CSARCH

Addendum No. 2

Date: 05-06-2024
Project Name: NECSD – New CTE Building
CSArch Project No. 108-2303
SED Control No. 44-16-00-01-0-053-001

This Addendum No. 2 forms part of the Contract Documents and modifies the original bidding documents dated April 15, 2024. Addendum No. 2 consists of 5 pages, 15 specification sections, and 75 drawings.

REGISTRATION EXPIRATION DATE: 12/31/2026
Architect's Seal

GENERAL INFORMATION

1. RFI Log: RFI questions and answers are included as an attachment to this addendum.
2. Pre-Bid meeting agenda and sign-in sheet are included as an attachment to this addendum.

REVISIONS TO THE PROJECT MANUAL

1. **DELETE** specification section 002113. **ADD** revised specification 002113 Instruction to Bidders in its entirety, attached.
2. **DELETE** specification section 003113.01. **ADD** revised specification 003113.01 Milestone Schedule in its entirety, attached.
3. **DELETE** specification section 004116.01. **ADD** revised specification 004116.01 Bid Form Contract No 1. – General Construction (GC-01) in its entirety, attached.
4. **DELETE** specification section 011200. **ADD** revised specification 011200 GC Summary of Work in its entirety, attached.
5. **DELETE** specification section 011200.01. **ADD** revised specification 011200.01 Responsibility Matrix in its entirety, attached.
6. **DELETE** specification section 012100 **ADD** revised specification 012100 Allowances in its entirety, attached.
7. **DELETE** specification section 015001. **ADD** revised specification 015001 Temporary Facilities & Controls - GC Contracts in its entirety, attached.
8. **DELETE** specification section 015002. **ADD** revised specification 015002 Proposed Site Logistics Plan in its entirety, attached.
9. **DELETE** specification section 042200. **ADD** revised specification 042200 Structural Unit Masonry in its entirety, attached.
10. **DELETE** specification section 083473. **ADD** revised specification 083473 Sound Control Door Assemblies in its entirety, attached.
11. **DELETE** specification section 087100. **ADD** revised specification 087100 Door Hardware in its entirety, attached.

12. **DELETE** specification section 142100. **ADD** revised specification 142100 Electric Traction Elevators in its entirety, attached.
13. **DELETE** specification section 224000. **ADD** revised specification 224000 Plumbing Fixtures and Trim in its entirety, attached.
14. **DELETE** specification section 275113. **ADD** revised specification 275113 Public Address System in its entirety, attached.
15. **DELETE** specification section 281350. **ADD** revised specification 281350 Door Access Control System in its entirety, attached.

REVISIONS TO THE CONTRACT DRAWINGS

1. **DELETE** drawing C120. **ADD** revised drawing C120, attached.
2. **DELETE** drawing C150. **ADD** revised drawing C150, attached.
3. **DELETE** drawing C151. **ADD** revised drawing C151, attached.
4. **DELETE** drawing C180. **ADD** revised drawing C180, attached.
5. **DELETE** drawing C232. **ADD** revised drawing C232, attached.
6. **DELETE** drawing S002. **ADD** revised drawing S002, attached.
7. **DELETE** drawing S003. **ADD** revised drawing S003, attached.
8. **DELETE** drawing S101. **ADD** revised drawing S101, attached.
9. **DELETE** drawing S102. **ADD** revised drawing S102, attached.
10. **DELETE** drawing S103. **ADD** revised drawing S103, attached.
11. **ADD** drawing S104, attached.
12. **ADD** drawing S105, attached.
13. **DELETE** drawing S121. **ADD** revised drawing S121, attached.
14. **DELETE** drawing S122. **ADD** revised drawing S122, attached.
15. **DELETE** drawing S123. **ADD** revised drawing S123, attached.
16. **DELETE** drawing S132. **ADD** revised drawing S132, attached.
17. **DELETE** drawing S133. **ADD** revised drawing S133, attached.
18. **DELETE** drawing S143. **ADD** revised drawing S143, attached.

19. **DELETE** drawing S201. **ADD** revised drawing S201, attached.
20. **DELETE** drawing S301. **ADD** revised drawing S301, attached.
21. **DELETE** drawing S303. **ADD** revised drawing S303, attached.
22. **DELETE** drawing S305. **ADD** revised drawing S305, attached.
23. **DELETE** drawing S307. **ADD** revised drawing S307, attached.
24. **DELETE** drawing S308. **ADD** revised drawing S308, attached.
25. **DELETE** drawing S501. **ADD** revised drawing S501, attached.
26. **DELETE** drawing S502. **ADD** revised drawing S502, attached.
27. **DELETE** drawing S503. **ADD** revised drawing S503, attached.
28. **DELETE** drawing A111. **ADD** revised drawing A111, attached.
29. **DELETE** drawing A112. **ADD** revised drawing A112, attached.
30. **DELETE** drawing A122. **ADD** revised drawing A122, attached.
31. **DELETE** drawing A132. **ADD** revised drawing A132, attached.
32. **DELETE** drawing A502. **ADD** revised drawing A502, attached.
33. **DELETE** drawing A601. **ADD** revised drawing A601, attached.
34. **DELETE** drawing A604. **ADD** revised drawing A604, attached.
35. **DELETE** drawing A902. **ADD** revised drawing A902, attached.
36. **DELETE** drawing A904. **ADD** revised drawing A904, attached.
37. **DELETE** drawing AF112. **ADD** revised drawing AF112, attached.
38. **DELETE** drawing AF113. **ADD** revised drawing AF113, attached.
39. **DELETE** drawing P001. **ADD** revised drawing P001, attached.
40. **DELETE** drawing P101. **ADD** revised drawing P101, attached.
41. **DELETE** drawing P112. **ADD** revised drawing P112, attached.
42. **DELETE** drawing P301. **ADD** revised drawing P301, attached.

43. **DELETE** drawing M112. **ADD** revised drawing M112, attached.
44. **DELETE** drawing M113. **ADD** revised drawing M113, attached.
45. **DELETE** drawing M123. **ADD** revised drawing M123, attached.
46. **DELETE** drawing M133. **ADD** revised drawing M133, attached.
47. **DELETE** drawing M902. **ADD** revised drawing M902, attached.
48. **DELETE** drawing E111. **ADD** revised drawing E111, attached.
49. **DELETE** drawing E112. **ADD** revised drawing E112, attached.
50. **DELETE** drawing E113. **ADD** revised drawing E113, attached.
51. **DELETE** drawing E133. **ADD** revised drawing E133, attached.
52. **DELETE** drawing E211. **ADD** revised drawing E211, attached.
53. **DELETE** drawing E212. **ADD** revised drawing E212, attached.
54. **DELETE** drawing E213. **ADD** revised drawing E213, attached.
55. **DELETE** drawing E221. **ADD** revised drawing E221, attached.
56. **DELETE** drawing E222. **ADD** revised drawing E222, attached.
57. **DELETE** drawing E223. **ADD** revised drawing E223, attached.
58. **DELETE** drawing E233. **ADD** revised drawing E233, attached.
59. **DELETE** drawing E701. **ADD** revised drawing E701, attached.
60. **DELETE** drawing E702. **ADD** revised drawing E702, attached.
61. **DELETE** drawing E902. **ADD** revised drawing E902, attached.
62. **DELETE** drawing E903. **ADD** revised drawing E903, attached.
63. **DELETE** drawing E905. **ADD** revised drawing E905, attached.
64. **DELETE** drawing FA111. **ADD** revised drawing FA111, attached.
65. **DELETE** drawing FA112. **ADD** revised drawing FA112, attached.
66. **DELETE** drawing FA113. **ADD** revised drawing FA113, attached.

67. **DELETE** drawing FA121. **ADD** revised drawing FA121, attached.
68. **DELETE** drawing FA123. **ADD** revised drawing FA123, attached.
69. **DELETE** drawing T001. **ADD** revised drawing T001, attached.
70. **DELETE** drawing T111. **ADD** revised drawing T111, attached.
71. **DELETE** drawing T112. **ADD** revised drawing T112, attached.
72. **DELETE** drawing T113. **ADD** revised drawing T113, attached.
73. **DELETE** drawing T122. **ADD** revised drawing T122, attached.
74. **DELETE** drawing T133. **ADD** revised drawing T133, attached.
75. **DELETE** drawing T500. **ADD** revised drawing T500, attached.

END OF ADDENDUM NO. 2

Newburgh ECSD - New CTE Building
Date: 5/3/2024

ITEM NO.	DISCIPLINE	SUBJECT	RFI	DATE	FROM	RESPONSE	ADDENDUM ITEM	DRAWING NUMBER(S)	SPEC SECTION/ ARTICLE	ADDENDUM NUMBER
1	A	Elevator	1. Drawing A502 and the Division 14 specification do not align, the specifications call for a 3500lb elevator with a 36" wide door opening and the drawings seem to show a 5000lb elevator with a 54" door opening. Which one is correct? Please note, if a 5000lb car is desired here we recommend increasing the clear hoistway width to 8'-0" and the pit depth will need to increase to 5'-0" for either car. 2. The specifications call for a Lobby monitoring panel, this is not typically seen on a single 3 stop elevator and would add a lot of additional cost nor is it required by code. Please advise if this is actually required? 3. The specifications call for a plastic laminate on plywood ceiling. We can provide a brushed stainless-steel ceiling which is a standard option. Please advise if this is acceptable? 4. Please confirm what the voltage supply to the elevator will be. The electrical drawings are not clear on this. Is it 208V or 480V?	4/24/2024	Darlind Associates, Inc.	1. Elevator should be Otis Gen3 Edge 4000 lbs service elevator or equal. Door width opening shall be 48" wide. Pit depth will be 5'-0". Clear hoistway to remain 7'-10" x 10'-9" as shown on drawing A502. 2. Lobby Monitoring Panel is not required. 3. Brushed Stainless Steel ceiling is acceptable. 4. Voltage supply is 480V. Provided as part of addendum #2	Yes	S502, A112, A122, A132, A502	142100	Add #2
2	E	PA System	The attached specification lists Care Hawk as the basis of design for your projects. The specification also indicates that an alternate manufacturer be submitted 15 days prior to the bid date. With this in mind, I would like to request the approval of our Telecor eSeries Platform as an acceptable alternate to the specified Care Hawk design. Please let me know if you require any additional information and also be advised that I am available to present a complete system demonstration at your office or the district office if requested. Thank you and I look forward to your response.	4/29/2024	Telecor	As per Spec Section 012519- Equivalents, article 1.2, E and G; Requests for Architect approval of proposed equivalents prior to the bid date will only be reviewed if the request is submitted directly by the contractor submitting a bid.	No			
3	M	Duct Silencers	Silencer Schedule : Please provide duct silencer schedule?	4/30/2024	ACS Systems Associates, Inc.	Provided as part of future addendum	Yes			Future Add
4	M	Controls & BMS	Controls /BMS : Please provide existing BMS details if any?	4/30/2024	ACS Systems Associates, Inc.	There are no existing BMS details to share at this time.	No			
5	G	Project Schedule	Duration : Kindly provide duration of project- Start/End date?	4/30/2024	ACS Systems Associates, Inc.	Provided as part of addendum #2	Yes		003113.01	Add #2

