E7.02          | DETAILS  |
|                |  | A2.00                | PART IT ION TYPES   | E8.01          | PANEL SCHEDULES  |
| PLUMBING       |  | A2.01                | PROPOSED FLOOR PLANS  |                |  |
|                |  | A2.02                | ENLARGED ADDITION PROPOSED FLOOR PLAN and PLAN DETAILS  | TECHNOLOG      | GY   |
| P0.01          | GENERAL NOTES, LEGENDS, ETC.   | A2.03                | PLAN DET AILS   |                |  |
| P1.01          | DOMESTIC WATER DEMOLITION PLANS  | A3.01                | ROOF PLAN and DETAILS   | E9.00          | GENERAL NOTES, LEGENDS and ABBREVIATIONS                       |
| P1.02          | SANITARY WASTE, VENT and STORM WATER DEMOLITION PLANS  | A3.02                | T APERED INSULATION PLAN  | E9.01          | DATA and SECURITY PLANS  |
| P2.01          | PROPOSED DOMESTIC WATER PIPING PLANS   | A4.01                | EXTERIOR ELEVATIONS   | E9.02          | TECHNOLOGY PLAN - SECURITY GATE                                |
| P2.02          | PROPOSED SANITARY, VENT and STORM WATER PLANS  | A5.01                | BUILDING SECTIONS   | E10.01         | TECHNOLOGY DETAILS   |
| P3.01          | ROOF DRAIN PLAN - ROOF PLAN AREAS 'A' AND 'B'  | A6.01                | WALL SECTIONS and DETAILS   | E10.02         | SECURITYDETAILS  |
| P6.01          | SCHEDULES and DET AILS   | A6.02                | WALL SECTIONS and DETAILS   |                |  |
|                |  | A6.03                | WALL SECTIONS and DETAILS   |                | ATION BUILDING   |
| ELECTRICAL     |  | A6.04                | WALL SECTIONS and DETAILS   |                |  |
|                |  | A6.05                | WALL SECTIONS and DETAILS   | CIVIL          |  |
| E0.01          | GENERAL NOTES, LEGENDS and ABBREVIATIONS   | A7.01                | ENLARGED RAMP and WALKWAY CANOPY PLANS  |                |  |
| E0.02          | SWIT CHGEAR, PANELS and RISER DIAGRAMS   | A7.02                | RAMP and CANOPY SECTIONS and DETAILS  | CS0.01         | ADMINISTRATION BUILDING TOPOGRAPHIC SURVEY                     |
| E1.01          | DEMOLITION PLAN - AREA 'A'   | A8.01                | DOOR SCHEDULE and ELEVATIONS  | CS4.01         | SITE SEWER PLAN  |
| E1.02          | DEMOLITION PLAN - AREA 'B'   | A8.02                |   |                |  |
| E1.03          | DEMOLITION PLAN - AREA 'C'   | A9.00                | FINISH SCHEDULE and DETAILS   | ARCHITECT      |  |
| E1.04<br>E2.01 | DEMOLITION PLAN - AREAS 'A','B','C'  | A9.01                | FINISH FLOOR PLANS  | A2 00          | OVERALL KEY PLANS and PART IT ION TYPE DET AILS                |
| E2.01<br>E3.01 | SITE PLAN - FIELD #4 RESTROOM BUILDING<br>PROPOSED LIGHTING PLAN - AREA 'A'                                  | A10.01<br>A11.01     | REFLECTED CEILING PLANS<br>ENLARGED TOILET ROOM PLANS and DETAILS   | A2.00<br>A2.01 | TOILET ROOM PLANS and DETAILS                                  |
| E3.01<br>E3.02 | PROPOSED LIGHTING PLAN - AREA 'B'  | A11.01<br>A11.02     | CASEWORK PLANS  | A2.01<br>A8.01 | DOOR SCHEDULE and DETAILS                                      |
| E3.02<br>E3.03 | PROPOSED LIGHTING PLAN - AREA 'C'  | A11.02<br>A11.03     | CASEWORK ELEVATIONS   | A9.01<br>A9.01 | REFLECTED CEILING PLAN and FINISH FLOOR PLAN                   |
| E4.01          | PROPOSED POWER PLAN - AREA 'A'   | A12.01               | MISCELLANEUOUS DET AILS   | 7.5.01         |  |
| E4.02          | PROPOSED POWER PLAN - AREA 'B'   | 7(12.01              |   | MECHANICA      |  |
| E4.02          | PROPOSED POWER PLAN - AREA 'C'   | STRUCTU              |   |                | <u>-</u>   |
| E4.04          | PROPOSED MECHANICAL POWER PLAN - AREA'A'   |                      |   | M2.01          | LOWER LEVEL MECHANICAL PLAN                                    |
| E4.05          | PROPOSED MECHANICAL POWER PLAN - AREA'B'   | S0.01                | DESIGN DATA and GENERAL NOTES   | M4.01          | BOILER ROOM DEMOLITION PLAN and NEW BOILER ROOM LAYOUT         |
| E4.06          | PROPOSED MECHANICAL POWER PLAN - AREA'C'   | S0.02                | DESIGN DATA and GENERAL NOTES   | M4.02          | BOILER ROOM DETAILS  |
| E4.07          | PROPOSED MECHANICAL POWER PLAN - ROOF AREAS 'A' and 'B'  | S0.02                | SPECIAL INSPECTION NOTES and SCHEDULE   |                |  |
| E4.08          | PROPOSED MECHANICAL POWER PLAN - ROOF AREA 'C'   | S1.00                | FOUNDATION PLAN   | PLUMBING       |  |
| E4.09          | PROPOSED MECHANICAL POWER PLAN - BASEMENT AREA 'C'   | S1.01                | CANOPY FOUNDATION and ROOF FRAMING PLANS  |                |  |
| E4.10          | PROPOSED SMOKE DAMPER POWER PLAN - AREA 'A'  | S2.00                | HIGH and LOW ROOF FRAMING PLANS   | P2.01          | TOILET ROOM PLANS and DETAILS                                  |
| E5.01          | PROPOSED SPECIAL SYSTEMS PLAN - AREA 'A'   | S3.00                | FOUNDATION SECTIONS and DETAILS   | P6.01          | PLUMBING DEMOLITION / NEW PLUMBING WORK                        |
| E5.02          | PROPOSED SPECIAL SYSTEMS PLAN - AREA 'B'   | S3.01                | FOUNDATION SECTIONS, PIER and BASEPLATE DETAILS   |                |  |
| E5.03          | PROPOSED SPECIAL SYSTEMS PLAN - AREA'C'  | S3.02                | CANOPY FOUNDATION SECTIONS, PIER and BASEPLATE DETAILS  | ELECTRICAL     | _  |
| E5.04          | PROPOSED SPECIAL SYSTEMS ROOF PLAN - AREA S 'A', 'B'   | S4.00                | MASONRY ELEVATIONS, SECTIONS and DETAILS  |                | -  |
| E5.05          | PROPOSED SPECIAL SYSTEMS ROOF PLAN - AREA 'C'  | S5.00                | STEEL FRAMING SECTIONS and DETAILS  | E0.01          | GENERAL NOTES, SYMBOLS and ABBREVIAT IONS                      |
| E5.06          | PROPOSED SPECIAL SYSTEMS BASEMENT PLAN - AREA 'C'  | S5.01                | STEEL FRAMING SECTIONS and DETAILS  | E1.01          | PROPOSED FLOOR PLAN  |
| E7.01          | DETAILS  | S5.01                | STEEL FRAMING SECTIONS and DETAILS  | E6.01          | SCHEDULES  |
| E7.02          | DETAILS  |                      |   |                |  |
| E8.01          | PANEL SCHEDULES  |                      |   |                |  |
| E8.02          | PANEL SCHEDULES  |                      |   |                |  |
|                |  |                      |   |                |  |

# **BEDFORD CENTRAL DISTRICT** DISTRICT ADMINISTRATION OFFICES

632 SOUTH BEDFORD ROAD, BEDFORD, NY 10506

# PHASE 2 - BOND IMPROVEMENTS

AT

# FOX LANE MIDDLE SCHOOL

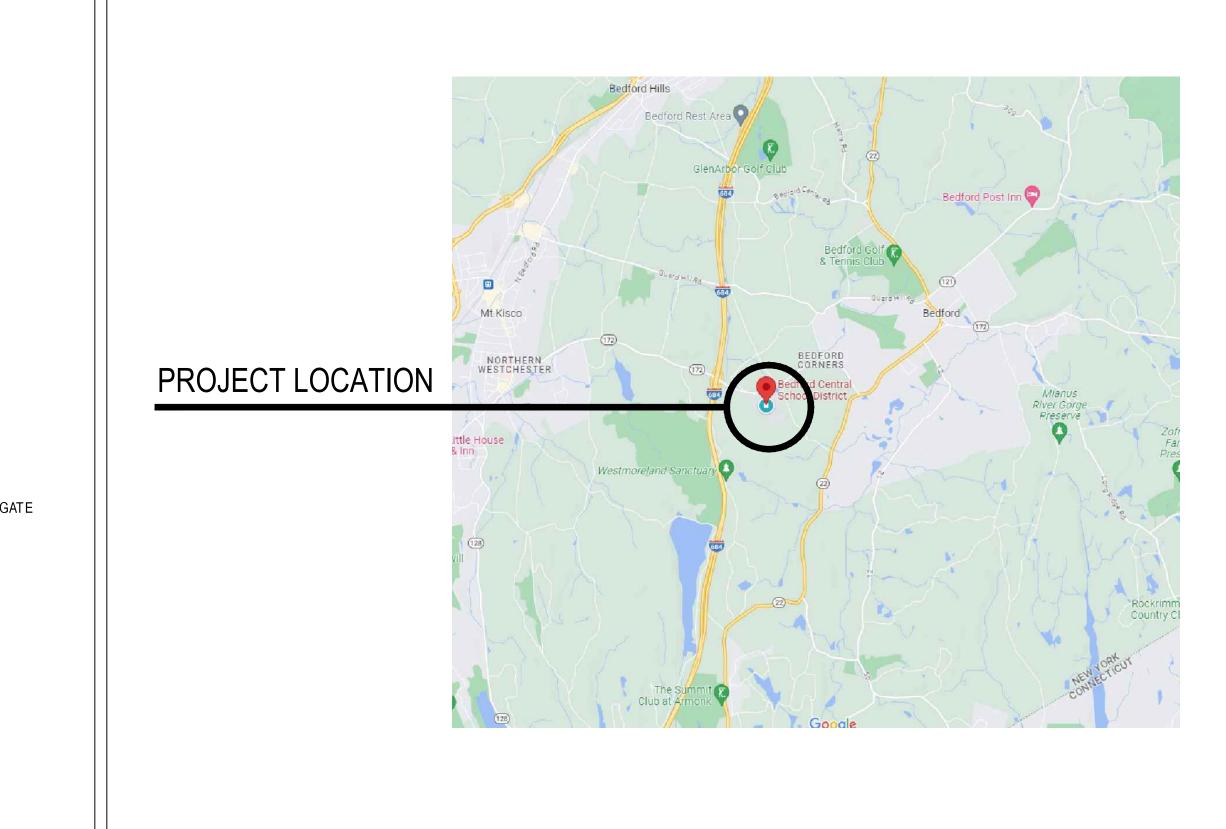
SOUTH BEDFORD ROAD BEDFORD, NY 10506

SED No.: 66-01-02-06-0-007-013 (23-131b)

# ADMINISTRATION BUILDING

632 SOUTH BEDFORD ROAD BEDFORD, NY 10506 SED No.: 66-01-02-06-1-008-014 (23-131c)

# LOCATION MAP

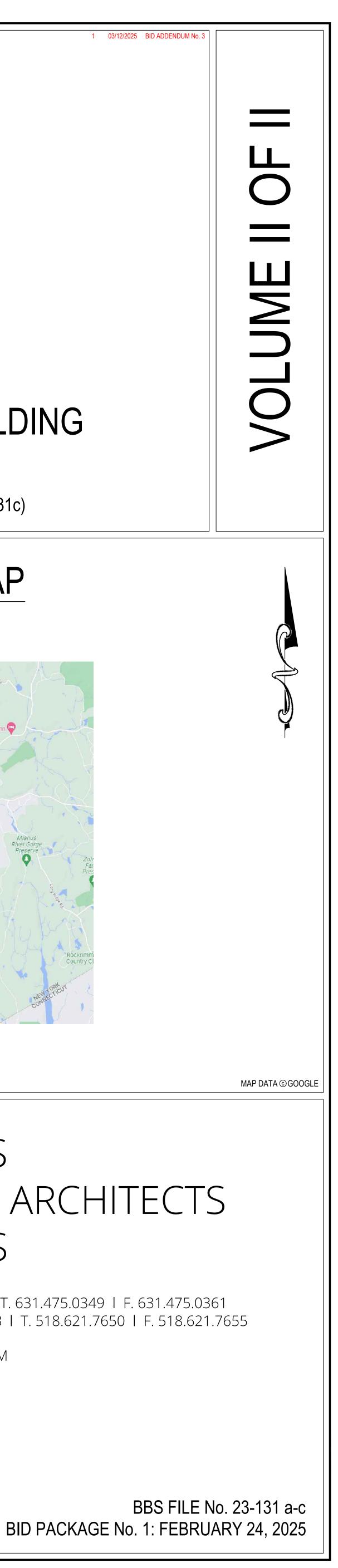


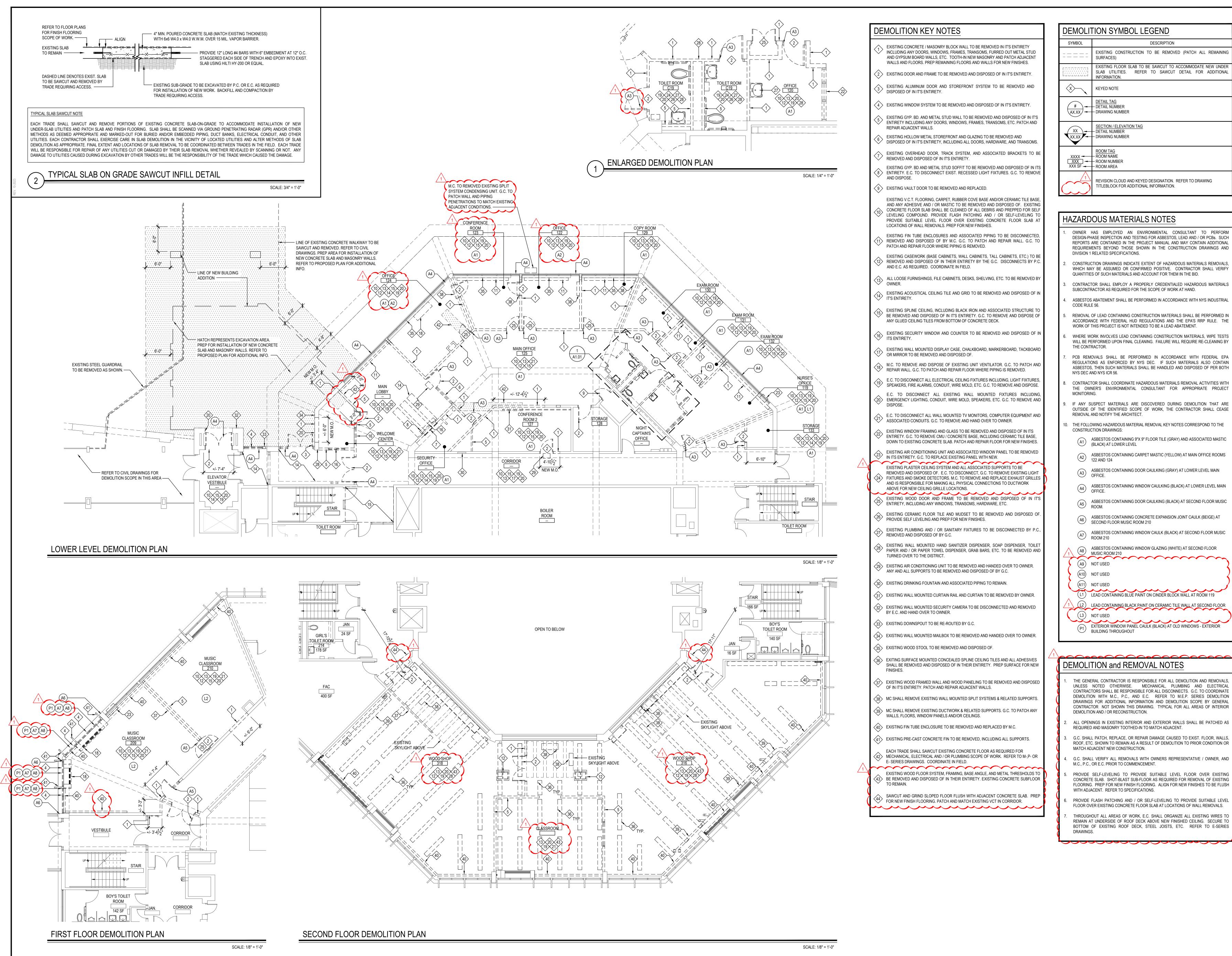
# ARCHITECTS LANDSCAPE ARCHITECTS ENGINEERS

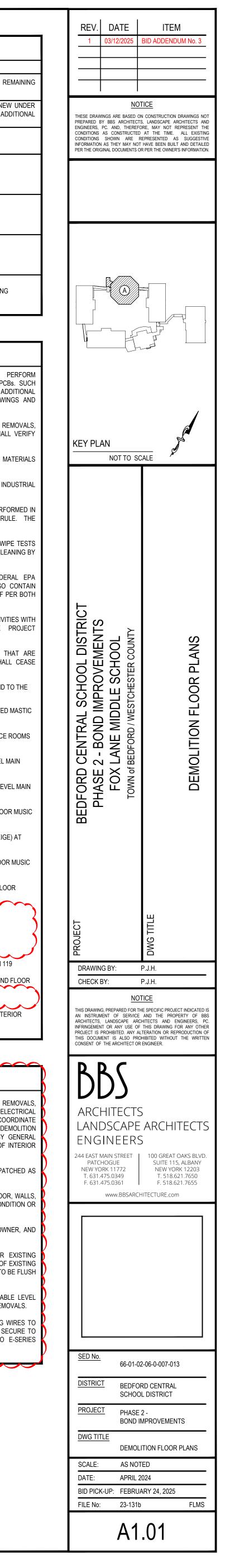
244 EAST MAIN STREET | PATCHOGUE | NEW YORK 11772 | T. 631.475.0349 | F. 631.475.0361 100 GREAT OAKS BLVD., SUITE 115 | ALBANY | NEW YORK 12203 | T. 518.621.7650 | F. 518.621.7655

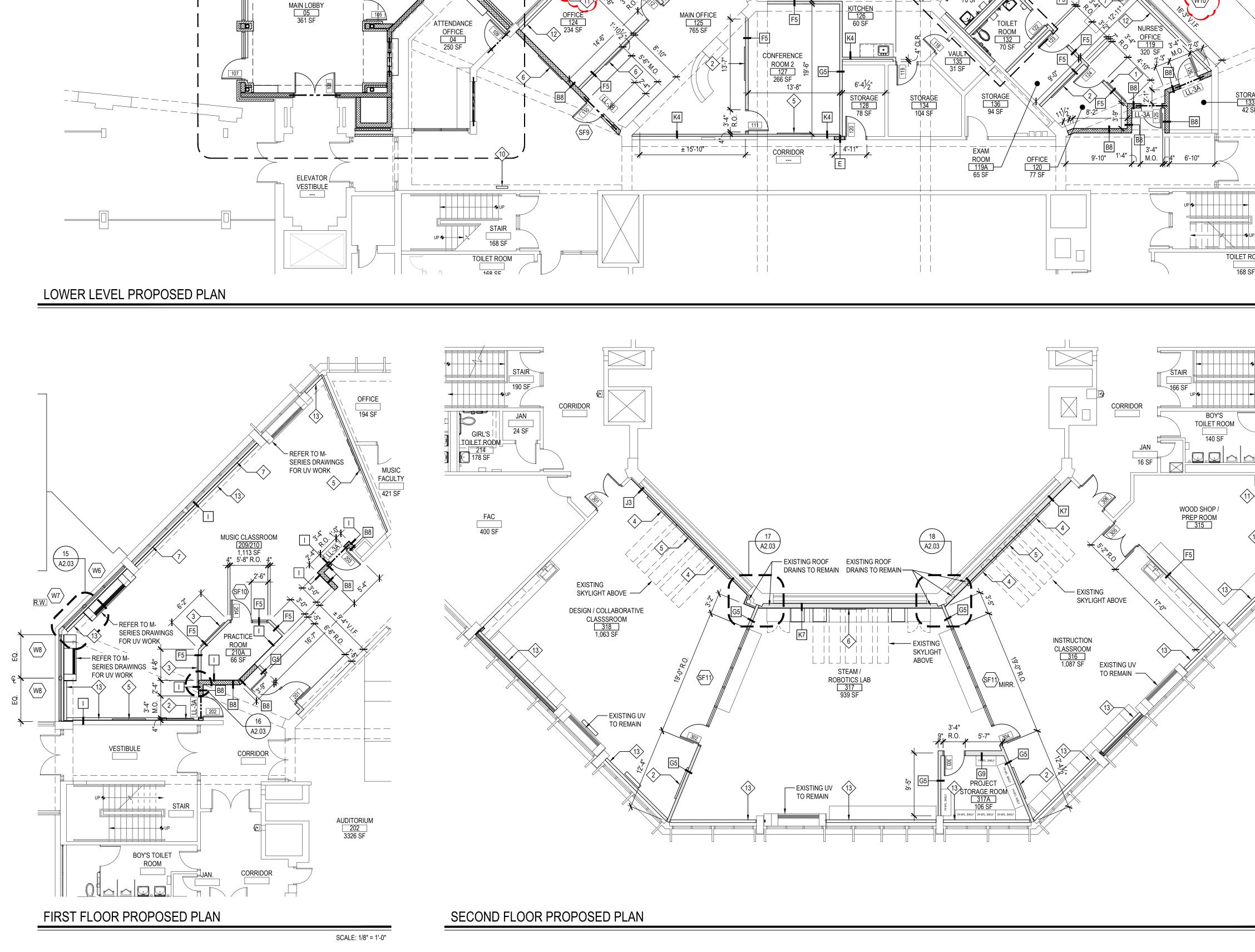
www.BBSARCHITECTURE.COM

ARCHITECTS CERTIFICATION THE UNDERSIGNED CERTIFIES THAT TO THE BEST OF HIS KNOWLEDGE, INFORMATION, AND BELIEF, THE PLANS AND SPECIFICATIONS ARE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE, THE CONSTRUCTION STANDARDS OF THE EDUCATION DEPARTMENT, NEW YORK STATE DEPARTMENT OF LABOR RULE 56, EPA AND AHERA REQUIREMENTS.









- REFER TO DWG. A2.02 FOR ENLARGED FLOOR PLAN

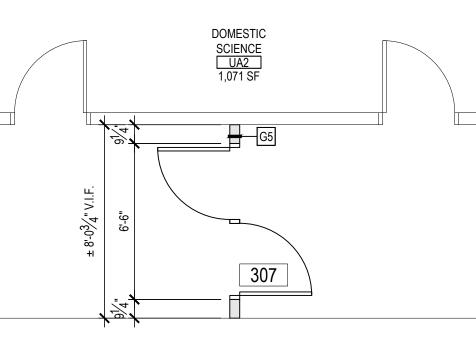
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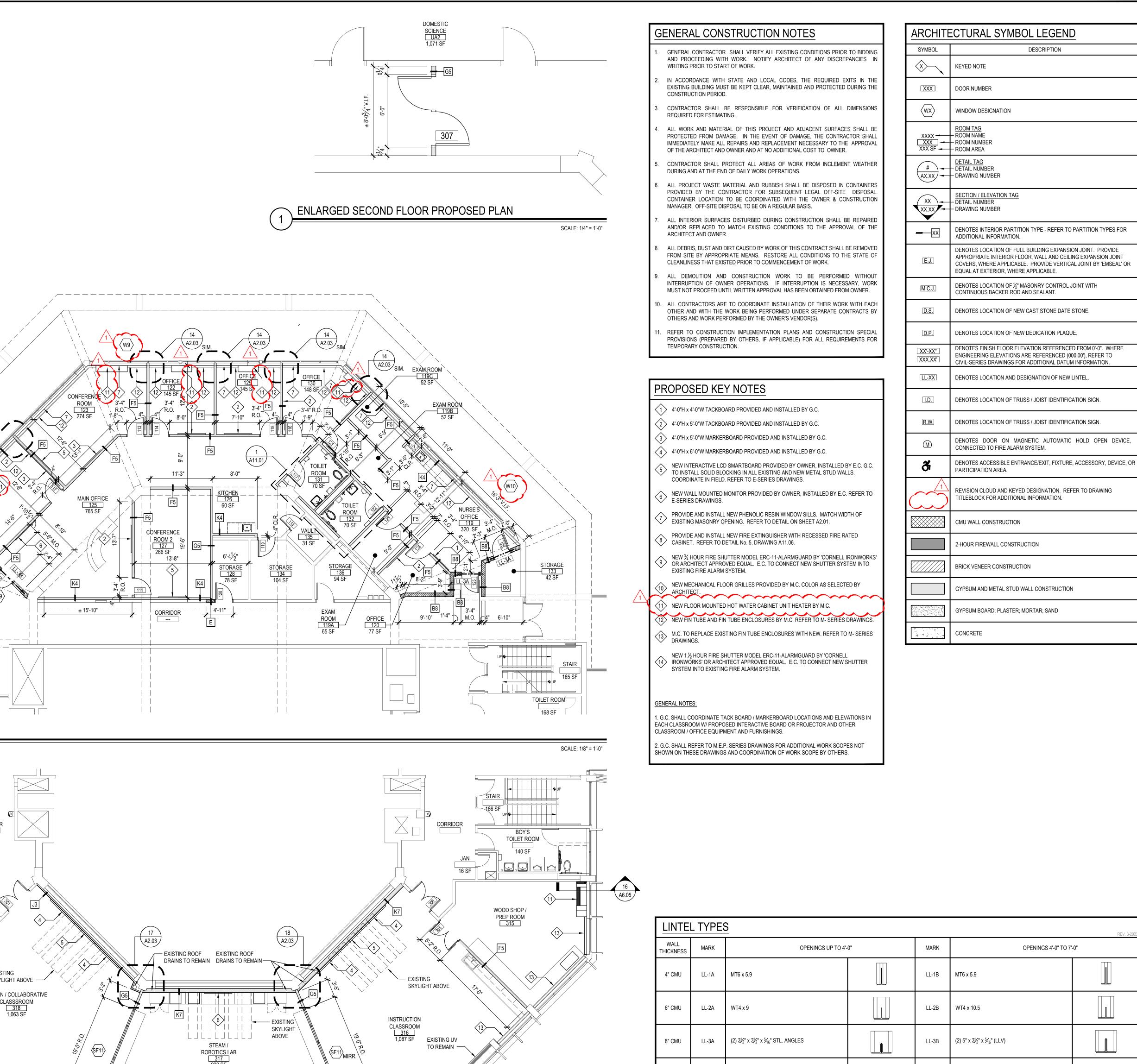
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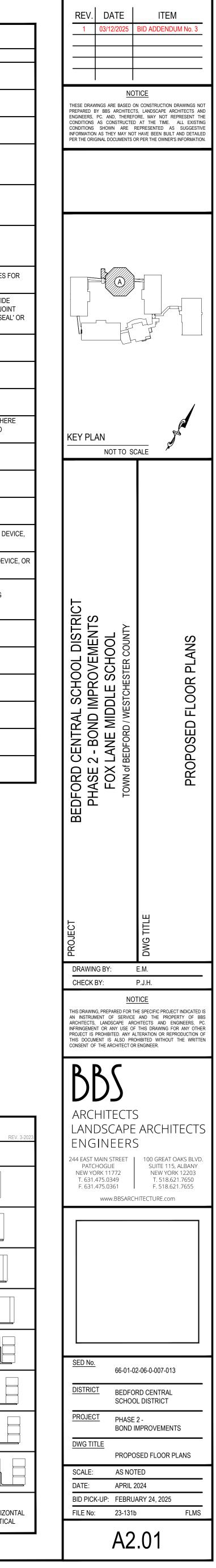
STUDENTS / STAF

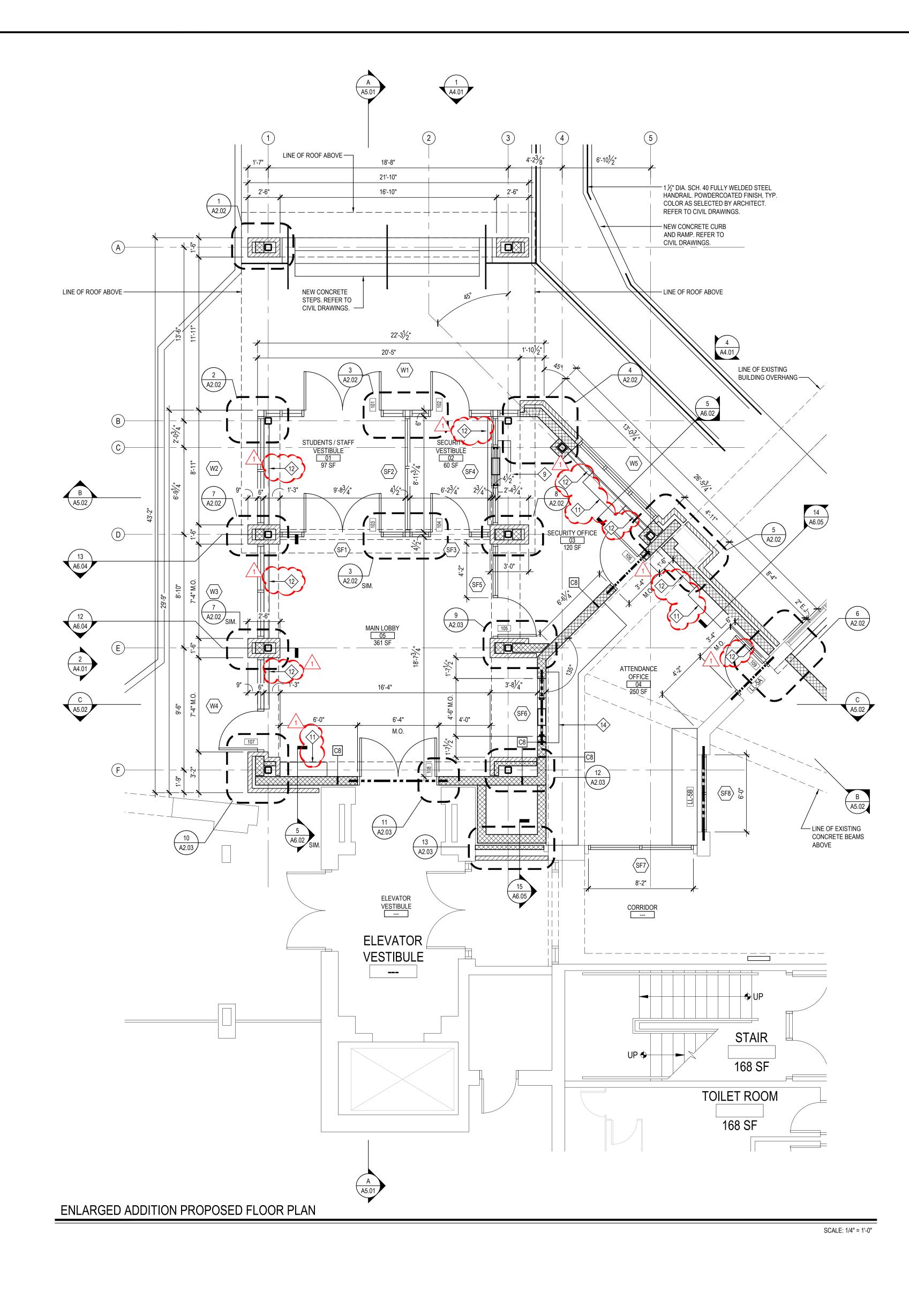
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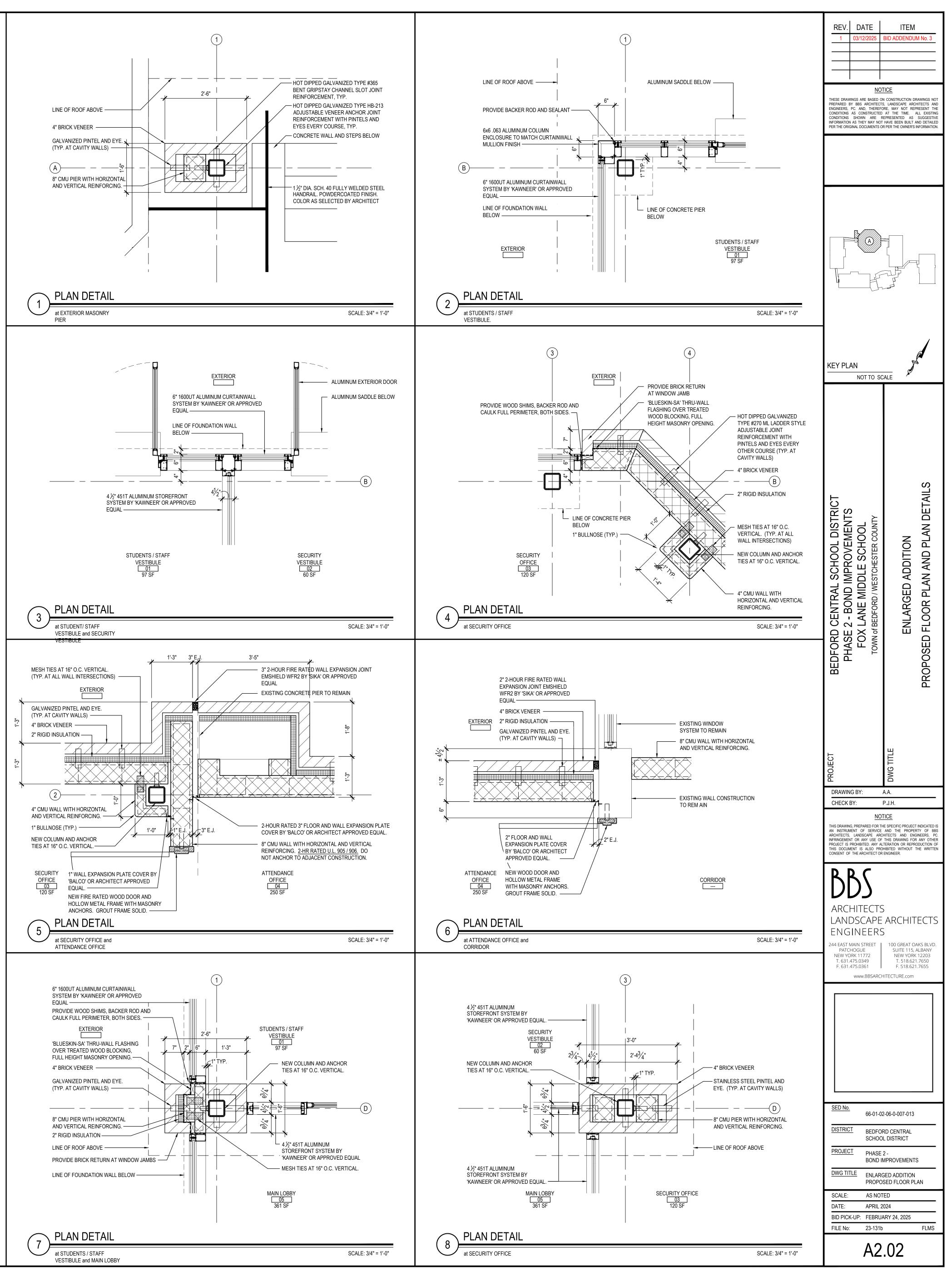


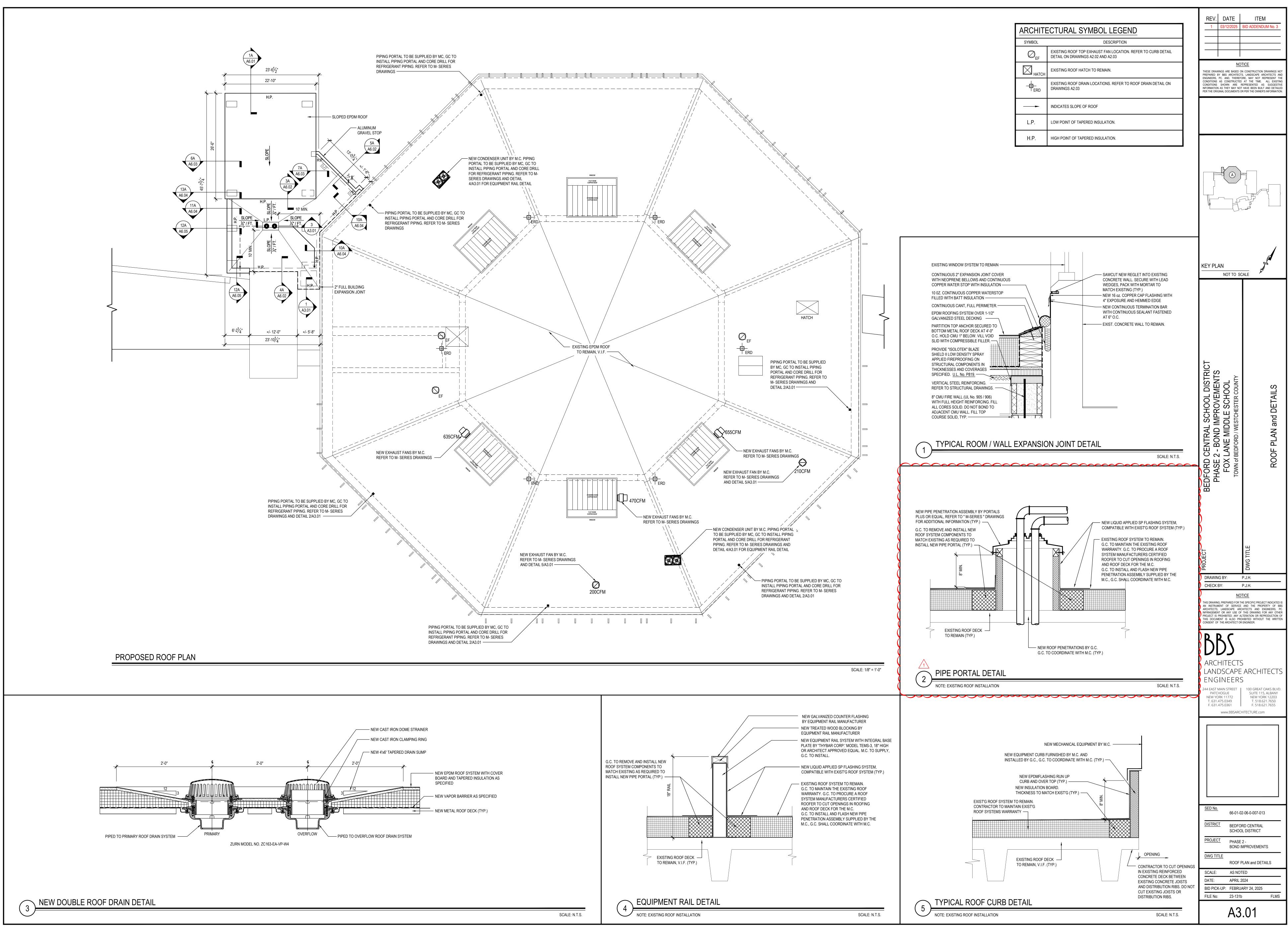


|                   |       |   |       |       |   | REV. 3-202  |
|-------------------|-------|---|-------|-------|---|---|
| WALL<br>THICKNESS | MARK  | OPENINGS UP TO 4'   | -0"   | MARK  | OPENINGS 4'-0" TO 7   | 7'-0"   |
| 4" CMU            | LL-1A | MT6 x 5.9   |       | LL-1B | MT6 x 5.9   |   |
| 6" CMU            | LL-2A | WT4 x 9   |       | LL-2B | WT4 x 10.5  |   |
| 8" CMU            | LL-3A | (2) 3½" x 3½" x 5½" STL. ANGLES   |       | LL-3B | (2) 5" x 3½" x <sup>5</sup> ⁄ <sub>16</sub> " (LLV)                         |   |
| 12" CMU           | LL-4A | (1) 6" x 3½" x ⅔ <sub>16</sub> " (LLH) + (1) 5" x 3½" x ⅔ <sub>16</sub> " (LLH)         |       | LL-4B | (1) 6" x 6" x ⁵⁄ <sub>16</sub> " + (1) 5" x 5" x ⁵⁄ <sub>16</sub> "         |   |
| 12"<br>COMPOSITE  | LL-5A | (3) 3½" x 3½" x 5½"   |       | LL-5B | (3) 5" x 3½" x ⅔ <sub>16</sub> " (LLV)                                      |   |
| 14" CAVITY        | LL-6A | (2) 3½" x 3½" x 5½" + (1) 6" x 3½" x 5½" (LLH)  |       | LL-6B | (2) 5" x 3½" x ⅔ <sub>16</sub> " (LLV) + (1) 6" x 6" x ⅔ <sub>16</sub> "    |   |
| 15" CAVITY        | LL-7A | (2) 3½" x 3½" x 5½" + (1) 7" x 4" x ¾" (LLH)  |       | LL-7B | (2) 5" x 3½" x $\frac{5}{16}$ " (LLV) + (1) 7" x 4" x $\frac{3}{8}$ " (LLH) |   |
| 19" CAVITY        | LL-8A | (1) 6" x 3½" x ⅔6" (LLH) + (1) 7" x 4" x ⅔" (LLH)                                       |       | LL-8B | (1) 6" x 6" x <sup>5</sup> ⁄ <sub>16</sub> " + (1) 7" x 4" x ⅔" (LLH)       |   |
|                   |       | L, THE OUTSIDE ANGLE IS GALVANIZED.<br>L BE 8" BEARING WITH (2) COURSES FILLED SOLID BE | ELOW. |       |   | T <u>E:</u><br> - LONG LEG HORIZONTAL<br>'- LONG LEG VERTICAL |