6	A	Wood Athletic Flooring	Attached please find Action Floor Systems Anchor Flex DIN-PUR floor system submitted for consideration as an equal to Robbins Bio Channel Star as covered under Section 096566 - Wood Athletic Flooring Anchor Flex DIN-PUR system uses 6 mil polyethylene vapor barrier, factory fabricated 3/4" plywood sub-floor system with 5/8" continuous foam resilient layer and 25/32" x 2 1/4" 1st grade ER (expansion ridge) MFMA - maple strip flooring. Specification, cut sheet, system data sheet, MFMA PUR and DIN certification and substitution request form attached. Thank you for your consideration in this substitution request.	4/30/2024	Action Floor Systems	As per Spec Section 012519- Equivalents, article 1.2, E and G; Requests for Architect approval of proposed equivalents prior to the bid date will only be reviewed if the request is submitted directly by the contractor submitting a bid.	No			
7	G	Instructions to Bidders	Instructions to bidders indicate Labor Rates to be submitted with bid. However the actual Bid Form does not list Labor Rates as a required attachment. Please clarify if the complete prevailing and union labor rates schedules are required to be submitted in duplicate with the bid.	4/30/2024	Worth Construction Co., Inc.	Labor Rates will not be required at bid submission. Spec. Section 002113 Instruction to Bidders Sub paragraph 4.3 Item D.3 has been updated to reflect. This requirement has been removed from Spec. Section 002113 Instruction to Bidders Sub paragraph 4.3 Item D.3. Refer to addendum #2 attachment for more information. If contractor is deemed to be the lowest apparent bidder, labor rate sheets will be required per sub paragraph 6.2 item A.2 within (3) calendar days following the bid opening time.	Yes		002113	Add #2
8	G	Instructions to Bidders	Instructions to bidders indicate the bids shall be submitted in duplicate. The Advertisement for Bids indicates a single copy submitted by bid time with one copy emailed no later than the next day. Please clarify.	4/30/2024	Worth Construction Co., Inc.	What is outlined in the Advertisement for Bids is correct. Revision to the Instruction to Bidders has been provided as part of addendum #2.	Yes		002113	Add #2
9	C	Sheet Error	Drawing C180 pdf file does not print correctly. Please provide another file.	4/30/2024	Worth Construction Co., Inc.	Provided as part of addendum #2	Yes	C180		Add #2
10	A	Equipment List	The equipment list is understood but incomplete. It is fine for equipment positioning and electrical requirements, but there is specific information missing that is required for an accurate quote. There are accessories for the brake lathe and the wheel balancers that aren't included on the plans but are typically required to be included in the price quote. For example, the wheel alignment system, described on the plan as "head unit", HE421, is incomplete. There are several configurations available for a wheel alignment system. HE421 just describes the measuring sensor type, but does not include the console which houses the PC, monitor, printer, etc. There are options for the wheel alignment lift, RX12 that might be beneficial in a student learning environment but are not indicated. Please review the contractor required equipment lists and clarify which accessories should be included in the bid.	4/30/2024	Worth Construction Co., Inc.	Provided as part of future addendum	Yes			Future Add
11	A	Door Hardware	Door Schedule Dr. A904 door #305A, 305B should be “acoustical with STC rating: 6.1 hardware 48”. However, specs for hardware 08 71 00 stated Set:48 by MFG. Since there is variety of hardware, please be more specific what Set:48 should be.	4/30/2024	Worth Construction Co., Inc.	Provided as part of addendum #2.	Yes		083473, 084700	Add #2

12	A	Casework	Please advise if millwork in office 100C, D, F, H storage 100K, office 129A (Dr. A606, A620) should be included, since no elevations / details shown.	4/30/2024	Worth Construction Co., Inc.	As per "GENERAL NOTE #6: ALL FURNITURE SHOWN AS HALFTONE IS NOT IN CONTRACT." What is shown in office 100C, D, F, H, 100K storage, and office 129A is furniture and should **NOT** be included in your bid.	No			
13	A	Casework	Please identify classrooms which receive Manufactured Wood Casework 12 32 00. Drawings are not clear which casework is div. 06 and which is div. 12. Please clarify.	4/30/2024	Worth Construction Co., Inc.	Section 064100 is for specialty fabricated cabinet units as detailed on A651 & A652. Section 123200 is for standard casework tagged with the casework tag as indicated within the "CASEWORK NOTES" on drawings A601 thru A635.	No			
14	AF	Finish Drawings	First floor finish plans dr. AF112 & AF113 shown heavy stipes at the multiple locations. Please explain and provide requirements for that.	4/30/2024	Worth Construction Co., Inc.	Provided as part of addendum #2	Yes	AF112, AF113		Add #2
15	P	Oil Separator / Grease Interceptor	As per drawing P-301 please provide sizes for oil separator and grease interceptor.	4/30/2024	Worth Construction Co., Inc.	Provided as part of addendum #2	Yes	P301		Add #2
16	P	Lavatories	As per schedule on drawing P-001, LV-a, b &c schedule is 1, 3 & 4 stations. Written spec show 1, 2 & 3 stations. Please advise.	4/30/2024	Worth Construction Co., Inc.	Provided as Part of addendum #2	Yes	P001	224000	Add #2
17	G	3d Model	Is there a 3D model of this building available?	5/1/2024	Rizzo Companies	There is a 3d model, but it is **NOT** part of the bidding documents. The model can be shared with the contractor once the contract is awarded.	No			
18	G	Instructions to Bidders	Section 00 21 13 "Instructions to Bidders" page 9 - 4.3/D reads "Bids shall be submitted in duplicate". Section 00 11 16 "Advertisements for Bids" page 1 reads "One copy of sealed bids…." and "One copy of bid in PDF format…". Please clarify if the sealed bid shall include two (2) hard copies of the bid submission, in addition to a PDF copy of the bid emailed the next day.	5/1/2024	EW Howell Construction Group	What is outlined in the Advertisement for Bids is correct. Revision to the Instruction to Bidders has been provided as part of addendum #2.	Yes		002113	Add #2
19	G	Instructions to Bidders	Section 00 21 13 "Instructions to Bidders" pages 9-10 - 4.3/D lists a series of documents for bid submissions to be considered a complete bid. This list differs from the list provided on the Addendum #1 Bid Form GC-01, page 3. Please clarify which list shall be followed for submitting a complete bid.	5/1/2024	EW Howell Construction Group	Labor Rates will not be required at bid submission. Spec. Section 002113 Instruction to Bidders Sub paragraph 4.3 Item D.3 has been updated to reflect. This requirement has been removed from Spec. Section 002113 Instruction to Bidders Sub paragraph 4.3 Item D.3. Refer to addendum #2 attachment for more information. If contractor is deemed to be the lowest apparent bidder, labor rate sheets will be required per sub paragraph 6.2 item A.2 within (3) calendar days following the bid opening time.	Yes		002113	Add #2
20	G	MWBE	V1 Specifications provided with the bid documents does not identify MWBE Requirements and/or MWBE Participation Goals for the project. Please advise if any MWBE Participation Goals have been set for this project.	5/1/2024	EW Howell Construction Group	Response Pending, open RFI				
21	G	CSArch Plan Room	CS Arch Plan Room website used for Bid documents & Addenda identifies a planholder list, where one name/contact is listed under the company as a main contact. This contact receives email notification of any new posted addenda. Please advise if it's possible to have another contact added to this list, so that they may receive email notification of any new posted addenda.	5/1/2024	EW Howell Construction Group	Please reach out to Vincent@revplans.com for support.	No			
22	G	Insurance Requirements	V1 Specifications do not call out a set of specific insurance requirements for the project. Please provide a document for insurance requirements if any are set for this project.	5/1/2024	EW Howell Construction Group	Refer to AIA A232 General Conditions, Article 11 for the specific insurance requirements for this project.	No			

23	A	Wood Athletic Flooring	Attached please find the substitution request and product data for your consideration of approval for the above project. Aacer Channel VLP HC flooring by Aacer Sports Flooring is being submitted as an equal to Bio-Channel Star flooring by Robbins Sports Surfaces. The Aacer Channel VLP HC has the same component configuration as the products specified. Approval of Aacers Floor System will not affect the design, schedule, or other trades and local installation and service are available. Please visit www.aacerflooring.com and learn more about our maple floor systems. We appreciate your time and consideration, please feel free to contact me if you have questions or require additional information.	5/1/2024	Aacer Sports Flooring	As per Spec Section 012519- Equivalents, article 1.2, E and G; Requests for Architect approval of proposed equivalents prior to the bid date will only be reviewed if the request is submitted directly by the contractor submitting a bid.	No			
24	M	HVAC Controls	SPECIFICATION 012100-1.8-"B.1A" STATES HVAC CONTROLS WILL BE PROVIDED BY OWNER UNDER A SEPARATE CONTRACT AND THE MC-02 CONTRACT IS TO PROVIDE STAND ALONE CONTROLS FOR MECHANICAL SYSTEM. PLEASE ADVISE IF THE OWNER HAS ASSIGNED A HVAC BAS CONTRACTOR AND IF THIS INFORMATION IS AVAILABLE, WE WOULD LIKE TO CONTACT THEM FOR COORDINATION AND RECEIVING A PROPOSAL FOR STAND-ALONE CONTROLS.	5/1/2024	Joseph Lombardo Plumbing, Heating & Cooling, Inc.	At this time it is the owners intent to use Day Automation for the HVAC controls.	No			

Jacobs

NECSD Bid Walk-Through Sign in Sheet

Date: 4/29/2024

Time: 3:00 pm.

Project / location: New CTE Building

Name	Company	Title/Work Classification	Email Address	Signature
Ben Alling	Jacobs Project Manager	Project Manager	ben.alling@jacobs.com	
JOE METZGER	CSARCH	ARCHITECT	JMETZGER@CSARCHPC.COM	
Mike Higgins	OCS Industries	Estimator	Jdowley@ocsindustries.com	
Jim Sass III	J+J Sass Electric	Estimator	Jimsass3@JJSassc.com	
Pat Mastropolo	Prismatic	Proj. Manager	pmastropolo@prismdev.com	
Alexandra Garrity	CSArch	Architect	agarrity@csarchpc.com	
Tom Ritzenthaler	CSArch	Architect	tritzenthaler@csarchpc.com	
Peter Fiedler	Dartland Associates, Inc	GC	pfiedler@dartlandassociates.com	
Brittney Boult	HM Rizzo	Estimator	BBoult@Rizzocompanies.com	
BRUCE MCFARLANE	RKL LIGHTING	LIGHTING SUPPLIER	BRUCE@RKLLIGHTING.COM	
Rob Lockyer	SOUNDVIEW SHEET METAL	ESTIMATING / PM	RLOCKYER@SOUNDVIEWMETAL.COM	
Paul Imbriale	EW Howell Co. LLC	Estimator / PM	pimbriale@ewhowell.com	
Jorden C. Ely	Premier - Argenio	President	Jorden@PremierGNY.com	
Robert Armistead	Armistead Mechanical	Project Engineer	Rwarmistead@Armistead-ny.com	
Travis Klemm	Armistead Mech	Estimator	TimKlemm@armistead-ny.com	
DAJ SALVATORE	PC CONSTRUCTION	PROJ. SUPER	DSALVATORE@PCCONSTRUCTION.COM	
Steve Salerno	Bovis Construction Group	Site	SteveSalerno@bovis.com	
Mark Pellandi	Worth Construction	Estimator	Chiefestimator@deallarchitects.com	
Matt Kane	WHITING-TURNER	SR PM	matthew.kane@whiting-turner.com	
Lara Crete	Whiting-Turner	Project Manager	lara.crete@whiting-turner.com	
MARK ZYCH	PIKE CONSTRUCTION SVC.	PROJ. EXEC	MZych@pikecs.com	
Scott Sullivan	Day Automation	Account Exec.	Scott.Sullivan@dayautomation.com	

Jacobs

NECSD Bid Walk-Through Sign in Sheet

Date: 4/29/2024

Time: 3:00 pm.

Project / location: New CTE Building

Name	Company	Title/Work Classification	Email Address	Signature
Rocco DiMaiolo	Dobco inc	Project engineer	estimating@dobcogroup.com	
Patrick Mitchell	Passero Assoc.	Project Manager	pmitchell@passero.com	
John Gjokaj	RK Roofing	Estimator	Johngjokaj@rkroofers.com	
Thomas Gobbi	PBC	Estimator	estimating@pbcinc.co	
Joel Granulet	NECSD			

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CTE Agenda Items Pre-Bid Conference Walk Through

Project Team Introduction:

Newburgh Enlarged City School District
-Kimberly Rohring (Assistant Superintendent for Finance/CFO)
-Lori Gonzalez (Capital Projects Manager)
-Andy Velez (Directory of Facilities)

CSArch
-Tom Ritzenthaler (Executive Principal)
-Richard Peckham (Executive Principal)
-Joseph Metzger (Project Manager)

Jacobs Project Managers
-David LaTour (Project Executive)
-James Levato (Senior Project Manager)
-Ben Alling (Senior Project Manager)

Agenda Items:

1. Please make sure to sign-in on the sign-in sheet being passed around.
2. This project has a PLA please read through the PLA and familiarize yourself with this document.
3. Per the PLA Contractors must participate in an Apprentice Program. Please become familiar with these requirements.
4. This project was recently changed to a Single Prime Contract last week via addendum #1.
5. Under a Single Prime Contract, Contractors need to have the bonding capacity for the total project.
6. Review PLA for contractor work hours.
7. Preliminary Site logistics Plan was included in the Project Manual. Contractors to make note of this.
8. Per Milestone schedule included in the Project Manual the date of Final Completion of Construction which include Substantial Completion and Punchlist is July 31st, 2026. Owner will be moving in and setting up the entire month of August and there will be no contactor work allowed in the building during this period.
9. Contractor and Surety are bound to the Owner in the amount set forth for the Bond Amount. Review the language in the AIA A310 Bid Bond requirements.
10. Contractors to familiarize themselves with the Prime Contractor Summary specification. The Multi Prime Contract Summary will be updated in a forth coming addendum to reflect Single Prime Contract Summary.

11. Make note in Contract Summary Owner furnished, Contractor Coordinated Items:
    - Daikin Mechanical Equipment
    - Mechanical Controls
    - Fire Alarm Devices
    - Security Devices
    - Other equipment identified as owner furnished in Architectural Drawings equipment schedules
    - Promethean Boards
    - Furniture
12. Forth coming Bid Addendum #2 will be issued.
13. All Bidder questions must be formally RFI'd per the instruction to bidders.
14. We will visit and walk the project site today to review existing site conditions and strongly recommended contracts attend this walk.
15. For anyone who has not picked up documents they are available at csarchplanroom.com

DOCUMENT 002113 - INSTRUCTIONS TO BIDDERS

PART 1 – DEFINITIONS

A. Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Invitation to Bid, Instruction to Bidders, the Bid Form, Supplementary Bid Forms and other sample bidding and contract forms.

B. The proposed Contract Documents include the Contract Forms between the Owner and Contractor, Contractor's executed Bid Form and executed Supplementary Bid Forms, Conditions of the Contract (General, supplemental, and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.

C. Definitions set forth in the General Conditions of the Contract of Construction, or in other Contract Documents are applicable to the Bidding Documents.

D. Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

E. 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.

1. Wherever the word "Bid" occurs in the documents, it refers to the Bidder's Proposal.

F. The Base Bid is an amount stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents.

G. An Alternate is an amount stated on the Bid Form to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

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

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

1. 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.

PART 2 – BIDDER'S REPRESENTATIONS

A. The Bidder by making a Bid represents that:

1. The Bidder has read and understands the Bidding Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being Bid concurrently or presently under construction.
2. The Bid is made in compliance with the Bidding Documents.
3. The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.
   a. Bidders may visit the existing site by making prior arrangements with Thomas Ritzenthaler, CSArch at 845-561-3179.
4. The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.
5. 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.

B. Each Bidder is required to form an individual opinion of the quantities and character of construction work by personal examination of the site and all existing facilities where the project work is to be done, and of the plans and specifications relating to it by such means as is preferred. Each Bidder shall inspect accessible concealed areas of existing construction, provided no significant permanent damage is inflicted upon the property. Lack of knowledge about conditions in accessible concealed areas shall not be the basis for additional cost claims at a later time.

C. 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.

D. 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.

PART 3 – BIDDING DOCUMENTS

3.1 COPIES

A. It is the intention of this Project to be both environmentally and fiscally conscious of paper use and consumption. Therefore, documents will be distributed as digital sets in PDF format. Bidding Documents, Drawings, and Specifications, may be viewed online free of charge beginning on **April 15, 2024**, at www.csarchplanroom.com or www.usinglesspaper.com under Public Projects or

electronically downloaded for a non-refundable charge of one-hundred dollars ($100.00.)

1. Please note, in order to access online documents and information, a log in is required. New users can create a free online account upon visiting site by clicking "Register for an Account."

B. Complete sets of Bidding Documents, Drawings, and Specifications, in PDF format (not CAD format) on compact disc (CD) may be obtained from Rev, 28 Church Street, Unit #7, Warwick, NY 10990 Tel: (877) 272-0216, upon depositing the sum of one hundred dollars ($100.00) for each combined set of documents. Checks or money orders shall be made payable to Newburgh Enlarged City School District.

1. Deposit is refundable in accordance with the terms in the Instructions to Bidders to all submitting bids. Any Bidder requiring CD(s) to be shipped shall make arrangements with the printer and pay for all packaging and shipping costs.
2. Any Bidder requiring paper copies of the Bidding Documents, Drawings, and Specifications, shall make arrangements with the printer, and pay for all printing, packaging, and shipping costs. Such costs are non-refundable.

C. All Bid Addenda will be transmitted to registered plan holders via email in PDF format and will be available at www.csarchplanroom.com. Plan holders who have paid for CDs or hard copies of the Bidding Documents will need to make the determination if hard copies of the Addenda are required for their use, and coordinate directly with the printer for hard copies of Addenda to be issued.

1. There will be no charge for registered plan holders to obtain hard copies of the Bid Addenda.

D. Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

E. The Owner and Architect may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

A. The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being Bid concurrently or presently under

construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered. All reports to the Architect shall be in writing.

B. No interpretation of the meaning of the Contract Documents, the existing conditions, or of the scope of Work will be made verbally. Provide every request for such interpretation in writing, addressed to CSArch, Attention Joseph Metzger, 40 Beaver Street, Albany, New York 12207 or by e-mail: jmetzger@csarchpc.com, with copy to rpeckham@csarchpc.com, tritzenthaler@csarchpc.com. To provide consideration RFI must be received at least seven (7) working days prior to the date of the Bid Opening.

C. Interpretations, corrections, and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections, and changes of the Bidding Documents made in any other manner will not be binding, and Bidders are not required to rely upon them.

D. The Bidding Documents for this Project have been prepared using certain existing construction documents furnished by the Owner, which pertain to the construction of the existing conditions, and limited observations obtained by the Architect at the Project site.

1. More extensive investigations of existing conditions, including disassembly, or testing of existing building components, was not undertaken by the Architect.
2. Portrayal of such existing conditions obscured or concealed from the Owner or Architect's view prior to the start of this Project's construction activities, is based on reasonable implications and assumptions. The Owner and Architect do not imply or guarantee to the Bidders, in any way, that such portrayals are accurate or true existing conditions.

E. 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.

3.3 EQUIVALENTS

A. **Each Bidder shall base his Bid upon the materials and equipment described in the Bidding Documents to the fullest extent possible.** ~~The materials, products and equipment described in the Bidding Documents establish as standard of required function, dimension, appearance, and quality to be met by any proposed substitution and/or comparable product/equivalent. It is not the intention of the~~

~~Owner or Architect to eliminate from consideration products that are equivalent in quality, appearance, and function to those specified.~~

B. In the specifications, two or more kinds, types, brands, or manufacturers or materials may be named. They shall be regarded as the required standard of quality, and overall, are judged to be equivalent by the Architect. The Bidder may select one of these named items as the basis for its Bid **or, if the Bidder desires to use any other 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 award of the Contract, what kind, type, brand, or manufacturer is proposed in lieu of the named specified item(s).** ~~If a Bidder proposes to use comparable products/equivalents other than those listed in the Project Manual, submit in accordance with subparagraph C below.~~

C. ~~No substitution will be considered prior to receipt of Bids unless written request for approval on a Substitution Request (During the Bidding Phase) Form (Section 004325) has been received by the Architect at least ten (10) days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment, or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed equivalent would require, shall be included. 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.~~

D. ~~If the Architect approves a proposed equivalent prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.~~

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

3.4 ADDENDA

A. Addenda will be transmitted to all that are known to have received a complete set of Bidding Documents. All such addenda shall become part of the Contract Documents and all Bidders shall be bound by such Addenda whether or not received by the Bidders.

1. Provide Bidding Document distributor with full company name, address, telephone and facsimile numbers and contact person’s name.

B. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

C. Addenda will not be issued later than five (5) working days prior to the time specified for receipt of Bids, except any Addendum withdrawing the request for Bids or one which includes postponement of the time for receipt of Bids.

D. Each Bidder shall ascertain upon submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt on the Bid Form.

3.5 TAX LIABILITY

A. Bidders are exempt from payment of manufacturer's excise taxes for materials purchased for the exclusive use of the Owner, provided that the manufacturer has complied with rules and regulation of the Commissioner of Internal Revenue Service.

B. New York State Sales Tax does not apply to this Project. Contractors are exempt from payment on purchase of materials for the execution of this Contract and such taxes shall not be included in Bids. Exemption Certificates will be provided upon request.

C. All other taxes shall be included in the Bid.

3.6 PRE-BID CONFERENCE

A. There will be a Pre-Bid Conference as detailed in the Invitation to Bidders. A lack of representation at the Pre-bid Conference will not be justification for additional costs due to unforeseen conditions during the construction phases of the Contracts.

PART 4 – BIDDING PROCEDURES

4.1 PREPARATION OF BIDS

A. Bids shall be submitted on forms identical to the Bid Forms contained in this Project Manual, or submitted using unaltered and legible copies thereof.

B. All blanks on the Bid Form shall be legible executed in a non-erasable medium. No Bid will be considered which does not include bids for all items listed in the proposal sheets.

C. Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.

D. Interlineations, alterations, and erasures must be initialed by the signer of the Bid.

E. Bid all requested alternates. If no change in the Base Bid is required, enter "No Change."

F. Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. The Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work. Each Bid copy shall be signed by the person or persons legally authorized to bind the Bidder to a Contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

G. Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall make no additional stipulations on the bid form nor qualify the Bid in any other manner.

H. 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.

4.2 BID SECURITY

A. Each Bid must be accompanied by a certified bank check of the Bidder, or a Bid Bond prepared by a surety company licensed in New York State.

1. Bid Security shall be provided in the amount of five (5) percent of the dollar amount of the Base Bid.
2. Bid Security shall be payable to Newburgh Enlarged City School District,.
3. If certified check is utilized, the Bidder shall provide written confirmation from a licensed New York State Surety company that Performance and Payment Bonds will be available to said Bidder for this Project.
4. The apparent low Bidders, upon failure or refusal to furnish the required Performance and Payment Bonds and execute a Contract within ten (10) calendar days after receipt of notice of the acceptance of Bid, shall forfeit the Bid Security as liquidated damages for such failure or refusal, and not as a penalty.
5. The successful Bidders shall have the Bid Security returned upon execution of an Owner/Contractor Agreement.

6. Unsuccessful Bidders shall have their Bid Security returned following the execution of the Owner/Contractor Agreements or the forty-five (45) day period following the Bid Opening, whichever occurs first.
7. The Bid Security shall not be forfeited to the Owner in the event the Owner fails to comply with subparagraph 6.2.

B. Surety Bond shall be written on AIA Document A310, Bid Bond, and the attorney-in-fact that executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney and with a copy of the riders.

C. The Owner will have the right to retain the Bid Security of Bidders to whom an award is being considered until either:

1. The Contract has been executed and bonds, when required, have been furnished, or;
2. The specified time has elapsed so that Bids may be withdrawn or;
3. All Bids have been rejected.

4.3 SUBMISSION OF BIDS

A. All copies of the Bid, the Bid Security, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name, and address and, if applicable, the designated Contract for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

1. If Bidder submits for different Contracts, each shall be submitted individually and so labeled for that Contract.

B. Bids shall be deposited at the designated location prior to the time and date indicated in the Invitation to Bidders for the receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

1. The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.
2. Oral, telephonic, telegraphic, facsimile, or other electronically transmitted Bids will not be considered.

C. Bids not exhibiting original signatures or seals will not be accepted as a responsive Bid.

D. Bids shall be submitted **with one copy of sealed bids in an envelope and one copy of bid in PDF format to be emailed no later than the next day before close of business for record keeping purposes** ~~in duplicate~~. Executed forms required for each submitted Bid are as follows to be considered a complete bid:
   1. Bid Form- all costs are to be filled out
   2. Unit prices
   3. ~~Labor Rates~~
   4. Substitution list
   5. Resolution.
   6. Non-Collusive Bid Certification.
   7. Iran Divestment Act Certification.
   8. Bid Security.