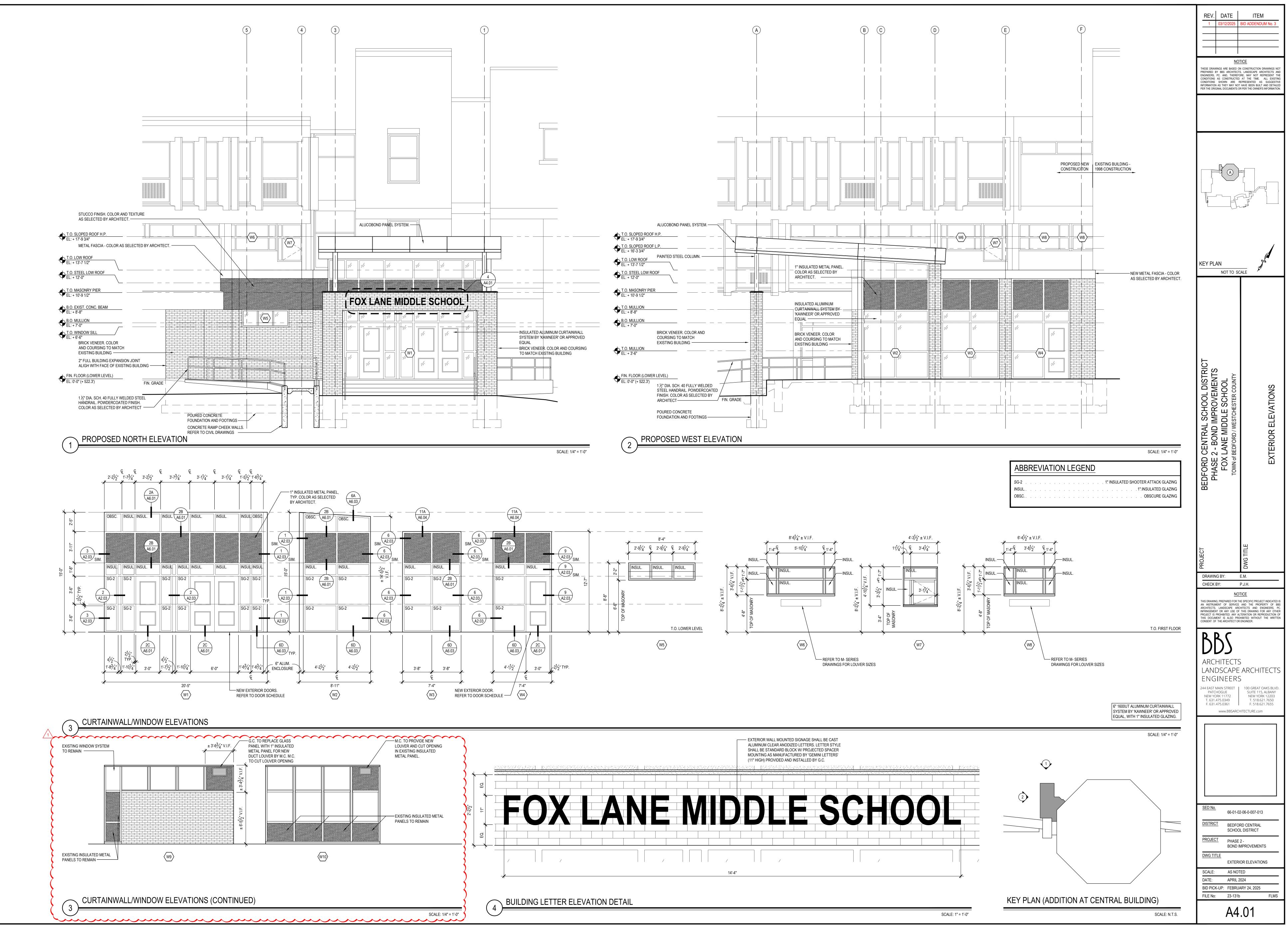


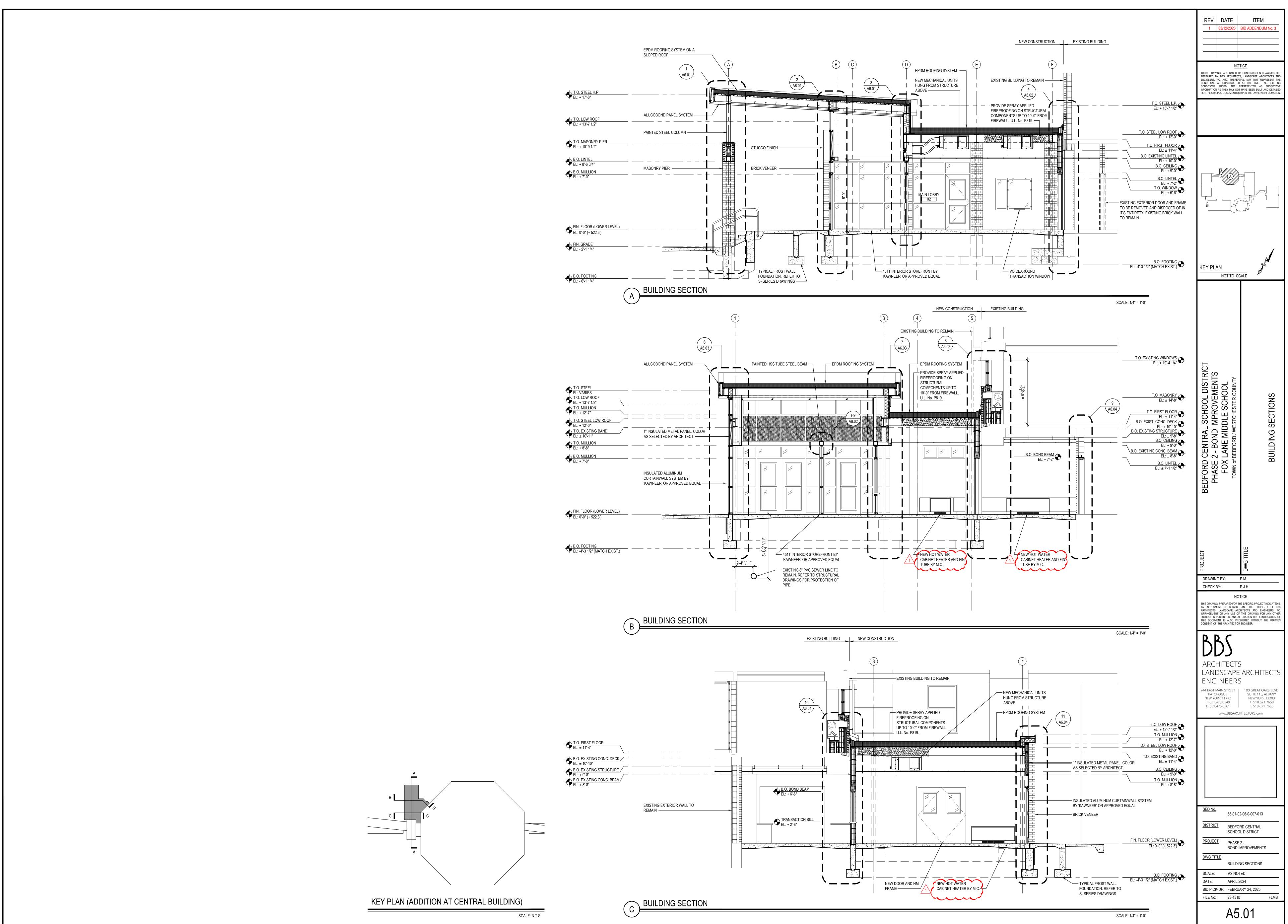


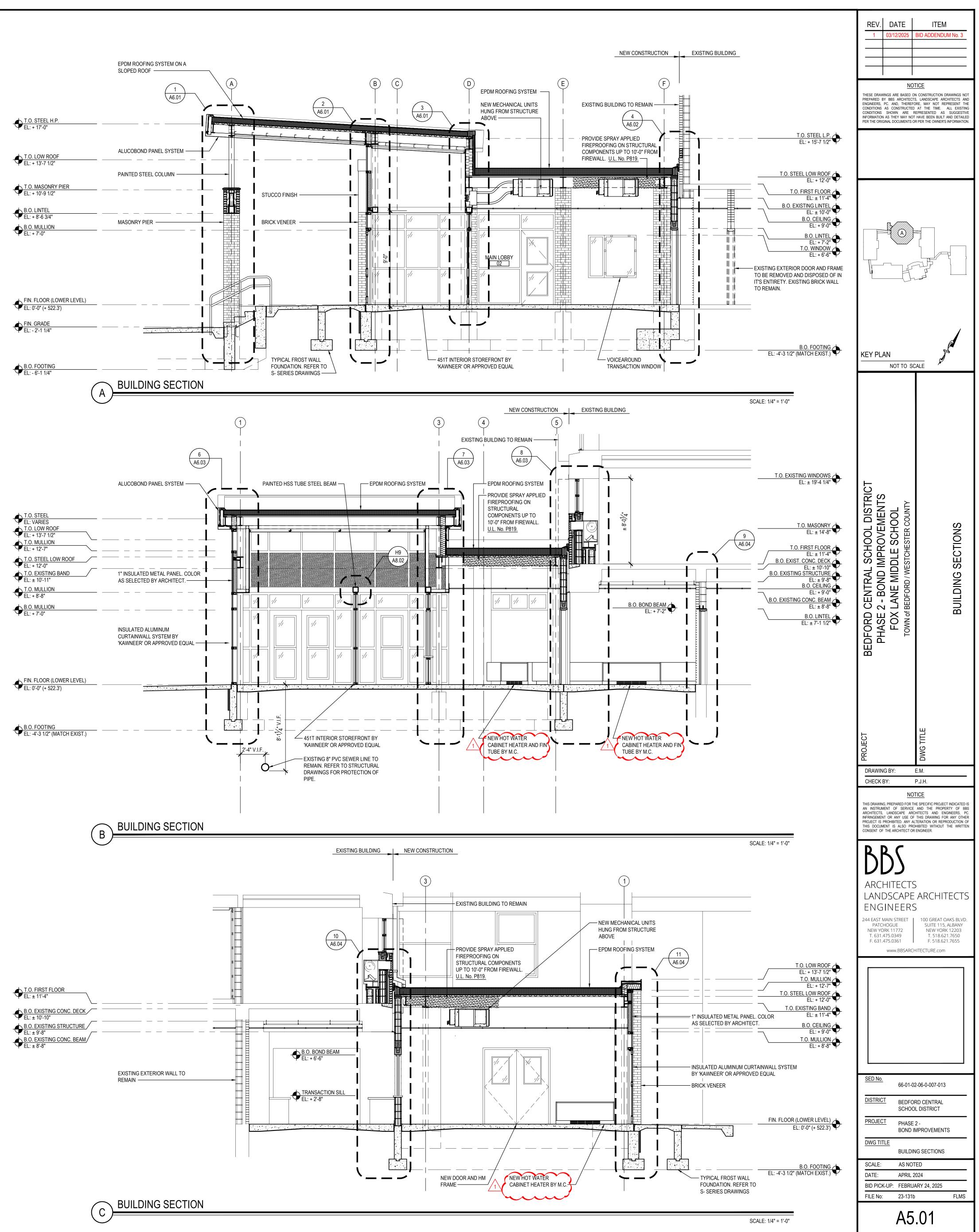


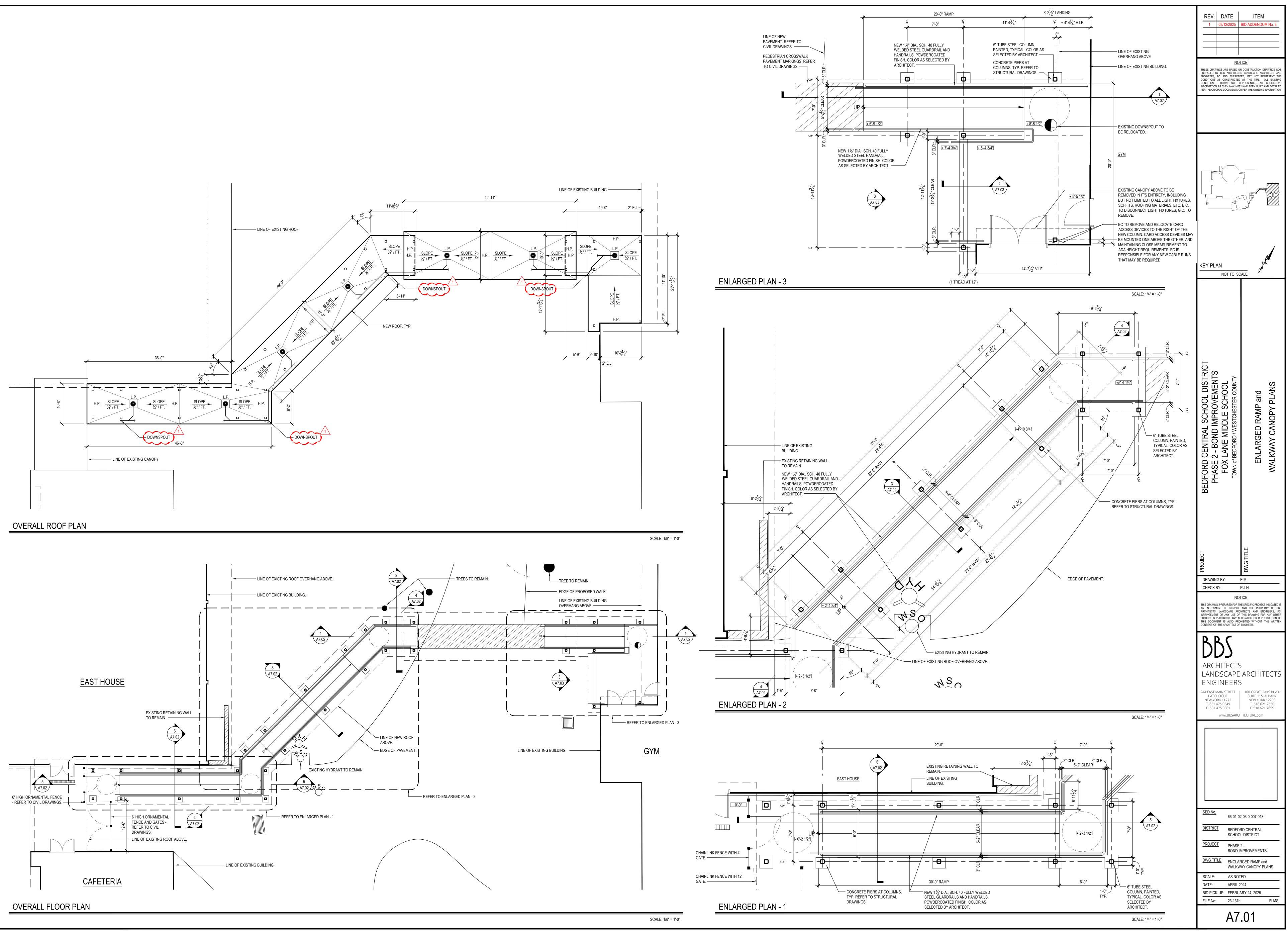


| ARCHITE | ECTURAL SYMBOL LEGEND   |
|---------|---|
| SYMBOL  | DESCRIPTION   |
|         | EXISTING ROOF TOP EXHAUST FAN LOCATION. REFER TO CURB DE DETAIL ON DRAWINGS A2.02 AND A2.03 |
| HATCH   | EXISTING ROOF HATCH TO REMAIN.  |
|         | EXISTING ROOF DRAIN LOCATIONS. REFER TO ROOF DRAIN DETAIL<br>DRAWINGS A2.03                 |
|         | INDICATES SLOPE OF ROOF   |
| L.P.    | LOW POINT OF TAPERED INSULATION.  |
| H.P.    | HIGH POINT OF TAPERED INSULATION.   |









|          |                 |                                  |        |        | F     | INISH SO | CHEDUL | .E     |                     |                    |
|----------|-----------------|----------------------------------|--------|--------|-------|----------|--------|--------|---------------------|--------------------|
|          |                 |                                  | FLOORS |        |       | WALLS    |        |        |                     |                    |
| EA       | ROOM No.        | LOCATION                         | FIELD  | ACCENT | BASE  | TYPE.    | FINISH | ACCENT | CEILINGS            | REMARKS            |
|          | 01              | STUDENTS / STAFF VESTIBULE       | CPT1   |        | RCB1  | GYP.     | P1     |        |                     |                    |
|          | 02              | SECURITY VESTIBULE               | CPT1   |        | RCB1  | GYP.     | P1     |        |                     |                    |
|          | 03              | SECURITY OFFICE                  | SVT1   |        | RCB1  | GYP.     | P1     |        | ACT1                | ALL DOOR FRAMES P6 |
|          | 04              | ATTENDANCE OFFICE                | SVT1   |        | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
|          | 05              | MAIN LOBBY                       | SVT1   | SVT2   | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
|          | 119             | NURSE'S OFFICE                   | SVT1   | SVT2   | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
|          | 119A            | EXAM ROOM                        | SVT1   |        | RCB1  | GYP.     | P1     |        | ACT1                | ALL DOOR FRAMES P6 |
|          | 119B            | EXAM ROOM                        | SVT1   |        | RCB1  | GYP.     | P1     |        | ACT1                | ALL DOOR FRAMES P6 |
|          | 119C            | EXAM ROOM                        | SVT1   |        | RCB1  | GYP.     | P1     |        | ACT1                | ALL DOOR FRAMES P6 |
| 1        | 120             | OFFICE                           | SVT1   |        | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
|          | 122             | OFFICE                           | SVT1   |        | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
| i [      | 123             | CONFERENCE ROOM                  | CPT2   |        | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
|          | 124             | OFFICE                           | CPT2   |        | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
| í        | 125             | MAIN OFFICE                      | SVT1   | SVT2   | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
|          | 126             | KITCHEN                          | SVT1   | SVT2   | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
| 5        | 127             | CONFERENCE ROOM                  | CPT2   |        | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
| Ĺ        |                 |                                  |        |        |       |          |        |        |                     |                    |
| -        | 129             | OFFICE                           | CPT2   |        | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
| _        | 130             | OFFICE                           | CPT2   |        | RCB1  | GYP.     | P1     | P4     | ACT1                | ALL DOOR FRAMES P6 |
| -        | 131             | TOILET ROOM                      | PFT1   |        | CTCB1 | GYP.     | CWT1   | CWT2   | ACT2                | ALL DOOR FRAMES P6 |
|          | 132             | TOILET ROOM                      | PFT1   |        | CTCB1 | GYP.     | CWT1   | CWT2   | ACT2                | ALL DOOR FRAMES P6 |
|          | 133             | STORAGE ROOM                     | SVT1   |        | RCB1  | GYP.     | P1     |        | ACT1                | ALL DOOR FRAMES P6 |
| -        | 134             | STORAGE ROOM                     |        |        |       |          |        |        |                     |                    |
|          |                 | VAULT                            |        |        |       |          |        |        |                     |                    |
| -        | 136             | STORAGE ROOM                     |        |        |       |          |        |        |                     |                    |
|          | 209/210         | MUSIC CLASSROOM                  | LVT1   | LVT2   | RCB2  | GYP.     | P1     | P4     | ACT3 / GYP.         | ALL DOOR FRAMES P6 |
| <        | 2037210<br>210A | PRACTICE ROOM                    | LVT1   |        | RCB2  | GYP.     | P1     | P4     | ACT3 / GYP.         | ALL DOOR FRAMES P6 |
| ) ⊦      | 2104            |                                  |        |        | TODZ  |          |        | 14     | AUD/UT.             |                    |
| <b>)</b> |                 |                                  |        |        |       |          |        |        |                     |                    |
| 2 h      |                 |                                  |        |        |       |          |        |        |                     |                    |
| - 1      |                 |                                  |        |        |       |          |        |        |                     |                    |
| )        |                 |                                  |        |        |       |          |        |        |                     |                    |
|          |                 |                                  |        |        |       |          |        |        |                     |                    |
|          | 315             | WOOD SHOP / PREP ROOM            | EP1    |        | RCB3  | GYP.     | P2     | P4     | EXPOSED - P3 / ACT4 | ALL DOOR FRAMES P5 |
| 5        | 316             | INSTRUCTION CLASSROOM            | EP1    |        | RCB3  | GYP.     | P2     | P4     |                     | ALL DOOR FRAMES P5 |
| 5        | 317             | STEAM / ROBOTICS LAB             | EP1    |        | RCB3  | GYP.     | P2     | P4     | EXPOSED - P3 / ACT4 | ALL DOOR FRAMES P5 |
|          | 317B            | PROJECT STORAGE ROOM             | EP1    |        | RCB3  | GYP.     | P2     | P4     |                     | ALL DOOR FRAMES P5 |
| - 1      | 318             | DESIGN / COLLABORATIVE CLASSROOM | EP1    |        | RCB3  | GYP.     | P2     | P4     | EXPOSED - P3 / ACT4 | ALL DOOR FRAMES P5 |
|          |                 |                                  |        |        |       |          |        |        |                     |                    |

| PAINT T  | YPES   |
|----------|--|
| YPE P1:  | PAINT BY SHERWIN WILLIAMS:<br>LATEX EGGSHELL ENAMEL FINISH<br>COLOR: TO BE SELECTED BY ARCH<br>(CORRIDORS & GENERAL) |
| YPE P2:  | PAINT BY SHERWIN WILLIAMS:<br>LATEX EGGSHELL ENAMEL FINISH<br>COLOR: TO BE SELECTED BY ARCH<br>(WHITE)               |
| YPE P3:  | PAINT BY SHERWIN WILLIAMS:<br>LATEX EGGSHELL ENAMEL FINISH<br>COLOR: TO BE SELECTED BY ARCH<br>(MEDIUM GREY)         |
| YPE P4:  | PAINT BY SHERWIN WILLIAMS:<br>LATEX EGGSHELL ENAMEL FINISH<br>COLOR: TO BE SELECTED BY ARCH<br>(RED)                 |
| YPE P5:  | PAINT BY SHERWIN WILLIAMS:<br>DTM ALKYD SEMI-GLOSS ENAMEL<br>COLOR: TO BE SELECTED BY ARCH<br>(HM DOOR FRAMES-BLACK) |
| YPE P6:  | PAINT BY SHERWIN WILLIAMS:<br>DTM ALKYD SEMI-GLOSS ENAMEL<br>COLOR: TO BE SELECTED BY ARCH<br>(HM DOOR FRAMES-GRAY)  |
| TYPE P7: | PAINT BY SHERWIN WILLIAMS:<br>LATEX FLAT ENAMEL FINISH<br>COLOR: WHITE<br>(GYP. BD SOFFIT AND CEILINGS)              |

**CEILING TYPES** 

|                          |                          | TYPE ACT1:   | ACOUSTIC CEILING TILE BY "ARMSTRONG"<br>SIZE: 24" X 24" X 3/4"   |
|--------------------------|--------------------------|--|--|
|                          |                          |  | STYLE: #1910 ULTIMA SQUARE LAY-IN<br>(CLASSROOMS, OFFICES, CORRIDORS)  |
|                          |                          | TYPE ACT2:   | ACOUSTIC CEILING TILE BY "ARMSTRONG"   |
|                          |                          |  | SIZE: 24" X 24" X 7/8", NRC RATING .80<br>STYLE: #1445 ULTIMA HEALTH ZONE HIGH NRC, SQUARE LAY IN<br>(TOILET ROOMS)  |
|                          |                          | TYPE ACT3:   | ACOUSTIC CEILING TILE BY "ARMSTRONG"   |
|                          |                          |  | SIZE: 24" X 24" X 1", NRC RATING .95<br>STYLE: #3250 OPTIMA SQUARE TEGULAR<br>(MUSIC ROOMS, PRACTICE ROOMS)  |
| •••                      | l Z                      | TYPE ACT4:   | 1" THICK TECTUM DIRECT ATTACH HIGH NRC. CEILING PANELS AS  |
|                          | 3                        |  | MANUFACTURED BY "ARMSTRONG"- SHORT EDGES SQUARE.<br>SIZE: 12"W X LENGTH VARRIES- REFER TO A10.01<br>PANEL SIZES CAN EITHER BE MADE-TO-ORDER OR FIELD CUT<br>COLOR: RED   |
| 3Y                       | 3                        | TYPE ACT5:   | GYPSUM WALLBOARD, SQUARE EDGE LAY-IN.<br>SIZE: 24"X24"X5/8" PRIME & PAINT WALLBOARD BM READY-MIX WHITE<br>PRIOR TO INSTALLING.   |
| S/PATTERN)               | В                        |  | "ARMSTRONG", 15/16" PRELUDE, U.O.N.<br>IG TILE & GRID TO BE STANDARD WHITE UNLESS OTHERWISE NOTED.   |
| BY                       | 5                        | NOTE. ALL CEILIN   | NG TILE & GRID TO BE STANDARD WHITE UNLESS OTHERWISE NOTED.  |
|                          | В.,                      |  |  |
| S/PATTERN)<br>Y PATCRAFT | 3                        | RUBBER   | BASE TYPES   |
|                          | 3                        | TYPE RCB1:   | 4" RUBBER COVE BASE BY "JOHNSONITE"<br>COLOR: TO BE SELECTED BY ARCHITECT  |
| OFFICE)<br>Y PATCRAFT    | ß                        | TYPE RCB2:   | 4" RUBBER COVE BASE BY "JOHNSONITE"<br>COLOR: TO BE SELECTED BY ARCHITECT  |
| OFFICE)                  | Z                        | TYPE RCB3:   | 4" RUBBER COVE BASE BY "JOHNSONITE"<br>COLOR: BLACK  |
|                          | $\frac{1}{2}$            |  |  |
|                          |                          | <b>\</b>   |  |
| -                        | $\overline{\mathcal{C}}$ |  |  |
| -                        | } {                      | PORCEL   | AIN/CERAMIC TILE TYPES   |
| СК                       |                          | PORCEL   | AIN/CERAMIC TILE TYPES   |
| Mohawk<br>CK<br>Mohawk   |                          |  |  |
| СК                       |                          | FLOORS:  | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63  |
| СК                       |                          | FLOORS:<br>TYPE PFT1:<br>WALLS:  | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR   |
| СК                       |                          | FLOORS:<br>TYPE PFT1:<br>WALLS:  | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE  |
|                          |                          | FLOORS:<br>TYPE PFT1:<br>WALLS:  | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR<br>COLOR: MATTE BISCUIT<br>(BATHROOM WALL FIELD TILE)<br>4"X12" CERAMIC WALL TILE BY FIRECLAY TILE<br>COLLECTION: ORIGINAL CERAMIC<br>COLOR: TOMATO RED   |
|                          |                          | FLOORS:<br>TYPE PFT1:<br>WALLS:<br>TYPE CWT1:  | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR<br>COLOR: MATTE BISCUIT<br>(BATHROOM WALL FIELD TILE)<br>4"X12" CERAMIC WALL TILE BY FIRECLAY TILE<br>COLLECTION: ORIGINAL CERAMIC<br>COLOR: TOMATO RED<br>(BATHROOM WALL ACCENT TILE)  |
|                          |                          | FLOORS:<br>TYPE PFT1:<br>WALLS:<br>TYPE CWT1:<br>TYPE CWT2:<br>SCHLUTER TRAN                             | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR<br>COLOR: MATTE BISCUIT<br>(BATHROOM WALL FIELD TILE)<br>4"X12" CERAMIC WALL TILE BY FIRECLAY TILE<br>COLLECTION: ORIGINAL CERAMIC<br>COLOR: TOMATO RED<br>(BATHROOM WALL ACCENT TILE)<br>SITIONS:  |
|                          |                          | FLOORS:<br>TYPE PFT1:<br>WALLS:<br>TYPE CWT1:<br>TYPE CWT2:  | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR<br>COLOR: MATTE BISCUIT<br>(BATHROOM WALL FIELD TILE)<br>4"X12" CERAMIC WALL TILE BY FIRECLAY TILE<br>COLLECTION: ORIGINAL CERAMIC<br>COLOR: TOMATO RED<br>(BATHROOM WALL ACCENT TILE)  |
|                          |                          | FLOORS:<br>TYPE PFT1:<br>WALLS:<br>TYPE CWT1:<br>TYPE CWT2:<br>SCHLUTER TRAN                             | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR<br>COLOR: MATTE BISCUIT<br>(BATHROOM WALL FIELD TILE)<br>4"X12" CERAMIC WALL TILE BY FIRECLAY TILE<br>COLLECTION: ORIGINAL CERAMIC<br>COLOR: TOMATO RED<br>(BATHROOM WALL ACCENT TILE)<br>SITIONS:<br>PROVIDE SCHLUTER DILEX-AHK SANITARY COVE TRANSITION,<br>INCLUDE ALL INSIDE CORNERS, CONNECTORS AND END CAPS AS<br>REQUIRED BY LAYOUT. ANODIZED ALUMINUM FINISH  |
|                          |                          | FLOORS:<br>TYPE PFT1:<br>WALLS:<br>TYPE CWT1:<br>TYPE CWT2:<br>SCHLUTER TRAN<br>TYPE SCH1:<br>TYPE SCH2: | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR<br>COLOR: MATTE BISCUIT<br>(BATHROOM WALL FIELD TILE)<br>4"X12" CERAMIC WALL TILE BY FIRECLAY TILE<br>COLLECTION: ORIGINAL CERAMIC<br>COLOR: TOMATO RED<br>(BATHROOM WALL ACCENT TILE)<br>SITIONS:<br>PROVIDE SCHLUTER DILEX-AHK SANITARY COVE TRANSITION,<br>INCLUDE ALL INSIDE CORNERS, CONNECTORS AND END CAPS AS<br>REQUIRED BY LAYOUT. ANODIZED ALUMINUM FINISH<br>(COVE BASE)<br>PROVIDE SCHLUTER FINEC AT OUTSIDE CORNERS AS REQUIRED BY<br>LAYOUT. ANODIZED ALUMINUM FINISH |
|                          | minimum                  | FLOORS:<br>TYPE PFT1:<br>WALLS:<br>TYPE CWT1:<br>TYPE CWT2:<br>SCHLUTER TRAN<br>TYPE SCH1:               | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR<br>COLOR: MATTE BISCUIT<br>(BATHROOM WALL FIELD TILE)<br>4"X12" CERAMIC WALL TILE BY FIRECLAY TILE<br>COLLECTION: ORIGINAL CERAMIC<br>COLOR: TOMATO RED<br>(BATHROOM WALL ACCENT TILE)<br>SITIONS:<br>PROVIDE SCHLUTER DILEX-AHK SANITARY COVE TRANSITION,<br>INCLUDE ALL INSIDE CORNERS, CONNECTORS AND END CAPS AS<br>REQUIRED BY LAYOUT. ANODIZED ALUMINUM FINISH<br>(COVE BASE)<br>PROVIDE SCHLUTER FINEC AT OUTSIDE CORNERS AS REQUIRED BY<br>LAYOUT. ANODIZED ALUMINUM FINISH |
|                          |                          | FLOORS:<br>TYPE PFT1:<br>WALLS:<br>TYPE CWT1:<br>TYPE CWT2:<br>SCHLUTER TRAN<br>TYPE SCH1:<br>TYPE SCH2: | 12" X 12" PORCELAIN FLOOR TILE BY DALTILE<br>STYLE: VOLUME 1.0<br>COLOR: VAPOR VL63<br>(BATHROOM FLOOR TILE)<br>8"X24" CERAMIC WALL TILE BY DALTILE<br>STYLE: COLOR WHEEL LINEAR<br>COLOR: MATTE BISCUIT<br>(BATHROOM WALL FIELD TILE)<br>4"X12" CERAMIC WALL TILE BY FIRECLAY TILE<br>COLLECTION: ORIGINAL CERAMIC<br>COLOR: TOMATO RED<br>(BATHROOM WALL ACCENT TILE)<br>SITIONS:<br>PROVIDE SCHLUTER DILEX-AHK SANITARY COVE TRANSITION,<br>INCLUDE ALL INSIDE CORNERS, CONNECTORS AND END CAPS AS<br>REQUIRED BY LAYOUT. ANODIZED ALUMINUM FINISH<br>(COVE BASE)<br>PROVIDE SCHLUTER FINEC AT OUTSIDE CORNERS AS REQUIRED BY<br>LAYOUT. ANODIZED ALUMINUM FINISH |

| <b>FLOOR</b> | TYPES   |
|--------------|---|
| VINYL:       |   |
| TYPE VCT1:   | 12"x12"x1/8" VINYL COMPOSITE TILE AS MANUFACTURED BY<br>ARMSTRONG FLOORING<br>COLLECTION: STANDARD EXCELON IMPERIAL TEXTURE<br>COLOR: TO BE SELECTED BY ARCHITECT<br>(EXISTING 2ND LEVEL CORRIDOR- MATCH EXIST. COLORS/PATTER |
| TYPE VCT2:   | 12"x12"x1/8" VINYL COMPOSITE TILE AS MANUFACTURED BY<br>ARMSTRONG FLOORING<br>COLLECTION: STANDARD EXCELON IMPERIAL TEXTURE<br>COLOR: TO BE SELECTED BY ARCHITECT<br>(EXISTING 2ND LEVEL CORRIDOR- MATCH EXIST. COLORS/PATTER |
| TYPE SVT1:   | 36" x 36" x 3.2mm SOLID VINYL TILE AS MANUFACTURED BY PATCRA<br>COLLECTION: NUMIX<br>COLOR: PEBLE FLECK<br>INSTALL METHOD: MONOLITHIC - GLUE DOWN<br>(NEW ADDITION / FIRST FLOOR CORRIDOR / NURSE/ MAIN OFFICE)               |
| TYPE SVT2:   | 36" x 36" x 3.2mm SOLID VINYL TILE AS MANUFACTURED BY PATCRA<br>COLLECTION: NUMIX<br>COLOR: COLOR AS PER ARCHITECT<br>INSTALL METHOD: MONOLITHIC - GLUE DOWN<br>(NEW ADDITION / FIRST FLOOR CORRIDOR / NURSE/ MAIN OFFICE)    |
| TYPE LVT1:   | 9"x59"x5MM" LUXURY VINYL TILE AS MANUFACTURED BY MOHAWK<br>COMMERCIAL FLOORING<br>COLLECTION: HOT ND HEAVY - LINEATE , 20 MIL, 5MM THICK<br>COLOR: 948 FIGURED<br>INSTALLATION: GLUE DOWN, ASHLAR<br>(MUSIC EXPLORATION)      |
| TYPE LVT2:   | 9"x59"x5MM" LUXURY VINYL TILE AS MANUFACTURED BY MOHAWK<br>COMMERCIAL FLOORING<br>COLLECTION: HOT ND HEAVY - METAL, 20 MIL, 5MM THICK<br>COLOR: 353 RAVE RED<br>INSTALLATION: GLUE DOWN, ASHLAR<br>(MUSIC EXPLORATION)        |
| CARPET:      |   |
| TYPE CPT1:   | 24" X 24" CARPET TILE AS MANUFACTURED BY INTERFACE<br>STEP REPEAT COLLECTION, SR899, MONOLITHIC INSTALLATION<br>COLOR: TO BE SELECTED BY ARCHITECT<br>(VESTIBULES)  |
| TYPE CPT2:   | 12" X 36" CARPET TILE AS MANUFACTURED BY MOHAWK GROUP<br>COLLECTION: WILD HORIZON<br>STYLE: GT366<br>COLOR: 863 SCARLET CREEPER<br>HALF-LAP INSTALLATION<br>(MAIN OFFICE)   |
| EPOXY:       |   |
| TYPE EP1:    | ACCELERA C 100% SOLIDS, DECORATIVE VINYL CHIP EPOXY<br>FLOORING SYSTEM AS MANUFACTURED BY DURAFLEX OR EQUAL.<br>STYLE: MACROCHIP<br>COLOR: CUSTOM MULTICOLOR PREBLEND BY ARCHITECT-<br>5 COLORS MAX<br>(STEAM LABS)           |

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# FINISH NOTES

- ALL FINISHED TYPES (STYLE/COLOR/PATTERN) SHALL BE OFF THE STANDARD OF QUALITY INDICATED BY THE PROJECT MANUAL. FINAL STYLE / COLOR / PATTERN TO BE SELECTED BY ARCHITECT.
- 2. ALL C.M.U. SURFACES SHALL BE PRIMED WITH INTERIOR & EXTERIOR BLOCK FILLER M88 INDUSTRIAL MAINTENANCE BY BENJAMIN MOORE PRIOR TO FINISH PAINT APPLICATION.
- 3. ALL NEW BRICK WALLS ARE TO REMAIN NATURAL, CLEANED AND SEALED, IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. 4. CONTRACTOR SHALL PREP, PRIME AND PAINT ALL SHEET METAL PIPE ENCLOSURES (INSTALLED BY M.C.) COLOR AS SELECTED BY ARCHITECT.
- . BEFORE PAINTING, CONCRETE SURFACES MUST CURE 30 DAYS, BLOCK AND PLASTER SURFACES MUST CURE FOR 30 DAYS
- 6. REFER TO REFLECTED CEILING PLANS AND FINISH FLOOR PLANS FOR ADDITIONAL INFORMATION.
- ALL INTERIOR FINISHES IN CORRIDOR SHALL BE 'CLASS A' RATED.
- 8. PATCH, REPAIR AND FINISH CEILING, WALLS, AND FLOOR AT POINTS OF DEMOLITION TO MATCH EXISTING. EXISTING FINISHES TO REMAIN.
- SHOULD ANY FINISH MATERIALS BE DISCONTINUED BY MANUFACTURER, THE CONTRACTOR MUST REPLACE WITH CLOSEST MATCH AT NO ADDITIONAL COST, AND SUBMIT TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- AT ROOMS HAVING EXISTING FLOOR TILE TO BE REMOVED AND / OR ABATED, CONTRACTOR SHALL PROVIDE AND INSTALL FLOOR PATCH (PLANI/PATCH PLUS) BY 'MAPEI' OR ARCHITECT APPROVED EQUAL OVER ENTIRE EXISTING SUBSTRATE AND / OR CONCRETE SLAB TO PROVIDE A FLOOR SURFACE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND AS SPECIFIED FOR INSTALLATION OF FINISH FLOORING AS SPECIFIED ON FINISH SCHEDULE.
- 1. HOLLOW METAL DOOR FRAMES, SIDE LIGHTS AND WINDOW FRAMES SHALL BE PREPPED AND PAINTED AS PER PAINTING SPECIFICATION 099000. (ALL COLORS AS SELECTED BY ARCHITECT.) 12. CONTRACTOR SHALL PREP, PRIME AND PAINT SHEETROCK CEILINGS UNLESS OTHERWISE NOTED.
- 3. REFER TO FINISH FLOOR PLANS FOR TILE PATTERNS THE TILE PATTERNS MAY NOT REPRESENT THE FINAL PATTERNS TO BE DESIGNED, INSTALLED AND TURNED OVER TO OWNER. THE BID SHALL BE BASED ON THE TILE MIX AND PERCENTAGES AS INDICATED IN THE PROJECT MANUAL.
- 14. ALL FINISHES SHALL BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR UNLESS OTHERWISE NOTED.
- 15. REFER TO REFLECTED CEILING PLANS, TOILET ROOM TILE PLANS AND FINISHED FLOOR PLANS FOR ADDITIONAL FINISH INFORMATION. 16. NEW TOILET AND URINAL PARTITIONS SHALL BE 1" THICK HDPE AS MANUFACTURED BY SCRANTON, ASI GLOBAL PARTITIONS, OR APPROVED EQUAL. (COLOR AND FINISH TO BE SELECTED

# GYPSUM BOARD FINISHING

BY ARCHITECT).