4.4 MODIFICATION OR WITHDRAWAL OF BID

A. A Bid may not be modified, withdrawn, or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid. No Bidder may withdraw a Bid within the forty-five (45) day period following the time of the Bid Opening or be subject to forfeiture of the bid security.

B. Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date and time-stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.

C. Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.

D. 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 a Bidder claims to have made a mistake or error in its Bid, it shall deliver to the Architect within three (3) days after the Bid Opening, a written notice describing in detail the nature of the claimed mistake or error with documentary evidence or proof (including, but not limited to, bid worksheets, summary sheets and other bid related data requested of it). Failure to deliver notice and evidence or proof specified above within the specified time shall constitute a waiver of the Bidder's right to claim an error or mistake. Upon receipt of specified notice and evidence or proof within the specified time period, the Architect and 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 the claim rights under the Bidder.

PART 5 – CONSIDERATION OF BIDS

5.1 OPENING OF BIDS

A. The properly identified Bids received on time will be publicly opened and will be read aloud. An abstract 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 Invitation to Bid.

5.2 REJECTION OF BIDS

A. The Owner shall maintain the right to reject any or all Bids. A Bid not accompanied by the required Bid Security or by other data required by the Bidding Documents, or which is in any way incomplete, or irregular is subject to rejection.

B. If identical bids are received and these bids are or become the low Bids, the Owner reserves the right to award the Contract on the basis of the relative quality of the product or products as shown by similar work done elsewhere, and it is mutually agreed that the Owner's judgment shall be final.

C. In order to qualify as a Contractor satisfactory to the Owner, each Bidder shall document to the satisfaction of the Owner that it has the skill and experience as well as the necessary facilities, ample financial resources, and adequate laborers and equipment to do the Work in a satisfactory manner and within the time specified. Bidders may be judged qualified only for the type of work in which they demonstrate competence. Bidders must prove to the satisfaction of the Owner that they are 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.

D. 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 will 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 K-12 public school 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 they are 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.

5.3 AWARD OF BID

A. 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, for each Prime Contract, provided the Bids are submitted in accordance with the requirements of the Bidding Documents and does 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 interest.

B. 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 low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

C. The acceptance of a Bid will be a notice in writing signed by a duly authorized representative of the Owner by 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.

PART 6 – POST-BID INFORMATION

6.1 CONTRACTOR'S QUALIFICATION STATEMENT

A. Bidders to whom an award of a Contract is under consideration shall submit to the Owner, within three (3) calendar days, a properly executed AIA Document A305, Contractor's Qualification Statement, unless such statement has been previously required and submitted as a prerequisite to the issuance of Bidding Documents.

B. 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 by the Owner 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 a Bidder's payment by the Owner shall not be construed as pre-qualification of that Bidder. If a Bidder is later discovered to have misrepresented or provided false or incorrect information with regard to any material party of the information submitted to the Owner, including but not limited to 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 Contract has been awarded, it will become automatically voidable at the sole discretion and election of the Owner.

6.2 SUBMITTALS

A. Within three (3) calendar days following the Bid Opening time, the apparent lowest Bidder, shall furnish to the Owner through the Architect the following information:

1. Contractor’s Qualification Statement – AIA Document 305, 2020 edition.
2. Labor rate sheet
3. Material and Equipment List.
4. Schedule of Values.
5. Proposed Project Manager.

B. The Bidder will be required to establish to the satisfaction of the Owner and Construction Manager the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

C. Upon request only, the apparent second and third low Bidders shall be prepared to submit the information of paragraphs 6.1 and 6.2.A.

D. Prior to the execution of the Contract, the Construction Manager will notify the Bidder in writing if either the Owner, Architect/Engineer, or Construction Manager, after due investigation, has reasonable objection to a person or entity

proposed by the Bidder. If the Owner, Architect or Construction Manager 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. In the event of withdrawal or disqualification, Bid Security will not be forfeited.

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

F. Any Bidder, upon failure to submit the information required in subparagraphs 6.1.A, 6.2.A, and 6.2.B in the allowed time, may have the Bid rejected. In that event, the Bidder shall forfeit the Bid Security to the Owner as liquidated damages for such failure or refusal, and not as penalty.

6.3 BOND REQUIREMENTS

A. The Owner requires the apparent successful Bidder to furnish and deliver bonds, covering the faithful performance of the Contract Work and payment of all obligations arising thereunder duly executed by the Bidder and a surety company licensed to do business in New York State rating.

B. The premiums shall be included in the Bid and paid by the Contractor. The Bidder shall proportionally distribute the costs of such bonds between the Base Bid and any Alternates.

6.4 TIME OF DELIVERY AND FORM OF BONDS

A. The Bidder shall deliver the required bonds to the Owner through the Construction Manager on or before the time of execution of the Owner/Contractor Agreement. Bonds shall be payable to Newburgh Enlarged City School District.

B. Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond, Version 2010. Both bonds shall be written in the amount of the Contract Sum.

C. The bonds shall be dated the same as the Owner/Contractor Agreement.

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

E. The surety for the performance and payments bonds shall be a duly authorized surety company, licensed to do business in the State of New York, and listed in the latest issue of U.S. Treasury Circular 570. The sufficiency of the surety and the bonds is subject to the approval of the Owner, and sureties and bonds that are deemed insufficient by the Owner may be rejected.

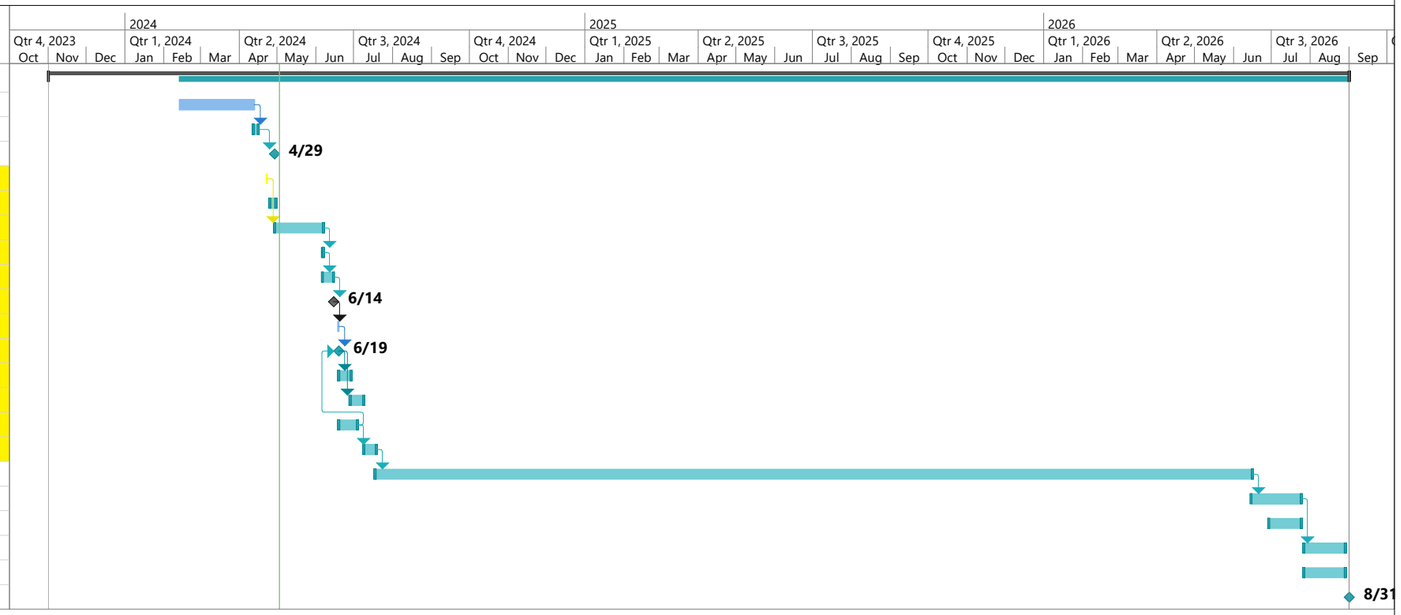
PART 7 – AGREEMENT FORM BETWEEN OWNER AND CONTRACTOR

A. Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition – AIA Document A132-2019 Edition, as modified.

END OF DOCUMENT 002113

Newburgh Enlarged City School District
New CTE Building
Milestone Schedule

ID	Task Mode	Task Name	Duration	Start	Finish
1		**CTE Building**	**1035 days?**	**Wed 11/1/23**	**Mon 8/31/26**
2		100% CD - SED Submission	60 days	Tue 2/13/24	Fri 4/12/24
3		Orginal Bid Advertisment	4 days	Fri 4/12/24	Mon 4/15/24
4		Bid walk Through	0 days	Mon 4/29/24	Mon 4/29/24
5		SED Approval	1 day	Mon 4/22/24	Mon 4/22/24
6		ReAdvertisment to Bid- Single Prime	5 days	Thu 4/25/24	Mon 4/29/24
7		Revised Bid period	39 days	Mon 4/29/24	Thu 6/6/24
8		Revised Bid opening	1 day	Thu 6/6/24	Thu 6/6/24
9		Revised Bid leveling	9 days	Thu 6/6/24	Fri 6/14/24
10		Revised Low Bidders Recommendation to BoE	0 days	Fri 6/14/24	Fri 6/14/24
11		Revised BOE approval of Lower bidder	1 day	Tue 6/18/24	Tue 6/18/24
12		Revised NTP issued to bidder	0 days	Wed 6/19/24	Wed 6/19/24
13		Revised Contract issued to Low Bidder	10 days	Wed 6/19/24	Fri 6/28/24
14		Revised Awarded contractor upfront submittals IE: insurance, bonds	11 days	Fri 6/28/24	Mon 7/8/24
15		Revised GC submits first site logistics plan-See contract for other requiremen	15 days	Wed 6/19/24	Wed 7/3/24
16		Revised Site work Commennces	10 days	Tue 7/9/24	Thu 7/18/24
17		Construction in progress	698 days	Thu 7/18/24	Mon 6/15/26
18		Construction Substantial Completion	40 days	Mon 6/15/26	Fri 7/24/26
19		Temp Trailer/Electric Demobolization parking lot Completion	26 days	Mon 6/29/26	Fri 7/24/26
20		District setup interiors	33 days	Mon 7/27/26	Fri 8/28/26
21		Testing DATA systems- Finals	33 days	Mon 7/27/26	Fri 8/28/26
22		Move In	0 days	Mon 8/31/26	Mon 8/31/26



CTE Milestone Schedule
Date: Fri 5/3/24

Task	Summary	Inactive Milestone	Duration-only	Start-only	External Milestone	Manual Progress
Split	Project Summary	Inactive Summary	Manual Summary Rollup	Finish-only	Deadline	
Milestone	Inactive Task	Manual Task	Manual Summary	External Tasks	Progress	

SECTION 004116.01 - BID FORM CONTRACT NO. 01 – General Construction **(REVISED ADD2)**

Newburgh Enlarged City School District – New CTE Building

BIDDER INFORMATION

CONTACT: _____

COMPANY: _____

ADDRESS: _____

_____

TELEPHONE: (_____) _____

FACSIMILE: (_____) _____

BID TO (Owner): Attention: Purchasing Agent
Newburgh Enlarged City School District
124 Grand Street
Newburgh, New York 12550

PRIME CONTRACT: Contract No. 01 General Construction

PROJECT TITLE: Newburgh Enlarged City School District –
New CTE building (CTE)

SED Project Control No. *CTE Building SED#44-16-00-01-0-053-001*

CSArch PROJECT NO: 108-2303.00

1. **Representations**: By making this Bid, the Bidder represents that:

   The Bidder (identified above) hereby certifies that they have examined and fully understands the requirements and intent of the Bidding and Contract Documents, including Drawings, Project Manuals, and Addenda; and proposes to provide all labor, material, and equipment necessary to complete the Work on, or before, the dates specified in the Agreement for the Base Bid of:

2. **Base Bid**: _____ ($_____)
   (Words) (Figures)
   In all locations sums shall be expressed in both words and figures. In case of discrepancy, written word governs.

3. **Addenda**: The Bidder acknowledges receipt of the following Addendum:

   No. _____ Dated_____ No. _____ Dated_____
   No. _____ Dated_____ No. _____ Dated_____
   No. _____ Dated_____ No. _____ Dated_____

4. **Alternates**: None.

5. **Bid Security:** Attached hereto is Bid Security in the form of (circle correct form) Bid Bond, Certified Check, Cash in the amount of 5 percent of the written Base Bid amount

6. **Allowances:**

   A. $300,000.00 Allowance for Rock Removal for Site Work ***Including trucking to a disposable location offsite. Trucking and manifest receipts from the disposable location will be required to reconcile quantities and cost against this allowance. (Addendum 2)***
   B. $50,000.00 Allowance for Exterior Building Signage and Behind Front Entrance Desk
   C. Include in base bid the removal of 3,000 cubic yards of rock including trucking to a disposal location offsite. Trucking and manifest receipts from disposal location will be required to track quantity. Any amount of rock removal above the 3,000 cubic yards will be paid for from the allowance. (Addendum 2)
   D. Include in base bid the removal of 7,000 cubic yards of unsuitable soil/fill and replacement with structural fill. Once unsuitable soils have been uncovered and verified by the EOR the contractor then shall proceed with the removal and provide trucking and disposal tickets. (Addendum 2)
   E. $100,000 Allowance for Unsuitable Soil Removal above and beyond the 7,000 CY in the base bid. Once unsuitable soils have been uncovered and verified by the EOR the contractor then shall proceed with the removal and provide T&M to track allowance usage. (Addendum 2)

7. **Time of Commencement and Completion**: The Bidder agrees to commence Work on the stipulated starting date(s) and will substantially complete the Work in accordance with the project schedule stipulated in Specification Section 011200 Multiple Contract Summary and Section 003113 Preliminary Schedules.

8. **Rejection of Bids**: The Bidder acknowledges that the Owner reserves the right to waive any informality in, or to reject any or all Bids.

9. **Execution of Contract**: If notice of the acceptance of this Bid is mailed, telegraphed, or otherwise delivered to the undersigned within forty-five (45) days after the date of the Bid Opening, or any time thereafter, the undersigned will, within ten (10) working days after the receipt of the form of Agreement, execute and deliver the Contract.

10. **Signature**:

_____
(Signature)

_____
(Name – Printed)

_____
(Title – Printed (Date)

11. **Attachments**: Obtain and attach the following documents to each individual Bid.
    a. Resolution
    b. Non-Collusive Bid Certification
    c. Iran Divestment Act Affidavit
    d. Bid Security
    e. Subcontractor List
    f. Substitution List

12. **Work Cost Breakdown**: This form shall be filled out and submitted by the Contractor. The grand total must equal the BASE BID under Section I (A) "THE BID". UNIT PRICES are required for the items listed in the Unit Prices section of the work cost breakdown. Unit prices will be provided for use if the required quantities are more or less than the quantities indicated in the plans and specifications. Failure to complete the work cost breakdown may result in the disqualification of the bid. As itemized in the "Instructions to Bidders" for a complete Bid Form include the following which must be filled out completely, failure to comply with any listed below bid will be a rejected bid:

a. Bid Form, all costs must be shown and totaled, failure to breakdown these costs will be subject to disqualification of bid.

b. Unit costs

The Bid

Contract Number: Contract No. 01 General Construction (GC-01)

Contract Titles: Newburgh Enlarged City School District –
New CTE building (CTE)

Bidder: Date:

* Refer to Section 012973 Schedule of Values for additional information

Trade	Bid Value
General Requirements	
Rock Removal Allowance	$300,000
Exterior Building Signage and Interior Front Entrance Signage Allowance	$50,000
Unsuitable Soil Removal (Addendum 2)	**$100,000**
Sitework	
General Construction	
Mechanical	
Plumbing	
Electrical	
Fire Protection	
TOTAL – Must Equal Bid	

Unit Prices – Additional Fee Schedule – All prices are Furnish and Install

Contract Number: Contract No. 01 General Construction (GC-01)

Contract Titles: Newburgh Enlarged City School District –
New CTE building (CTE)

Bidder: Date:

* Refer to Section 012200 Unit Prices for additional information

(Unit cost don't apply for large quantities, and the Architect, Owner and the Construction Manager reserve the right to negotiate an overall change order and not apply the unit costs.)

Item	Description	Unit	Unit Price - ADD
1	Unsuitable Soil Excavation & Removal	CY	
2	Engineered Fill	CY	
3	Rock Removal	CY	

END OF SECTION 004116.01

SECTION 011200 – GC SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General and Supplemental Conditions and Division 1 Specification Section, apply to this Section.

1.2 SUMMARY

A. Section includes:

- Project information.
- Work covered by Contract Documents.
- Construction schedule.
- All trade coordination
- BIM coordination

1. Owner-furnished equipment
2. Coordination with occupants.

- Work restrictions.

B. Section includes a brief summary of GC work, including responsibilities for coordination and temporary facilities and controls. The GC is the Single Prime Contractor responsible for all subcontractor scopes of work.

C. GC is responsible for reviewing all Drawings and Specifications for every contract to gain a complete understanding and knowledge of the entire Project and to coordinate each for the intent of a logical sequence of construction means and methods.

D. GC is responsible for providing a min. of (1) Full Time experienced Construction Project Manager and (1) Full Time Senior Superintendent, each with a minimum of 10 years of relevant Construction experience.

E. GC shall provide resumes of the proposed Full Time Project Manager and Full Time Superintendent for CM, Architect and Owner approval.

F. GC shall provide an org chart of their staff that will be involved with the project once the project is awarded.

DEFINITIONS

A. Project Identification: Project consists of all labor, materials, equipment, appliances, services, and incidentals necessary for layout, installing, and performing New Construction at the Newburgh Enlarged City School District as shown on the Contract Drawings and described in the Specifications.

B. Contract work is projected to start late June or early July 2024.

C. The work will be constructed under Single Prime Contracts. The GC is responsible for communicating, coordinating, and scheduling work with all awarded listed subcontractors including but not limited to below. One set of contract documents is issued covering all scopes of work.

1. SITE WORK
2. MECHANICAL
3. PLUMBING
4. ELECTRICAL
5. FIRE PROTECTION
6. Procurement from district vendors and state contracts in coordination with CM/AOR and Owner, these include:

    a) HVAC equipment Procurement as identified on Mechanical contract drawings.
    b) Fire alarm devices
    c) Security vendor
    d) Controls
    e) PA System devices
    f) Display Monitors (Promethean Boards)
    g) Furniture
    h) Owner furnished items installed by GC
    i) (Refer to responsibility matrix provided in specifications)

D. This section includes a brief summary of work for the General Contractor, including responsibilities for coordination and temporary facilities and controls.

1. Project includes the construction of a new building.
2. A 5-day work week is required on this project with hours from 7am-3:30pm or per the PLA agreement. Nights and weekends will be mandated if the contractor(s) are behind schedule and need additional time to bring the project back on schedule and or directed by the Construction Manager.
3. GC will conduct all subcontractor meetings and BIM coordinating meetings.
4. GC will attend OACM meetings and CM will conduct these meetings.

E. Architect Identification: The Contract Documents were prepared for the Project by CSArch.

F. Construction Manager: Jacobs Project Management has been engaged as Construction Manager for this Project to serve as an advisor to Owner and to aid in administering the Contract for Construction between Owner and Contractor, according to a separate contract between Owner and Construction Manager.

G. Building Code in Effect for Project: 2020 NYS Building Code and Local Fire Marshall requirements.

H. Comply with the following: New York State building Code and the building standards of the New York State Education Department.

1.3 THE CONTRACT

A. The Project will be constructed under a Single Prime GC contracting arrangement with the Owner awarding and GC holding separate Contracts with each trade. The GC is required to ensure each subcontractor has included all scope required for a complete operational project.

B. Contractors have been given the opportunity prior to bidding to inspect the entire Project for references and agrees to accept as it exists on the date of the bid opening.

1. Keep driveways and site entrances serving the project clear and available to critical deliveries, placement of concrete, emergency vehicles, etc. for the duration of construction. Do not obstruct access to, or use these areas for parking, staging of equipment or materials. All deliveries are to be scheduled and any material stored onsite must be communicated with the CM and Stored in the designated staging area per the site logistics plan. The school grounds can't support over storage of material. Offsite storage will be needed if material is procured in advance of its installation date.
2. GC will provide sign in sheets daily reflecting the project site manpower count and submit to the CM.
3. GC will be responsible to provide weekly toolbox talks, Job Hazardous Analysis (JHA's), and 2-week lookaheads. Additionally the GC will collect these documents from their subcontractors as well as keep a log of them and will coordinate the individual trade activities as well as include them on their 2 week lookaheads.

C. General Contractor:

1. Is responsible for creating, maintaining, and updating the project Master Schedule. The project Master Schedule will be updated at a minimum once a month and sent to the CM and Client for review for project progress.
2. Provide reflective vests and make sure all subcontractors have required OSHA-approved PPE and are responsible for enforcing that it is worn by all on-site personnel. Parties that do not abide by this requirement will be escorted off the premises after their 2nd warning.
3. Provide potable drinking water for its own employees and mandate that their subcontractors also provide to their employees.
4. Is responsible for Furnishing and installing access panels for all concealed systems, for system maintenance and repair for items installed. This specifically talks to access panels needed for future maintenance by the district.
5. Provide and maintain material lifting equipment required for the completion of all Contract requirements, and complying with NYS Labor Laws, OSHA Regulations, and other Federal, State, and local laws.
6. Provide and maintain additional temporary stairs, ladders, ramps, scaffolding, and platforms required specifically for completion of work, and as further detailed in this section. All work needs to comply with the NYS Labor Laws, OSHA regulation, and other Federal, State, and local laws.
7. Provide Fire Prevention materials and equipment for fire protection. Provide fire extinguishers, fire blankets, and fire watch during all cutting and welding operations.

8. Provide required temp lighting/power to install new work for all contractors, per OSHA levels and to include lighting in all spaces. The GC shall also include site temp lighting and shall coordinated with the CM/Owner. GC to ensure this complete work is under the Electrical Work subcontract.
9.
10. Temporary Facilities: in addition to

    a) Provide Temporary Facilities indicated as Work of this Contract is
    b) Division 1 Section 01 5000, "Temporary Facilities and Controls"
    c) Provide night/day security camera system with DVR and monitor for the purpose of monitoring construction activity during the construction schedule only. System will be equipped with local and remote access. See site logistics plan for dramatic placement of security cameras. All cameras are to be mounted on a structurally secured post provided by this contractor and at a height no less then 8'-0". Final location of set up to be chosen by the CM and District.
    d) Provide new temp electric service with new service pole near the temp office, and power connection and disconnect to CM trailer as well as one trailer for each prime contractor. Provide and maintain a temporary electric service, including lighting office trailer off the temporary service being provided. Maximum of 1 trailer per Prime Contractor. Each trailer to have a 100 amp, 240 Volt single-phase connections. Assume a diversified peak connected load factor of 12KW per trailer. GC shall include the electrical metering cost for this new temp service in their bid for the duration of the project.
    e) Provide temporary lighting (as required) construction staging/yard/work areas.
    f) Provide temp and permanent power outlets, panels and connections for other trades tools and equipment. No limit to how many temp services or voltage.
    g) coordinate with CM/Owner for service activation of existing 400 AMP Single Phase Panel where indicated on Site Logistics Plan. General Contractor to provide temp power for temp. construction activities in new building. General Contractor is responsible for coordinating the power needs for their subcontractors, and providing several 100 AMP distribution panels for temp service inside the building. Provide appropriate wire to reach from the temp panel that will be placed at the farthest point of the new building from temp service starting location. General Contractor is responsible for the removal of the temp service panel and pole and coordinating with the utility company for this work.

11. GC shall provide Temp site lighting with a minimum of 12 fixtures. These are to be located at the following areas:

    a) Site trailer; Each entrance; Stored material trailers; 4-6 at general location on the site TBD.

12. Provide any supplemental heat required to install the work of all Contracts when temp heat is needed outside the timeline of interior finishing work. Examples included but are not limited to tenting and heating for exterior masonry work, blanketing of concrete, localized heating in and area not fully enclosed.