- GENERAL CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF GYPSUM ASSOCIATION TRADE PUBLICATION GA-214-96 'RECOMMENDED LEVELS OF GYPSUM BOARD FINISH' AND SPECIFICATION SECTION 092900.
- A. LEVEL 0 FOR USE IN TEMPORARY CONSTRUCTION, OR WHERE FINAL FINISH/DECORATION HAS NOT BEEN DETERMINED.
- B. LEVEL 1 FOR USE AT PLENUM AREAS, ABOVE CEILING, IN ATTICS & IN AREAS WHERE THE ASSEMBLY WOULD GENERALLY BE CONCEALED OR IN BUILDING CORRIDORS & OTHER AREAS NOT NORMALLY OPEN TO THE PUBLIC VIEW. E. LEVEL 2 - FOR USE AT LOCATIONS WHERE WATER-RESISTANT GYPSUM BACKING BOARD IS INSTALLED AS A TILE SUBSTRATE AND FOR USE IN GARAGES, WAREHOUSE STORAGE OR
- OTHER SIMILAR AREAS WHERE SURFACE APPEARANCES ARE NOT OF PRIMARY CONCERN. LEVEL 3 - FOR USE IN APPEARANCE AREAS THAT ARE TO RECEIVE HEAVY OR MEDIUM TEXTURE FINISHES BEFORE FINAL PAINTING, OR WHERE HEAVY - GRADE WALL COVERINGS ARE TO BE APPLIED AS THE FINAL DECORATION.
- E. LEVEL 4 FOR USE WHERE LIGHT TEXTURE OR WALL COVERINGS ARE TO BE APPLIED, OR WHERE ECONOMY IS OF THE ARCHITECT'S CONCERN.
- LEVEL 5 FOR USE WHERE GLOSS, SEMI-GLOSS, ENAMEL OR NON-TEXTURED FLAT PAINTS ARE SPECIFIED, OR WHERE SEVERE LIGHTING CONDITIONS OCCUR (IN THE OPTION OF THE ARCHITECT.)

# NOTES

- GENERAL CONTRACTOR SHALL PATCH ALL AREAS OF FLOOR DAMAGED BY THE REMOVAL OF MASTIC.
- GENERAL CONTRACTOR SHALL FLASH PATCH ALL FLOORS IN THEIR ENTIRETY WHERE MASTIC REMOVAL HAS OCCURRED WITH (PLANI/PATCH PLUS) BY 'MAPEI' OR ARCHITECT APPROVED EQUAL.
- 3. GENERAL CONTRACTOR SHALL PERFORM A BOND TEST IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. PRIOR TO INSTALLATION OF NEW FLOORING.
- 4. PROVIDE NEW MARBLE SADDLE AT ALL TOILET ROOM DOORS. PROVIDE BEVELED SADDLE TO MEET ADA REQUIREMENTS.
- . ALL NEW V.C.T. FLOORING TO BE INSTALLED THROUGHOUT ENTIRE FLOOR AREA AS SHOWN UNLESS OTHERWISE NOTED.

# WINDOW TREATMENTS

WS1: DRAPER CLUTCH OPERATED FLEXSHADE, PHIFER SHEARWEAVE PW 2500, 1% OPEN COLOR: AS SELECTED BY ARCHITECT (ALL EXTERIOR WINDOWS IN WORK SCOPE)

NOTE: G.C. SHALL PROVIDE AND INSTALL NEW WINDOW TREATMENTS FOR ALL NEW AND EXISTING AREAS OF WORK EXCEPT AS NOTED BELOW: NEW WINDOW TREATMENTS SHALL NOT BE REQUIRED AT THE FOLLOWING LOCATIONS: VESTIBULES, CORRIDORS, STAIRS, BATHROOMS, BOILER ROOMS, STORAGE. PROVIDE (1) UNIT PER WINDOW

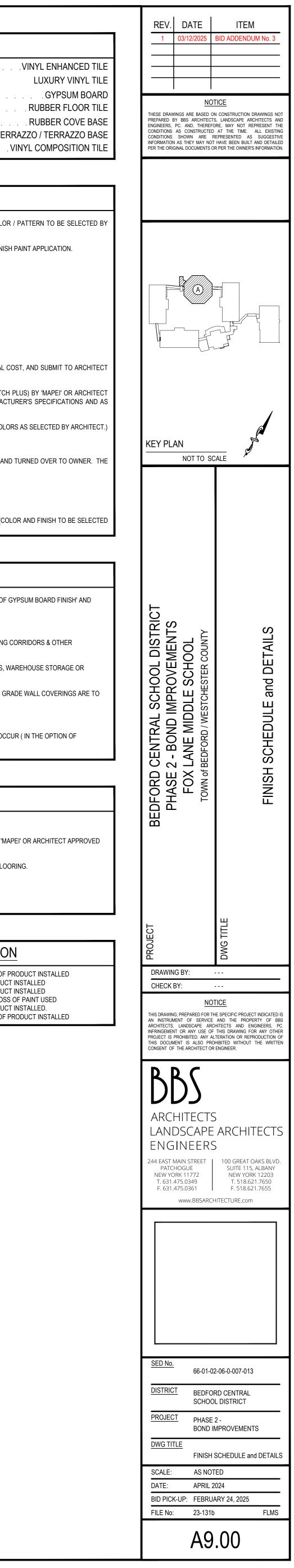
# PRIVACY CURTAIN

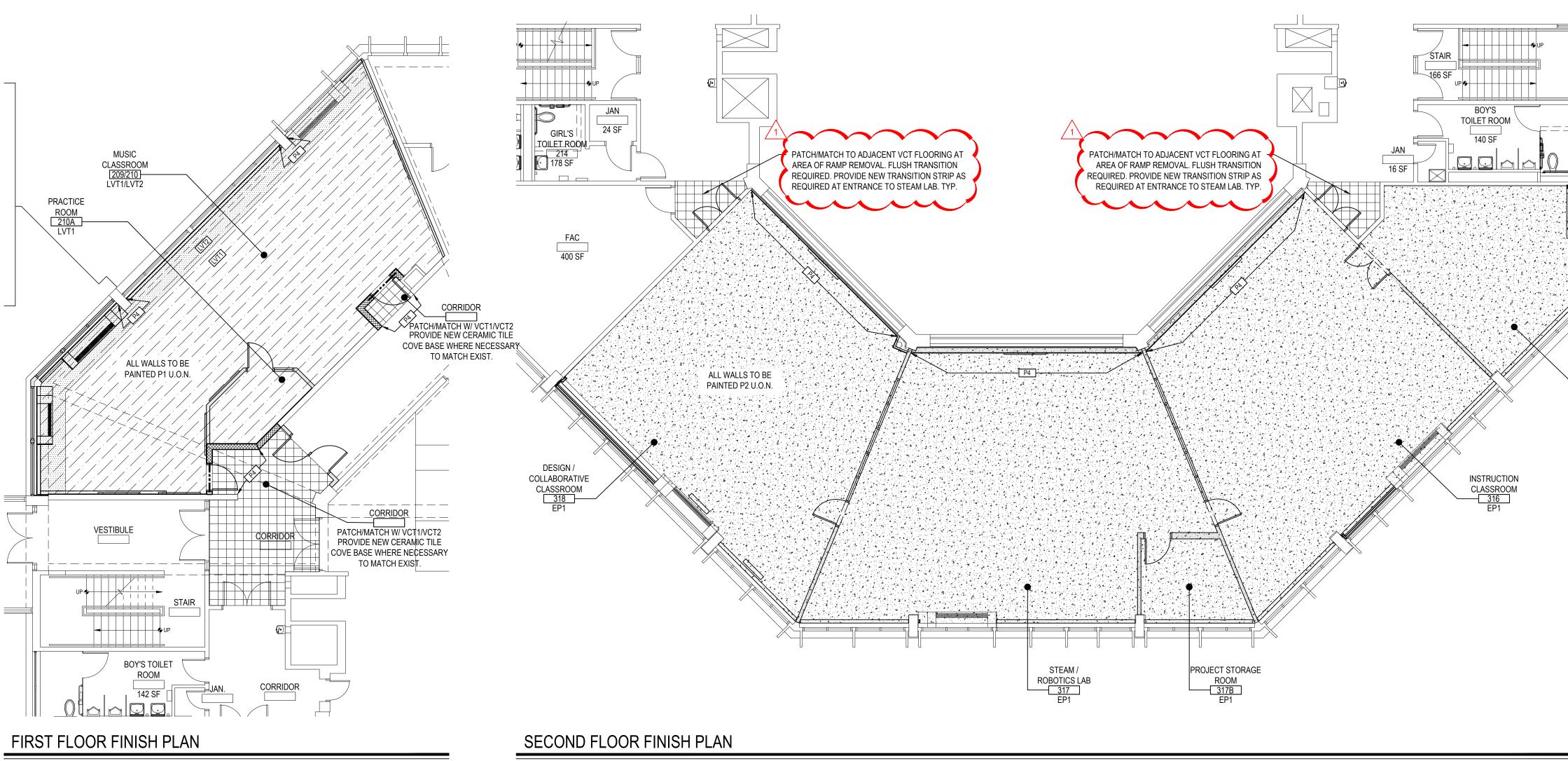
7000 SERIES CEILING CURTAIN TRACK BY HEALTH CARE CURTAINS 855-563-3364 OR EQUAL AS APPROVED BY ARCHITECT. PROVIDE 3 CARRIERS PER LINEAR FOOT OF TRACK, END STOP, AND END STOP WITH PULLOUT(S) FOR REMOVAL AND CLEANING. PROVIDE ALL OTHER REQUIRED ACCESSORIES FOR COMPLETE TRACK SYSTEM AND INSTALLATION.

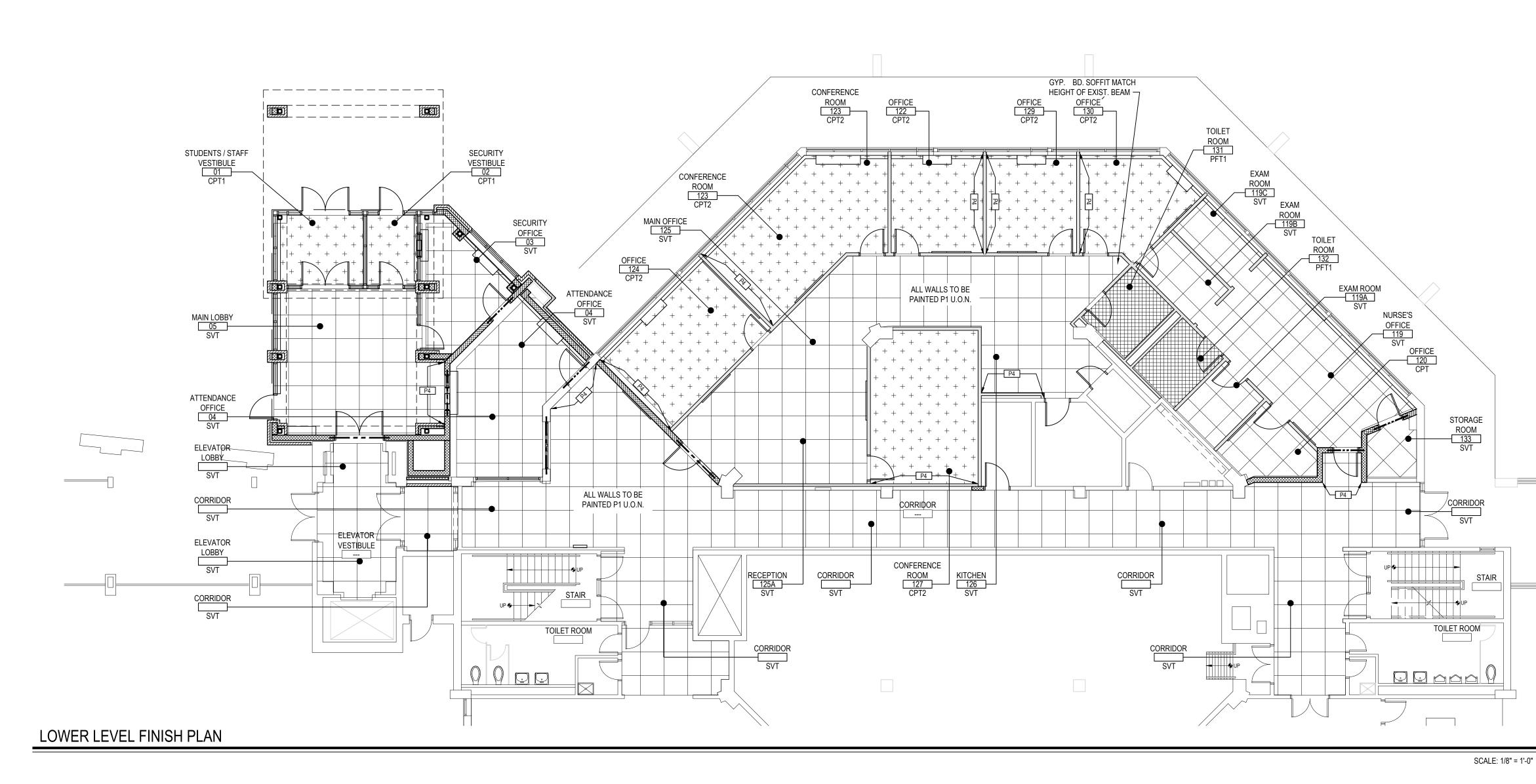
FABRIC SHALL BE CLASS A RATED WITH ANTIMICROBIAL COATING - DESIGNTEX PRIVACY TEXTILE STYLE: COMPOSE 8096 OR AS SELECTED BY ARCHITECT - (ALLOW \$40/SY) COLOR AS SELECTED BY ARCHITECT

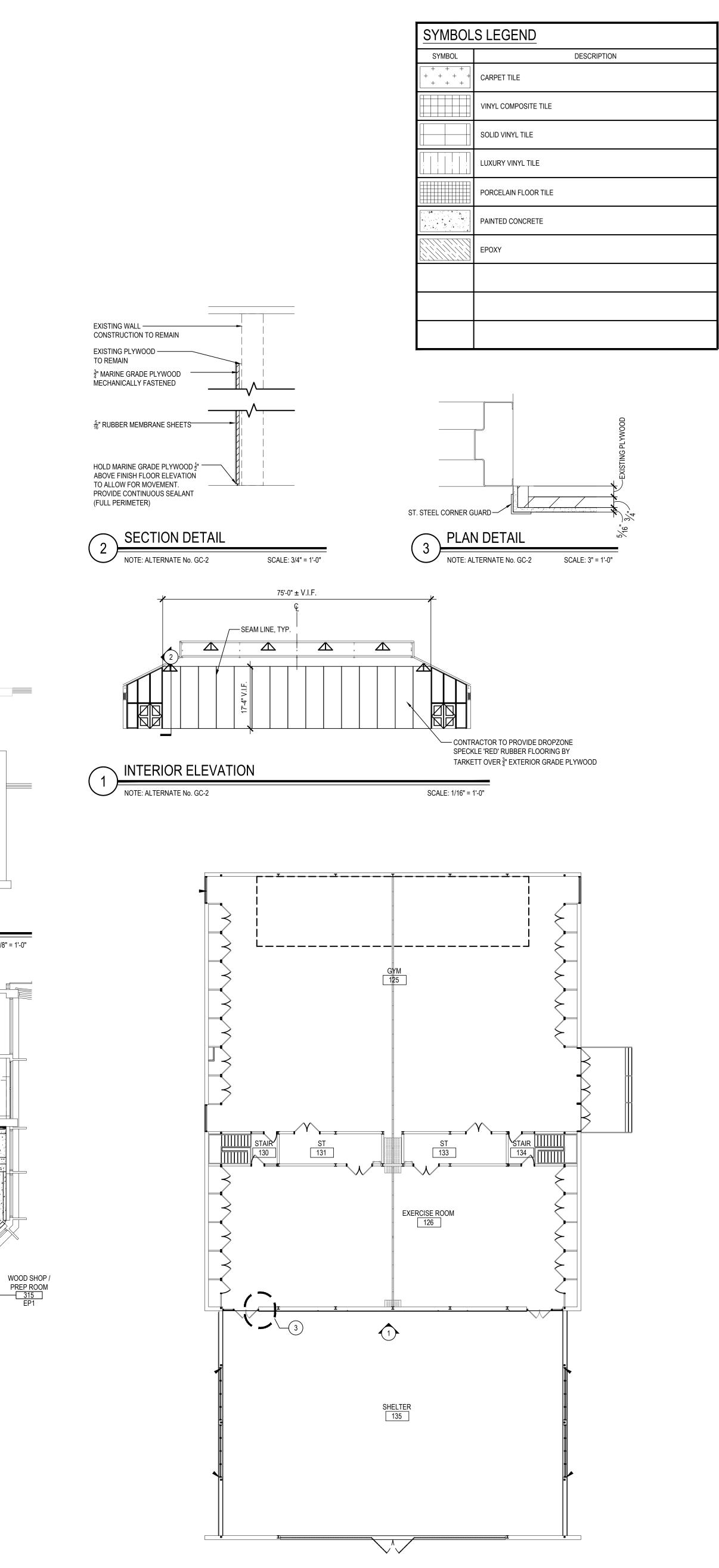
# ATTIC STOCK INFORMATION

| VET:    | (1) ONE BOX FOR EACH (50) BOXES OF PRODUCT INSTALLED |
|---------|--|
| ACT:    | NOT LESS THAN 1% OF TOTAL PRODUCT INSTALLED          |
| RUBBER: | NOT LESS THAN 1% OF TOTAL PRODUCT INSTALLED          |
| PAINT:  | 10% OF EACH COLOR, TYPE AND GLOSS OF PAINT USED      |
| PFT:    | NOT LESS THAN 1% OF TOTAL PRODUCT INSTALLED.         |
| CPT:    | (1) ONE BOX FOR EACH (50) BOXES OF PRODUCT INSTALLED |



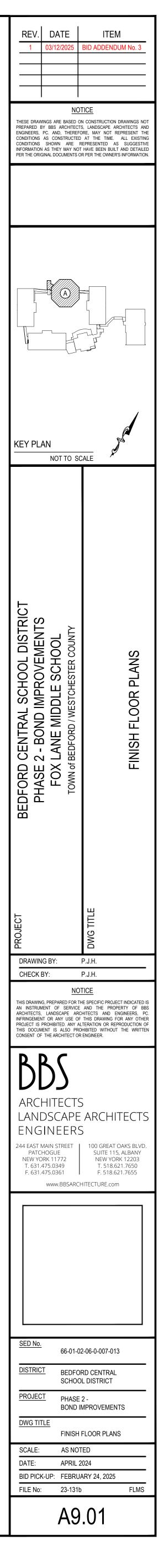


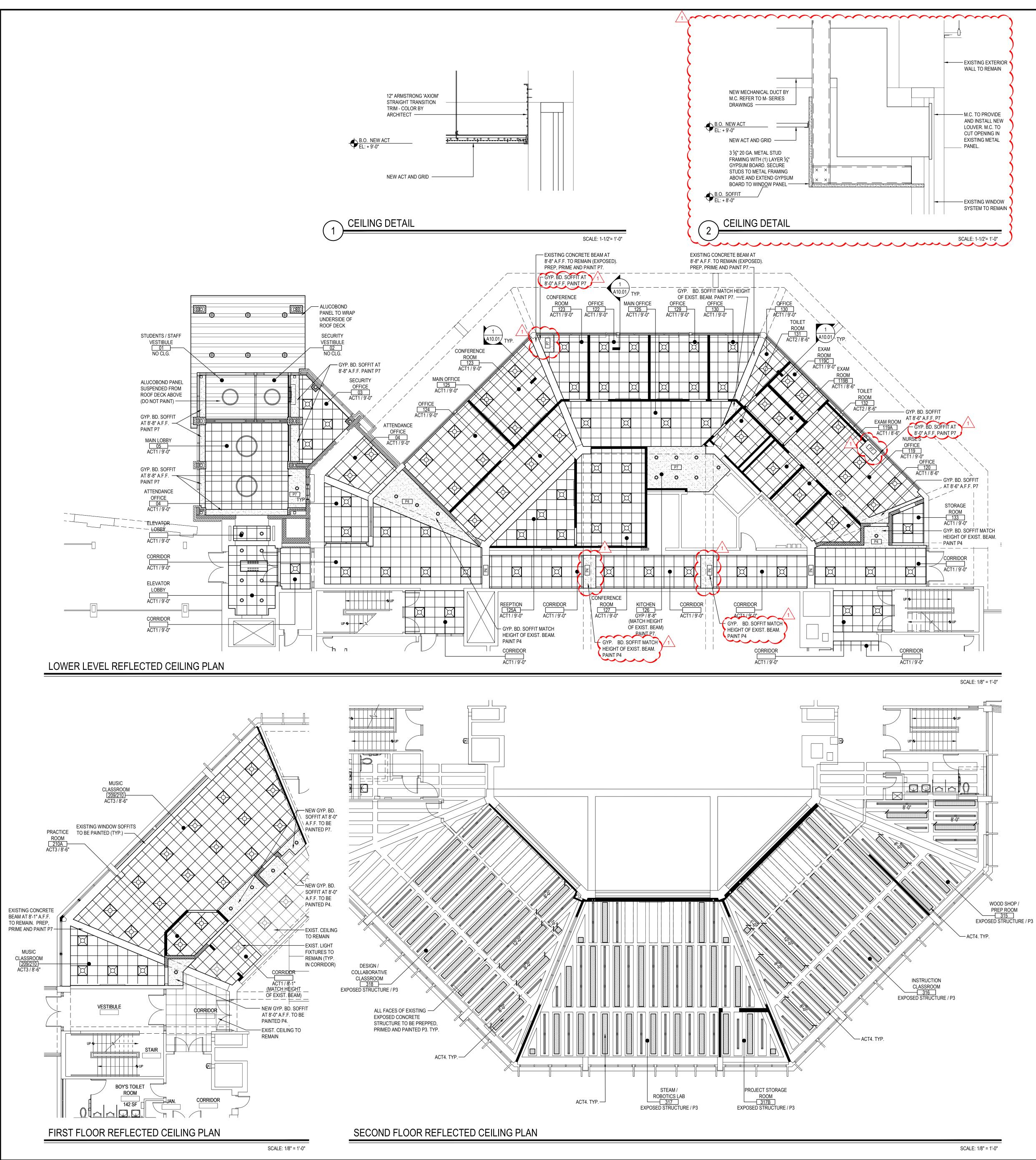




# FOUTH FLOOR - KEY PLAN

NOTE: ALL WORK SCOPE WITHIN THIS COUNDARY SHALL BE PART OF ALTERNATE №. GC-2

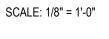


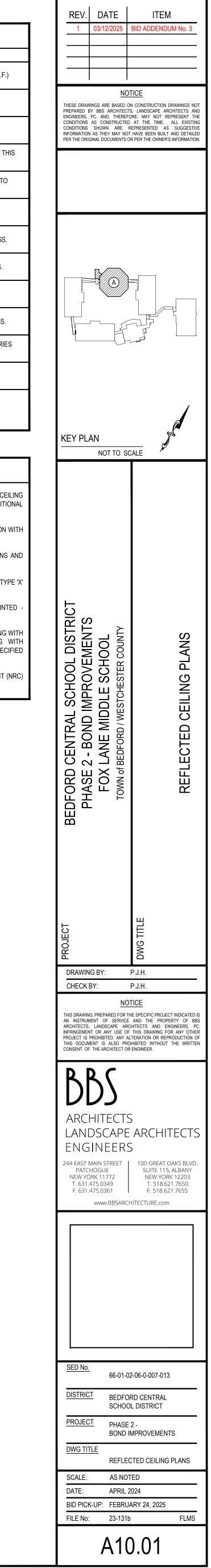


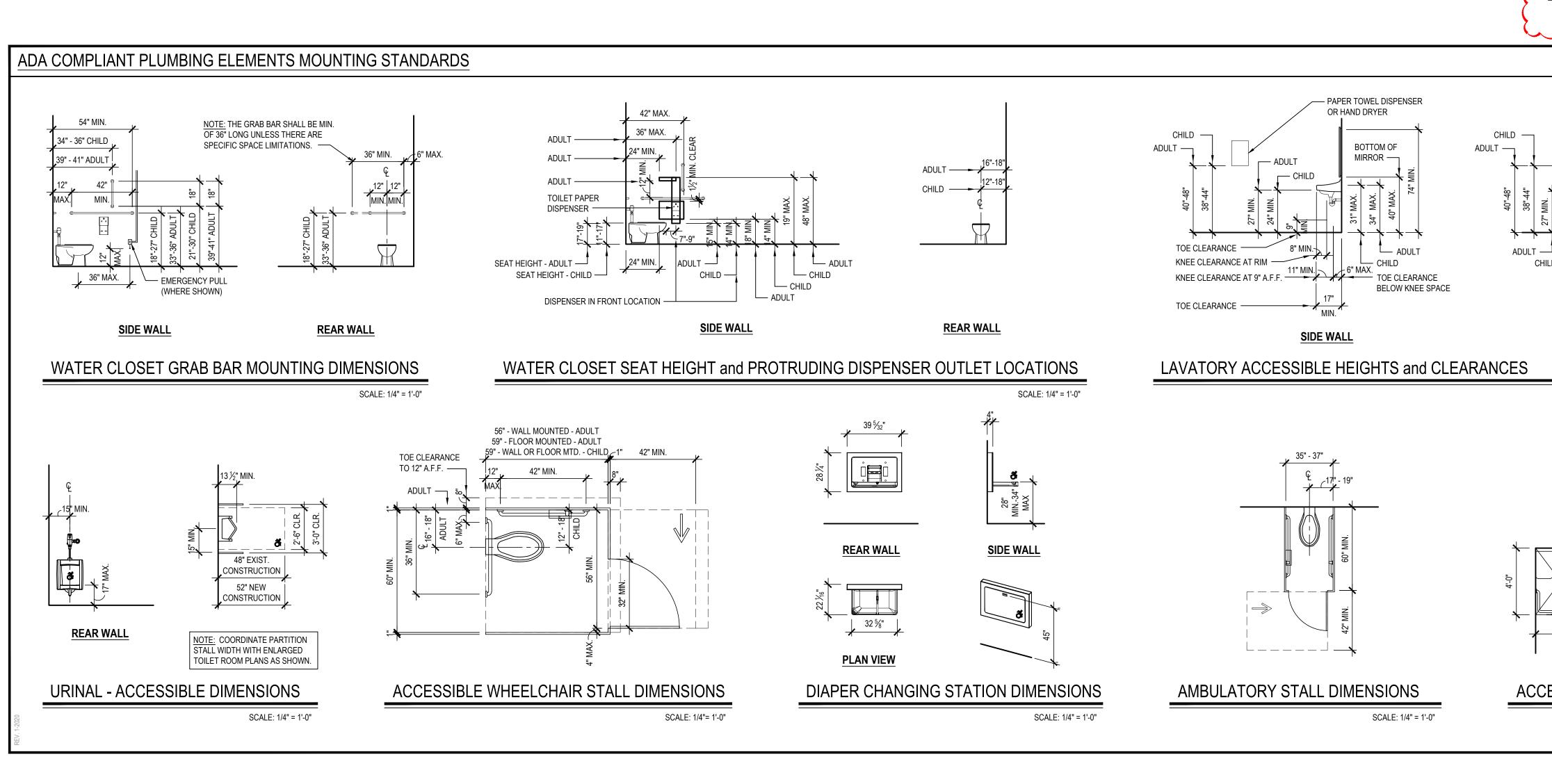
| EXISTING EXTERIOR<br>WALL TO REMAIN   |   |
|---|---|
| M.C. TO PROVIDE<br>AND INSTALL NEW<br>LOUVER. M.C. TO<br>CUT OPENING IN<br>EXISTING METAL<br>PANEL. |   |
| — EXISTING WINDOW<br>SYSTEM TO REMAIN   |   |
| SCALE: 1-1/2'= 1'-0"  | ) |

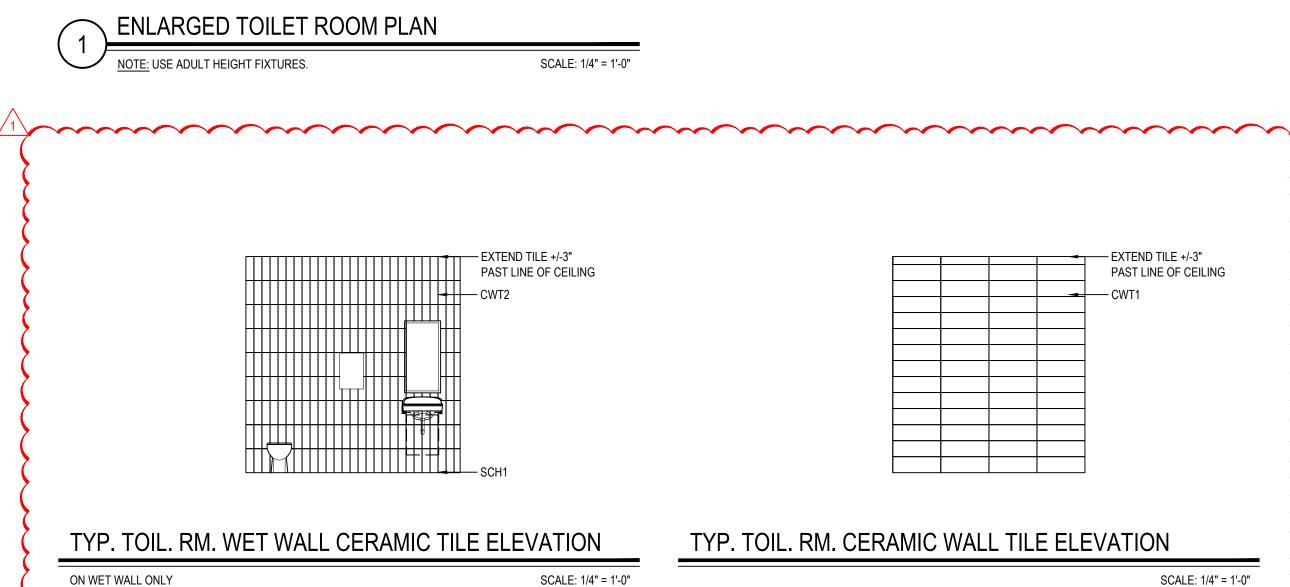
### SYMBOLS LEGEND SYMBOL DESCRIPTION ROOM TAG, CEILING TILE TYPE AND FINISH CEILING ELEVATION (A.F.F.) LG. HEIGHT NO CLG. OPEN TO STRUCTURE AND DECK ABOVE (PAINT) SUSPENDED ACOUSTICAL CEILING TILE AND GRID GYPSUM BOARD SOFFIT OVER METAL FRAMING. REFER TO DETAIL, THIS SHEET. TAPE, SPACKLE AND PAINT. Image: Construct of the sector of the sect $\bigtriangledown$ EXIT SIGN BY E.C. REFER TO E-SERIES DRAWINGS. \$ D C CEILING MOUNTED SPEAKER BY E.C. REFER TO E-SERIES DRAWINGS. **(S**) SMOKE / HEAT DETECTORS BY E.C. REFER TO E-SERIES DRAWINGS. OS OCCUPANCY SENSOR BY E.C. REFER TO E-SERIES DRAWINGS. N 🛛 CEILING GRILLE / REGISTER BY M.C. REFER TO M-SERIES DRAWINGS. EXTERIOR WALL MOUNTED LIGHT FIXTURE BY E.C. REFER TO E-SERIES DRAWINGS. CEILING MOUNTED CABINET HEATER BY M.C. REFER TO M-SERIES DRAWINGS. REVISION CLOUD AND KEYED DESIGNATION. REFER TO DRAWING $\sim$ TITLEBLOCK FOR ADDITIONAL INFORMATION. **TYPICAL REFLECTED CEILING PLAN NOTES**

- CEILING PLANS MAY NOT INDICATE ALL MECHANICAL AND / OR ELECTRICAL CEILING
- MOUNTED ITEMS. REFER TO M SERIES AND E SERIES DRAWINGS FOR ADDITIONAL INFORMATION. CEILING GRID SHALL BE ARRANGED TO BE SPACED EQUALLY IN EACH DIRECTION WITH
- NO TILE LESS THAN 6" UNLESS OTHERWISE REQUIRED. PROVIDE CEILING EXPANSION JOINT AT ALL NEW TO EXISTING INTERSECTIONS AND WHERE INDICATED ON PLANS.
- UNLESS OTHERWISE NOTED, ALL SOFFITS AND WINDOW POCKETS SHALL BE 5/8" TYPE 'X' GYP. BOARD OVER 18 GA. COLD FORMED FRAMING AT 16" O.C.
- ALL AREAS NOTED AS 'OPEN' AND / OR 'NO CEILING (CLG.) SHALL BE PAINTED -INCLUDING BUT NOT LIMITED TO DECK, STRUCTURE, DUCTWORK, ETC.)
- ACOUSTICAL CEILINGS SHALL HAVE A FLAME SPREAD OF 25 OR LESS COMPLYING WITH 'ASTM E-84'; SMOKE DEVELOPED RATING OF 50 OR LESS COMPLYING WITH PERFORMANCE REQUIREMENTS AND PHYSICAL CHARACTERISTICS OF THE SPECIFIED CEILINGS AS INDICATED IN THE REFLECTED CEILING PLAN. (ASTM E-1264)
- ACOUSTICAL CEILINGS SHALL HAVE A MINIMUM NOISE REDUCTION COEFFICIENT (NRC) RATING OF 0.65.







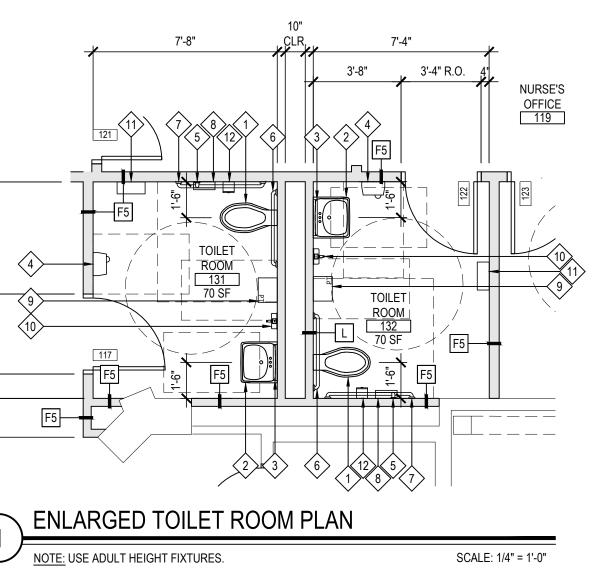


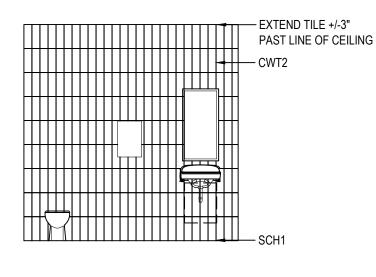
CHILD -

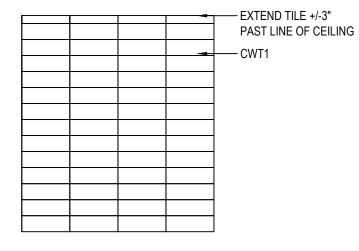
# **TOILET FIXTURE MOUNTING HEIGHTS**

- AT ALL STUDENT USE TOILET FACILITIES, ALL TOILET FIXTURES, URINALS, LAVATORIES, GRAB BARS, ACCESSORIES, ETC. SHALL BE MOUNTED EITHER AT ADULT HEIGHT OR CHILD HEIGHT AS INDICATED ON THE PLANS AND 'TYPICAL ADA PLUMBING ELEMENTS MOUNTING STANDARDS.'
- AT ALL ADULT USE TOILET FACILITIES, ALL TOILET FIXTURES, URINALS, LAVATORIES, GRAB BARS, ACCESSORIES, ETC. SHALL BE MOUNTED AT ADULT HEIGHT AS INDICATED ON THE PLANS AND 'TYPICAL ADA PLUMBING ELEMENTS MOUNTING STANDARDS.'
- 3. THE HEIGHT OF ALL GRAB BAR MUST BE THE SAME WITHIN EACH STALL / ROOM. . THE CHILD MOUNTING HEIGHT LIMITS APPLY FOR ADA AND NON-ADA LOCATIONS.