13. Provide traffic control for deliveries, and equipment needed for the project.
14. Provide protection of all finished Work, after installation, until accepted by the Owner.
15. Provide fire caulking for any penetration related to the work and required by all codes.
16. Provide office and storage trailers required to complete the work of the Contract. Storage containers must be within the staging area and approved by the district.
17. GC to provide a CM trailer by Willscot size being 64x12 with bathroom and services. This also includes Temp high speed internet services for the duration of the project.
18. GC and their Subcontractors shall provide a list of potential and all employees that will require access to the CTE site. This list of employees will be checked through the NECSD Raptor System. Failure to provide this list of employees to the Construction Manager within a min. of 48 hrs. in advance prior to site visit will result in the delay of access to the Project Site. Confirmation of acceptance must be provided by the district and sent to the Contractor before work can start.

1.4 SUMMARY OF WORK

A. CTE Project – The GC work consists of but is not limited to the following:

1. GENERAL / SITE Work - New Building Construction, including food service equipment. All site grading, flat work, paving's, plantings. Refer to contract specific section for more information.
2. MECHANICAL - New Building Construction, New mechanical throughout the building, specialty equipment including but not limited to welding booths, all roof top curbs and supports, refer to contract specific section for more information.
3. ELECTRICAL - New Building Construction. Main service and Mechanical connections, Fire alarm, low voltage controls. Refer to contract specific section for more information.
4. PLUMBING – New Building Construction. Inclusive of gas and plumbing services. Refer to contract specific section for more information.
5. FIRE SUPPRESSION – New Building Construction, Tamper and Flow Switches, FDC Connection, Fire Sprinkler Assembly in Plumbing Equipment Room Refer to contract specific section for more information.
6. Coordination and delivery of all procurement and owner furnished equipment.

1.5 WORK UNDER SINGLE CONTRACT

A. The project will be constructed under a single contracting arrangement.
B. One set of documents is issued covering all scopes of work. Review ALL drawings and specifications for complete understanding and knowledge of the work to be performed by all trades. Any questions of responsibility should be discovered Pre award. After award, the CM has the right to dictate responsibility.
C. The following Contract Documents are specifically included and defined as integral to the Prime Contract.

1. Bidding Requirements
2. Performance and Payment Bonds (with acknowledgement of any and all Riders)
3. Conditions of the Contract, including
   a. General Conditions & Supplementary Conditions
   b. Insurance Requirements
   c. NYS Prevailing Wage Rates
4. d. Project Labor Agreement

D. **Temporary Facilities/Heat and Controls:** **In addition to** specific responsibilities for temporary facilities and controls indicated in this Section and in Division 1 Section 01 5000 "Temporary Facilities and Controls," each Contract is responsible for the following:

1. Installation, operation, maintenance, and removal of each temporary facility are usually considered as its own normal construction activity, and costs and use charges associated with each facility.
2. Temp Heat for New Building will be provided by the General Contractor when portion of building become fully or partially enclosed or as directed by the Construction Manager. The General contractor is responsible for engaging an engineer to determine how many heaters will be required to sufficiently heat the building. GC to provide fuel and operator to ensure uninterrupted power. Temp heaters to be furnished with all accessories necessary to distribute heat through the building. The GC is responsible for installing and executing this work. Electrical contractor to provide temp power to temp mechanical equipment. Site logistics plan to be updated to reflect temp heater locations and what is being used for temp heaters which will need to be in accordance with the requirements of the local AHJ and Fire Marshal.
3. Provide generators, plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting for construction work.
4. GC Contractor is to stockpile debris on a daily basis and place it in the dumpster. Dumpsters will be provided by the GC for use by all its subcontractors, recycling of materials will be instituted daily.
5. Provide Secure lockup of tools, materials, and equipment.
6. Safety procedures as dictated by the district, OSHA, and the NYS Department of Labor.
7. Provide Labor for daily clean-up.
8. General Contractor is responsible for maintaining and fixing the existing temp fence. Any additional temp fencing used on site must be POST DRIVEN. GC to review site logistics plan for more information on added fencing. Information shown on site logistics plan shows approximate location, it is the GC's responsibility to completely enclose the construction area and modify construction fencing necessary to execute their work and maintain a secured site. Additional temp Fencing maybe needed to Corden off areas of work and it will be the responsibility of the General Contractor to coordinate this with the CM and figure this cost into the cost of work. All gates to have chains and locks that are keyed alike.
9. Provide temp power for the duration of the project for the work happening onsite including but not limited to the building, temp trailer and Conex boxes. GC to coordinate with CM to re-establish existing temp utility power onsite. Additionally, the GC is responsible for establishing a new temp service with pole local to the temp trailers and coordinating with the utility company for this work. The GC is responsible for trenching and backfilling for temp service and GC is responsible

for all electrical work including conduit, wiring and connections. Refer to logistic plan for diagrammatic location.

10. GC to provide temp water as required. Including temp hose bibs. Include heat tracing if exposed to the elements. GC to connect if required.
11. GC to obtain hydrant permit from the City of Newburgh including backflow preventor.

1.6 CONTRACT 1 - GENERAL CONSTRUCTION

A. The Work of the General Construction Work Contract includes but is not limited to, the following descriptions:

1. New building construction. This includes, but is not limited to, *work shown* on the following:
2. Drawings: Includes all Volumes 1 thru 4 which are the construction drawings, see spec sections also Volumes 1 thru 4 that makes up the complete set of the construction documents.
3. Coordination:

    1) The GC is required to lead, compile, and provide a detailed Master Schedule for all areas of work which includes all schedules provided by their subcontractors.
    2) GC shall coordinate BIM activities with all trades and complete all trade coordination with each trade discipline.
    3) Project Areas (see phasing plan)
    4) The GC shall include the below as part of the BIM coordinate but not limited to

    b) Foundation, rebar, penetrations/sleeves
    c) Steel framing
    d) Slab opening, Slab trenching
    e) RCPs
    f) Full MEP & FP overlays and composite drawings
    g) Clash detection
    h) Weekly meetings with the MEP & FP trades as well as the design consultants
    i) Food Service and Theatrical Equipment

4. Coordination With Subcontractors:

    1) Each trade will participate in producing coordination drawings. The General Contractor shall lead the coordination by means of producing a Master Construction Schedule for each Area of Work. The General Contractor shall coordinate with each subcontractor by means of BIM final signed off shop drawings. The efforts of all Contractors to coordinate locations, heights, routes, etc. to eliminate clashes between trades and/or obstructions. Coordination Period will consist of each trade meeting once a week to coordinate their model/drawings. Once

the Coordination Period is complete with all involved, they will be required to sign off on the Coordination Set.

2) The General Contractor to provide a complete coordinated schedule including all trades, tasks, and durations for each Area as shown in the Contract Documents. GC shall update the Master Project Schedule, as needed, during the life of the Project.
3) GC shall Provide a Recovery Schedule if required and directed by the CM.
4) GC to provide roof rails for rooftop condensing units and food freezers condensing units down to structural decking prior to roofing. GC is responsible for the food service equipment in its entirety including but not limited to associated condensing unit and attaching to rails.

5. Temporary Facilities: In Addition to

1) Provide dust protection as directed by the CM. GC shall maintain existing fencing surrounding the site.
2) GC to Provide wash out areas for construction vehicles as outlined in the Civil Drawings.
3) Provide erosion and Sediment Control and dewatering as it relates to any excavation associated with the this Contract
4) GC to Provide Portable toilets for all trades per OSHA requirements as well as a cleaning service to clean the Portable Toilets weekly.
5) GC to provide a cleaning service to clean the CM trailer once a week.
6) Provide snow removal for contractor staging and all work areas.
7) During cold weather GC o submit cold weather procedures.
8) During cold weather GC to provide temp heat and blanketing for concrete curing.
9) Provide temp hose bibs to construction GC for use of all trades.
10) Provide backflow preventer and hydrant key for the connection and use to the existing fire hydrant .
11) GC is responsible for Dewatering of the construction site.
12) Provide Trackpad (Construction Entrances) maintenance.
13) GC is responsible for Existing Utilities Mark outs.
14) Provide and install Project information signs at the Site as directed by the CM. GC to provide a 4’-0” h x 8’-0” w metal sign with printed color rendering with project name and address. Signage to be mounted to existing support system. Project Signs provided and installed by GC and final designed by Architect.
15) Provide Temporary Facilities indicated as Work of this Contract in Division 1 Section 01 5000, “Temporary Facilities and Controls”.
16) The General Contractor is responsible for OSHA required protection and safety, this includes but is not limited to:
17) a. leading edge guardrails
18) b. floor opening protection
19) c. elevator shaft protection
20) d. controlled access zones
21) e. OSHA compliant scaffolding, hanging scaffold, hydro mobile, baker scaffold
22) f. stair guard rails

23) g. fire extinguishers
24) h. flagmen
25) g. Temp signage

6. New Construction includes but is not limited to:

1) The General Construction Work Contract shall perform all necessary cutting, trenching, excavation, backfilling, compaction, and field required poured in place concrete for all other trades. Coordinate A drawings with M, E, P, and FP drawings for recessed items, access panel locations, slab openings, roof openings, embeds, supplemental support, etc. for other trades and performed under this contract.
2) Provide multiple shifts work as needed to complete work as shown on milestone schedule. Multiple shifts during the week and single shift on Saturdays will be required to make up days on the schedule, unless contractor requests the additional time for other reasons that are acceptable by the district.
3) General Contractor to include all Theatrical Rigging, support and curtain systems as outlined in the "TS" & "TR"drawings.
4) Provide surveyor to layout new building, submit to architect for approval.
5) General contractor to include all roofing scope in this contract including associated accessories like down spouts, crickets, and MEP openings, setting and roofing in MEP curbs, provide all curbs and rooftop equipment associated with Food Service package, and provide roof rails for their Mechanical subcontractor to install mechanical equipment condensing units/supports on. Curbs are provided by their Mechanical subcontractor.
6) GC shall ensure their mechanical subcontractor has included in the bid that all other require equipment for a fully operational system that is not procured by the Owners vendor, is provided by the Mechanical subcontractor.
7) General contractor to supply and install all casework as shown on the contract drawings. Field measuring and shop drawings for architect approval will be the responsibility of this trade.
8) GC to include all winter concrete and masonry measures and expenses in this contract.
9) GC shall coordinate all Cx with district-provided Commissioning team.
10) GC is responsible for all site and landscaping work.
11) GC to provide final cleaning of the entire school building by a professional cleaning company pre accepted by the district, building, and equipment provided under their other Contract immediately before the final inspection. Cleaning must be accepted by the district and done to their standards. General Contractor is responsible for cleaning and dust and debris generated from all work. Maintain areas in a cleaned condition until the Owner occupies the space. All new floors get clean, and final finished by the GC prior to turnover per the manufacturer's maintenance and care instructions.

12) GC is responsible for providing all steel lintels and supplemental steel related to all work.
13) GC is responsible for all Roofing including the entire roofing system.
14) All blocking is provided by the GC including by not limited to roof, interior walls, coping and flashing, shelving and cabinet support, interior accessory support.
15) GC is responsible for all Joint sealants inside and outside, expansion joints and expansion control systems.
16) GC is responsible for providing all equipment outlined in the "A" Drawing equipment schedules that indicates contractor furnished.
17) Provide all equipment specified on Drawing M902 Schedules.
18) The controls will be provided by owner under separate controls contract except for controls noted in item 18 below which are complete systems by the General Contract Work. The controls contractor is responsible for furnishing the following instrumentation devices; control valves, stand-alone control dampers (shown and tagged on floor plans), thermowells, pressure probes, flow switches, insertion flow meters, and ultrasonic flow meters, required for system operations and as indicated, "furnished by the Controls Contractor" in the mechanical systems. Through the General Contractor the Mechanical subcontractor is still responsible for coordinating with the Controls Contractor the requirements of said devices based on approved submittals and field condition and installing said devices.
19) Mechanical Systems intended to operate as standalone - The General Contractor shall provide all parts, labor, components, controls, electrical connections, associated piping, ductwork and wiring required for mechanical systems as shown on the drawings and as required by the manufacturer, to ensure a fully operational, standalone system. The Controls Contractor shall provide any monitoring or set points of said systems as indicated by the contract documents.