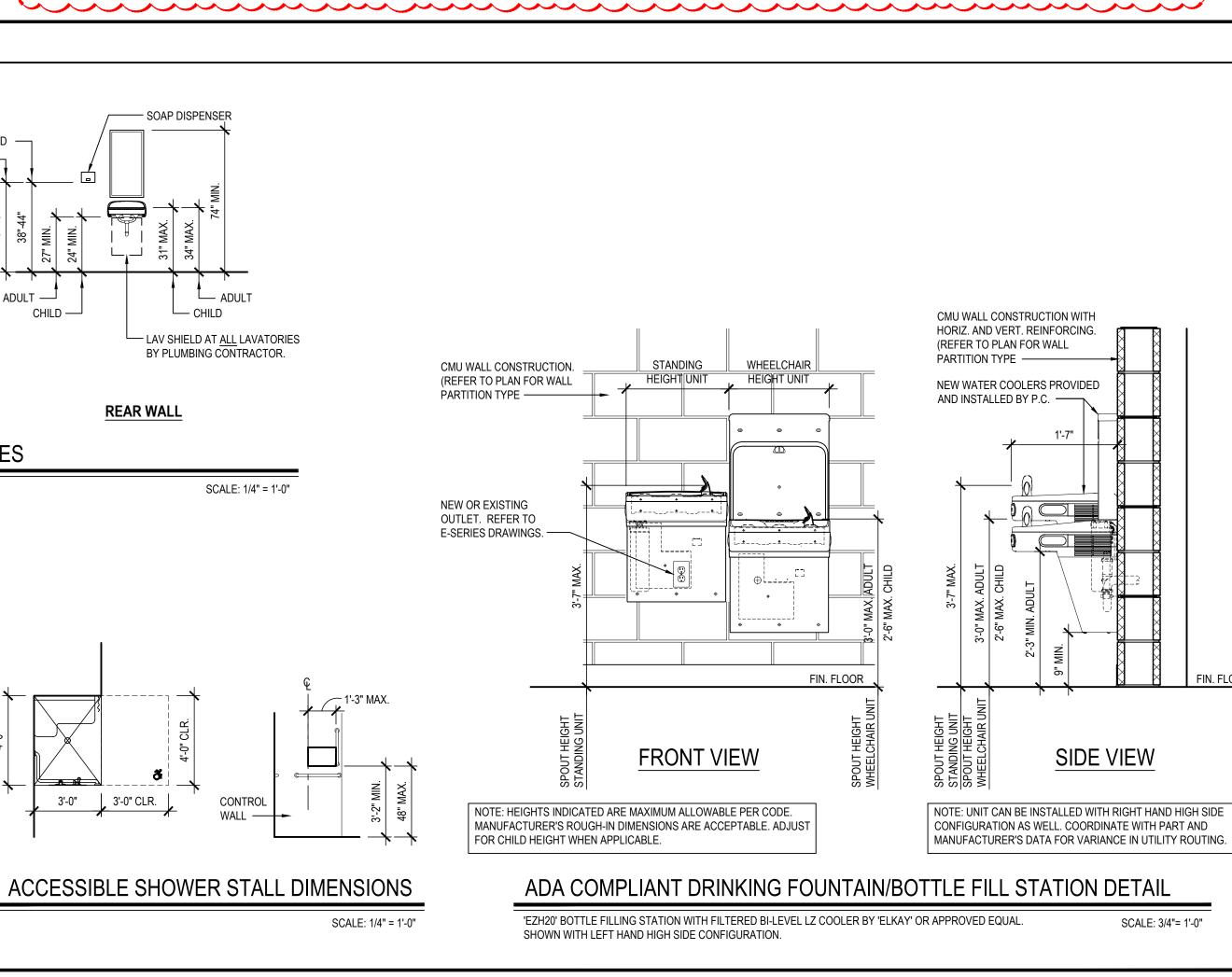
| TO                       | TOILET ROOM KEY NOTES  |  |  |  |  |  |
|--------------------------|--|--|--|--|--|--|
| $\langle 1 \rangle$      | P.C. TO FURNISH AND INSTALL NEW ADA ACCESSIBLE WATER CLOSET AND FLUSHOMETER.                                       |  |  |  |  |  |
| $\langle 2 \rangle$      | P.C. TO FURNISH AND INSTALL NEW ADA ACCESSIBLE LAVATORY, FAUCET AND LAV SHIELD.                                    |  |  |  |  |  |
| $\langle 3 \rangle$      | G.C. TO FURNISH AND INSTALL NEW MIRROR WITH SHELF.   |  |  |  |  |  |
| $\langle 4 \rangle$      | G.C. TO PROVIDE AND INSTALL NEW ADA COMPLIANT SURFACE MOUNTED HAN DRYER. E.C. TO CONNECT TO NEW OR EXISTING POWER. |  |  |  |  |  |
| 5                        | G.C. TO FURNISH AND INSTALL NEW VERTICAL 18" GRAB BAR.   |  |  |  |  |  |
| 6                        | G.C. TO FURNISH AND INSTALL NEW HORIZONTAL 36" GRAB BAR.   |  |  |  |  |  |
| $\langle \gamma \rangle$ | G.C. TO FURNISH AND INSTALL NEW HORIZONTAL 42" GRAB BAR.   |  |  |  |  |  |
| 8                        | G.C. TO FURNISH AND INSTALL NEW TOILET PAPER DISPENSER.  |  |  |  |  |  |
| 9                        | G.C. TO FURNISH AND INSTALL NEW ROLL PAPER TOWEL DISPENSER.  |  |  |  |  |  |
|                          | G.C. TO FURNISH AND INSTALL NEW WALL MOUNTED SOAP DISPENSER.   |  |  |  |  |  |
| $\langle 11 \rangle$     | G.C. TO FURNISH AND INSTALL NEW SANITARY NAPKIN DISPENSER.   |  |  |  |  |  |
| (12)                     | G.C. TO FURNISH AND INSTALL NEW SANITARY NAPKIN WASTE RECEPTACLE.  |  |  |  |  |  |



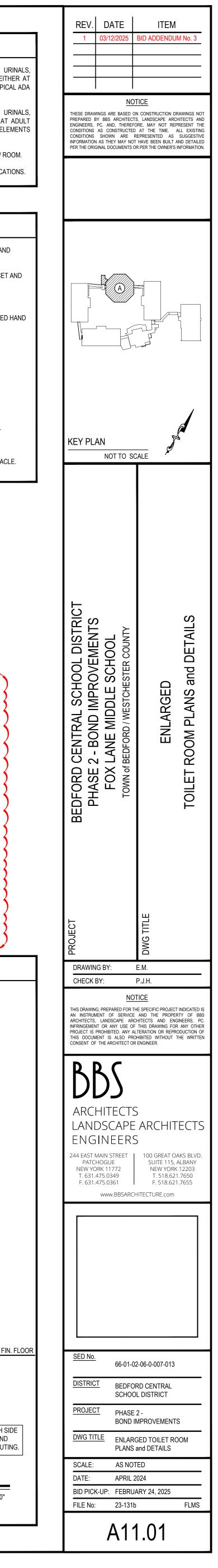




SCALE: 1/4" = 1'-0"



SCALE: 1/4" = 1'-0"



| DE                   | SIGN LOADS AND CRITERIA: (FLMS ENTRY ADDITION)  |
|----------------------|---|
| •                    | DESIGN PROVISIONS: 2020 BUILDING CODE OF NEW YORK STATE<br>BUILDING RISK CATEGORY, III<br>TERRAIN EXPOSURE CATEGORY, B<br>BASIC SEISMIC/MAIN WIND FORCE RESISTING SYSTEM:   |
|                      | NORTH-SOUTH, STEEL MOMENT FRAMES<br>EAST-WEST, STEEL MOMENT FRAMES<br>NOTE: STEEL MOMENT FRAMES NOT SPECIFICALLY DETAILS FOR SEISMIC  |
| 2.                   | RESISTANCE.<br>ROOF DEAD LOAD, 20 PSF (TYPICAL)<br>PORTION OF ABOVE ROOF DEAD LOAD FOR MECHANICAL EQUIPMENT AND PIPING<br>SUSPENDED FROM STRUCTURAL FRAMING, 5 PSF  |
|                      | CONCENTRATED LOADS SHALL BE LIMITED TO THOSE WHICH INDUCE MOMENTS<br>AND SHEARS IN MEMBERS NOT GREATER THAN THOSE INDUCED BY THE NOTED<br>UNIFORMLY DISTRIBUTED LOADS.  |
| 3.                   | SNOW LOAD:<br>GROUND SNOW LOAD (Pg), 30 PSF   |
|                      | FLAT ROOF SNOW LOAD (Pf), 25 PSF<br>EXPOSURE FACTOR ( $C_E$ ), 1.0<br>THERMAL FACTOR ( $C_t$ ), 1.0<br>IMPORTANCE FACTOR ( $I_s$ ), 1.1   |
|                      | RAIN LOAD (PONDING), NOT APPLICABLE<br>RAIN-ON-SNOW SURCHARGE, NOT APPLICABLE   |
| ŀ.                   | DRIFTED, UNBALANCE AND SLIDING SNOW LOADS AS INDICATED IN AMERICAN<br>SOCIETY OF CIVIL ENGINEERS STANDARD ASCE 7-16.<br>WIND LOAD:  |
|                      | MAIN WIND FORCE RESISTING SYSTEM HAS BEEN DESIGNED USING THE<br>PROCEDURE SIMPLE DIAPHRAGM LOW RISE BUILDINGS.<br>BASIC WIND SPEED, 125 MPH<br>EXPOSURE CATEGORY, B<br>TOPOGRAPHIC FACTOR, 1.0<br>HEIGHT OF MAIN ROOF, 12 FEET  |
| 5.                   | AVERAGE NET WIND UPLIFT PRESSURE, 20 PSF (ULTIMATE)   |
|                      | RISK CATEGORY, III<br>SITE CLASS, D   |
|                      | SEISMIC IMPORTANCE FACTOR ( $I_e$ ), 1.25<br>SHORT-PERIOD ACCELERATION ( $S_{ds}$ ), 0.291 g<br>ONE-SECOND ACCELERATION ( $S_{d1}$ ), 0.96 g  |
|                      | SEISMIC DESIGN CATEGORY, B<br>SEISMIC RESPONSE COEFFICIENT (Cs), 0.1057<br>RESPONSE MODIFICATION COEFFICIENT (R), 3<br>DESIGN PASE SHEAP (A), 4 KIPS  |
| 5.                   | DESIGN BASE SHEAR (V), 4 KIPS<br>GEOTECHNICAL DESIGN CRITERIA:  |
|                      | PRESUMTIVE SOIL BEARING PRESSURE, 2,000 PSF<br>ASSUMED BEARING STRATA, NATIVE SOIL OR COMPACTED STRUCTURAL FILL   |
| STI                  | RUCTURAL MATERIALS<br>RUCTURAL STEEL AND MISCELLANEOUS STEEL  |
| 70<br>70             | LLED STEEL W SHAPES: ASTM A 992<br>LLED STEEL C, MC SHAPES: ASTM A 36<br>LLED STEEL PLATES, BARS, AND ANGLES: ASTM A 36<br>SH-STRENGTH BOLTS: ASTM A 325 OR ASTM A 490  |
| ΓΗ<br>ΝΕ             | GH-STRENGTH BOLTS: ASTM A 325 OR ASTM A 490<br>READED ANCHORS: ASTM A 36<br>ILD ELECTRODES: AWS E70XX<br>R CONNECTIONS, PROVIDE HIGHER GRADE OR AS REQUIRED FOR CAPACITY.   |
| -A3                  | STENERS<br>WDER ACTUATED FASTENERS (PAF): HILTI 0.177 DIA DS/EDS  |
| 0                    | HESIVE ANCHORS (SOLID CONC OR MASONRY): HILTI HIT HY 200<br>NCRETE<br>DTINGS, FOUNDATION WALLS, PIERS, GRADE BEAMS, MISC:   |
|                      | 28 DAY COMPRESSIVE STRENGTH, $f_c$ = 3,000 PSI<br>SLUMP, 3 TO 5 INCHES<br>AIR ENTRAINMENT, 5 % ± 1 %  |
|                      | ERIOR SLABS ON GRADE:<br>28 DAY COMPRESSIVE STRENGTH, f'c = 3,500 PSI   |
| 4s<br>Jn<br>4s<br>Gr | NCRETE BLOCK: ASTM C 90, 2,800 PSI NET COMPRESSIVE STRENGTH, MORTAR -<br>TM C 270, TYPE S<br>IT MASONRY: ASTM C 90 CMU, 2,800 PSI NET COMPRESSIVE STRENGTH, MORTAR -<br>TM C 270, TYPE S, f 'm=2,000PSI<br>OUT:ASTM C 476, 2,500 PSI COMPRESSIVE STRENGTH, 8 TO 10 INCH SLUMP<br>NFORCING, CONCRETE: ASTM A 615. GRADE 60 |
|                      | NERAL NOTES:  |
|                      | DIMENSIONS TO, OF, AND IN EXISTING STRUCTURE SHALL BE VERIFIED IN FIELD BY CONTRACTOR.  |
| 2.<br>3.             | DO NOT SCALE DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY<br>DISCREPANCIES IN DIMENSIONS BETWEEN THE EXISTING CONDITIONS,<br>ARCHITECTURAL DRAWINGS, AND STRUCTURAL DRAWINGS.<br>DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.   |
| J.<br>1.             | SECTIONS, AND DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO<br>SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.  |
| 5.                   | THE NOTES ON THIS DRAWING ARE TYPICAL UNLESS OTHERWISE INDICATED.   |
| δ.                   | CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES<br>BEFORE COMMENCING WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE<br>FOR DAMAGES WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE<br>AND PRESERVE EXISTING UTILITIES.  |
| 7.                   | CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF PROPOSED<br>DEVIATIONS OR SUBSTITUTIONS FROM DIMENSIONS, MATERIALS, OR<br>COMPONENTS SHOWN ON THE DRAWINGS AND MAKE ONLY THOSE DEVIATIONS<br>OR SUBSTITUTIONS ACCEPTED BY THE ENGINEER.  |
| 3.                   | DO NOT SUSPEND MECHANICAL, ELECTRICAL, OR PLUMBING ITEMS FROM ROOF<br>DECK. REFER TO THE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS<br>AND SPECIFICATIONS FOR HANGERS AND SUPPLEMENTAL FRAMING REQUIRED<br>TO ATTACH THESE ITEMS TO THE MAIN ROOF FRAMING.   |
| ).                   | BRACE BUILDING UNTIL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE<br>INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: ROOF DECK, MOMENT<br>FRAMES, BRACING MEMBERS, AND CONNECTIONS.   |
| 0.                   | THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR<br>CONSTRUCTION SAFETY. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR<br>CONSTRUCTION SAFETY.   |
| 1.                   | REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION AND REMOVALS REQUIRED FOR EXISTING CONDITIONS.   |
| 2.                   | COORDINATE THE NUMBER AND LOCATION OF ROOF DRAINS AND OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.  |
| :                    | JNDATION NOTES:<br>BEAR FOOTINGS ON FIRM UNDISTURBED SOIL, OR COMPACTED STRUCTURAL  |
| 2.                   | FILL OR BEDROCK.<br>FOOTING BEARING STRATUM SHALL BE VERIFIED IN FIELD BY A LICENSED  |
| 3.                   | GEOTECHNICAL ENGINEER BEFORE CASTING CONCRETE FOOTINGS.<br>UNLESS OTHERWISE NOTED, BOTTOM OF EXTERIOR FOOTINGS IS 4 FEET<br>MINIMUM BELOW FINISHED GRADE. FOOTINGS MAY BE STEPPED DOWN OR<br>LOWERED TO REACH AN ACCEPTABLE BEARING STRATUM AS DETERMINED BY  |
| 4.                   | GEOTECHNICAL ENGINEER.<br>WHERE FOOTING ELEVATIONS ARE LOWERED DUE TO SOIL CONDITIONS, LOWER<br>ADJACENT FOOTINGS IN ELEVATION IN ORDER THAT RATIO OF CLEAR DISTANCE<br>BETWEEN NEAREST EDGE OF FOOTINGS TO DIFFERENCE IN ELEVATION<br>DETWEEN NEAREST EDGE OF FOOTINGS TO DIFFERENCE IN ELEVATION                        |
| 5.                   | BETWEEN BOTTOMS OF FOOTINGS SHALL NOT EXCEED 2H:1V<br>ELEVATIONS OF BOTTOM OF FOOTINGS ARE FOR ESTIMATING PURPOSES AND<br>WILL BE ADJUSTED TO REQUIRED BEARING STRATA AS DETERMINED UPON<br>EXCAVATION.   |
| 6.<br>7              | DO NOT PLACE FOOTINGS IN WATER OR ON FROZEN GROUND.   |
| 7.                   | DO NOT ALLOW GROUND BENEATH FOOTINGS OR SLABS TO FREEZE.  |

- LOAD FROM MAXIMUM TOTAL FACTORED UNIFORM LOAD LRFD MANUAL, PART 5, FOR THE GIVEN STEEL MEM C. FOR BEAMS AND GIRDERS WITH SHEAR CONNECTORS, PROVID CONNECTION CAPACITY OF AT LEAST 70 PERCENT OF TH VALUES (ASD OR LRFD, AS APPROPRIATE), UNLESS INDIC. OTHERWISE ON DRAWINGS.
- D. CONCENTRATED LOADS NEAR SUPPORTS MUST BE ADDED. PROVIDE HOT DIP GALVANIZED FASTENERS FOR GALVANIZED FF CONNECTIONS AND STAINLESS STEEL FASTENERS FOR STAINLE
- FRAMING CONNECTIONS. 6. FABRICATE AND ERECT STEEL IN ACCORDANCE WITH THE AISC
- STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
- 7. SLOPE ROOF STEEL UNIFORMLY BETWEEN ELEVATIONS SPECIFIC REMOVE ALL PAINT AND OTHER DEBRIS FROM STEEL PRIOR TO TO STRUCTURE. FIELD WELDS AND ADJACENT AREAS SHALL BE AFTER INSPECTED.
- 9. ALL SAFETY REGULATION AND PRECAUTIONS WITH REGARDS T WELDING SHALL BE COMPLIED WITH TO PROTECT EXISTING COM REMAIN, FINISHES, AND ON SITE WORKERS (SCREENS & BARRIE
- 10. WHERE FILLET WELD SIZES ARE NOT SPECIFICALLY NOTED, THE SHALL DETAIL A MINIMUM SIZE FILLET WELD IN ACCORDANCE WI STANDARDS. THE ACTUAL SIZES SHALL BE SHOWN ON THE SHO
- 11. BACKER BARS AT COMPLETE JOINT PENETRATION WELDS MUST "R" IS GREATER THAN 3 OR IF STEEL IS "AESS".
- 12. CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REV ENGINEER. USE DOUBLE ANGLE SHEAR CONNECTIONS WITH 3/4 ASTM A325 BOLTS WITH AT LEAST THE FOLLOWING NUMBER OF I NUMBER OF BOLT ROWS BEAM SIZE

## W8, W10 W12, W14, W16 W18, W21, W24

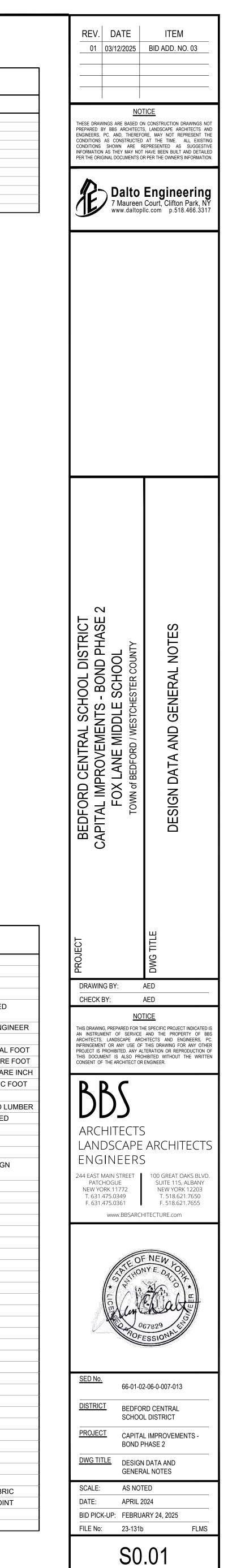
- 13. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS UNLESS INDICATED IN STRUCTURAL DRAWINGS.
- 14. BOLTED CONNECTIONS SHALL UTILIZE TYPE 3 ASTM A 325 BOLTS CONNECTIONS SHALL BE INSTALLED SNUG TIGHT.
- 15. REMOVE BURRS, DIRT, AND OTHER FOREIGN MATERIALS FROM I SURFACES AND SURFACES ADJACENT TO BOLT HEADS AND NUT THAN OR EQUAL TO 1/16" IN HEIGHT ARE PERMITTED TO REMAIN SURFACES.
- 16. FABRICATE BOLTED CONNECTIONS WITH STANDARD SIZED HOLE NOTED OTHERWISE.
- 17. COMPLY WITH AISC SPECIFICATIONS FOR STRUCTURAL JOINTS U STRENGTH BOLTED CONNECTIONS.

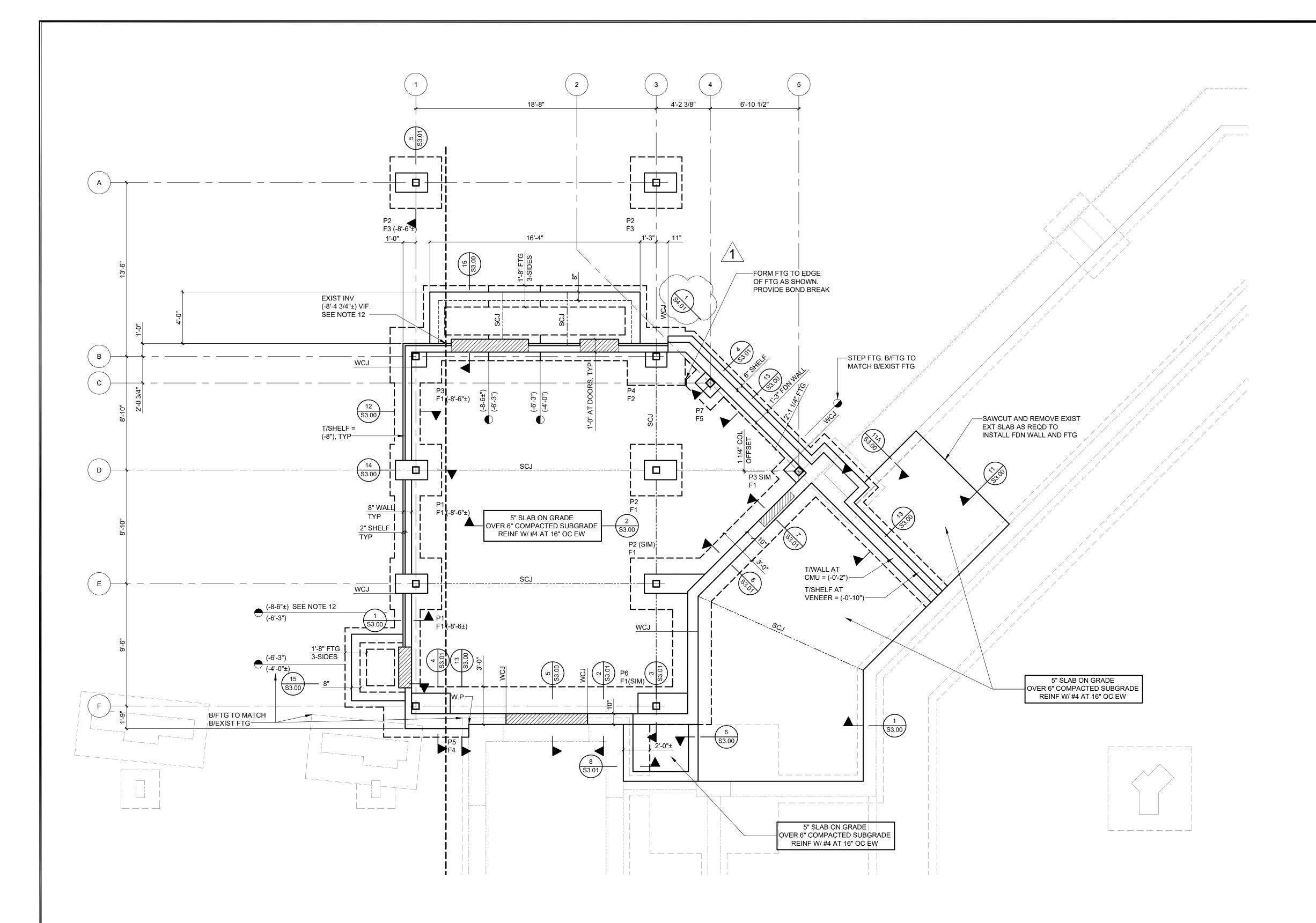
- 2. CUT FRAMING COMPONENTS SQUARELY OR ON AN ANGLE AS RE TIGHTLY WITH FULL BEARING AGAINST ABUTTING MEMBERS. TE BRACE MEMBERS AS REQUIRED PRIOR TO FINAL FASTENING.
- 3. FIELD CUTTING OF MEMBERS SHALL BE PERFORMED BY SHEARING OR SAWING. TORCH CUTTING IS NOT ACCEPTABLE.
- 4. SPLICES ARE NOT PERMITTED IN STUDS, JOISTS, OR OTHER LOAD-CARRYING

| WHICH ARE ALLOWED TO BECOME SATURATED, FROZEN, OR DISTURBED SH/<br>BE REWORKED TO THE SATISFACTION OF GEOTECHNICAL ENGINEER.  | ALL MEMBERS UNLESS CALCULATIONS AND DETAILS HAVE BEEN SUBMITTED TO ENGINEER FOR REVIEW AND ACCEPTED.  |
|---|---|
| 9. CENTER FOOTINGS UNDER WALLS, PIERS, OR GRADE BEAMS UNLESS NOTED OTHERWISE.   | 5. WHEN COLD-FORMED STUDS ARE TO BE USED FOR TRUSS, RAFTER, OR HEADER<br>APPLICATIONS, STUDS SHALL BE UN-PUNCHED THROUGH THE WEB. IT IS THE<br>RESPONSIBILITY OF THE CONTRACTOR TO SPECIFY UN-PUNCHED STUDS WHEN  |
| <ol> <li>PROVIDE FOUNDATION WALL CONTROL JOINTS WHERE INDICATED ON PLAN.<br/>WHERE CONTROL JOINTS ARE NOT INDICATED ON PLAN, PROVIDE CONTROL<br/>JOINTS SPACED AT 35 FEET, MAXIMUM.</li> </ol>  | <ul><li>ORDERING MATERIALS.</li><li>6. FIELD-INSTALLED HOLES ARE NOT PERMITTED IN MEMBERS UNLESS INDICATED</li></ul>  |
| 11. REINFORCE ALL FOUNDATION WALLS IN ACCORDANCE WITH THE TYPICAL<br>CONCRETE WALL REINFORCING DETAIL, UNLESS NOTED OTHERWISE.  | IN DRAWINGS.<br>7. DO NOT SCREW OR WELD STUDS TO VERTICAL DEFLECTION TRACKS. DO NOT<br>CONNECT SHEATHING TO VERTICAL DEFLECTION TRACKS. PROVIDE GAP IN  |
| 12. FOUNDATION PREPARATION: REFER TO SPECIFICATIONS FOR "STRUCTURAL EXCAVATION, BACKFILL, AND COMPACTION (BUILDING AREA)".  |   |
| 13. CONCRETE WALLS SHALL ATTAIN A MINIMUM STRENGTH OF 70 % fc BEFORE<br>PLACING BACKFILL AGAINST THEM.  | STUD/JOIST SCREWED TO THE TRACK ON BOTH SIDES OF JOINT. BUTT-WELDING IS ALSO ACCEPTABLE.  |
| <ol> <li><u>CAST-IN-PLACE CONCRETE NOTES:</u></li> <li>REINFORCE CONCRETE ELEMENTS INCLUDING FOOTINGS, WALLS, GRADE<br/>BEAMS, PIERS, AND SLABS. REINFORCEMENT SHOWN PERTAINS TO TYPICAL</li> </ol>   | <ol> <li>FOR LOAD BEARING CONSTRUCTION, THE CONTRACTOR SHALL ENSURE THAT<br/>ADEQUATE BRACING IS IN PLACE UNTIL SHEATHING IS ATTACHED TO BOTH STUD<br/>FLANGES. DO NOT OVERLOAD STUDS DURING CONSTRUCTION.</li> </ol>   |
| 2. COORDINATE CONCRETE MIX DESIGNS WITH CONCRETE MIX SCHEDULE AND   | <ol> <li>THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ERECTION BRACING.</li> <li>MINIMUM SCREW SPACING AND EDGE DISTANCE IS 3/4 INCH UNLESS NOTED</li> </ol>  |
| <ol> <li>DESIGN DATA NOTES.</li> <li>LAP SPLICE CONCRETE REINFORCEMENT AS SHOWN IN BAR LAP SPLICE<br/>SCHEDULE, UNLESS NOTED OTHERWISE. PROVIDE CLASS B LAP UNLESS NOT</li> </ol>   | OTHERWISE.<br>12. THE FOLLOWING SHALL BE USED FOR POWDER-ACTUATED FASTENERS IN STEEL<br>UNLESS NOTED OTHERWISE:   |
| <ul> <li>OTHERWISE.</li> <li>4. PROVIDE CORNER BARS IN CONTINUOUS FOOTINGS, THE SAME SIZE AND<br/>NUMBER AS CONTINUOUS REINFORCEMENT. LAP SPLICE WITH MAIN</li> </ul>   | MINIMUM EDGE DISTANCE = 1/2 INCH<br>MINIMUM FASTENER SPACING = 1 INCH<br>13. THE FOLLOWING SHALL BE USED FOR POWDER-ACTUATED FASTENERS IN   |
| REINFORCEMENT AS SHOWN IN BAR LAP SPLICE SCHEDULE BUT NOT LESS T 2'-0".   |   |
| <ol> <li>5. EXTEND WALL FOOTING REINFORCEMENT INTO COLUMN FOOTINGS WITH A<br/>MINIMUM EMBEDMENT EQUAL TO THE MINIMUM BAR DEVELOPMENT LENGTH.</li> <li>6. CAST STEPPED FOOTINGS MONOLITHICALLY.</li> </ol>   | 14. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE - SHEET STEEL".   |
| 7. DOWEL CONCRETE WALLS AND PIERS INTO FOOTINGS WITH DOWELS THE SA<br>SIZE AND SPACING AS VERTICAL REINFORCEMENT. EXTEND DOWELS TO WIT  | HIN   |
| 3 INCHES OF BOTTOM OF FOOTING, TERMINATED WITH ACI STANDARD 90<br>DEGREE HOOK. LAP SPLICE WITH VERTICAL REINFORCEMENT UNLESS NOTEI<br>OTHERWISE.  | 16. TOUCH-UP WELDS WITH GALVANIZED REPAIR PAINT.<br>)<br><u>MASONRY NOTES:</u>  |
| <ol> <li>CAST CONCRETE PIERS IN CONCRETE WALLS MONOLITHICALLY WITH WALLS</li> <li>VERIFY SIZE AND LOCATION OF MECHANICAL OPENINGS THROUGH CONCRET</li> </ol>  | EVERY SECOND COURSE AND TOP TWO COURSES UNLESS NOTED OTHERWISE.   |
| MEMBERS PRIOR TO PLACING CONCRETE. PROVIDE SLEEVE OR CHASE FOR<br>PIPING, CONDUIT, OR DUCT PENETRATIONS. CORE DRILLING IS NOT PERMIT<br>10. DO NOT LOCATE PENETRATIONS FOR THROUGH FOOTINGS. STEP FOOTINGS  | <ul> <li>WALLS. LAP SPLICE JOINT REINFORCEMENT A MINIMUM OF 6 INCHES TYPICALLY.</li> <li>USE PREFABRICATED CORNERS AND TEES.</li> <li>PLACE JOINT REINFORCEMENT CONTINUOUSLY THROUGH PILASTERS.</li> </ul>  |
| DOWN AS REQUIRED TO LOCATE PENETRATION IN WALL.<br>11. DO NOT LOCATE PENETRATIONS THROUGH PIERS, COLUMNS, BEAMS OR GR/  | 3. BEARING AND OTHER EXTERIOR WALLS MADE OF BRICK AND BLOCK SHALL BE<br>BUILT SIMULTANEOUSLY AS COMPOSITE WALLS, BONDED TOGETHER WITH FULL  |
| BEAMS UNLESS SHOWN IN DRAWINGS OR ACCEPTED BY ENGINEER.<br>12. INSTALL EMBEDDED PIPES OR CONDUIT IN STRUCTURAL CONCRETE AS<br>FOLLOWS:  | <ul> <li>WIDTH HORIZONTAL JOINT REINFORCEMENT AT 16 INCHES ON CENTER. FILL<br/>COLLAR JOINTS SOLID WITH MORTAR.</li> <li>4. SUBMIT PROPOSED GROUTING PROGRAM FOR GROUTING CONCRETE MASONRY</li> </ul>   |
| <ul> <li>a. ALUMINUM CONDUITS AND PIPES ARE NOT PERMITTED.</li> <li>b. CONDUIT AND PIPE OUTSIDE DIAMETER SHALL NOT EXCEED 1/3 THE<br/>THICKNESS OF SLAB, BEAM OR WALL IN WHICH THEY ARE EMBEDDED.</li> <li>c. SPACE CONDUIT AND PIPE A MINIMUM OF 3 DIAMETERS (WIDTHS) ON CENT<br/>OR 4 INCHES WHICHEVER IS GREATER.</li> </ul> | WALLS. GROUTING SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF<br>NCMA-TEK 3-2A, "GROUTING CONCRETE MASONRY WALLS." STOP GROUT 2<br>INCHES BELOW TOP OF BLOCK AT EACH POUR TO ENABLE AN INTERLOCK WITH  |
| <ul> <li>d. PROVIDE A MINIMUM OF 1 1/2 INCH COVER FOR CONCRETE EXPOSED TO<br/>EARTH OR WEATHER OR 3/4 INCH COVER OTHERWISE, UNLESS NOTED<br/>OTHERWISE.</li> <li>e. REFER TO ACI 318, SECTION 6.3 FOR ADDITIONAL REQUIREMENTS.</li> </ul>   | <ol> <li>REINFORCE WALLS WITH #ATON CENTER. SEE/FOR ELEVATION OF<br/>MASONRY WALL REINFORCING. LAP #4 BARS 20 INCHES. LAP #5 BARS 25 INCHES.<br/>LAP #6 BARS 30 INCHES.</li> </ol>  |
| 13. CHAMFER EXPOSED CONCRETE CORNERS AND EDGES 3/4 INCH UNLESS NOT<br>OTHERWISE.  | ED 6. FILL CORES IN HOLLOW CONCRETE MASONRY UNITS WITH GROUT THREE<br>COURSES (24 INCHES) UNDER BEARING PLATES, BEAMS, LINTELS, POSTS, AND<br>SIMILAR ITEMS, UNLESS OTHERWISE INDICATED.  |
| 14. CONCRETE COVER FOR REINFORCEMENT SHALL BE AS INDICATED IN CONCR<br>COVER SCHEDULE.  |   |
| <ol> <li>STRUCTURAL STEEL NOTES:</li> <li>DO NOT BEGIN STEEL ERECTION UNTIL SUPPORTING CONCRETE OBTAINS 75<br/>PERCENT OF THE MATERIAL STRENGTHS NOTED IN DESIGN DATA NOTES.</li> </ol>   | 8. FILL COLUMN AND BEAM POCKETS WITH MASONRY AFTER COLUMN OR BEAM IS ERECTED.   |
| <ol> <li>LOCATE ROOFTOP MECHANICAL UNITS AS SHOWN: COORDINATE WITH<br/>MECHANICAL DRAWINGS. NOTIFY ENGINEER IF ACTUAL UNIT WEIGHTS EXCENT<br/>THE WEIGHTS SHOWN ON DRAWINGS.</li> </ol>   | <ul> <li>9. NON-LOAD BEARING PARTITIONS SHALL NOT BE BUILT TIGHT TO STRUCTURE<br/>ABOVE. LEAVE GAP BETWEEN TOP OF PARTITION AND STRUCTURE, AND BRACE<br/>TOP OF PARTITION AS INDICATED ON DRAWINGS.</li> </ul>  |
| <ol> <li>WHERE BEAM SPACING IS NOT NOTED, SPACE BEAMS EQUALLY BETWEEN<br/>COLUMNS OR BETWEEN COLUMNS AND WALLS.</li> </ol>  | 10. STRUCTURAL DRAWINGS DO NOT SHOW FLASHINGS, WEEPS, AND DRIPS;<br>HOWEVER, THEY ARE ESSENTIAL TO MAINTAINING THE WATER TIGHTNESS OF<br>THE BUILDING AND PROTECTION OF THE FRAMING. REFER TO ARCHITECTURAL<br>DRAWINGS AND SPECIFICATIONS FOR DETAILS AND INFORMATION. |
| 4. MINIMUM CAPACITY OF BEAM CONNECTIONS; FOR CONNECTIONS NOT DETA<br>PROVIDE CONNECTION CAPACITY FOR REACTIONS SHOWN ON DRAWINGS OF<br>NOT SHOWN, BASED ON EITHER ALLOWABLE STRESS DESIGN OR LOAD AND<br>RESISTANCE FACTOR DESIGN AS FOLLOWS:   | LED,  |
| <ul> <li>A. AT LEAST 50 PERCENT OF THE ALLOWABLE UNIFORM LOAD FROM<br/>ALLOWABLE UNIFORM LOAD TABLES IN AISC ASD MANUAL, PART 2, FC<br/>THE GIVEN STEEL MEMBER.</li> <li>B. AT LEAST 50 PERCENT OF THE MAXIMUM TOTAL FACTORED UNIFORM</li> </ul>  | R 12. LAP REINFORCEMENT BARS AS SHOWN IN CMU BAR LAP SCHEDULE.  |
| LOAD FROM MAXIMUM TOTAL FACTORED UNIFORM LOAD TABLES IN A<br>LRFD MANUAL, PART 5, FOR THE GIVEN STEEL MEMBER.<br>C. FOR BEAMS AND GIRDERS WITH SHEAR CONNECTORS, PROVIDE  |   |
| CONNECTION CAPACITY OF AT LEAST 70 PERCENT OF THE UNIFORM L<br>VALUES (ASD OR LRFD, AS APPROPRIATE), UNLESS INDICATED<br>OTHERWISE ON DRAWINGS.   | OAD<br>2. MINIMUM MEMBER MATERIAL THICKNESS IS 18 GAUGE UNLESS NOTED<br>OTHERWISE. MINIMUM EXTERIOR WALL TRACK IS 16 GAUGE UNLESS NOTED<br>OTHERWISE.   |
| <ul> <li>D. CONCENTRATED LOADS NEAR SUPPORTS MUST BE ADDED.</li> <li>5. PROVIDE HOT DIP GALVANIZED FASTENERS FOR GALVANIZED FRAMING<br/>CONNECTIONS AND STAINLESS STEEL FASTENERS FOR STAINLESS STEEL</li> </ul>  | 3. CUT FRAMING COMPONENTS SQUARELY OR ON AN ANGLE AS REQUIRED TO FIT<br>TIGHTLY WITH FULL BEARING AGAINST ABUTTING MEMBERS. TEMPORARILY   |
| <ul> <li>FRAMING CONNECTIONS.</li> <li>6. FABRICATE AND ERECT STEEL IN ACCORDANCE WITH THE AISC CODE OF<br/>STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.</li> </ul>   | <ul> <li>BRACE MEMBERS AS REQUIRED PRIOR TO FINAL FASTENING.</li> <li>4. FIELD CUTTING OF MEMBERS SHALL BE PERFORMED BY SHEARING OR SAWING.<br/>TORCH CUTTING IS NOT ACCEPTABLE.</li> </ul>   |
| 7. SLOPE ROOF STEEL UNIFORMLY BETWEEN ELEVATIONS SPECIFIED ON PLAN  |   |
| <ol> <li>REMOVE ALL PAINT AND OTHER DEBRIS FROM STEEL PRIOR TO FIELD WELDI<br/>TO STRUCTURE. FIELD WELDS AND ADJACENT AREAS SHALL BE FIELD PRIME<br/>AFTER INSPECTED.</li> </ol>  |   |
| 9. ALL SAFETY REGULATION AND PRECAUTIONS WITH REGARDS TO FIELD<br>WELDING SHALL BE COMPLIED WITH TO PROTECT EXISTING CONSTRUCTION<br>REMAIN, FINISHES, AND ON SITE WORKERS (SCREENS & BARRIERS).  | OF THE CONTRACTOR TO SPECIFY UN-PUNCHED STUDS WHEN ORDERING   |
| 10. WHERE FILLET WELD SIZES ARE NOT SPECIFICALLY NOTED, THE FABRICATO<br>SHALL DETAIL A MINIMUM SIZE FILLET WELD IN ACCORDANCE WITH AWS<br>STANDARDS. THE ACTUAL SIZES SHALL BE SHOWN ON THE SHOP DRAWINGS  | <ul> <li>IN DRAWINGS.</li> <li>B. DO NOT SCREW OR WELD STUDS TO VERTICAL DEFLECTION TRACKS. DO NOT</li> </ul>   |
| 11. BACKER BARS AT COMPLETE JOINT PENETRATION WELDS MUST BE REMOVE<br>"R" IS GREATER THAN 3 OR IF STEEL IS "AESS".  | D IF<br>9. ABUTTING TRACK MEMBERS SHALL BE SPLICED TOGETHER USING A TYPICAL   |
| 12. CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW BY<br>ENGINEER. USE DOUBLE ANGLE SHEAR CONNECTIONS WITH 3/4" DIAMETER<br>ASTM A325 BOLTS WITH AT LEAST THE FOLLOWING NUMBER OF BOLT ROWS:   | STUD/JOIST SCREWED TO THE TRACK ON BOTH SIDES OF JOINT. BUTT-WELDING<br>IS ALSO ACCEPTABLE.   |
| BEAM SIZENUMBER OF BOLT ROWSW8, W102W12, W14, W163  | 10. FOR LOAD BEARING CONSTRUCTION, THE CONTRACTOR SHALL ENSURE THAT<br>ADEQUATE BRACING IS IN PLACE UNTIL SHEATHING IS ATTACHED TO BOTH STUD<br>FLANGES. DO NOT OVERLOAD STUDS DURING CONSTRUCTION.   |
| W18, W21, W24 4<br>13. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT   | <ul> <li>11. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ERECTION BRACING.</li> <li>12. MINIMUM SCREW SPACING AND EDGE DISTANCE IS 3/4 INCH UNLESS NOTED</li> </ul>  |
| <ul><li>UNLESS INDICATED IN STRUCTURAL DRAWINGS.</li><li>14. BOLTED CONNECTIONS SHALL UTILIZE TYPE 3 ASTM A 325 BOLTS, UNO. ALL CONNECTIONS SHALL BE INSTALLED SNUG TIGHT.</li></ul>  | OTHERWISE.<br>13. THE FOLLOWING SHALL BE USED FOR POWDER-ACTUATED FASTENERS IN STEEL<br>UNLESS NOTED OTHERWISE:   |
| 15. REMOVE BURRS, DIRT, AND OTHER FOREIGN MATERIALS FROM FRAYING<br>SURFACES AND SURFACES ADJACENT TO BOLT HEADS AND NUTS. BURRS LE<br>THAN OR EQUAL TO 1/16" IN HEIGHT ARE PERMITTED TO REMAIN ON FAYING   | MINIMUM EDGE DISTANCE = 1/2 INCH<br>MINIMUM FASTENER SPACING = 1 INCH<br>14. THE FOLLOWING SHALL BE USED FOR POWDER-ACTUATED FASTENERS IN   |
| SURFACES.<br>16. FABRICATE BOLTED CONNECTIONS WITH STANDARD SIZED HOLES, UNLESS<br>NOTED OTHERWISE.   | CONCRETE UNLESS NOTED OTHERWISE:<br>MINIMUM EDGE DISTANCE = 3 INCHES<br>MINIMUM FASTENER SPACING = 4 INCHES   |
| <ol> <li>17. COMPLY WITH AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING HIGH<br/>STRENGTH BOLTED CONNECTIONS.</li> </ol>   | <ul> <li>15. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE - SHEET STEEL".</li> <li>10. MINIMUM WELD THEO AT THEORY FOR FOLIAL OTHER DADE METAL THEORY FOR OF</li> </ul>  |
| COLD-FORMED METAL FRAMING NOTES:  | <ul> <li>16. MINIMUM WELD THROAT THICKNESS EQUALS THE BASE METAL THICKNESS OF<br/>THE THINNEST CONNECTED MATERIAL UNLESS NOTED OTHERWISE.</li> <li>17. TOUCH-UP WELDS WITH GALVANIZED REPAIR PAINT.</li> </ul>  |
| <ol> <li>MINIMUM MEMBER MATERIAL THICKNESS IS 18 GAUGE UNLESS NOTED<br/>OTHERWISE.</li> <li>OUT FRAMING COMPONENTS COMPENSION OF ON AN ANOLE AS REQUIRED TO</li> </ol>  |   |
| 2. CUT FRAMING COMPONENTS SQUARELY OR ON AN ANGLE AS REQUIRED TO<br>TIGHTLY WITH FULL BEARING AGAINST ABUTTING MEMBERS. TEMPORARILY<br>BRACE MEMBERS AS REQUIRED PRIOR TO FINAL FASTENING.  |   |

|              | SHEET LIST                                      |
|--------------|---|
| SHEET NUMBER | SHEET NAME                                      |
| S0.01        | DESIGN DATA AND GENERAL NOTES                   |
| S0.02        | SPECIAL INSPECTON NOTES AND SCHEDULE            |
| S1.00        | PARTIAL FOUNDATION PLAN                         |
| S2.00        | PARTIAL ROOF FRAMING PLAN                       |
| S3.00        | FOUNDATION SECTIONS AND DETAILS                 |
| S3.01        | FOUNDATION SECTIONS, PIER AND BASEPLATE DETAILS |
| S4.00        | MASONRY, ELEVATIONS, SECTIONS AND DETAILS       |
| S4.01        | MASONRY ELEVATIONS, SECTIONS AND DETAILS        |
| S5.00        | STEEL FRAMING SECTIONS AND DETAILS              |
| S5.01        | STEEL FRAMING SECTIONS AND DETAILS              |
|              |   |
|              |   |

| ADDL    | ADDITIONAL                               | ENGR  | EDGE OF DECK               | OPP     | OPPOSITE                          |
|---------|--|-------|----------------------------|---------|-----------------------------------|
| ADJ     | ADJACENT                                 | FD    | FLOOR DRAIN                | OF      | OUSIDE FACE                       |
| APPROX  | APPROXIMATE                              | FT    | FOOT                       |         |                                   |
| ARCH    | ARCHITECTURAL                            | FDN   | FOUNDATION                 | PL      | PLATE                             |
| AESS    | ARCHITECTURAL EXPOSED<br>STRUCTUAL STEEL | FTG   | FOOTING                    | PAF     | POWDER ACTUATED<br>FASTENER       |
|         |  | GALV  | GALVANIZED                 | PE      | PROFESSIONAL ENGI                 |
| B/ , BO | BOTTOM OF                                | GA    | GAUGE                      | PERP    | PERPENDICULAR                     |
| BLDG    | BUILDING                                 |       |                            | PLF     | POUNDS PER LINEAL                 |
| BLKG    | BLOCKING                                 | HSS   | HOLLOW STEEL SECTION       | PSF     | POUNDS PER SQUARE                 |
| BP      | BASEPLATE                                | HORIZ | HORIZONTAL                 | PSI     | POUNDS PER SQUARE                 |
| BRG     | BEARING                                  | Н     | HIGH                       | PCF     | POUNDS PER CUBIC F                |
| BTWN    | BETWEEN                                  | HP    | HIGH POINT                 | PC      | PRECAST                           |
|         |  |       | HEATING, VENTILATION,      | PSL     | PARALLEL STRAND LU                |
| CANT    | CANTILEVER                               | HVAC  | AIR CONDITIONING           | PT      | PRESSURE TREATED                  |
| CIP     | CAST IN PLACE                            | IF    | INSIDE FACE                |         |                                   |
| CJ      | CONTROL JOINT                            | INFO  | INFORMATION                | R       | RADIUS                            |
| CL      | CENTER LINE                              | INT   | INTERIOR                   | RD      | ROOF DRAIN                        |
| CLR     | CLEAR                                    | INV   | INVERT                     |         |                                   |
|         | CONCRETE                                 |       |                            | RDP     | REGISTERED DESIGN<br>PROFESSIONAL |
| CMU     | MASONRY UNIT(S)                          | K     | KIPS                       | REQD    | REQUIRED                          |
| COL     | COLUMN                                   | KSF   | KIPS PER SQUARE FOOT       | REINF   | REINFORCING                       |
| CONC    | CONCRETE                                 | NOI   |                            | REV     | REVISION                          |
| CONT    | CONTINUOUS                               | L     | ANGLE                      | RO      | ROUGH OPENING                     |
| CONT    |  |       | POUNDS                     | NU      | ROUGH OPENING                     |
| CFMF    | COLD-FORMED<br>METAL FRAMING             | LG    | LONG                       | SIM     | SIMILAR                           |
| COORD   |  | LLH   | LONG LEG HORIZONTAL        | SPA     |                                   |
| COORD   | COORDINATE                               |       | LONG LEG VERTICAL          | STD     | SPACE                             |
| DET     |  | LLV   |                            | SF      | STANDARD<br>SQUARE FEET           |
| DET     | DETAIL                                   | LO    |                            | SS      |                                   |
| DIA     | DIAMETER                                 | LOC   |                            |         | STAINLESS STEEL                   |
| DIM     | DIMENSION                                | LW    |                            | STL     | STEEL                             |
| DN      | DOWN                                     | LVL   | LAMINATED VENEER<br>LUMBER | SQ      | SQUARE                            |
| DO      |  |       |                            |         | THIOK                             |
| DWLS    | DOWELS                                   |       |                            | THK     | THICK                             |
| DWG     | DRAWINGS                                 | MFR   | MANUFACTURER               | T/ , TO |                                   |
|         | <b>-</b> 1 011                           | MAX   | MAXIMUM                    | TYP     | TYPICAL                           |
| EA      | EACH                                     | MIN   | MIN                        | T&B     | TOP AND BOTTOM                    |
| EF      | EACH FACE                                | MECH  | MECHANICAL                 |         |                                   |
| ES      |  | MISC  | MISCELLANEOUS              | UNO     | THICK                             |
| EL      | ELEVATION                                | MO    | MASONRY OPENING            |         |                                   |
| ELEV    | ELEVATOR                                 |       |                            | VERT    | VERTICAL                          |
| EOS     | EDGE OF SLAB                             | NA    | NOT APPLICABLE             | VIF     | VERIFY IN FIELD                   |
| EOD     | EDGE OF DECK                             | NIC   | NOT IN CONTRACT            |         |                                   |
| EQ      | EQUAL                                    | NOM   | NOMINAL                    | W       | WIDTH, WIDE                       |
| EQUIP   | EQUIPMENT                                | NW    | NORMAL WEIGHT              | W/      | WITH                              |
| EW      | EACH WAY                                 | NS    | NEAR SIDE                  | WD      | WOOD                              |
| EXIST   | EXIST                                    | NTS   | NOT TO SCALE               | WP      | WORK POINT                        |
| EXT     | EXTERIOR                                 |       |                            | WWF     | WELDED WIRE FABRIC                |
| EIFS    | EXTERIOR INSULATION                      | OC    | ON CENTER                  | WCJ     | WALL CONTROL JOIN                 |
|         | FINISH SYSTEM                            | OD    | OUTSIDE DIAMETER           |         |                                   |
| EXP     | EXPANSION                                | OPNG  | OPENING                    |         |                                   |





# ENTRY FOUNDATION PLAN

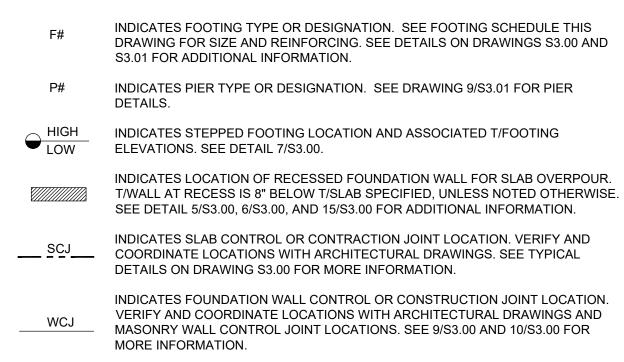
## 1/4" = 1'-0" NOTES:

- 1. T/EXIST FINISHED FLOOR ELEVATION ( 522.30' ± ) EQUALS REFERENCE ELEVATION (0'-0"). T/SLAB ELEVATION (0'-0"), TYPICAL UNLESS NOTED OTHERWISE. 2. ELEVATIONS NOTED THUS ( ) ARE WITH RESPECT TO (0'-0").
- 3. T/EXTERIOR FOOTING (-4'-0") TYPICAL UNLESS NOTE OTHERWISE. T/INTERIOR FOOTING (-2'-0") TYPICAL UNLESS NOTED OTHERWISE. F\_-INDICATES FOOTING TYPE. SEE S1.00 FOR FOOTING SCHEDULE.
- ELEVATION (-0'-5") TYPICAL UNLESS NOTED OTHERWISE. 5. T/PIER ELEVATION (-0'-8") TYPICAL UNLESS NOTED OTHERWISE. P\_ INDICATES PIER TYPE. SEE \$3.01 FOR PIER AND BASEPLATE DETAILS.
- 6. W.P. INDICATES WORK POINT FOR ADDITION LAYOUT. 7. WCJ - INDICATES WALL CONTROL OR CONSTRUCTION JOINT LOCATION; ALIGN WITH MASONRY WALL CONTROL JOINTS. COORDINATE LOCATIONS WITH ARCHITECTURLA DRAWINGS.
- 8. SEE 8/S3.00 FOR WALL REINFORCING AT CORNERS AND INTERSECTIONS. 9. DRILL AND GROUT WALL AND FOOTING REINFORCING 6" INTO EXISTING FOUNDATIONS (TYPICAL, UNLESS NOTED OTHERWISE, FOR ALL LOCATIONS
- WHERE NEW FOUNDATIONS INTERFACE WITH EXISTING). 10. SLEEVE OPENINGS THROUGH WALLS AND SLABS AT PIPING AND CONDUIT; DO NOT CORE. COORDINATE SLEEVE SIZES, QUANTITIES, AND LOCATIONS WITH MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. NOT ALL LOCATIONS ARE SHOWN ON THE STRUCTURAL DRAWINGS.
- SLABS ON GRADE. 12. STEP FOOTING TO LOCATE PIPE THROUGH FOUNDATION WALL. PROVIDE SLEEVE TO SUIT PIPE DIAMENTS. FIELD VERIFY EXISTING PIPE INVERT
- ELEVATION. 13. SEE S0.01 FOR ADDITIONAL NOTES.

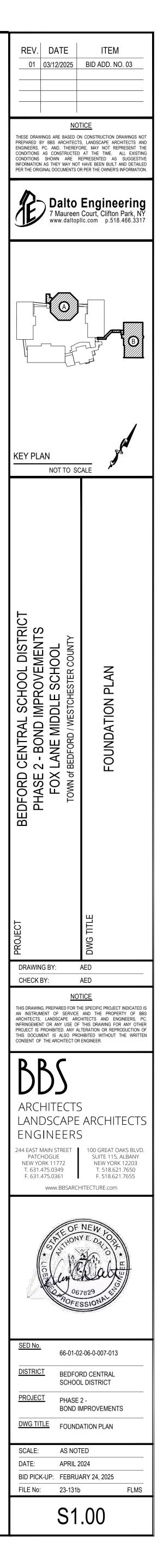
4. T/WALL ELEVATION (-0'-2") TYPICAL UNLESS NOTED OTHERWISE. T/SHELF

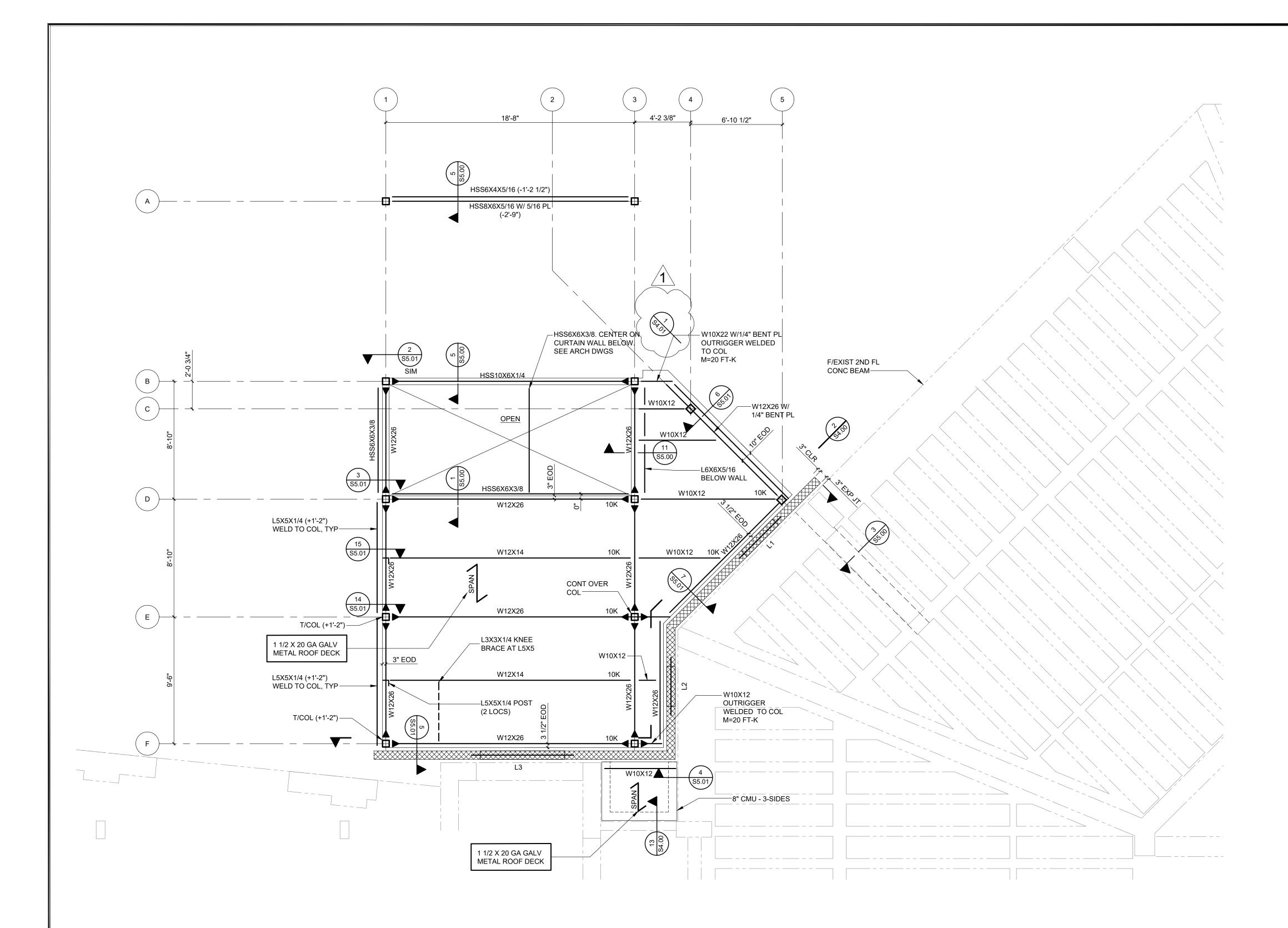
11. PROVIDE (1)#4X4'-0" LONG DIAGONAL BAR AT CORNERS AND OPENINGS IN

# FOUNDATION PLAN LEGEND



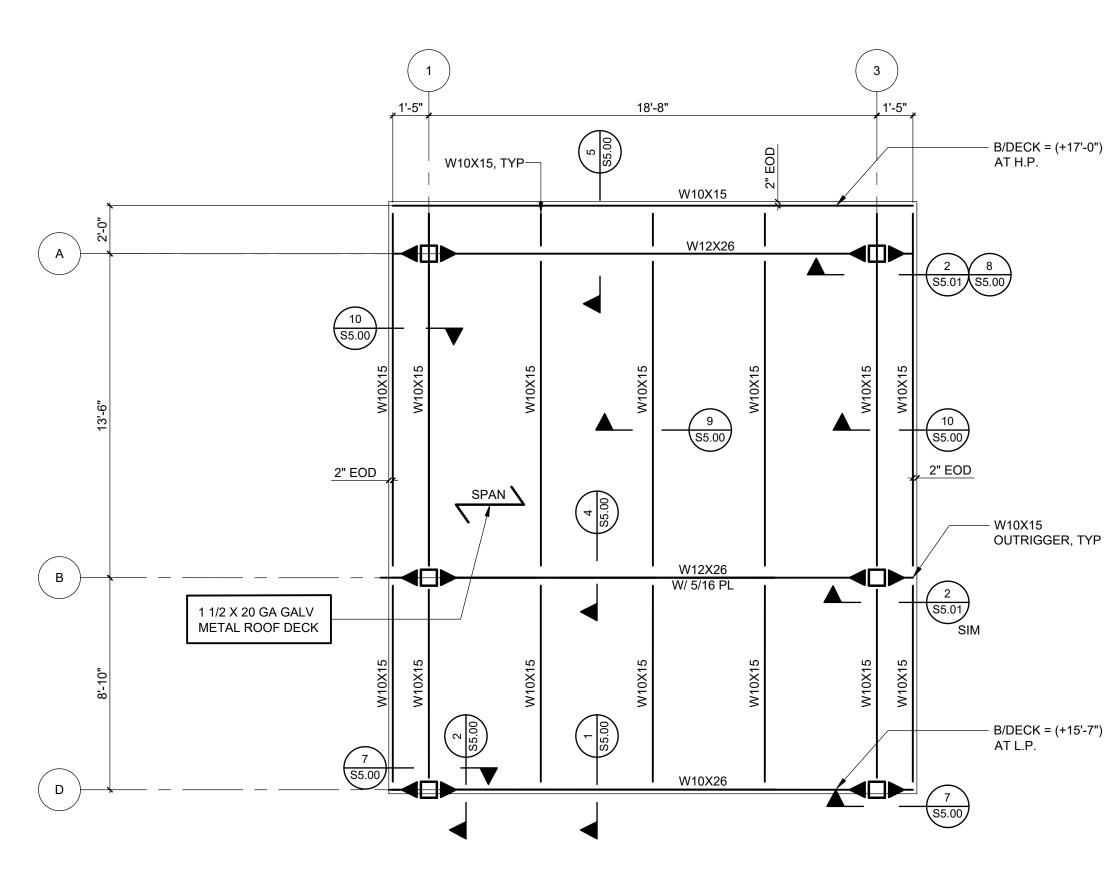
|      | ENTRY COLUMN FOOTING SCHEDULE |                        |                |  |  |  |
|------|-------------------------------|------------------------|----------------|--|--|--|
| MARK | RK SIZE REINFORCING           |                        | REMARKS        |  |  |  |
| F1   | 4'-0"X4'-0"X1'-0"             | (5) #5 EA WAY          | BOTTOM         |  |  |  |
| F2   | 4'-6"X4'-6"X1'-0"             | (6) #5 EA WAY          | BOTTOM         |  |  |  |
| F3   | 4'-0"X4'-0"X1'-6"             | (5) #5 EA WAY          | TOP AND BOTTOM |  |  |  |
| F4   | 6'-0"X4'-0"X1'-0"             | #5 AT 1'-0" OC, EA WAY | BOTTOM         |  |  |  |
| F5   | 3'-0"X3'-0"X1'-0"             | (4) #4 EA WAY          | BOTTOM         |  |  |  |
|      |                               |                        |                |  |  |  |





# LOW ROOF FRAMING PLAN AT ENTRANCE

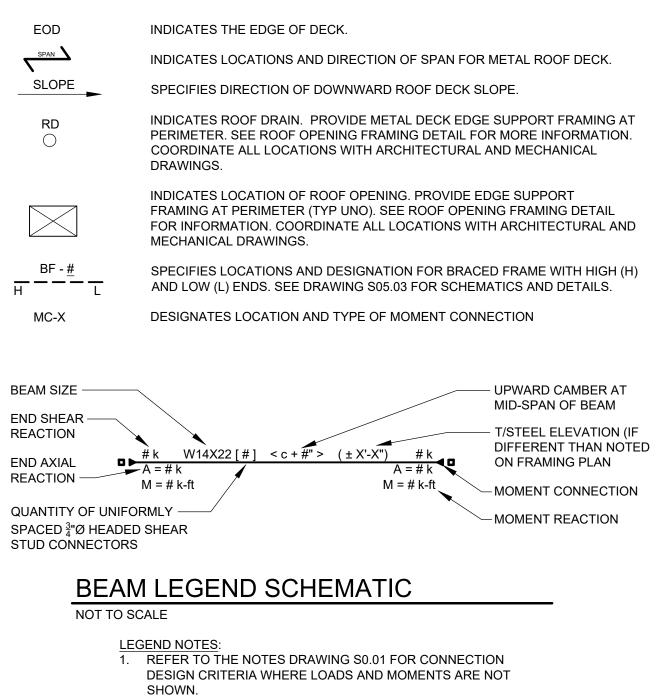
- 1/4" = 1'-0" NOTES 1. T/STEEL (B/DECK) ELEVATION (+12'-0") ABOVE REFERENCE ELEVATION (0'-0") UNLESS NOTED OTHERWISE. 2. ELEVATIONS NOTED (±X'-XX") ARE TO T/STEEL (B/DECK) WITH RESPECT TO ELEVATION (+12'-0"). 3. COLUMNS ARE HSS6X6X3/8 UNLESS NOTED OTHERWISE. 4. EQUALLY SPACE BEAMS BETWEEN COLUMNS UNLESS NOTED OTHERWISE.
- 5. SEE 12/S5.00 FOR TYPICAL FRAMING CONNECTIONS TO HSS COLUMNS. 6. EOD INDICATES EDGE OF DECK. 7. SEE 1/S4.00 FOR LINTEL SCHEDULE AND NOTES. NOT ALL LINTELS IN WALLS ARE SHOWN.
- 8. SEE 1/S4.00 AND 2/S4.00 FOR MASONRY WALL AND FIREWALL REINFORCING
- REQUIREMENTS. 9. RD - INDICATES ROOF DRAIN, EF - INDICATES EXHAUST FAN, RV - INDICATES ROOF
- VENT. COORDINATE SIZE AND LOCATION WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE ROOF OPENING ANGLE FRAME AT ROOF DRAINS, VENTS, EXHAUST FANS, AND HATCHES. SEE 15/S5.00.
- 10. SEE S0.01 FOR ADDITIONAL NOTES.



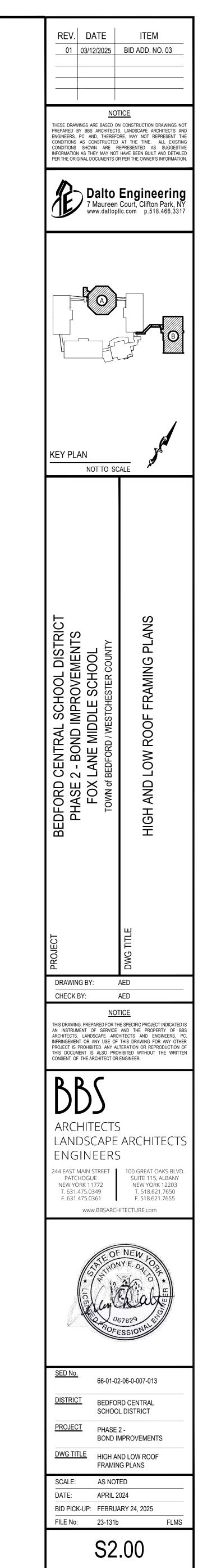
# HIGH ROOF FRAMING PLAN AT ENTRANCE

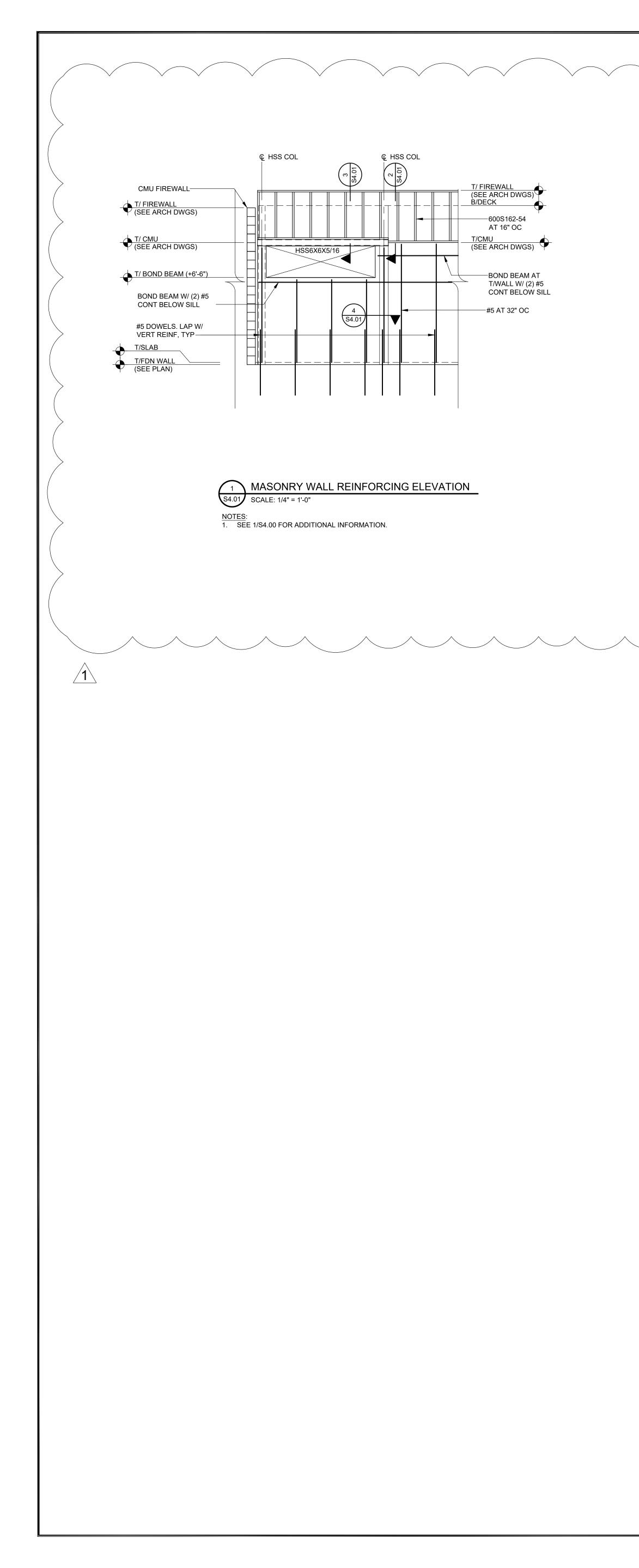
- T/STEEL (B/DECK) ELEVATION ABOVE REFERENCE ELEVATION (0'-0") INDICATED ON PLAN AT GRID LINES A AND D. SLOPE STEEL UNIFORMLY TO ROOF SLOPE INDICATED IN ARCHITECTURAL DRAWINGS.
- 2. ELEVATIONS NOTED (±X'-XX") ARE TO T/STEEL (B/DECK) ELEVATION. 3. SLOPE ROOF STEEL UNIFORMLY BETWEEN CONTROL ELEVATIONS SPECIFIED
- IN PLAN. 4. SEE LOW ROOF FRAMING PLAN AT ENTRANCE NOTES FOR ADDITIONAL INFORMATION

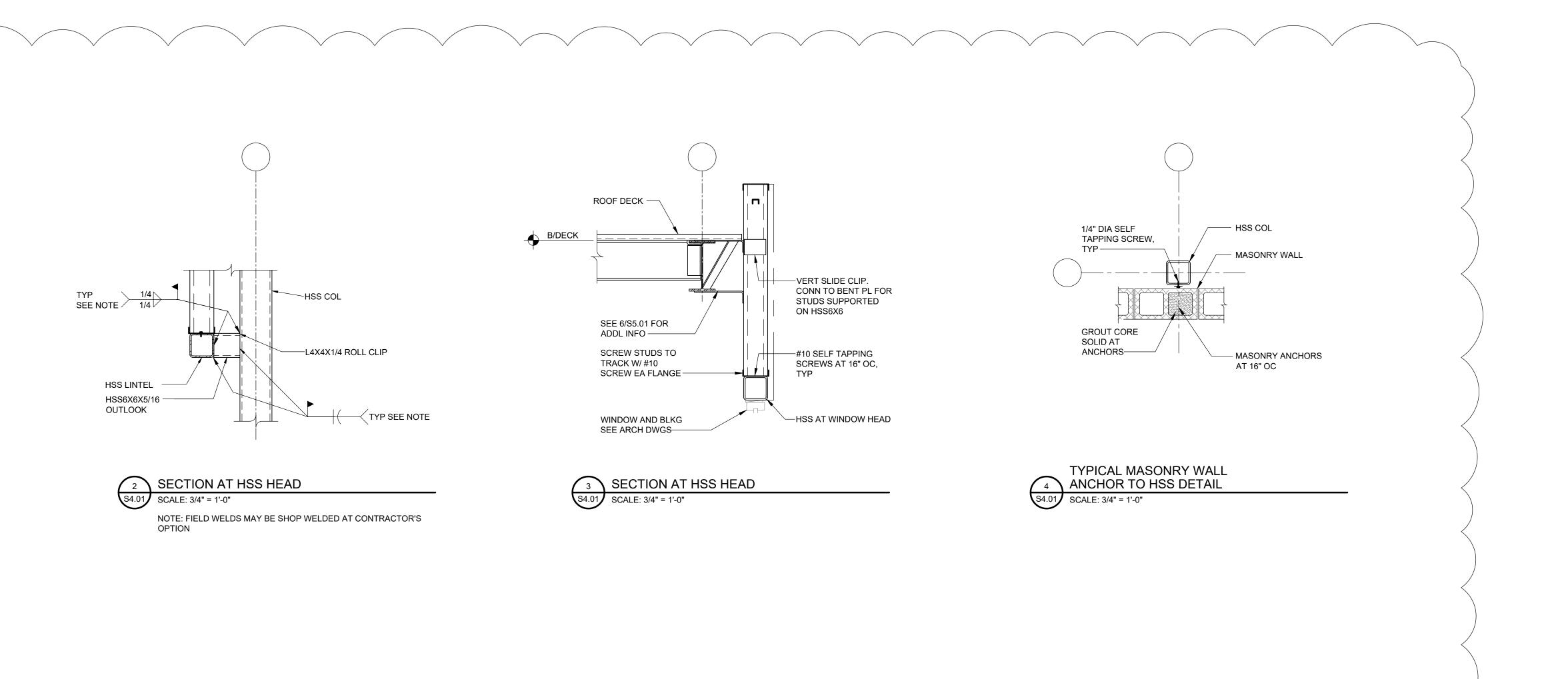
# FRAMING PLAN LEGEND

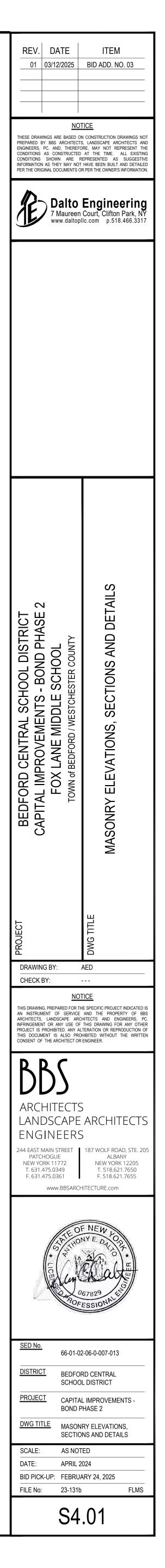


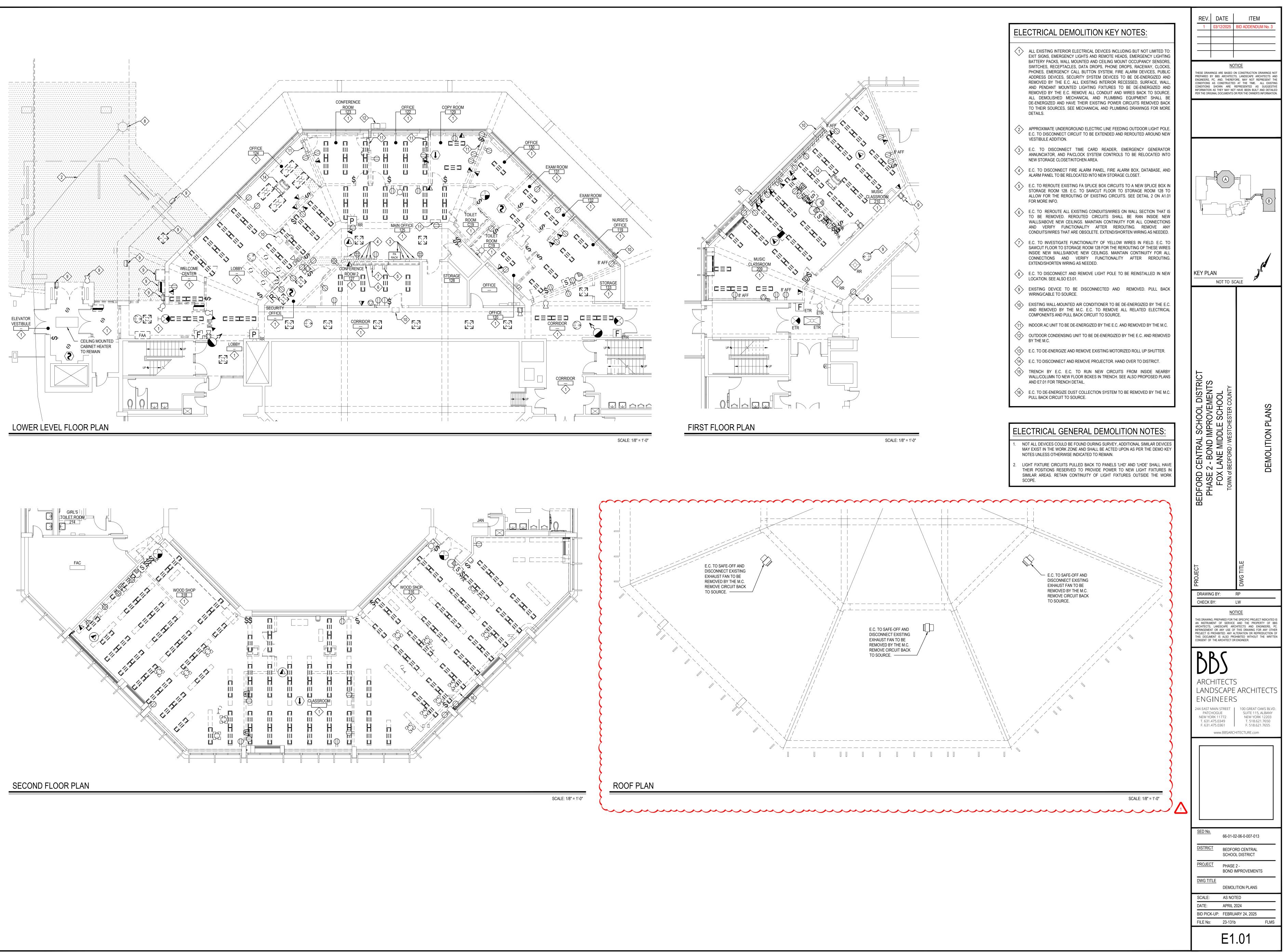
- 2. LOADS AND MOMENTS SHOWN ARE LRFD (ULTIMATE STRENGTH DESIGN) UNLESS NOTED OTHERWISE.