7. Systems including but not limited to:

a.) Variable refrigerant flow split systems.
b.) Dust collection systems.
c.) Vehicle exhaust systems.
d.) Boilers.
e.) Paint Booths.

1) The General Contractor is responsible for storing, coordinating, delivering, hoisting, etc. all Mechanical equipment specified on Drawing M901 Owner Provided Equipment Schedule. The equipment specified on Drawing M901 is being purchased separately by Owner. Mechanical Contractor to provide all associated accessories, Piping and Ductwork to provide a complete system. Any rooftop curbs or support required for this equipment shown on Drawing M901 is the responsibility of the GC to deliver, hoist and install on the roof at its planned location along with the rooftop equipment.
2) GC is responsible for the outdoor unit and ductwork associated with the welding capture system as shown on the M drawings as well as

everything in the booth including the capture arm shown as such on the A drawings. The GC shall coordinate with their MC subcontractor to make the connection between the capture arm and the ductwork.

3) GC is responsible for all the work associated with the paint booth standalone mechanical system and all the components are spelled out on the drawings.

4) Include protecting all air intakes by mechanical equipment with filters to help mitigate dust control per IAQ requirements. Install all controls components furnished by Controls Contractor into air and hydronic systems as required per the contract documents:

b) Install motor actuated dampers.
c) Install airflow measuring stations.
d) Install airside temperature and pressure sensors.
e) Install hydronic control valves.
f) Install hydronic temperature and pressure sensor wells.
g) Provide TAB and participate and commissioning work.
h) Provide all ductwork as indicated on the drawings.
i) All exposed duct to be painted
j)
k) 24) Provide replacement of all new unit filters at start up.
l) 25) Provide ALL power wiring to ALL HVAC equipment.
m) 26) Provide power to all ADA hardware and electric hardware shown in door hardware schedule.
n) 27) Provide control wiring and connection for electrified door hardware.
o) 28) Provide all fire alarms, and networking systems, WAP and camera wiring.
p) 29) Fire Alarm devices to be furnished by owner. General Contractor is responsible for the complete installation of the fire alarm system and all programing.
q) 30) Switchover over from temporary service to new service to be coordinated with Construction Manager a min. of 1 week in advance and all trade works should be notified.
r) 31) Provide low voltage to exterior doors for security vendor to punch down to their head equipment.
s) 32) All permanent security surveillance and equipment and access control devices with headed system to be provided by owner's security Contractor. Low Voltage wiring to be provided by General Contractor for these devices.
t) 33) GC is responsible for all fire department connections and signage.
u) 34) FP delegated design package. Provide design and hydronic calculation package. To be submitted and approved by EOR.

1) 34) GC is responsible for all items identified in the contract drawing and specification as delegated design.
2)
3)
4)

B. The Work of the GC includes but is not limited to, the following descriptions.

a) This trade is responsible for always maintaining a secure Site, including but not limited to locking all gates at the end of each day.
b) Provide all temporary fall protection, guardrails, handrails, temporary stairs and ramps as required. Include maintaining these items throughout the project as well as removal when no longer needed.
c) Provide and maintain all site signage as requested by the CM. Example; Gate A-B, Hard hat area, No Smoking, Construction personnel only, Exit signs, Project information sign, etc...
d) General Construction Contractor shall obtain and pay for any permits, inspections, or certifications from governing authorities having jurisdiction over the work to be performed, or over the finished product to be installed by this Contractor. Project Building Permit is by others. Include in this contract hydrant use permits.
e) Provide (unless noted otherwise):

1) interior/exterior equipment and housekeeping pads for all subcontractors, coordinate as necessary for size and locations.

f) All concrete, rebar and forms provided by the General Contractor including sidewalks.
g) Provide all Structural steel as per the "S" drawings and or for MEP trades where structural support for their openings are required.
h) All excavation for underground Utilities and MEPS will be by the General Contractor. Coordinate with M, P and E drawings for locations.
i) Provide all roof screening for HVAC equipment as indicated on the contract documents.
j) Provide "attic stock" per project specifications.
k) Provide all exterior caulking, control joints, and expansion joints.

1.7 Site Work of this Contract includes, but is not limited to, the following descriptions:

A. GC is required to maintain a clean, dust and debris free roadway outside of the site perimeters. GC to include cleaning of street daily and as required by the SWPPP. At the request of the Owner and CM this cleaning maybe required more than once a day depending on the level of activity onsite and on the adjacent roads.

1. Any activity related to creating airborne dust outside, shall be mitigated with the use of water spray.

B. Build and maintain stone tracking pads at each entrance and exit to the site if applicable.
C. Provide temporary driveway, parking lot paving and drainage if required.
D. Areas modified for construction/staging to be placed back to its natural state once construction is complete. Regrading and seeding as required.
E. GC contractor is responsible for work within the limits of existing lots and building as shown on all "C" drawings. Include all silt fence and erosion control measures required for this work and

requirements of SWPPP. Contractor is responsible for any corrective measures of erosion control and maintenance of the SWPPP.

F. The Work of the General Contract includes but is not limited to the Work that is specified in the Project Manual(s) Volumes 1 thru 4 and as shown on the drawings that form the complete construction documents. The Contractor is directed to examine all drawings, specifications and existing site conditions to full understand the complete scope and intent of the completed project.

1.8

1.9 WORK SEQUENCE

A. The Construction Manager Superintendent must be always on site when work is being performed. If a contractor fails to maintain the progress as indicated by the milestone schedule by no other fault but its own and requires overtime to complete the work; the contractor shall make arrangements with the Construction Manager 48 hours in advance and pay for a Construction Manager's superintendent at $150.00 per hour. In the event that the cause for delay is occurred by fault of the GC and or its subcontractor, then the costs shall be charged to the GC. Advise the Construction Manager 48 hours prior to commencing work inside the building. Regardless of schedule and delay, if a contractor wants to work overtime and weekends, the contractor shall make arrangements with the Construction Manager 48 hours in advance and pay for a Construction Manager's superintendent at $150.00 per hour.

B. Coordination of any utility and/or power interruption must be done with the Construction Manager. Shutdowns must be coordinated with the Construction Manager and with the least disruption to construction activity.

C. Construction access to the site shall be limited to those designated for contractor's personnel, equipment and deliveries. Contractors staging, parking and storage shall be coordinated by the Construction Manager.

1.10 OCCUPANCY REQUIREMENTS

A. The GC Work Contractor shall provide Outdoor air quality management as specified by the Department of Labor and OSHA during construction.

1. Provide an exhaust air system for the project indoor areas that could produce fumes, VOC's off-gasses, gasses, dusts, mists, or other emissions.
2. Exhaust air system for the project areas that could produce emissions listed in Paragraph 1 shall be utilized.

B. Quality assurance:

1. Before start of work, submit a design for the exhaust air system. Do not begin work until approval of the Owner is obtained.
2. The number of machines required.
3. Location of the machines in the workspace.

1.11 PROJECT MILESTONE SCHEDULE

A. All General Requirement submittals to be submitted with the first 3 weeks of NTP, this includes but is not limited to Bonds (with riders) and Insurances, submittal schedule, Schedule of Values, list of subcontractors and vendors, etc.
B. Within the 2 ½ Month of NTP General Contractor to provide fully coordinated Master Schedule including all trades activities for Construction Managers Review.
C. Within the 1st Month of NTP General Contractor to submit the first site logistics plan for review.
D. Within a 1 ½ Months of the NTP a full coordinated Underground shop drawing must be submitted
E. Groundbreaking for project must occur no later than Tuesday July 9th, 2024.
F. Master schedule must include Milestone dates for:
    - Groundbreaking
    - Building Excavation Start and Finish date
    - Foundation Start and Finish
    - Steel Erection Start and Finish
    - Exterior Mock-up review
    - Topping out
    - Building Enclosed and Watertight
    - Interior Program
    - Permanent Power
    - Site work Start and Finish
    - Substantial Completion
    - Move in
    - Final Completion

1.12 ALLOWANCES

A. See Specification Section 01 2100.

END OF SECTION 011200

Responsibility Matrix												
	Furnished by Owner's Vendor	Furnished by Owner	Furnished by GC	Furnished by Controls Contractor	Installed by Owner's Separate Contractor	Installed by GC	Installed by Owner's Contriols Contractors	Control Wiring by Controls Contractor	Control Wiring by GC	Power Wiring by GC	Power Wiring by Controls Contractor	Notes
Note: For any items not specifcally listed, the Prime contractor responsible for the spec section shall provide the item.												
102800 - Toilet and Bath Accessories												
Paper Towel Dispensers	X					X						
Toilet Paper Dispensers	X					X						
Soap Dispensers	X					X						
Sanitary Napkin Dispensers	X					X						
104413 - Fire Protection Cabinets												
Fire Extinguishers	X					X						
Fire Extinguisher Cabinets			X			X						
230900 Building Automation System												
Hydronic Control Valves for New Equipment				X		X		X			X	
Pipe Mounted Temperature Sensors				X		X		X				
Dampers				X		X		X				
Damper Actuators				X			X	X			X	
Duct Mounted Airflow Stations				X			X	X				
Fan Inlet Airflow Station				X		X		X				
Duct Mounted Pressure Sensor				X			X	X				
Duct Mounted Smoke Detector	X					X			X			
Variable Frequency Drives			X			X		X		X		
Pipe Mounted Pressure Sensors				X		X		X				
Building Management Control Panel				X				X			X	
Control Relays				X			X	X				
Current Sensing Device				X			X	X				
Hydronic Flow Meter				X				X			X	
Fire Alarm Equipment Shut Down Relay	X					X			X	X		

Responsibility Matrix												
	Furnished by Owner's Vendor	Furnished by Owner	Furnished by GC	Furnished by Controls Contractor	Installed by Owner's Separate Contractor	Installed by GC	Installed by Owner's Contriols Contractors	Control Wiring by Controls Contractor	Control Wiring by GC	Power Wiring by GC	Power Wiring by Controls Contractor	Notes
Smoke Dampers			X			X			X	X		
Combination Fire/Smoke Dampers			X			X			X	X		
Fire Dampers			X			X						
Space Occupancy Sensors								X				
Space CO2 Sensors				X				X				
Mechnical Equipment Scheduled on Sheet M901												
Equipment	X					X						Refer to 011200 Summary for specific responsibilities of the mechanical contractor to receive and store equipment
Curbs for Other Than VRF Condensing Units	X					X						
Rails for VRF Condesning Units			X			X						
Support Stands for VRF Condesning Units	X					X						
Mechanical Equipment Scheduled on Sheet M902 or Otherswise Required and NOT on M901												
Equipment			X			X						Refer to 011200 Summary for specific responsibilities of the mechanical contractor to receive and store equipment
Curbs and supports flashed into the roof.			X			X						
271600 - Communications Connecting Cords, Devices and Adapters												
Wireless Access Points		X				X						
Network Switches and UPS		X				X						

Responsibility Matrix												
	Furnished by Owner's Vendor	Furnished by Owner	Furnished by GC	Furnished by Controls Contractor	Installed by Owner's Separate Contractor	Installed by GC	Installed by Owner's Contriols Contractors	Control Wiring by Controls Contractor	Control Wiring by GC	Power Wiring by GC	Power Wiring by Controls Contractor	Notes
275113 - Public Address System												
Public Address Equipment	X					X						
Public Address Cabling and Pathways						X						
Public Address Programming and Training	X											
281300 - Door Access Control System												
Card Access Equipment	X					X						
Card Access Cabling and Pathways						X						
Card Access Programming and Training	X											
281301 - Audio Visual Entry System												
Audio Visual Entrance Equipment												
Audio Visual Entrance Cabling and Pathways												
Audio Visual Entrance Programming and Training												
281600 - Intrusion Detection System												
Intrusion Detection Equipment	X					X						
Intrusion Detection Cabling and Pathways						X						
Intrusion Detection Programming	X											
282300 - Closed Circuit Television System												
CCTV Cameras	X				X							
Pathways and Cabling for Cameras						X						
Programming and Training for Cameras	X											

Responsibility Matrix												
	Furnished by Owner's Vendor	Furnished by Owner	Furnished by GC	Furnished by Controls Contractor	Installed by Owner's Separate Contractor	Installed by GC	Installed by Owner's Contriols Contractors	Control Wiring by Controls Contractor	Control Wiring by GC	Power Wiring by GC	Power Wiring by Controls Contractor	Notes
283100 - Fire Detection and Alarm												
Devices	X					X						
Programming	X											
Cabling and Pathways						X						

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements governing allowances.