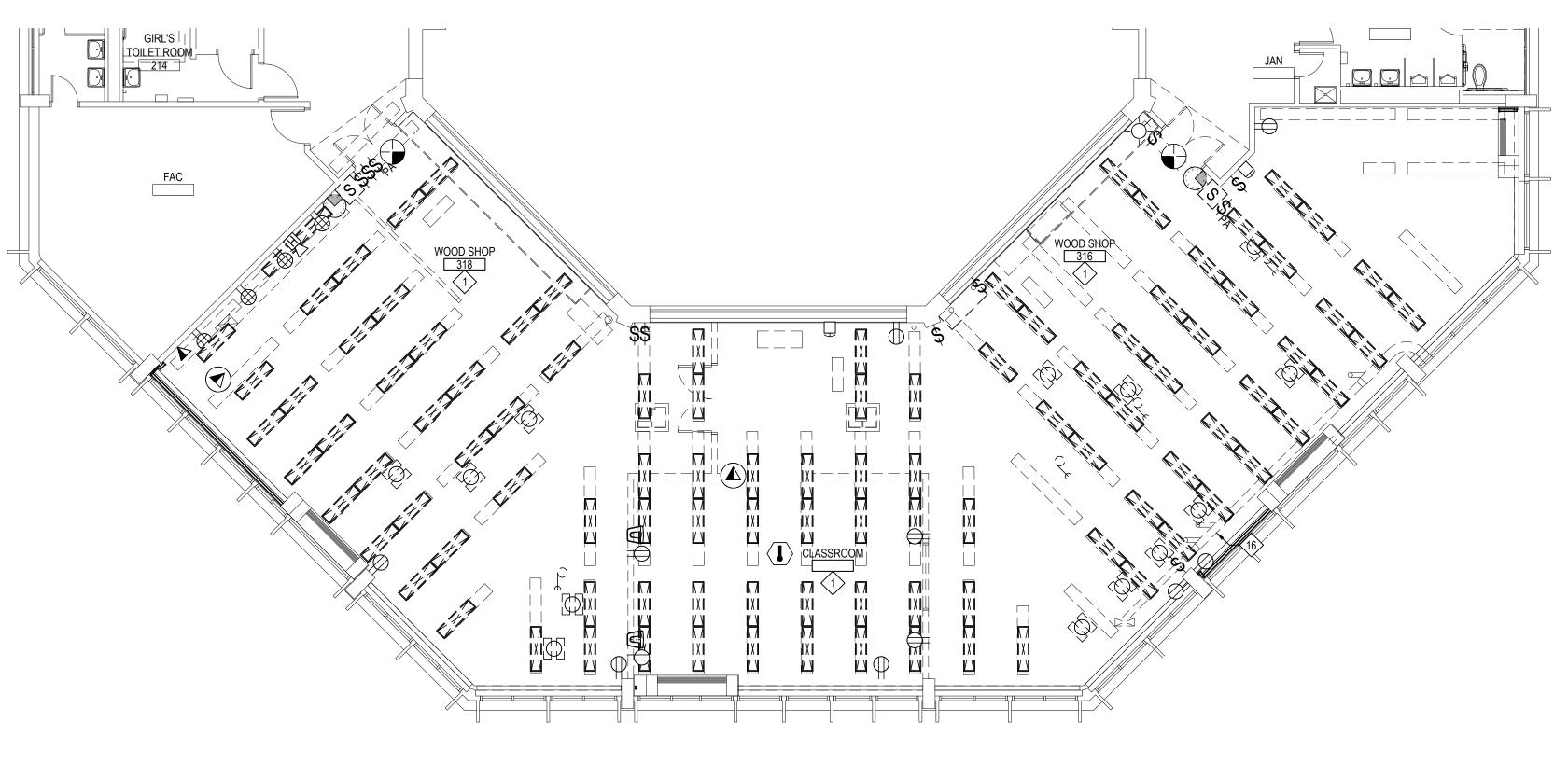


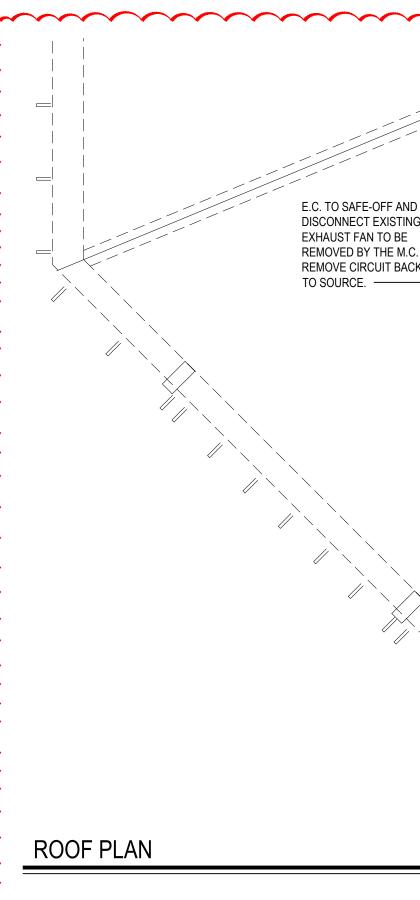


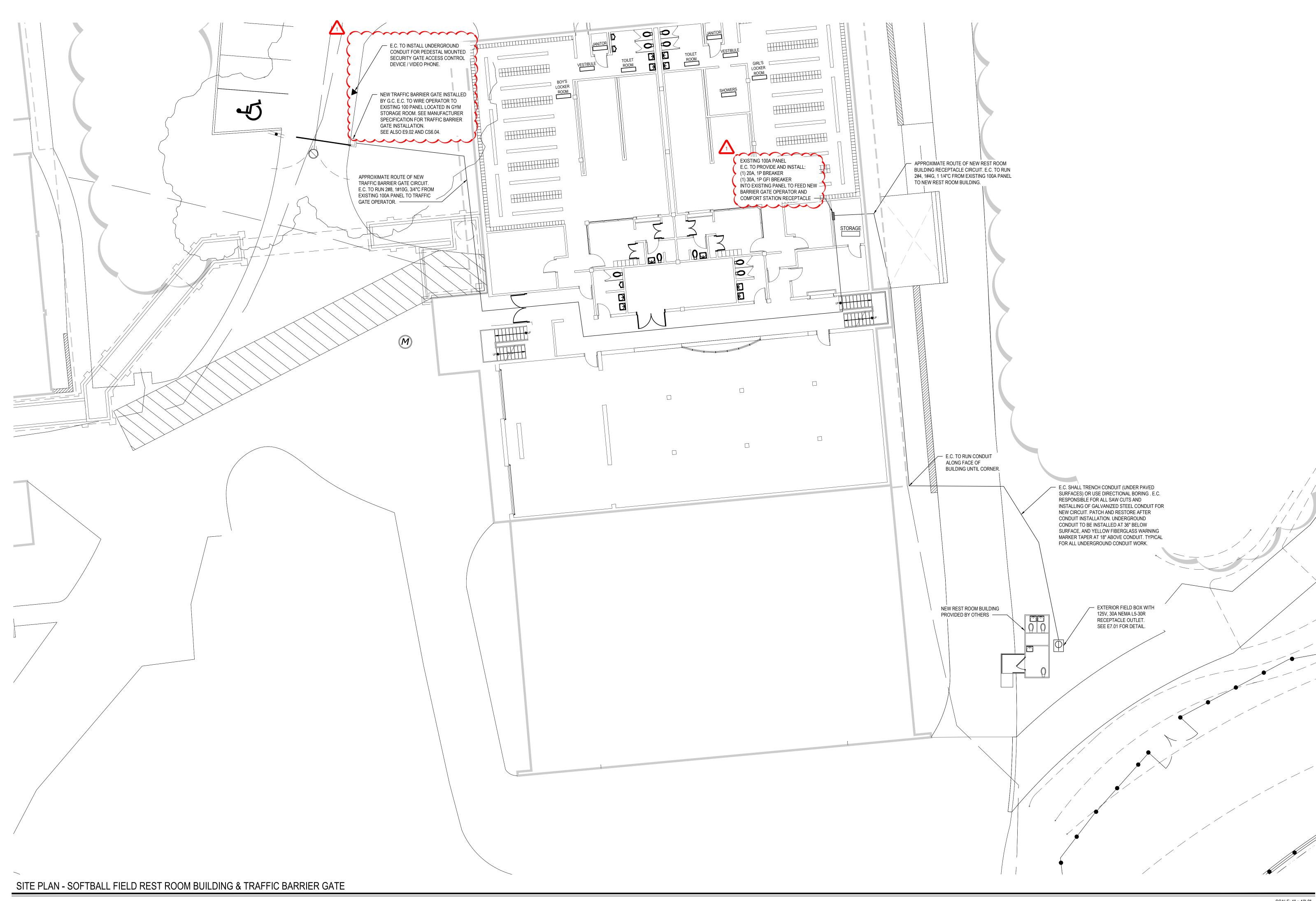




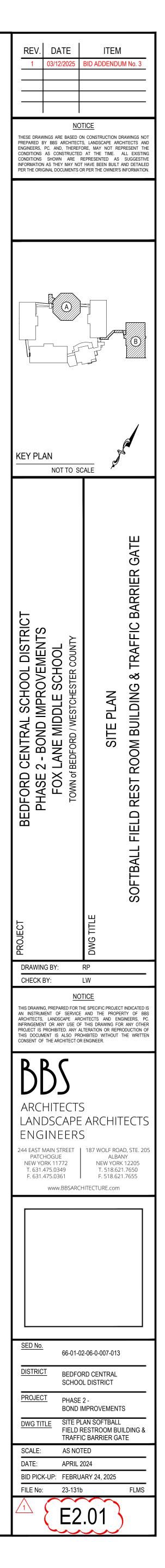




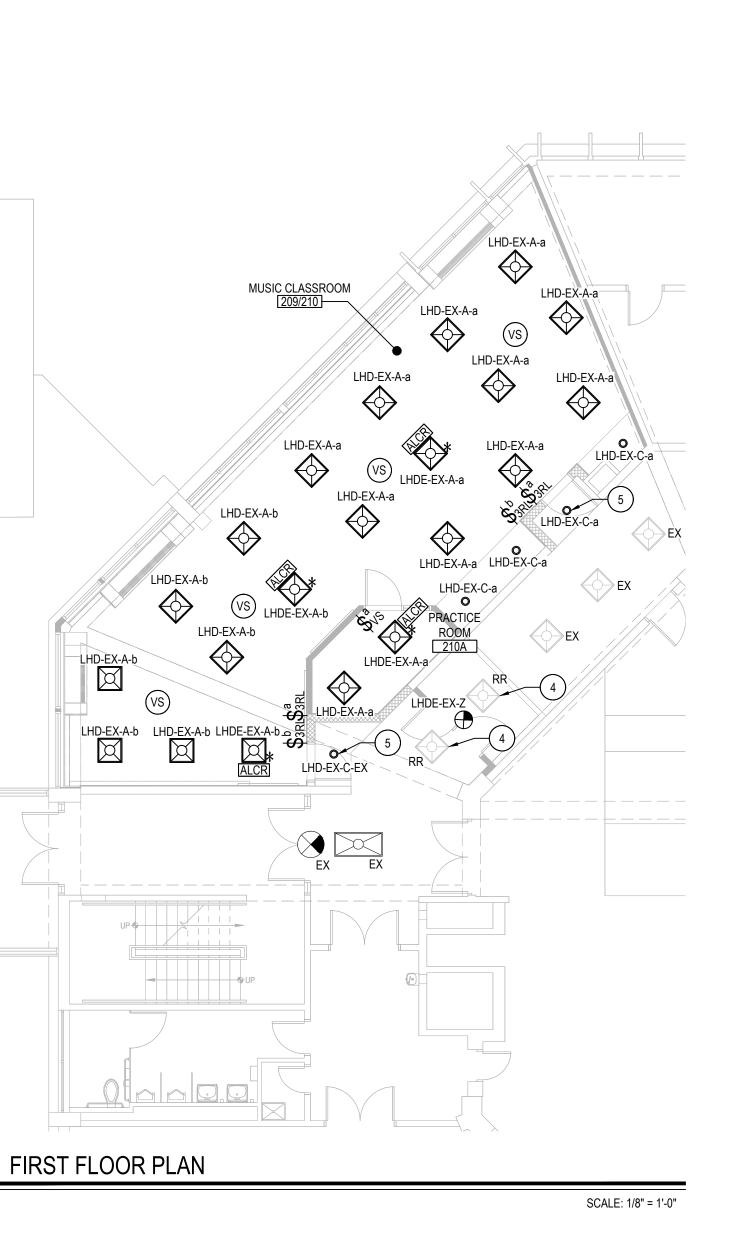




SCALE: 1" = 10'-0"







# ELECTRICAL PROPOSED GENERAL NOTES:

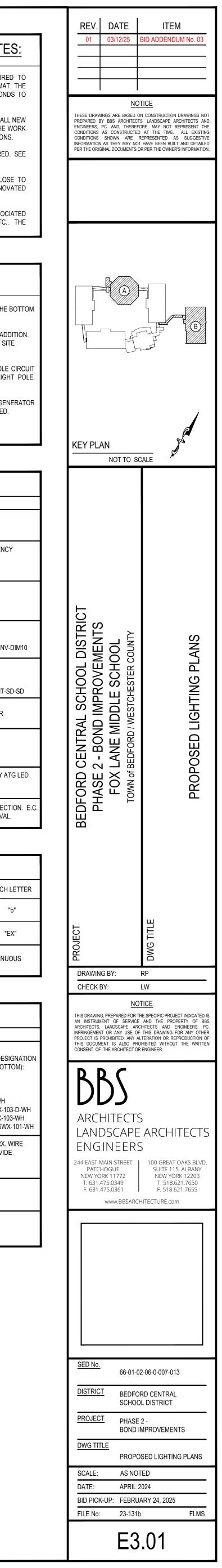
- . ALL LIGHT FIXTURES DENOTED WITH AN ASTERISK \* SHALL BE WIRED TO EMERGENCY GENERATOR PANEL SHOWN BY LIGHT FIXTURE WIRING FORMAT. THE EXISTING GENERATOR MET NFPA 110 REQUIREMENT (LESS THAN 10 SECONDS TO PROVIDE EMERGENCY LIGHTING).
- 2. NEW LIGHT FIXTURES BEING POWERED BY EXISTING CIRCUITS SHALL USE ALL NEW WIRING AND CONDUIT. RETAIN CONTINUITY OF LIGHT FIXTURES OUTSIDE THE WORK SCOPE. PROVIDE AND INSTALL NEW BREAKERS INTO EXISTING PANEL POSITIONS.
- 3. E.C. TO PROVIDE POWER PACKS FOR ALL NEW LIGHTING AS REQUIRED. SEE DRAWING E7.02 FOR LIGHTING CONTROL DETAILS.
- 4. WHERE NECESSARY, E.C. SHALL RUN ALL EXPOSED CONDUITS AS CLOSE TO EXPOSED BEAMS AS POSSIBLE TO MAINTAIN AESTHETICS OF THE RENOVATED
- SPACES. 5.CONTRACTOR SHALL CONNECT THE EXIT SIGNS DIRECTLY TO THE ASSOCIATED
- LIGHTING CIRCUITS AHEAD OF ANY LIGHTING SWITCHES, CONTACTORS, ETC.. THE EXIT SIGNS BATTERY SHOULD LAST MINIMUM 90 MINUTES.

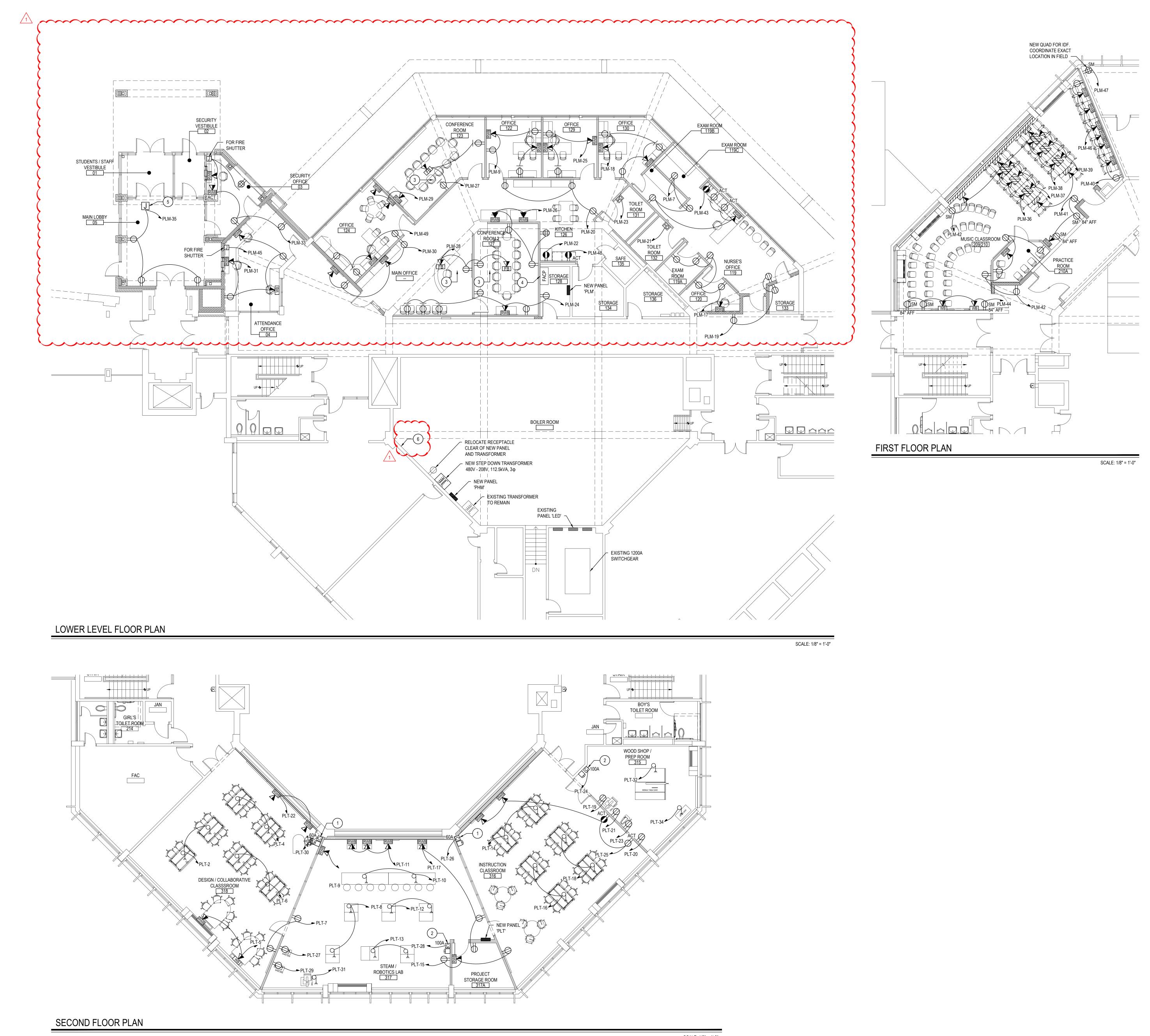
# ELECTRICAL DEMOLITION KEY NOTES:

- THE LINEAR LIGHTS IN THIS ROOM SHALL BE MOUNTED SUCH THAT THE BOTTOM OF THE FIXTURE IS FLUSH WITH THE LOWER CEILING RIBS WITHIN.
- E.C. TO RELOCATE EXISTING LIGHT POLE CLEAR OF NEW VESTIBULE ADDITION. CONNECT TO REROUTED EXISTING CIRCUIT. COORDINATE WITH NEW SITE WORK. ALL EXCAVATION, BACKFILL, AND COMPACTION BY E.C.
- 3) E.C. TO REROUTE AND EXTEND EXISTING UNDERGROUND LIGHT POLE CIRCUIT AROUND NEW VESTIBULE FOUNDATION AND INTO RELOCATED LIGHT POLE
- MATCH EXISTING CIRCUIT SIZE 4) WHEN REINSTALLING EXISTING FIXTURE, REWIRE TO NEARBY GENERATOR
- PANEL CIRCUIT AND CONTROLS. EXTEND/SHORTEN WIRING AS NEEDED. 5 ) WIRE TO EXISTING CORRIDOR LIGHTING CIRCUIT AND CONTROLS.
- LIGHTING SCHEDULE YPE SYMBOL DESCRIPTION 2'x2' RECESSED LIGHTING TROFFER BY DAY-BRITE.  $\bowtie$ 28 WATTS, 3500K, 3800 LUMENS. MODEL #2FGXG-38L-835-2'-RS-UNV-DIM 2'x2' RECESSED LIGHTING TROFFER W/90 MIN EMERGENCY BATTERY PACK BY DAY-BRITE. 28 WATTS, 3500K, 3800 LUMENS. MODEL #2FGXG-38L-835-2'-RS-UNV-DIM-BSL6LST LOW PROFILE DIRECT LUMINAIRE BY CORONET LED. 7 WATTS/FT, 0-10 DIMMING DRIVER, 677 LUMENS/FT. LENGTH OF FIXTURE VARIES BY SECTION. MODEL #LS1LP-X-35-MED-UNV-DB-W-AC-FL-NA-NA 4-INCH LED DOWNLIGHT BY CSL LIGHTING. 12.3W, 0-10 DIMMING DRIVER, 1485 LUMENS. 0 MODEL #NU4-RD-SW-15LM-35K-80-50D-CL-WH-WH-NC-UNV-DIM1 "RING LIGHTING FIXTURE BY CORONET LED. 130 WATTS, 3500K, 5350 DIRECT/INDIRECT LUMENS. RAL 3001 POWDER COAT MODEL #PRD-UPDN-3-35-MED-MED-UNV-DB-CC-AC.CENT-SD-SD DOWNLIGHT BY WE-EF 28 WATTS, 2542 LUMENS, 4000K, 0-10V DIMMING DRIVER  $\otimes$ MODEL #DOC120-FT-LED-134-6259 4' RING LIGHTING FIXTURE BY CORONET LED. 138 WATTS, 3500K, 13007 LUMENS. RAL 3001 POWDER COAT MODEL #PRD-4-35-MED-UNV-DB-CC-SM-SD LED EXIT SIGN W/ 90-MINUTE EMERGENCY BATTERY BY ATG LED LIGHTING. MODEL #EES01-R-1-WH LENGTHS OF CONTINUOUS RUNS FOR LINEAR FIXTURES VARY BY SECTION. E.C
- SHALL SUBMIT SHOP DRAWINGS OF ALL CONTINUOUS RUNS FOR APPROVAL.

|           | LIGHT FI  | <b>KTURE WIRI</b>                     | NG FORM          | 1AT     |
|-----------|---|---------------------------------------|------------------|---------|
|           | PANEL NAME/<br>EXISTING CIRCUIT                   | CKT BKR/ EXISTING<br>CIRCUIT GROUPING | FIXTURE TYPE     | SWITCH  |
| P1-1-AE-b | "P1"  | "1"                                   | "AE"             |         |
|           | "EX"  | "EX"                                  | "AE"             | "       |
| NL = N    | ght light.<br>Fixture to be wire!<br>Illumination | D AHEAD OF ALL SWITC                  | CHING TO PROVIDE | CONTINU |

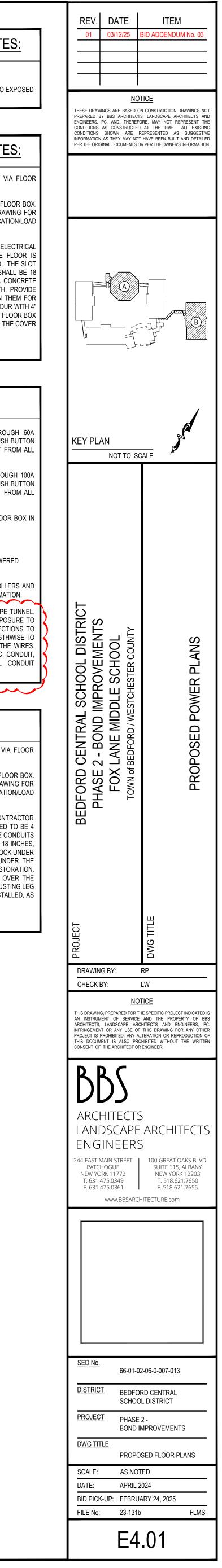
| LIGHTING CONTROLS |   |  |  |  |
|-------------------|---|--|--|--|
| SYMBOL            | DESCRIPTION   |  |  |  |
| a #               | <ul> <li>LOW VOLTAGE WALL SWITCH BY SENSORWORX:</li> <li>LOWER CASE LETTER (TOP) INDICATES SWITCHING DES</li> <li>UPPER CASE LETTER(S) OR NUMBER SUBSCRIPTS (BOT<br/>3 = THREE WAY SWITCH<br/>M = MOMENTARY CONTACT SWITCH<br/>K = KEY SWITCH - #SWX-KS-MOM<br/>3RL = 3 BUTTON CONTROLS - MODEL #SWX-854-B-WH<br/>VS = VACANCY PIR SENSOR DIMMER - MODEL #SWX-10<br/>VC = VACANCY PIR SENSOR SWITCH - MODEL #SWX-10<br/>OC = OCCUPANCY PIR SENSOR SWITCH - MODEL #SWX-10</li> </ul> |  |  |  |
| OS                | CEILING MOUNTED OCCUPANCY SENSOR BY SENSORWORX.<br>AS AUTO ON/AUTO OFF UNLESS OTHERWISE NOTED. PROVID<br>POWER PACKS AS REQUIRED.<br>MODEL #SWX-201-B   |  |  |  |
| ALCR)             | EMERGENCY POWER CONTROL FOR DIMMABLE LOADS<br>MODEL #SWX-EPC-A-2-D  |  |  |  |
| PC                | EMERGENCY POWER CONTROL FOR DIMMABLE LOADS<br>MODEL #SWX-LCS624D  |  |  |  |

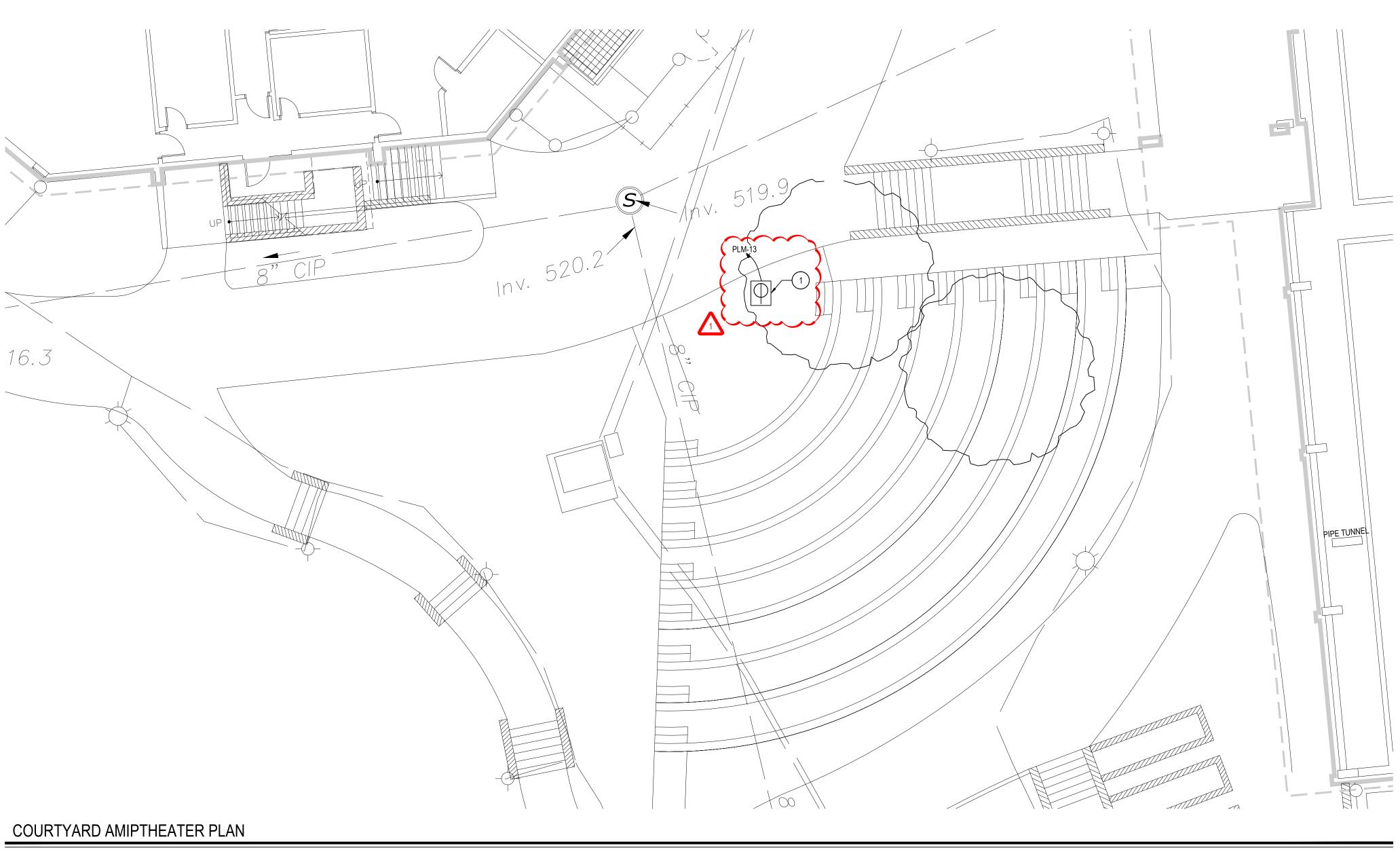


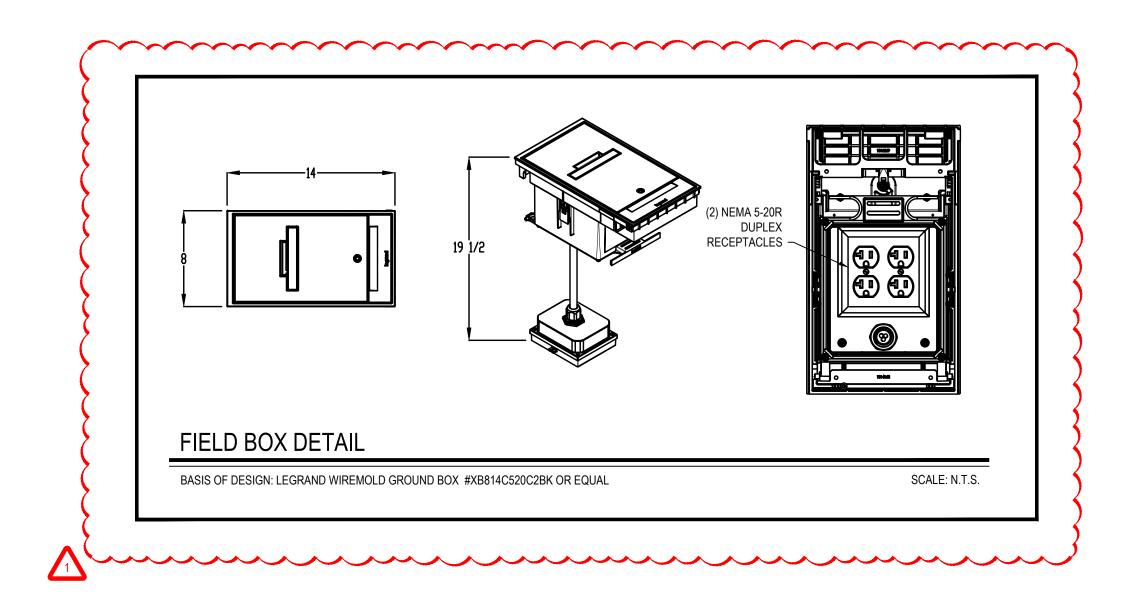


SCALE: 1/8" = 1'-0"

| ELE  | CTRICAL PROPOSED GENERAL NOTES:  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| 1. SEE   | DETAIL 5 ON E7.01 FOR CONTACTOR WIRING DIAGRAM   |  |  |  |  |  |
|  | RE NECESSARY, E.C. SHALL RUN ALL EXPOSED CONDUITS AS CLOSE TO EXPOS<br>AS POSSIBLE TO MAINTAIN AESTHETICS OF THE RENOVATED SPACES.   |  |  |  |  |  |
|  |  |  |  |  |  |  |
| ELE  | CTRICAL PROPOSED GENERAL NOTES:  |  |  |  |  |  |
| 1. POWER AND DATA SERVICE WILL BE SUPPLIED TO FLOOR EQUIPMENT VIA<br>BOXES AND CONDUITS AS DESCRIBED AS FOLLOWS.   |  |  |  |  |  |  |
| 2. THE FLOOR BOXES ARE FOUR-COMPARTMENT CAST-IRON COMBINATION FLOO<br>THE BOX WILL CONTAIN VARIOUS WIRING SERVICES, SEE TECHNOLOGY DRAWIN<br>MORE DETAILS, ALL IN QUANTITIES AS REQUIRED FOR THE SPECIFIC LOCATION<br>SUPPLIED.  |  |  |  |  |  |  |
| 3. THE EXISTING SITE CONCRETE FLOOR IS TO BE SAW CUT BY ELECT<br>CONTRACTOR FROM THE WALL TO BOX LOCATION AS REQUIRED. THE FLO<br>EXPECTED TO BE 4 INCHES THICK, BUT THIS THICKNESS IS NOT CONFIRMED. THE<br>FOR THE CONDUITS SHALL BE 12 INCHES WIDE. THE FLOOR BOX HOLE SHALL<br>INCHES BY 18 INCHES, MINIMUM, OR LARGER AS REQUIRED. PROVIDE A CONF<br>FOUNDATION BLOCK UNDER THE FLOOR BOX TO PROVIDE BEARING STRENGTH. PR<br>BLOCKS UNDER THE CONDUITS AS REQUIRED TO STABILIZE AND POSITION THEF<br>FLOOR RESTORATION. PLACE CONDUITS IN THE SAND BELOW THE FLOOR POUR W<br>SAND OVER THE CONDUITS. USE SCHEDULE 40 PVC CONDUITS. UTILIZE THE FLOO<br>ADJUSTING LEG SCREWS TO LEVEL THE BOX TO BE FLUSH WITH FLOOR WITH THE O<br>INSTALLED, AS PER MANUFACTURER'S INSTRUCTIONS.        |  |  |  |  |  |  |
| 4. OBS   | ERVE CAT-6 MINIMUM BENDING RADIUS IN DATA CONDUITS.  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| ELE  | CTRICAL DEMOLITION KEY NOTES:  |  |  |  |  |  |
| 1  | E.C. TO WIRE CORD REEL CIRCUITS SERVING THE ROOM THROUGH<br>CONTACTOR. WIRE CONTACTOR CIRCUIT THROUGH EMERGENCY PUSH BUTT<br>SO THAT IN THE EVENT THE BUTTON IS PRESSED, POWER IS CUT FROM<br>CORD REELS IN THE ROOM.  |  |  |  |  |  |
| 2  | E.C. TO WIRE DRILL PRESS, SAW, AND CORD REEL CIRCUITS THROUGH 1<br>CONTACTOR. WIRE CONTACTOR CIRCUIT THROUGH EMERGENCY PUSH BUTT<br>SO THAT IN THE EVENT THE BUTTON IS PRESSED, POWER IS CUT FROM<br>MACHINES IN THE ROOM.   |  |  |  |  |  |
| 3  | TRENCH BY E.C. E.C. TO RUN FROM INSIDE NEW WALL TO NEW FLOOR BO<br>TRENCH<br>(1) 1 1/2" CONDUIT FOR NEW POWER CIRCUIT<br>(1) 1 1/2" CONDUIT FOR NEW DATA WIRING  |  |  |  |  |  |
| 4  | RELOCATED FACP TO NEW LOCATION AND WIRE TO GENERATOR POWERED PANEL.  |  |  |  |  |  |
| 5  | PROVIDE AND INSTALL JUNCTION BOX FOR CARD ACCESS CONTROLLERS A<br>MOUNT ABOVE CEILING. SEE TECHNOLOGY PLANS FOR MORE INFORMATION.  |  |  |  |  |  |
| 6  | (4) EXISTING SETS OF 4" CONDUITS AND WIRES LOCATED INSIDE PIPE TUNN<br>SECTIONS OF CONDUITS ARE MISSING/RUSTED/DECAYED FROM EXPOSURE<br>ENVIRONMENT. E.C. TO USE (4) SETS OF 6" PVC CONDUIT IN 5' SECTIONS<br>ENCASE EXISTING EXPOSED WIRES. CUT PVC CONDUIT IN HALF LENGTHWISE<br>PLACE WIRES INTO, THEN USE OTHER HALF OF CUT TO ENCASE THE WIR<br>INSTALL BONDING JUMPER WIRE TO BRIDGE THE GAP OF PVC COND<br>MAINTAINING THE GROUND PATH BETWEEN EXISTING METAL COND<br>SECTIONS. |  |  |  |  |  |
|  |  |  |  |  |  |  |
| <u>FLC</u>   | OR BOX CONSTRUCTION NOTES:   |  |  |  |  |  |
|  | YER AND DATA SERVICE WILL BE SUPPLIED TO FLOOR EQUIPMENT VIA FLO<br>AND CONDUITS AS DESCRIBED AS FOLLOWS.  |  |  |  |  |  |
| THE BO<br>MORE   | FLOOR BOXES ARE FOUR-COMPARTMENT CAST-IRON COMBINATION FLOOR B<br>DX WILL CONTAIN VARIOUS WIRING SERVICES, SEE TECHNOLOGY DRAWING F<br>DETAILS, ALL IN QUANTITIES AS REQUIRED FOR THE SPECIFIC LOCATION/LC<br>ED.  |  |  |  |  |  |
| SUPPLIED.<br>3. THE EXISTING SITE CONCRETE FLOOR IS TO BE SAW CUT BY GENERAL CONTR.<br>FROM THE WALL TO BOX LOCATION AS REQUIRED. THE FLOOR IS EXPECTED TO<br>INCHES THICK, BUT THIS THICKNESS IS NOT CONFIRMED. THE SLOT FOR THE CON<br>SHALL BE 12 INCHES WIDE. THE FLOOR BOX HOLE SHALL BE 18 INCHES BY 18 IN<br>MINIMUM, OR LARGER AS REQUIRED. PROVIDE A CONCRETE FOUNDATION BLOCK<br>THE FLOOR BOX TO PROVIDE BEARING STRENGTH. PROVIDE BLOCKS UNDE<br>CONDUITS AS REQUIRED TO STABILIZE AND POSITION THEM FOR FLOOR RESTOR<br>PLACE CONDUITS IN THE SAND BELOW THE FLOOR POUR WITH 4" SAND OVE<br>CONDUITS. USE SCHEDULE 40 PVC CONDUITS. UTILIZE THE FLOOR BOX ADJUSTIN<br>SCREWS TO LEVEL THE BOX TO BE FLUSH WITH FLOOR WITH THE COVER INSTALL<br>PER MANUFACTURER'S INSTRUCTIONS. |  |  |  |  |  |  |
| 4. OBSE  | ERVE CAT-6 MINIMUM BENDING RADIUS IN DATA CONDUITS.  |  |  |  |  |  |

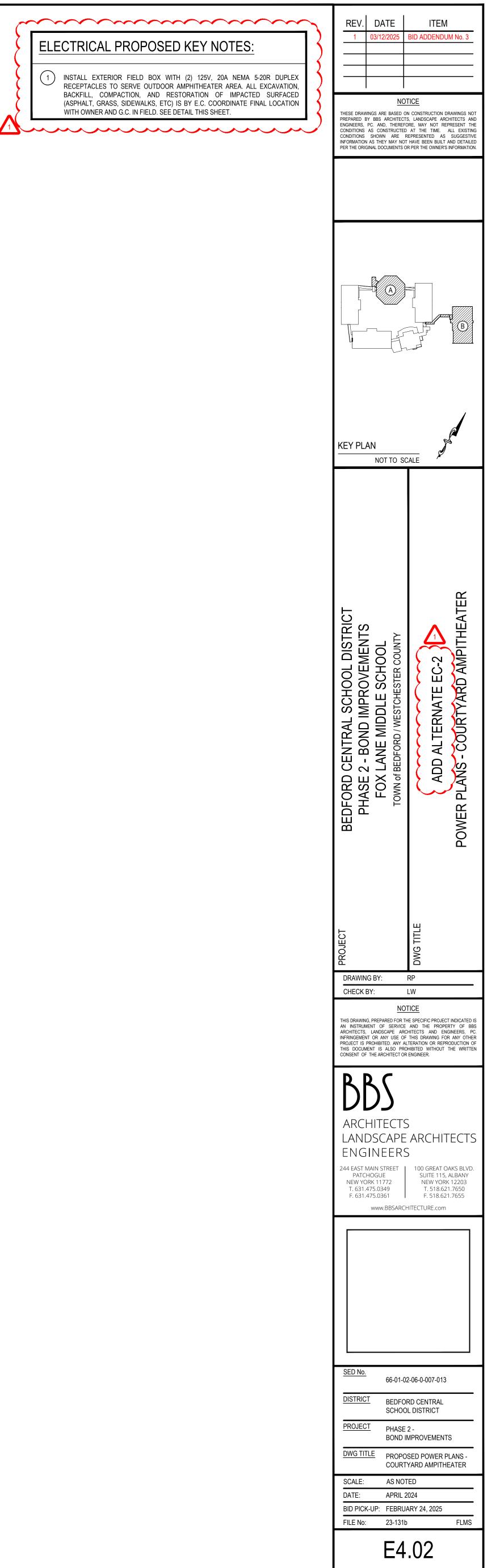


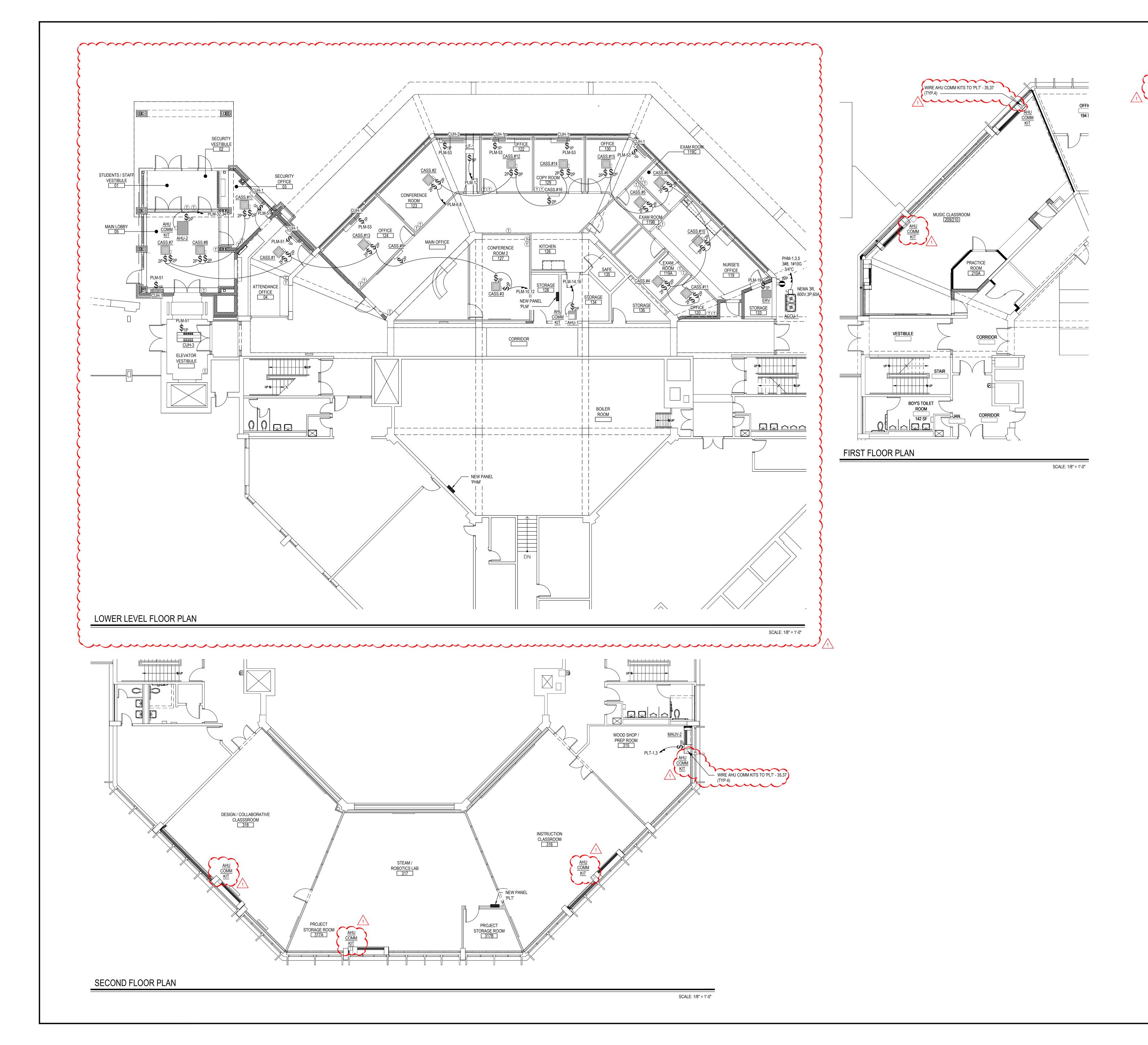




ELECTRICAL PROPOSED KEY NOTES: 1 INSTALL EXTERIOR FIELD BOX WITH (2) 125V, 20A NEMA 5-20R DUPLEX RECEPTACLES TO SERVE OUTDOOR AMPHITHEATER AREA. ALL EXCAVATION, BACKFILL, COMPACTION, AND RESTORATION OF IMPACTED SURFACED (ASPHALT, GRASS, SIDEWALKS, ETC) IS BY E.C. COORDINATE FINAL LOCATION WITH OWNER AND G.C. IN FIELD. SEE DETAIL THIS SHEET.

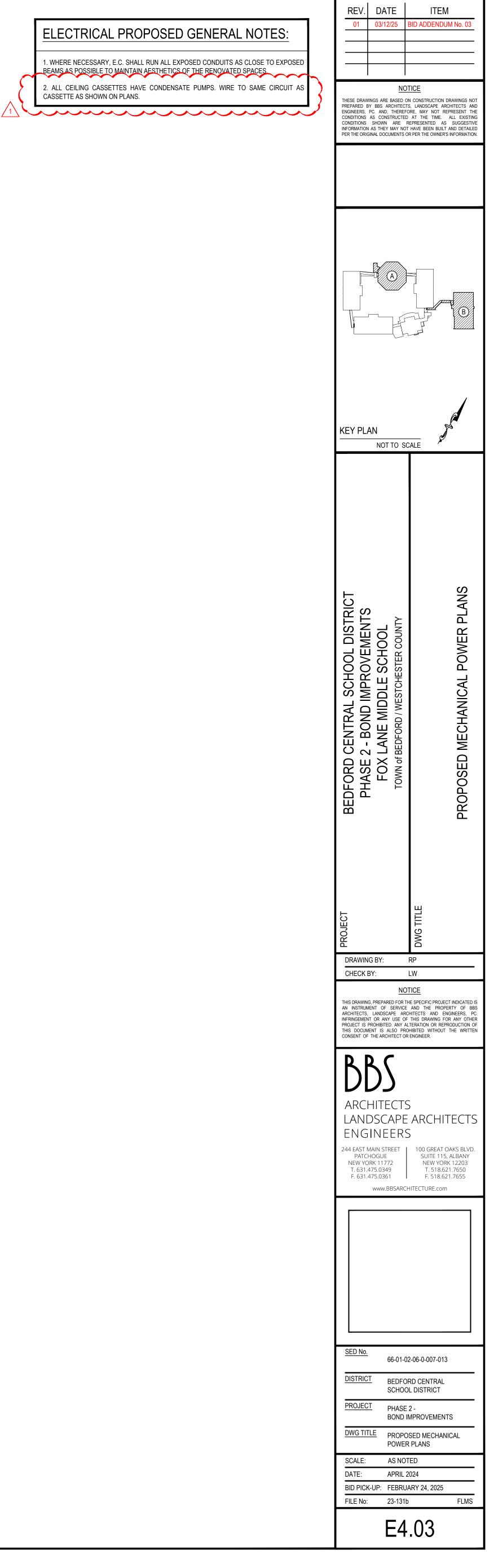
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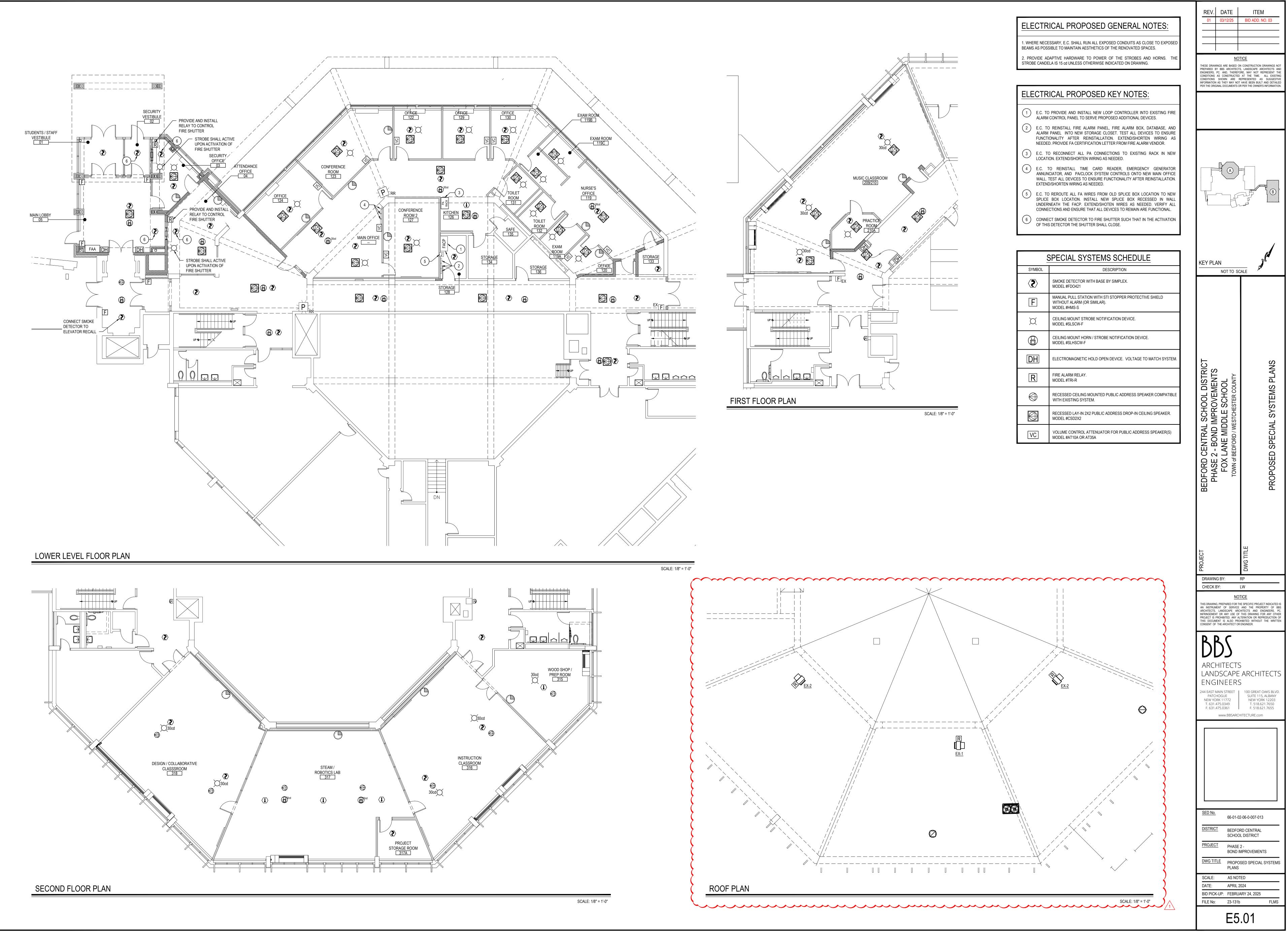


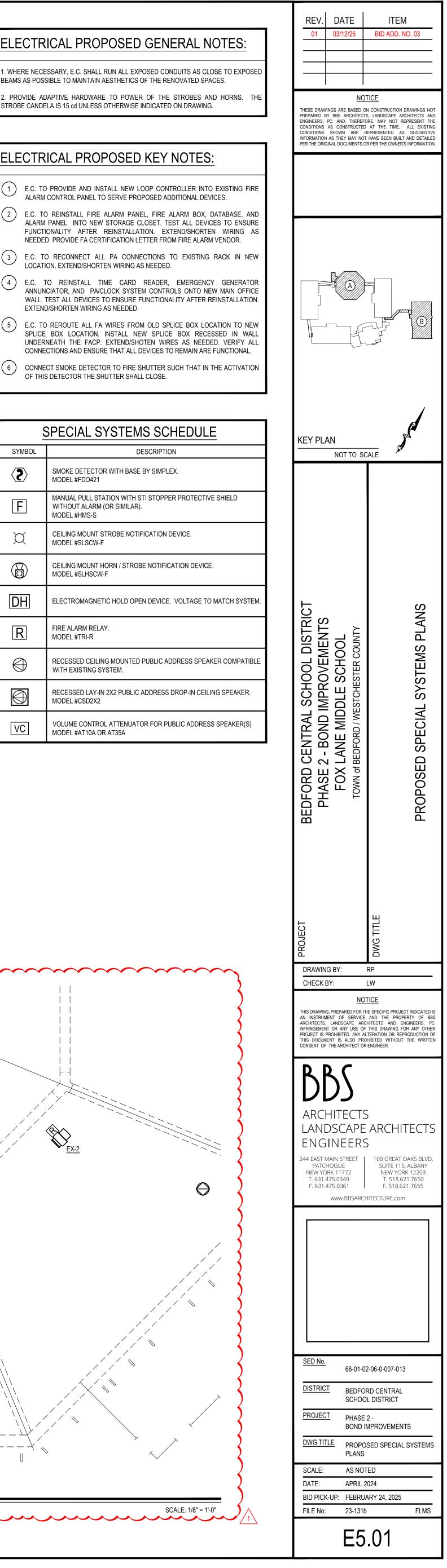


ELECTRICAL PROPOSED GENERAL NOTES:

1. WHERE NECESSARY, E.C. SHALL RUN ALL EXPOSED CONDUITS AS CLOSE TO EXPOSED BEAMS AS POSSIBLE TO MAINTAIN AESTHETICS OF THE RENOVATED SPACES. 2. ALL CEILING CASSETTES HAVE CONDENSATE PUMPS. WIRE TO SAME CIRCUIT AS CASSETTE AS SHOWN ON PLANS.



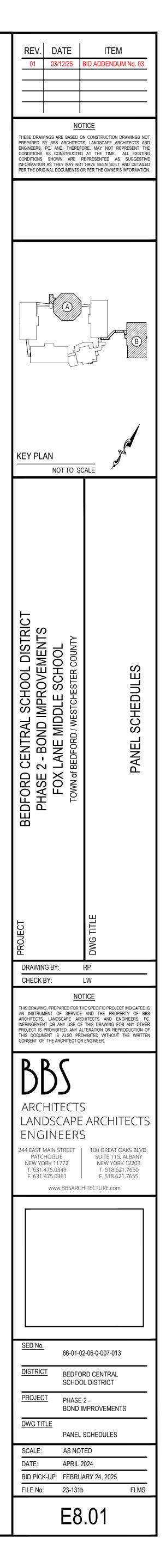


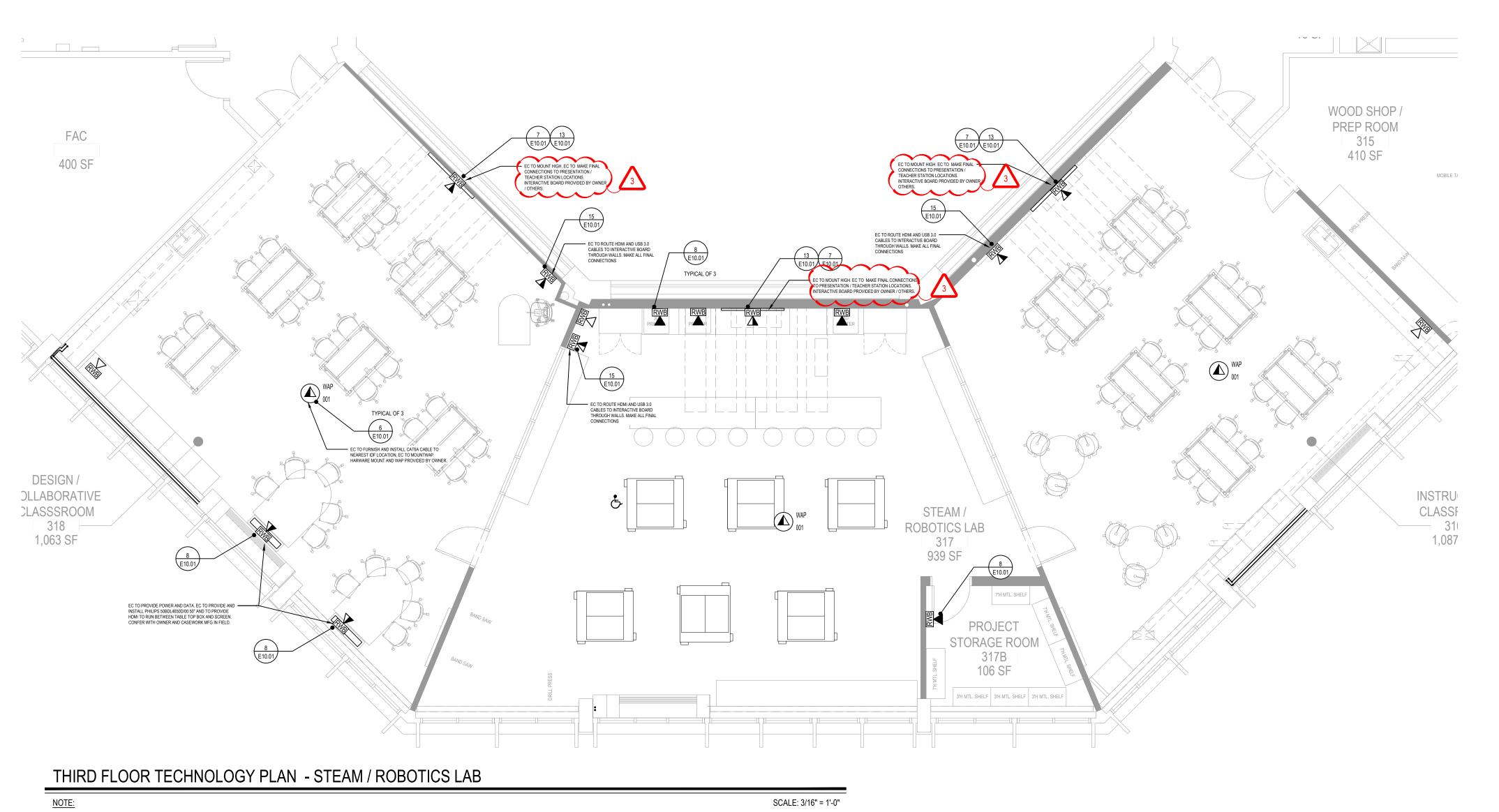


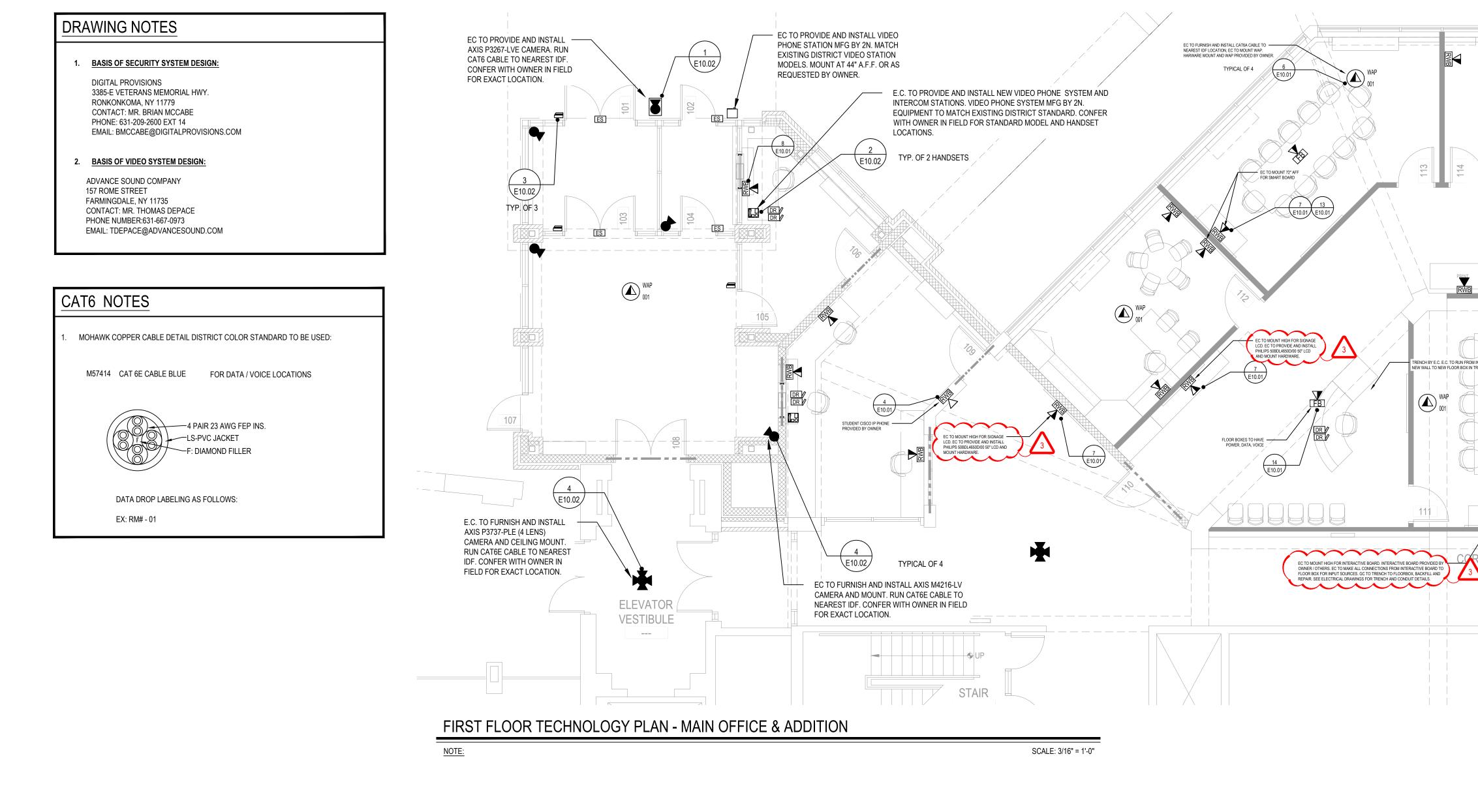
| SPECIAL SYSTEMS SCHEDULE |  |  |  |  |
|--------------------------|--|--|--|--|
| SYMBOL                   | DESCRIPTION  |  |  |  |
| <b>(S</b> )              | SMOKE DETECTOR WITH BASE BY SIMPLEX.<br>MODEL #FDO421  |  |  |  |
| F                        | MANUAL PULL STATION WITH STI STOPPER PROTECTIVE SHIEL<br>WITHOUT ALARM (OR SIMILAR).<br>MODEL #HMS-S |  |  |  |
| X                        | CEILING MOUNT STROBE NOTIFICATION DEVICE.<br>MODEL #SLSCW-F  |  |  |  |
|                          | CEILING MOUNT HORN / STROBE NOTIFICATION DEVICE.<br>MODEL #SLHSCW-F                                  |  |  |  |
| DH                       | ELECTROMAGNETIC HOLD OPEN DEVICE. VOLTAGE TO MATCI   |  |  |  |
| R                        | FIRE ALARM RELAY.<br>MODEL #TRI-R  |  |  |  |
| $\bigcirc$               | RECESSED CEILING MOUNTED PUBLIC ADDRESS SPEAKER CC<br>WITH EXISTING SYSTEM.                          |  |  |  |
| $\bigcirc$               | RECESSED LAY-IN 2X2 PUBLIC ADDRESS DROP-IN CEILING SPE<br>MODEL #CSD2X2                              |  |  |  |
| VC                       | VOLUME CONTROL ATTENUATOR FOR PUBLIC ADDRESS SPEA<br>MODEL #AT10A OR AT35A                           |  |  |  |

| PANEL BOARD     NAME:     PHM     LOCATION:     BOILER ROOM  | PANEL BOARD N                                       | AME: PLM                                   | LOCATION: STORAGE 14   | PAN              | EL BOARD              |
|--|---|--|--|------------------|-----------------------|
| TYPE:         BRANCH BREAKER TYPE:         BOLT ON         NO. OF POLES:         18         BUS SIZE (A):         250A   | TYPE: BRANCH BREAKER TYPE:                          | BOLT ON NO. OF POLES:                      | 8:60 BUS SIZE (A):400A   | TYPE:            | BRANCH BREAKER TYPE   |
| MIN AIC RATING (KA): <u>22K</u> NEUTRAL: <u>250A</u> MAIN CIRCUIT BREAKER: <u>250A, 3P</u>   | MIN AIC RATING (KA): <u>22K</u>                     | NEUTRAL: 400A MAIN CIF                     | RCUIT BREAKER: <u>400, 3P</u>  | MIN AIC RATIN    | IG (KA): <u>22K</u>   |
| MAIN LUGS: <u>4/0</u> VOLTS: <u>277/480V</u> PHASE: <u>3</u> # WIRES: <u>4</u>   | MAIN LUGS: 500kCMIL                                 | VOLTS: <u>120/208V</u> F                   | PHASE: <u>3</u> # WIRES: <u>4</u>  | MAIN LUGS:       | 4/0                   |
|  | MOUNTING:   |  |  |                  | MOUNTING: <u>RECE</u> |
| MOUNTING:       SURFACE MOUNTED       ENCL. TYPE:       1       DOOR REQ'D:       DOOR-IN-DOOR         ACCESSORIES:       SURGE PROTECTIVE DEVICE (SPD):       SPD RATING(KA):       N/A       SUB-FEED LUGS:       FEED-THRU LUGS:       I         SHUNT TRIP MAIN:       I       I       ASCO SWITCH:       ISOLATED GROUND:       I |   | SPD): 🔲 SPD RATING(KA): <u>N/A</u> SUB-FEE | DOOR REQ'D: <u>DOOR-IN-DOOR</u><br>ED LUGS: FEED-THRU LUGS:<br>WITCH: ISOLATED GROUND: | ACCESSORIES:     |                       |
| CKT. DESIGNATION WIRE CKT. LOAD CKT. WIRE DESIGNATION CKT.   | CKT. DESIGNATION                                    | WIRE CKT. LOAD CK                          | T. WIRE DESIGNATION CKT.   | СКТ.             |                       |
| # BESIGNATION SIZE BRKR. A B C BRKR. SIZE DESIGNATION #  | #   |  | KR. SIZE #   | #                |                       |
| ● 1 ACCU-1 8 50A 50A 50A 8 CU-1 2 ●  | 1 EX-2  |  | 5A 10 EX-2 2   | • 1 MAUV-2       |                       |
|  | 3 EX-3  |  |  | • 3              |                       |
|  | 5 EX-1<br>7 119, 119B, 119C RECEPTACLES AND WALLBOX | 12 15A 20,                                 |  | 5 318 WINDOW     |                       |
| ● 7       CU-2       12       25A       175A       2/0       NEW 112.5kVA TRANSFORMER       8 ●         ● 9            10 ●  | 9 122 RECEPTACLES AND WALLBOX                       | 12 20A 20A 20A                             | Image: NA         12         IDUs         10 €   | 9 317 LASER P    |                       |
|  | 11 ILF-1  | 12 20A 200                                 |  | 11 317 WALLBO    |                       |
|  | (G) 13 AMPITHEATER FIELD BOX                        | 12 20A 15/                                 |  | 13 317 CORD R    |                       |
|  | 15 SPARE  | 20A  |  | 15 316, 317, 317 |                       |
|  | 17 119A, 120 RECEPTACLES                            | 12 20A 20/                                 |  | 17 317 WALLBO    |                       |
|  | 19 ERV, OUTSIDE GFI, 133 RECEPTACLES                | 12 20A 20/                                 |  | 19 315 RECEPT    |                       |
|  | 21 HAND DRYER                                       | 12 20A 20/                                 | A 12 KITCHEN REFRIGERATOR RECEPTACLE 22  | 21 315 RECEPT.   | ACLE                  |
|  | 23 HAND DRYER                                       | 12 20A 20A                                 | A 12 CONFERENCE & RECEPTION RECEPTACLES 24   | 23 315 RECEPT    | ACLE                  |
|  | 25 129 RECEPTACLES AND WALLBOXES                    | 12 20A 20A                                 | A 12 CONFERENCE, PRINT, COPY, RECEPTACLES 26   | 25 316 RECEPT    | ACLE AND WALLBOX      |
|  | 27 OFFICE, CONFERENCE ROOM RECEPTACLES              | 12 20A 20A                                 | A 12 RECEPTION, CONFERENCE RECEPTACLES 28  | 27 317 RECEPT    | ACLE                  |
|  | 29 OFFICE, CONFERENCE ROOM RECEPTACLES              | 12 20A 20A                                 | A 12 MAIN OFFICE AND LOBBY RECEPTACLES 30  | 29 317 RECEPT.   | ACLE                  |
|  | 31 SECURITY RECEPTACLES                             | 12 20A 15/                                 | A 12 AHU-2 32•   | 31 317 RECEPT.   | ACLE                  |
|  | 33 SECURITY RECEPTACLES                             | 12 20A                                     |  | 33 MAINTENAN     | CE RECEPTACLES        |
|  | 35 VESTIBULE RECEPTACLES                            | 12 20A 20,                                 | A 12 209/210 RECEPTACLES 36  | •35 АНИ СОММ І   | KITS                  |
|  | 37 209/210 RECEPTACLES                              | 12 20A 20A                                 | DA         12         209/210 RECEPTACLES         38                                   | <b>↓</b> 37      |                       |
|  | 39 209/210 RECEPTACLES                              | 12 20A 20/                                 |  | 39               |                       |
|  | 41 209/210 RECEPTACLES                              | 12 20A 20/                                 |  | 41               |                       |
|  | 43 NURSE'S OFFICE FRIDGE RECEPTACLE                 | 12 20A 20/                                 |  |                  |                       |
|  | 45 FIRE SHUTTER                                     | 12 20A 20/                                 |  |                  |                       |
|  | 47 IDF QUAD   | 12 20A 20/                                 |  |                  |                       |
|  | 49 124 RECEPTACLES AND WALLBOX                      | 12 20A 225                                 |  |                  |                       |
|  | 51 CABINET HEATERS                                  | 12 20A                                     | 52•  |                  |                       |
|  | 53 CABINET HEATERS                                  | 12 20A                                     |  |                  |                       |
|  | 55 SPARE  | 20A 20,                                    |  |                  |                       |
|  | 57 SPARE  | 20A 20,                                    |  |                  |                       |
|  | 59 SPARE  | 20A 20/                                    | DA SPARE 60  |                  |                       |

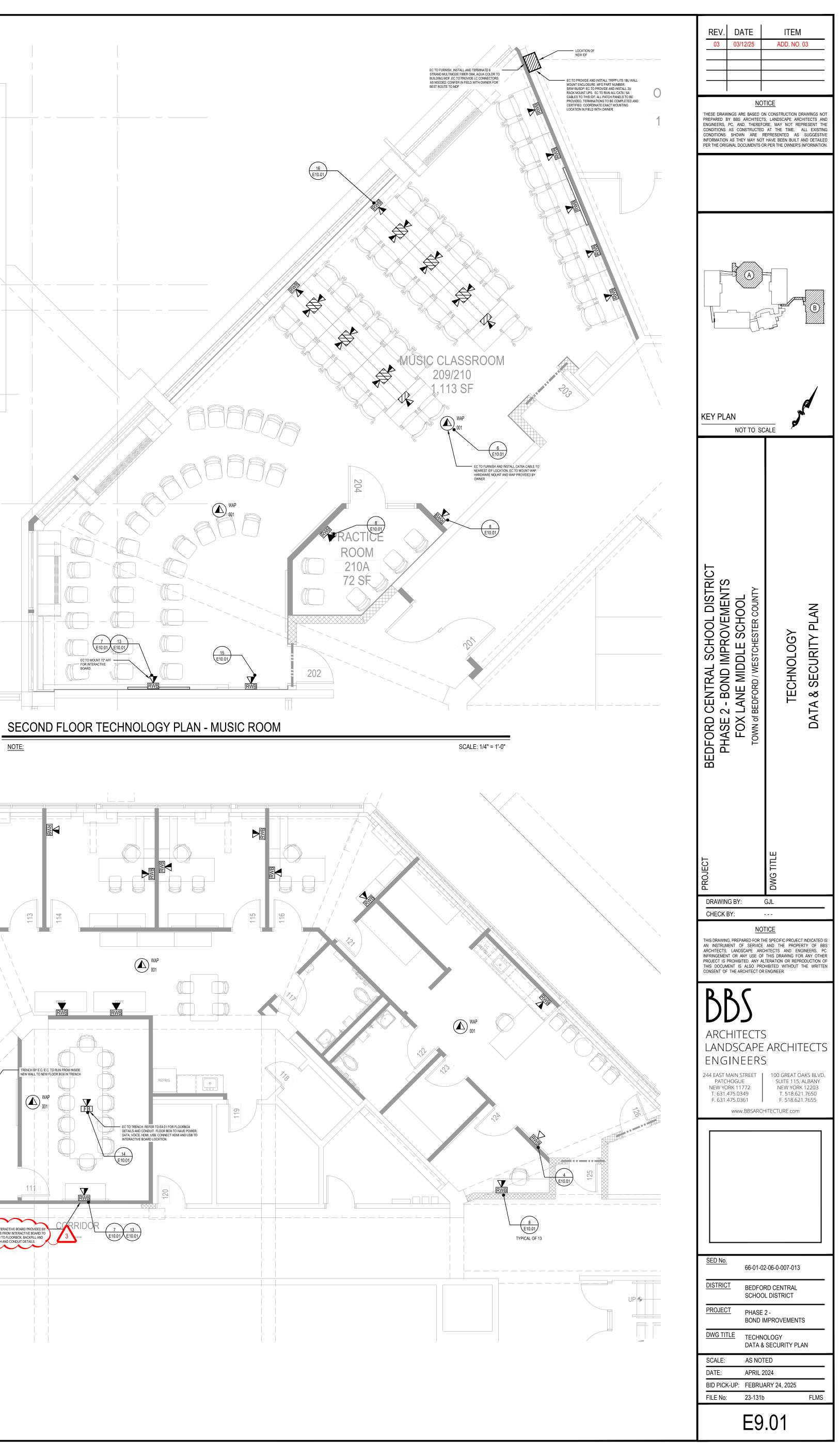
| RD NAM                  | E: _     | PL     |            |              |           |         | L       | OCATION: <u>STEAM/ROBOTICS</u>               | 317 |
|-------------------------|----------|--------|------------|--------------|-----------|---------|---------|--|-----|
| H BREAKER TYPE: BC      | OLT O    | N      |            | ١            | NO. OF PC | LES:    |         | 42 BUS SIZE (A): 225A                        |     |
| 22K N                   | IFUTRA   | ŀ      | 225A       |              | MAII      | N CIRCI | JIT BRE | AKER: <u>225A, 3P</u>                        |     |
|                         |          |        | 120/       |              |           |         |         | <u>3                                    </u> |     |
|                         |          |        |            | <u>200 v</u> | 4         | PD/     |         |  |     |
| NG: <u>RECESSED</u>     | _        |        | L. TYPE:   | NI/A         | 1         |         |         | OR REQ'D: <u>DOOR-IN-DOOR</u>                |     |
| PROTECTIVE DEVICE (SPD) | ): [] \$ | SPD RA | I ING(KA): | <u>N/A</u>   |           |         |         | FEED-THRU LUGS: ISOLATED GROUND:             |     |
| ATION                   | WIRE     |        |            | LOAD         |           | скт.    |         | DESIGNATION                                  | СКТ |
|                         | SIZE     | BRKR.  | A          | В            | C         | BRKR.   | SIZE    |  |     |
|                         | 12       | 15A    |            |              | ſ         | 20A     | 12      | 318 CORD REELS                               | 2   |
|                         |          |        |            |              |           | 20A     | 12      | 318 CORD REELS                               | 4   |
|                         | 12       | 20A    |            |              |           | 20A     | 12      | 318 CORD REELS                               | 6   |
| ES                      | 12       | 20A    |            |              | r         | 20A     | 12      | 317 CORD REELS                               | 8   |
| BOX                     | 12       | 20A    |            |              |           | 20A     | 12      | 317 CORD REELS                               | 10  |
|                         | 12       | 20A    |            |              |           | 20A     | 12      | 317 CORD REELS                               | 12  |
|                         | 12       | 20A    |            |              | r         | 20A     | 12      | 316 CORD REELS                               | 14  |
| ES                      | 12       | 20A    |            |              |           | 20A     | 12      | 316 CORD REELS                               | 16  |
|                         | 12       | 20A    |            |              |           | 20A     | 12      | 316 CORD REELS                               | 18  |
|                         | 12       | 20A    |            |              | 1         | 20A     | 12      | 315 RECEPTACLE                               | 20  |
|                         | 12       | 20A    |            |              |           | 20A     | 12      | 316, 318 SMARTBOARD WALLBOXES                | 22  |
|                         | 12       | 20A    |            |              |           | 20A     | 12      | 315 CONTACTOR POWER                          | 24  |
| LBOX                    | 12       | 20A    |            |              | 1         | 20A     | 12      | 316 CONTACTOR POWER                          | 26  |
|                         | 12       | 20A    |            |              |           | 20A     | 12      | 317 CONTACTOR POWER                          | 28  |
|                         | 12       | 20A    |            |              |           | 20A     | 12      | 318 CONTACTOR POWER                          | 30  |
|                         | 12       | 20A    |            |              | 1         | 20A     | 12      | 316 CORD REEL                                | 32  |
| ES                      | 10       | 20A    |            |              |           | 20A     | 12      | 316 CORD REEL                                | 34  |
|                         |          |        |            |              |           |         |         |  | 36  |
|                         |          |        |            |              |           |         |         |  | 38  |
|                         |          |        |            |              |           |         |         |  | 40  |
|                         |          |        |            |              |           |         |         |  | 42  |

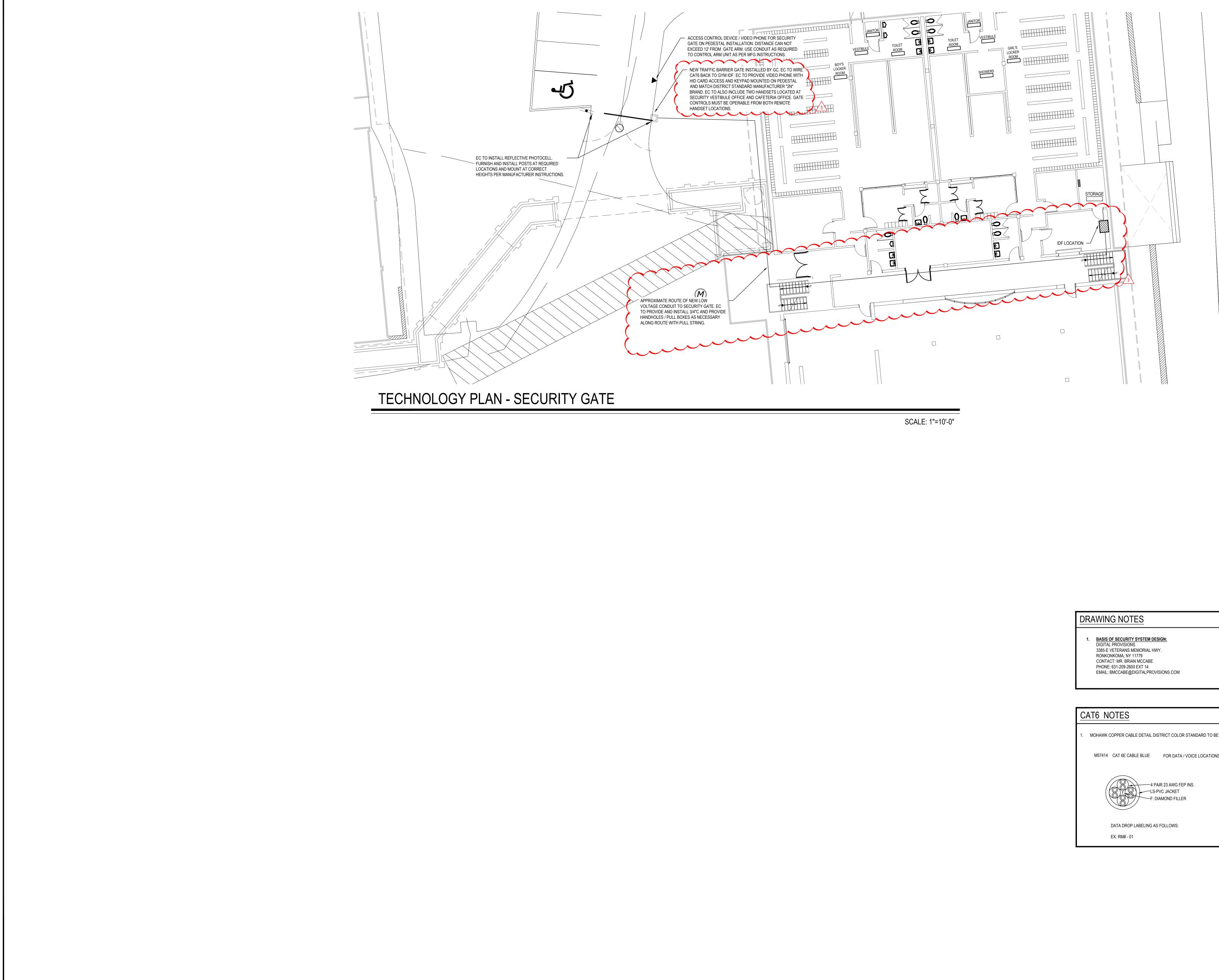




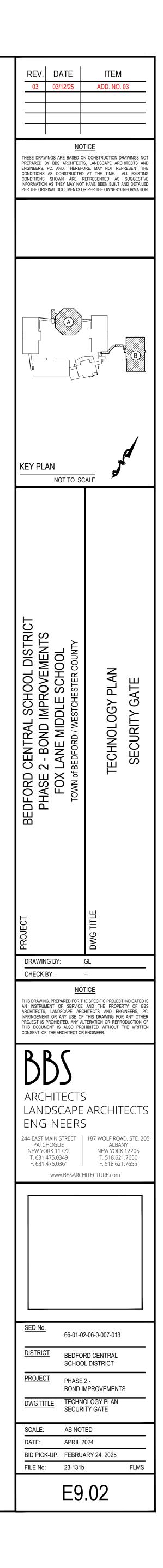


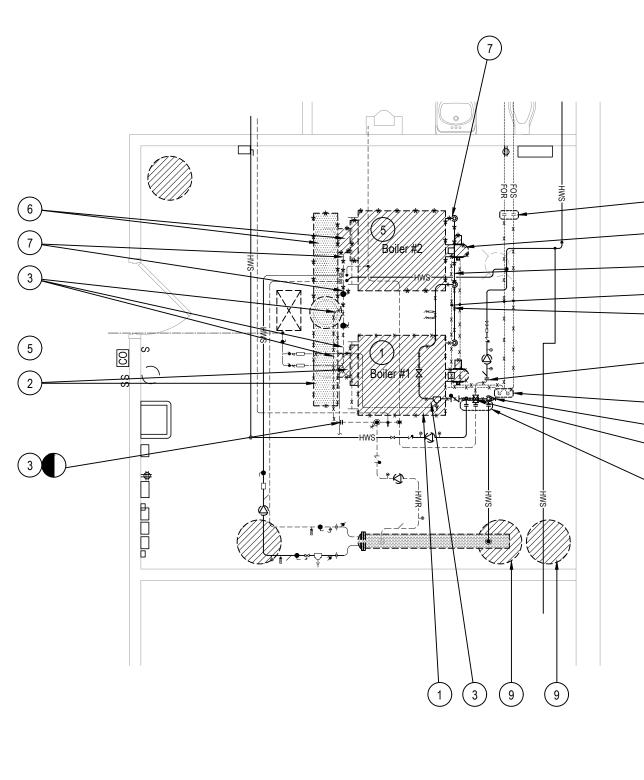
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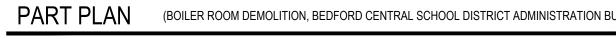


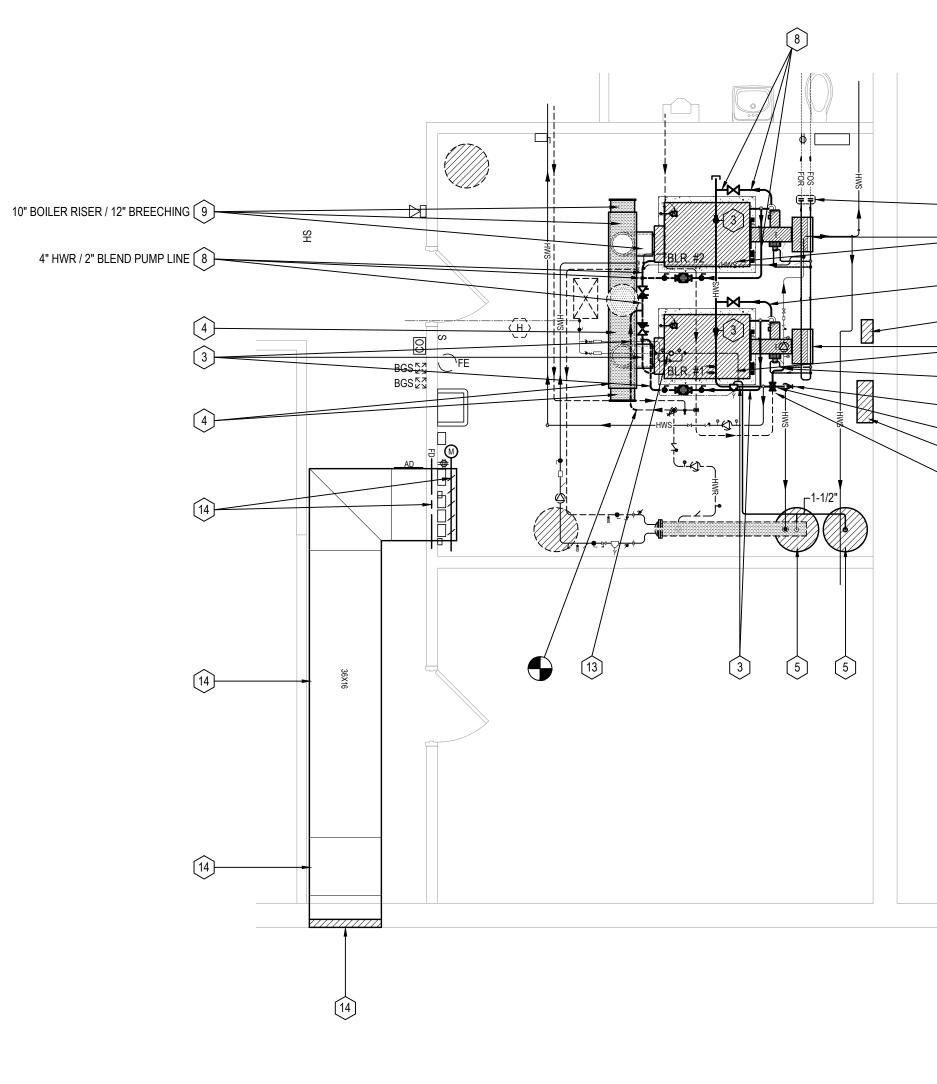


# MOHAWK COPPER CABLE DETAIL DISTRICT COLOR STANDARD TO BE USED: M57414 CAT 6E CABLE BLUE FOR DATA / VOICE LOCATIONS











|                                    | Note "HWB" (NEW HOT WATER BOILERS)   |
|------------------------------------|--|
|                                    | MECHANICAL CONTRACTOR SHALL PROVIDE & INSTALL (1) NEW CAST IRON WET BASE TYPE HOT WATER BOILER AT EACH LOCATION SHOWN (2 TO<br>McLAIN 'BGL-588-W' SERIES CAST IRON TYPE, 33.6 BOILER HORSEPOWER, 1,126 MBH GROSS I=B=R OUTPUT RATING WITH AN INPUT OF 9.4 GPH #2<br>85.6%. NEW BOILER SHALL BE PIPED AS SHOWN. EACH NEW BOILER SHALL COME COMPLETE WITH THE FOLLOWING ITEMS:   |
|                                    | DIRECT SPARK IGNITION SYSTEM<br>FULLY INSULATED METAL JACKET<br>BURNER MOUNTING PLATE WITH INSULATION BLOCK  |
|                                    | HIGH TEMPERATURE HYDRONIC PORT SEALS<br>ASME PRESSURE RELIEF VALVES, 40 PSI<br>COMBINATION PRESSURE / TEMPERATURE GAUGE  |
|                                    | RETURN HEADERS<br>MANUAL RESET HIGH LIMIT CONTROLS<br>OPERATING CONTROLS   |
|                                    | "POWER FLAME" #CR2-GO-15 FULLY MODULATING PRESSURE ATOMIZING GAS-OIL BURNER, BAROMETRIC DRAF<br>FUEL / IGNITION GAS TRAINS NOT REQUIORED AT THIS TIME.<br>MANUAL RESET LOW-LOW WATER CUTOFF W/ FUEL CUTOFF, McDONNEL & MILLER #63M W/ TC-4 TEST-N-CHECK<br>PROBE TYPE LOW WATER CUTOFF   |
| (10)                               | BOILER WATER BLEND PUMP INTERLOCKED W/BURNER TO OPERATE WHEN BURNER CONTROL CKT. IS ENERGI.<br>REMOTE OIL PUMP INTERLOCKS (WIRED TO EXISTING F.O. PUMP SET).<br>ALL MOTOR STARTERS, DISCONNECT SWITCHES, CONTROL WIRING, LEAD/LAG INTERLOCKS, DRAFT CONTROL  |
| 5                                  | INTERLOCKS W/ COMBUSTION AIR DAMPER / PROVING SWITCH<br>INTERLOCKS W/ EXISTING "ANDOVER" BMS TEMPERATURE CONTROL SYSTEM FOR OUTDOOR AIR TEMPERATUF<br>ALARMS, ETC.   |
|                                    | NEW BOILER SHALL BE PIPED AS SHOWN COMPLETE WITH ALL CONTROL WIRING, CONTROL DEVICES, SYSTEM EXPANSION TANK PIPING / PIPING, MAKEUP WATER CONNECTIONS COMPLETE WITH PRESSURE REDUCING VALVES, AUTOMATIC AIR PURGERS, AUTOMATIC / MANUA GAS PIPING, ETC. AS REQUIRED FOR A COMPLETE & OPERATIONAL INSTALLATION. SEE NOTE "NB" FOR FURTHER INFORMATION REGARD  |
|                                    | Note "NB" (NEW GAS / OIL BURNERS)  |
|                                    | MECHANICAL CONTRACTOR SHALL PROVIDE & INSTALL (2) NEW "POWER FLAME" #CR2-GO-15 FULLY MODULATING PRESSURE ATOMIZING   |
| 8                                  | SHOWN. NEW BURNERS SHALL BE OF THE FORCED DRAFT TYPE. CONTRACTOR SHALL NOTE THAT A GAS TRAIN FOR MAIN FUEL WILL NO<br>TIME. THE (2) NEW BURNERS SHALL COME COMPLETE WITH THE FOLLOWING ITEMS:<br>- DIRECT SPARK IGNITION SYSTEM  |
|                                    | <ul> <li>FLAME SAFEGUARD W/PREPURGE CYCLE &amp; U.V. SCANNER / CONTINUOUS FUEL VALVE MONITORING</li> <li>FULLY MODULATING FIRING CONTROLS</li> <li>FUEL OIL PUMP / PIPING / WIRING</li> </ul>  |
|                                    | <ul> <li>INTERLOCKS W/ REMOTE FUEL OIL TRANSFER PUMPSET</li> <li>INTERLOCKS W/ COMBUSTION AIR DAMPER(S)</li> <li>INTERLOCKS W/ BUILDING SECURITY SYSTEM</li> <li>INTERLOCKS W/ BOILER BLEND PUMPS SUCH THAT THE PUMPS RUN CONTINUOUSLY WHENEVER THE BURNER</li> </ul>  |
|                                    | <ul> <li>INTERLOCKS W/ BOILER BLEND FOMPS SOOT THAT THE FOMPS ROLL CONTINUOUSET WHENEVER THE BORNE</li> <li>INTERLOCKS W/ BUILDING TEMPERATURE CONTROL SYSTEM - SEE NOTE "ATC" FOR FURTHER INFO.</li> <li>INTERLOCKS W/ NEW "POWER FLAME" SYNC-MATIC HMI LEAD-LAG CONTROLLER</li> <li>MANUAL FUEL CHANGEOVER CONTROLS / SWITCH</li> </ul>  |
|                                    | NEW BURNER SHALL BE CAPABLE OF FIRING 15.7 GPH LIGHT (#2) OIL & 2,200 MBH NATURAL GAS AT MAXIMUM FIRING RATE. LIMIT FIRING I PROVIDE CONTROL PANEL, CONTROLS & INDICATOR LIGHTS FOR POWER ON, MAIN FUEL, LOW WATER LOCKOUT, FLAME FAILURE LOCKOUT, SUAL DE FOUNDED WINNERD SO FOR PUBLICATOR RATE. SET FOR DE SUBJECT OF UNIT. DI END PUBLICATOR DO VERI CADA FUEL SET FOR DE SUAL DE FOUNDED WINNERD SO FOR PUBLICATOR DE SUAL DE FOUNDED WINNERD SO FOR PUBLICATOR DE SUAL DE SUAL DE FOUNDED WINNERD SO FOR PUBLICATOR DE SUAL DE SUAL DE FOUNDED WINNERD SO FOR PUBLICATOR DE SUAL |
|                                    | SHALL BE EQUIPPED W/ MOTOR CONTACTORS FOR BURNER & REMOTE FUEL UNIT, BLEND PUMP, MOTOR OVERLOADS, FUEL SELECTOR /<br>FLAME SAFEGUARD CONTROL, CONTROL POWER SWITCH, MANUAL/AUTO SWITCH, & MANUAL FIRING RATE POTENTIOMETER. PROVIDE &<br>IGNITION SYSTEM, CONTROL WIRING, SYSTEM INTERLOCKS W/ AUTOMATIC TEMPERATURE CONTROL SYSTEM, SECURITY SYSTEM, BLENE<br>SHUTDOWN BREAK GLASS STATIONS (1 LOCATED @ BOILER ROOM EXIT). NOTE THAT BURNER CONTROLS SHALL LOCK OUT REMOTE FU  |
|                                    | PUMPSET IF THE BURNER IS SET TO OPERATE ON NATURAL GAS. POWER PANEL SHOWN ON ELECTRICAL DRAWINGS SHALL HAVE A SING<br>BURNER, RESPECTIVE REMOTE FUEL UNIT & BLEND PUMP. CONTROLS SHALL BE POWERED FROM A SEPARATE 120V GROUNDED CIRCUIT  |
| SUILDING)                          |  |
|                                    | Note "LD" (NEW NATURAL GAS / CARBON MONOXIDE LEAK DETECTION SYSTEM)  |
|                                    | PROVIDE & INSTALL A NEW "RKI BEACON" #410A 4 CHANNEL NATURAL GAS / CARBON MONOXIDE DETECTION PANEL F<br>OPERATION. PROVIDE (2) #65-2496RK (0-300 PPM) CARBON MONOXIE SENSORS, ONE MTD. IN BOILER RM. & (1) MTD. II<br>CORRIDOR OUTSIDE BOILER ROOM. NATURAL GAS SENSORS WILL NOT BE REQUIRED AT THIS TIME. PROVIDE NEMA<br>ENCLOSURE, LED DISPLAY FOR ALL 4 CHANNELS. PROVIDE CONFIGURABLE ALARM OUTPUTS W/ ISOLATION RELAYS   |
|                                    | INTERLOCK W/BOILERS, WATER HEATERS, & EXIST. FIRE ALARM CONTROL PANEL. PROVIDE (2) 15CD / DB. COMBINA<br>/ STROBE UNITS & RELATED POWER SUPPLIES. ONE HORN STROBE TO BE MOUNTED WITHIN THE BOILER ROOM & (1<br>MOUNTED IN ADJACENT BASEMENT AREA, 6'-8" A.F.F.   |
|                                    |  |
|                                    | Note "ATC" (NEW AUTOMATIC TEMPERATURE CONTROL WORK)  |
|                                    | MECHANICAL CONTRACTOR SHALL PERFORM ALL WORK AS REQUIRED TO ACCOMPLISH THE FOLLOWING SEQUENCE<br>ROOM EQUIPMENT:   |
|                                    | NEW BOILERS SHALL BE CONNECTED TO THE EXISTING "ANDOVER" HEAD END AS REQUIRED TO ENABLE / DISABLE<br>OUTDOOR AIR TEMPERATURE. ALL BOILER ALARMS SHALL READ ANY ALARMS RELATED TO THE BURNER OR BOIL<br>HEAD END. NEW BOILERS SHALL BE MAPPED UP TO THE HEAD END FOR RUN STATUS INDICATION, BOILER TEMPE<br>OTHER THAN THE ABOVE, OPERATION OF THE BOILERS WILL BE DICTATED BY THE NEW BOILER LEAD / LAG PANEL<br>CONTROLS.   |
| 6 7 ADD ALT. #M-1                  | BOILERS SHALL BE LOCKED OUT ABOVE A GIVEN TEMPERATURE (60 DEG. NOM., ADJUSTABLE). BOILERS SHALL BE CYCLE) BELOW A GIVEN TEMPERATURE (34 DEG. NOM., ADJUSTABLE).  |
| 3 4" HWS                           | WORK SHALL INCLUDE ALL CONTROL WIRING, POWER WIRING, CONTROLLERS, SENSORS, SENSOR WELLS, ETC. AS<br>OPERATIONAL INSTALLATION.  |
| 15 CARBON MONOXIDE DETECTION PANEL |  |
|                                    | Note "CA" (BOILER ROOM COMBUSTION AIR CALCULATIONS)  |
|                                    | M.C. SHALL NOTE THAT THERE IS (1) EXISTING 20x12 COMBUSTION AIR DUCT LOCATION SHOWN ON THE BOILER ROO<br>REMAIN. ONE NEW DUCT & DAMPER @ 36x18 WILL BE INSTALLED. INTERLOCK (1) DAMPER MOTOR W/ NEW BURNER O<br>OPENS WHEN EITHER BURNER FIRES. PROVIDE A DAMPER "FULL OPEN" PROVING SWITCH WIRED IN SERIES W/ BOILI   |
| 1 LEAD / LAG PANEL                 | CODE TO PROVE DAMPERS FULL OPEN PRIOR TO ALLOWING BURNERS TO FIRE.   |
|                                    | DUCT SIZING INFORMATION:<br>TOTAL BOILER RM. INPUT (2 BURNERS @ 1,298 MBH IN EA.) = 2,596,000 BTU INPUT  |
|                                    | 2,596,000 / 3,000 = 865 SQ. IN. FREE AREA REQUIRED<br>EXISTING DUCT IS 20x12, YIELDING 240 SQ. IN. FREE AREA   |
|                                    | AN ADDITIONAL NEW DUCT / LOUVER WILL BE 36x18, YIELDING 648 SQ. IN. ADDITIONAL AREA.   |
|                                    | NEW DUCT WILL CONNECT TO A NEW SIDE WALL LOUVER @ 36x36, 55% FREE AREA, YIELDING 712 SQ. IN. FREE AF<br>TOTAL FREE AREA PROVIDED WILL BE 888 SQ. IN. FREE AREA   |
|                                    |  |
|                                    | Note "CC-1" (CLEANING, INSPECTION & REPAIR OF EXISTING CHIMNEY)  |
|                                    | UNDER THE MECHANICAL BASE BID, M.C. SHALL BE RESPONSIBLE FOR COMPLETELY CLEANING THE INTERIOR OF TH<br>CHIMNEY. UPON COMPLETION OF CHIMNEY CLEANING, M.C. SHALL PERFORM A FULL VIDEO INSPECTION OF EACH IN   |
|                                    | THE PRESENCE OF THE ENGINEER OR OWNER'S REPRESENTATIVE. UPON COMPLETION OF VIDEO INSPECTION, HAN<br>ENGINEER FOR REVIEW / REPAIR RECOMMENDATIONS. ANY INTERNAL CHIMNEY REPAIR / LINING WORK REQUIRED V<br>UPON COMPLETION, CHIMNEY SYSTEM SHALL COMPLY WITH THE MECHANICAL CODE OF NEW YORK STATE, SECTION   |
|                                    |  |
|                                    |  |
| G)                                 |  |
| SCALE: 1/4" = 1'-0"                |  |
|                                    |  |
|                                    |  |
|                                    |  |
|                                    |  |
|                                    |  |
|                                    |  |
|                                    |  |

| IOWN (2 TOTAL). THE NEW BOILER SHALL BE A "WEIL<br>9.4 GPH #2 OIL & A THERMAL EFFICIENCY RATING OF  |                           | Mechanical Demolition Notes  |
|---|---------------------------|--|
|   |                           | Under the base bid, MC shall disconnect hot water supply / hot water return / fuel oil piping / cold water piping / control wiring from the existing boiler #1. Drain heating  |
|   |                           | system to the extent required to remove boiler. Remove existing boiler / burner & properly discard. Existing concrete pad may remain. EC to disconnect / remove power wiring to each boiler / burner. Refer to dwg. #M4.02 for new work.<br>Under the base bid, MC shall disconnect & remove the existing boiler #1 breeching from point of connection at boiler to point of connection at vertical stack & shall dispose  |
|   |                           | Under the base bid, MC shall remove existing heating system HW supply & return piping to the extent shown (related to boiler #1), inclusive of all valves / fittings / controls  |
| RIC DRAFT CONTROLS W/ SPILL SWITCHES. MAIN  |                           | within said section of piping (related to boiler #1). Properly discard all debris / old demolished piping materials. Remove existing piping hangers. Refer to dwg. #M4.02 for new work.  |
| N-CHECK VALVES.<br>ENERGIZED  |                           | Under the base bid, MC shall remove the existing 3-way hot water reset valve & all related controls. Refer to dwg. #M4.02 for new work.<br>Under add alternate #M-1, MC shall disconnect hot water supply / hot water return / fuel oil piping / cold water piping / control wiring from the existing boiler #2. Drain   |
| DNTROL INTERLOCKS, ETC. AS REQ'D.<br>PERATURE LOCKOUT / LOW O.A. TEMP. "LOCK-ON" /  | (5)                       | heating system to the extent required to remove boiler. Remove existing boiler / burner & properly discard. Existing concrete pad may remain. EC to disconnect / remove power wiring to each boiler / burner. Refer to dwg. #M4.02 for new work.   |
| K PIPING / CONNECTIONS, NEW BLEND PUMPS &   | 6                         | Under add alternate #M-1, MC shall disconnect & remove the existing boiler #2 breeching from point of connection at boiler to point of connection at vertical stack & shall dispose of same. Vertical stack is to remain.  |
| C / MANUAL AIR VENTS, VALVES, FITTINGS, OIL PIPING,<br>I REGARDING THE BURNERS.   |                           | Under add alternate #M-1, MC shall remove existing heating system HW supply & return piping to the extent shown, inclusive of all valves / fittings / controls within said section of piping (related to boiler #2). Properly discard all debris / old demolished piping materials. Remove existing piping hangers. Refer to dwg. #M4.02 for new work. Under the base bid, MC shall remove existing gate valve.  |
|   | (8)                       | Under the base bid, MC shall remove the existing expansion tank(s). Remove all expansion tank piping & supports.   |
| TOMIZING GAS-OIL BURNERS AT THE LOCATIONS   |                           | Under the base bid, MC shall remove the existing fuel oil piping to the extent shown, including the "low" runs over to boiler #2. Disconnect from both burners. Remove all hangers & supports. Clean up any spilled oil & properly dispose of per code.  |
| EL WILL NOT BE REQUIRED FOR THE BURNERS AT THIS   |                           |  |
|   |                           | <ul> <li>Denotes point of disconnect</li> </ul>  |
|   |                           | — Denotes equipment / piping to be removed under the Base Bid.   |
| IE BURNER CONTROL CKT. IS "ON"  | -* -* -*                  | ← Denotes equipment / piping to be removed under add alternate #M-1  |
| IT FIRING RATE TO THAT SHOWN UNDER NOTE "HWB".  |                           |  |
| RE LOCKOUT, & CALL FOR HEAT. CONTROL PANEL<br>LECTOR / AUTO CHANGEOVER CONTROLS & SWITCH,<br>PROVIDE & INSTALL FUEL OIL PIPING & CONN. TO |                           |  |
| EM, BLEND PUMPS, & MANUAL EMERGENCY BOILER<br>EMOTE FUEL UNIT & REMOTE FUEL OIL TRANSFER<br>.VE A SINGLE CIRCUIT CONNECTION TO POWER EACH |                           | Mechanical Construction Notes  |
| D CIRCUIT PROVIDED & INSTALLED BY M.C.  |                           | Under the base bid, MC shall provide & install a new cast iron wet base boiler / burner at the location shown. Refer to Note "HWB" & Note "NB", this dwg. for further details  |
|   |                           | shall level the existing housekeeping pad & extend pad as required such that the pad extends beyond the boiler by 4" in all directions. Level pad as req'd. by the manufactu that it is suitable for mounting the new boiler. Provide new 4" butterfly valves at the supply & return locations. Provide & install new "Taco" #2400-70 blend pump, 208v / 3 1/2hp, 50 gpm @ 10' head. Provide new lead / lag panel & connection to same. Refer to Note "LL" for further info. Upon completion of boiler installation & all piping work, |
|   |                           | refill the system with water.<br>Under the base bid, MC shall provide a new burner for the new boiler shown. Refer to Note "NB" for further details. All electrical power wiring by the EC, including the burn   |
| PANEL FOR 120V, 1~<br>1) MTD. IN<br>DE NEMA 4   | 2                         | pump & the boiler blend pump. MC to provide starters for the oil pump(s), blend pump & burner fan within the boiler control panel. Burner to have a single point power com<br>Disconnect switch to be provided by the MC & wired by the EC. EC shall run power from the power source to the burner & from the burner to the oil pump, burner fan & ble<br>All control wiring is by the MC, whether line or low voltage. Extend existing oil piping to new burner & connect as shown in Detail "OP", dwg. #M4.02.                       |
| RELAYS FOR<br>COMBINATION HORN<br>DOM & (1) TO BE   | 3                         | Under the base bid, MC shall provide new hot water supply & return piping as shown. New piping to be sch. 40 screw pipe or welded. Provide pipe hangers as required. A piping to be insulated per the latest edition of the International Energy Code. Provide labels for all piping.  |
|   | 4                         | Under the base bid, MC shall provide new 10 ga. galvanized sheet steel breeching as shown. Connect to existing breeching at the location shown. Provide barometric dan end of breeching run. Insulate new & existing breechings & stack riser (to the extent possible) using minimum 2" thick mineral wool blanket & cover insulation w/ 22 ga. alu sheet.   |
|   | 5                         | Under the base bid, contractor shall provide & install (2) new bladder type expansion tanks at the locations shown. New tanks shall be "Taco" CA-215 units. Run new 1-1/2 from air elimination device / makeup water connection over to new tanks as shown. Reconnect CW makeup water line to the system & replace fill valve. Provide pressure of   |
|   |                           | either side of fill valve. Refer to detail, dwg. #M4.02 for further info.<br>Under add alternate #M-1, MC shall provide & install a new cast iron wet base boiler / burner at the location shown (boiler #2). Refer to Note "HWB" & Note "NB", this dwg.   |
| QUENCES OF OPERATION FOR THE BOILER   | 6                         | details. MC shall level existing housekeeping pad & extend as required such that the pad extends beyond the boiler by 4" in all directions. Level pad as req'd. by the manu such that it is suitable for mounting the new boiler. Provide new 4" butterfly valves at the supply & return locations. Provide & install new blend pump. Provide new lead / la connection to same. Refer to Note "LL" for further info. Upon completion of boiler installation & all piping work, MC shall refill the system with water.                  |
| DISABLE THE BOILERS BASED UPON<br>OR BOILER OPERATION UP TO THE EXISTING<br>R TEMPERATURE & HEADER TEMPERATURE.                           | 7                         | Under add alternate #M-1, MC shall provide a new burner for the new boiler shown (boiler #2). Refer to Note "NB" for further details. All electrical power wiring by the EC, i the burner oil pump & the boiler blend pump listed under item #1. MC to provide starters for the oil pump(s), blend pump & burner fan within the boiler control panel. Burne  |
|   |                           | a single point power connection. Disconnect switch to be provided by the MC & wired by the EC. EC shall run power from the power source to the burner & from the burne<br>pump, burner fan & blend pump. All control wiring is by the MC, whether line or low voltage. Extend existing oil piping to new burner & connect as shown in Detail "OP", dw<br>#M4.02.   |
| SHALL BE LOCKED "ON" (EVEN DURING NIGHT<br>S, ETC. AS REQUIRED FOR A COMPLETE &   | 8                         | Under add alternate #M-1, MC shall provide new hot water supply & return piping as shown (associated with boiler #2). New piping to be sch. 40 screw pipe or welded. Pro hangers as required. All new piping to be insulated per the latest edition of the International Energy Code. Provide labels for all piping.   |
|   | 9                         | Under add alternate #M-1, MC shall provide new 10 ga. galvanized sheet steel breeching as shown (for boiler #2). Connect to existing breeching at the location shown. Probarometric damper in end of breeching run. Insulate new & existing breechings using minimum 2" thick mineral wool blanket & cover insulation w/ 22 ga. aluminum sheet.  |
|   | 10                        | Under the base bid, MC shall provide & install new fuel oil piping from the point of connection to the existing lines at boiler room ceiling (shown) to new boiler #1. Run new of Boiler #2 under the base bid, (whether boiler is replaced or existing to remain.   |
|   |                           | Under the base bid, the MC shall provide & install a new 2" dia. 3-way hot water reset valve at the location shown. New valve shall be electronically controlled & shall be su use w/ the existing building "Andover" BMS. MC to provide all fitting, wiring & programming as require dto install the valve & map it up to the BMS head end. Provide DDC to read boiler inlet water temperature, boiler return water temperature & 3-way valve discharge temperature.  |
| ER ROOM PLAN, WHICH IS EXISTING TO<br>URNER OPERATION SUCH THAT THE DAMPER<br>W/ BOILER LIMIT CONTROLS AS REQ'D. BY                       | 12<br>(13)                | Under the base bid, MC shall provide & install a new 4" O.S.&Y. type gate valve in piping at the location shown.<br>Under the base bid, MC shall provide & install a new pressure reducing / fill valve station at the nominal location shown. Refer to detail #1, dwg. #M4.02 for further informat  |
| W/ BOILER LIMIT CONTROLS AS REQ D. BT   |                           | MC shall provide & install a new 36x18 combustion air intake duct at the location shown. The new duct shall be run tight to the corridor ceiling. At Boiler Room end, provide a new 36x18 damper & a damper "full open" proving switch wired into burner(s) limit ckt. such that the damper opens fully whenever either burner fires. Provide new "  |
|   |                           | rated fusible link fire damper at location where duct passes through boiler room wall. Provide access door in duct to service damper fusible link. Run duct down the corrido transition to 36x36 & connect to new louver at foundation wall. Boiler room wall opening / foundation wall opening & related firestopping by the GC.  |
|   |                           | MC shall provide & install a new carbon monoxide monitoring / alarm system. Refer to note "LD" for further details.  |
|   |                           | Denotes point of connection between new & existing   |
| FREE AREA   |                           |  |
|   |                           | te "BB" (NEW WELDED BLACK IRON INSULATED BREACHING SYSTEM)   |
|   | EXIS <sup>-</sup><br>INSU | HANICAL CONTRACTOR SHALL PROVIDE & INSTALL MODIFICATIONS TO THE EXISTING BREACHING SYSTEM, INCLUDING NEW STUBS FROM NEW &<br>TING BOILERS & WATER HEATER UP TO EXISTING MAIN STACK AS SHOWN. NEW BREACHING SYSTEM SHALL BE A WELDED 10 GA. BLACK IRON /<br>LATED SYSTEM USING 2" MIN. OF HIGH TEMPERATURE MINERAL WOOL INSULATION ON THE OUTER WALL. MINERAL WOOL SHALL BE WRAPPED IN 20<br>BRUSHED ALUMINUM SHEET. CONTRACTOR SHALL PROVIDE ALL FITTINGS / TEES, BAROMETRIC DAMPERS, SUPPORTS, ETC. AS REQUIRED FOR A                 |
|   | СОМ                       | PLETE & OPERATIONAL INSTALLATION. BAROMETRIC DAMPERS SHALL BE MOUNTED ON 18"~ MIN. TEE EXTENSION. REFER TO THE FLOOR PLAN FOR<br>FING OF NEW BREACHING SYSTEMS.  |
| DR OF THE EXISTING STEEL / MASONRY  |                           |  |
| EACH INTERNAL WALL OF THE CHIMNEY IN<br>ION, HAND VIDEO TAPE OVER TO THE<br>QUIRED WILL BE PERFORMED BY THE OWNER.                        | No                        | te "LL" (NEW BOILER LEAD / LAG SYSTEM)   |
| SECTION 801.18.   |                           | IANICAL CONTRACTOR SHALL PROVIDE & INSTALL A NEW "POWER FLAME" SYNC-MATIC HMI LEAD-LAG CONTROLLER FOR THE NEW BOILER SYSTEM.   |
|   | NEW                       | LEAD-LAG PANEL SHALL HAVE THE FOLLOWING FUNCTIONS:   |
|   | PRC                       | DVIDE MANUAL / AUTOMATIC MODULATING CONTROL FOR EA. BOILER TO CONTROL FIRING RATE THAT WILL OPERATE IN CASE OF LEAD / LAG SEQUENCER FAILURE. SYSTEM<br>ALL DISPLAY FIRING RATE ACTUATOR POSITION & CONTROL CAPABILITY RATIO, DEAD BAND & PROPORTIONAL ACTION. TRANSFER FROM SEQUENCING TO MANUAL CONTROL   |
|   | SHA                       | ALL OCCUR AUTOMATICALLY IN THE EVENT OF CPU FAILURE.   |
|   | BOI                       | LER.<br>WIDE ASSURED LOW FIRE WARM UP & LOW FIRE SHUT DOWN FROM PROOF OF POSITION CONTACTS THAT ARE REQUIRED ON THE FIRING RATE ACTUATORS.   |
|   |                           |  |
|   | SYS                       | LEAD / LAG INTO BUILDING TEMPERATURE CONTROL SYSTEM TO ALLOW LOCKOUT OF BOILERS ABOVE A SELECTED OUTDOOR AIR TEMPERATURE OR TO ALLOW NIGHT CYCLE<br>TEM SHUTDOWN. NIGHT SHUTDOWN SHALL BE OVERRIDDEN AT OUTDOOR AIR TEMPERATURES BELOW A GIVEN SETPOINT (PROGRAMMABLE).<br>D / LAG SYSTEM SHALL BE ABLE TO AUTOMATICALLY ALTERNATE THE LEAD POSITION BETWEEN BOILERS FOR A PROGRAMMABLE TIME PERIOD IN ORDER TO FOUALIZE RUN TIME  |
|   | ON                        | D / LAG SYSTEM SHALL BE ABLE TO AUTOMATICALLY ALTERNATE THE LEAD POSITION BETWEEN BOILERS FOR A PROGRAMMABLE TIME PERIOD IN ORDER TO EQUALIZE RUN TIME<br>THE EQUIPMENT.<br>IERAL SEQUENCE OF OPERATION: UPON SYSTEM ENABLE, THE L/L SYSTEM SHALL START THE FIRST BOILER AT PROVEN LOW FIRE. 1st. BOILER SHALL MODULATE UP TO HIGH   |
|   | FIRE<br>AT F              | TO MEET DEMAND. IF THE 1st. BOILER IS UNABLE TO MEET THE DEMAND WITHIN A SPECIFIED AMOUNT OF TIME, THE L/L SYSTEM SHALL COMMAND THE NEXT BOILER TO START<br>PROVEN LOW FIRE. SYSTEM SHALL MODULATE BOILER #2 (ETC.) UP AS REQUIRED TO MEET THE LOAD. AS THE SYSTEM APPROACHES HEADER TEMPERATURE SET POINT, THE<br>TEM SHALL MODULATE ALL BOILERS DOWN TOWARD LOW FIRE IN UNISON. IF THIS IS STILL TOO MUCH INPUT, THE SECOND BOILER SHALL BE PROGRAMMED OFF (& THEN THE   |
|   | FIRS                      | ST WHEN SYSTEM REACHES TEMPERATURE SETPOINT. ONCE A BOILER HAS SHUT DOWN, IT SHALL REMAIN OFF UNTIL THERE IS A CALL TO START. UPON A CALL TO START, THE<br>ITEM SHALL HAVE A PROGRAMMABLE TIME DELAY (1 - 60 MIN.) WHICH WILL AUTOMATICALLY DELAY THE START OF THE BOILER FOR AT LEAST 5 MIN. BEFORE ALLOWING THE<br>LER TO START. IT SHALL BE IMPOSSIBLE FOR TWO BOILERS TO START SIMULTANEOUSLY.   |
|   | LEA                       | D-LAG SYSTEM SHALL BE FURNISHED WITH COUNTER OPTIONS FOR BOILER CYCLE AND BOILER HOURS.  |
|   | LEA                       | D/LAG CONTROLS SHALL OPERATE SUCH THAT UNDER NO CIRCUMSTANCES SHALL (2) BOILERS START CONCURRENTLY.  |