1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.
2. Certain unforeseen items may arise during the construction and/or the requirements for items that could not be accurately detailed in advance may become apparent during the construction, which will require work to be added to one or more Prime Contract's Scope(s). Actual work, if and where necessary, shall be defined at a later date when additional information is available for evaluation.

B. Types of allowances include the following:

1. Contingency allowances.

C. Related Requirements:

1. Division 01 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders and Allowance Use Authorizations.
2. Division 01 Section "Payment Procedures" for procedures governing the Schedule of Values for Allowances.

1.3 SELECTION AND PURCHASE

A. At the earliest practical date, advise Architect of the date when final selection and purchase of each product or system described by an Allowance Use must be completed to avoid delaying the Work.

B. At Architect's request, obtain proposals for each Allowance Use for use in making final selections. Include recommendations that are relevant to performing the Work.

C. Purchase products and systems selected by Architect from the designated supplier.

1.4 ACTION SUBMITTALS

A. Submit proposals for purchase of products or systems included in Allowance Uses, in the form specified for Change Orders.

1.5 INFORMATIONAL SUBMITTALS

A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.

B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.

C. Coordinate and process submittals for Allowance Use items with other portions of the Work.

1.6 COORDINATION

A. Coordinate Allowance Use items with other portions of the Work. Furnish templates as required to coordinate installation.

1.7 CONTINGENCY ALLOWANCES

A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Field Orders/Directives from the Architect and/or Construction Manager that indicate amounts to be charged to the allowance. Overhead, profit, and Bond Premium are not an allowable cost for work completed under the allowance.

B. Prime Contractor's related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.

C. Field Orders authorizing use of funds from the contingency allowance shall include all Prime Contract related costs other than overhead, profit, and corresponding bond premium adjustment. One or more of the following methods, which will be specified in the written directive, shall determine the value of the Work directed under this allowance.

1. By applying the applicable price or prices set forth in the Contract Documents or by applying a Unit Price agreed to by both parties.

2. By estimating the fair and reasonable cost of:
    a. Labor including all wages, required wage supplements and insurance required by law (workers' compensation, social security, disability, unemployment, etc.) paid to or on behalf of foremen, workers, and other employees below the rank of Prime Contract designated representative directly employed at the site.
    b. Materials.
    c. Equipment, excluding hand tools.
3. Time and Materials
4. The Owner reserves the right to utilize these methods provided it notifies the Prime Contract of its intent to do so prior to the time the Prime Contract is properly authorized to commence performance of such work.

D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

E. Unused Materials:

1. Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
2. If requested by Architect and/or Construction Manager, prepare unused material for storage by Owner when it is not economically practical to return the material for credit. If directed by Architect, deliver unused material to Owner's storage space. Otherwise, disposal of unused material is Contractor's responsibility.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Include in the base bid allowances in the amount/area listed below for all scope pertaining to Newburgh Enlarged City School District:

1. $300,000.00 Allowance for Rock Removal for Site Work: GC-01 General Construction ~~/ Site Work Contract~~. ***Including trucking to a disposable location offsite. Trucking and manifest receipts from the disposable location will be required to reconcile quantities and cost against this allowance. (Addendum 2)***

2. $50,000.00 Allowance for Exterior Building Signage and Signage Behind Front Entrance Desk: GC-01 General Construction ~~/ Site Work Contract~~. ***(Addendum 2)***

3. Include in base bid the removal of 3,000 cubic yards of rock including trucking to a disposal location offsite. Trucking and manifest receipts from disposal location will be required to track quantity. Any amount of rock removal above the 3,000 cubic yards will be paid for from the allowance. (Addendum 2)

4. Include in base bid the removal of 7,000 cubic yards of unsuitable soil/fill and replacement with structural fill. Once unsuitable soils have been uncovered and verified by the EOR the contractor then shall proceed with the removal and provide trucking and disposal tickets. (Addendum 2)

5. $100,000 Allowance for Unsuitable Soil Removal above the 7,000 CY in the base bid. Once unsuitable soils have been uncovered and verified by the EOR the contractor then shall proceed with the removal and provide T&M to track allowance usage. (Addendum 2)

END OF SECTION 012100

SECTION 015001 - TEMPORARY FACILITIES & CONTROLS-GC CONTRACTS

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection.

B. Temporary utilities include, but are not limited to, the following:
   1. Water service and distribution.
   2. Temporary electric power and light.
   3. Temporary heat.
   4. Ventilation and Humidity Control
   5. Telephone service.
   6. Sanitary facilities, including drinking water.
   7. Storm and sanitary sewer.

C. Support facilities include, but are not limited to, the following:
   1. Field offices and storage containers.
   2. Temporary roads and paving.
   3. Dewatering facilities and drains.
   4. Temporary partitions and enclosures.
   5. Hoists and temporary elevator use.
   6. Temporary project identification sign and project signage.
   7. Waste disposal services and dumpsters.
   8. Construction aids and miscellaneous services and facilities.

D. Security and protection facilities include, but are not limited to, the following:
   1. Temporary fire protection.
   2. Barricades, warning signs, and lights.
   3. Environmental protection.
   4. Tree and plant protection.
   5. Security enclosure and lockup.
   6. Temporary enclosures.
   7. Temporary partitions.
   8. Sidewalk Bridge for maintaining legal exits.
   9. Enclosure fence for the work site.

1.2 INFORMATIONAL SUBMITTALS

A. Temporary Utilities: GC contractor shall submit reports of tests, inspections, meter readings, and similar procedures performed on temporary utilities.

B. Implementation and Termination Schedule: Within 15 days of the date established for submittal of the Contractor's Construction Schedule, GC contractor shall submit a schedule indicating implementation and termination of each temporary utility for which the Contractor is responsible.

C. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

D. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent

E. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.

F. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage, including delivery, handling, and storage provisions for materials subject to water absorption or water damage, discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water damaged Work.

G. Describe delivery, handling, and storage provisions for materials subject to water absorption or water damage.

H. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.

I. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.

J. Dust-Control: Submit coordination drawing and narrative that indicates the dust-control measures proposed for use, proposed locations, and proposed time frame for their operation. Identify further options if proposed measures are later determined to be inadequate. Include the following:
   1. Locations of dust-control partitions at each phase of the work.
   2. Location of proposed air filtration system discharge.
   3. Other dust-control measures.

K. Waste management plan.

L. Accessible Temporary Egress: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.3 DEFINITIONS

A. Temporary Enclosure: As determined by Architect, temporary roofing is complete, insulated, all exterior wall openings are closed with temporary closures.

B. Permanent Enclosure: As determined by Architect, permanent roofing is complete, insulated, and weather tight; exterior walls are insulated and weather tight; and all openings are closed with permanent construction or substantial temporary closures.

C. Temporary Facilities: Construction, fixtures, fittings, and other built items required to accomplish the work, but which are not incorporated into the finished work.

D. Temporary Utilities: A type of temporary facility, primary sources of electric power, water, natural gas supply, etc., obtained from public utilities, other main distribution systems, or temporary sources constructed for the project, but not including the fixtures and equipment served.

E. Temporary Services: Activities required during construction, which do not directly accomplish the work.

F. General Contractor is the “Prime Contractor”

1.4 QUALITY ASSURANCE

A. Regulations: The contractor shall comply with industry standards and with 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. Police, fire department and rescue squad rules.
   5. Environmental protection regulations.

B. Standards: The Contractor shall 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."

C. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with the normal application of trade regulations and union jurisdictions.

D. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.5 USE CHARGES

A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Architect, testing agencies, and authorities having jurisdiction. These utilities may not be available, refer to Summary of work for scope.

B. Water and Sewer Service: Water from New Water System will need to be established with the local Utilities as well as metering. Owner will need to be notified when water is established with the City so an account can be established for payment if one hasn't been already. Provide connections and extensions of services as required for construction operations.

C. Electric Power Service: Electric power from Owner's existing Utility Service system is available to service the building construction activities. The owner will need to be notified when work resumes onsite so the meter can be established and power can be turned back on. Owner will be responsible for payment for these charges. GC is responsible for providing connections and extensions of services as required for construction operations including several distribution panels throughout new building to service all areas of construction, as well as the trenching and backfill associated with this temp service work.

Additional Electric Service: Temp service will need to be provided and established with the Utility company by the GC as identified in the GC Summary of work for the Temp Trailers and Facilities. Meter to be established for payment and charges. GC to provide connections and extensions of services as required for construction operations.

D. Gas Service: Gas Service from New feed will need to be established with the local Utilities as well as metering. Owner will need to be notified when service is established with the City so an account can be established for payment if one hasn't been already. Provide connections and extensions of services as required for construction operations.

E. Cost or use charges for temporary facilities are not chargeable to the Owner or the Architect. The Architect will not accept a GC's cost or use charges for temporary services or facilities as a basis of claim for an adjustment in the Contract Sum or the Contract Time.

F. Other entities using temporary services and facilities include, but are not limited to, the following:
   1. Other Subcontractors.
   2. The Construction Manager

3. The Owner's work forces.
4. Occupants of the Project.
5. The Architect.
6. Testing agencies.
7. Personnel of government agencies.

1.6 GC RESPONSIBILITIES

A. General: These Specifications are the responsibilities for temporary facilities. The GC Contractor is responsible for providing temporary facilities and controls that are normal construction activities and are not specifically assigned otherwise by the Architect or by any other documents.

B. THE GC is responsible for the following:
1. Installation, operation, maintenance, and removal of each temporary facility, as well as the costs and use charges associated with each facility.
2. Plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting necessary exclusively for its own activities.
3. field offices, complete with necessary furniture, utilities, telephone, and internet service.
4. storage containers for tools and storage of materials not incorporated into the building construction.
5. Dewatering for construction operations.
6. Collection and disposal of hazardous, dangerous, unsanitary, or other harmful waste material.
7. Collection of its waste material and transporting to a dumpster.
8. Secure lockup of tools, materials, and equipment.
9. Construction aids and miscellaneous services and facilities for construction activities.
10. Snow and ice removal from all site construction areas.
11. Barricades, warning signs, and lights related to the building work
12. Temporary toilets, including disposable supplies.
13. Temporary wash facilities, including disposable supplies
14. Temporary partitions indicated on drawings or specifically called for in specifications, required for project phasing or necessary to perform the work.
15. General disposal of waste from the new building areas including costs for dumpsters.
16. Security enclosure and lockup.
17. Project directional signage and safety signage.
18. Creating a controlled access zone
19. Providing labor for street work, coordination, and deliveries. Provide signs and flags as required.
20. Temporary lighting in accessible areas.

21. Electric Power Service: Provide power to all trade work by generator until permanent service is provided. Include temp outlets for all trade work during construction.
22. Water service: Provide water for all trade work by hydrant permit until permanent service is provided. Include temp hose bibs and heat trace for winter conditions.
23. Temp heat for the new building space while under construction for all trade work. Provide fuel and an operator as identified in the GC Single Prime Contract Summary.
24. Site barricades, silt fence around site and stock piles. Dumpsters for site work.
25. Waste and water connections to the street and or site utility.
26. Grading of site including seed and topsoil.
27. Stone Tracking pads.
28. Utility mark outs.
29. Repair and maintenance of existing temp site fence, gates and wind screening.
30. Installation of new temp post driven fencing to provide a complete enclosure around the construction site. Additional (2) sets of gates and 300 LF of fencing to be provided by GC for phasing work.
31. Dumpsters for all construction activity along with dumpster pick up service to remove dumpster waste from the site as required for the duration of construction.
32. Washout areas for construction vehicles as outlined in the Civil Drawings.
33. Waste and Water connections to the street and site Utilities.
34. Grading, leveling and proving suitable fill to support temporary facilities.
35. Portable toilets for all trades per OSHA requirements as well as a cleaning service to clean all portable toilets weekly.
36. Temporary wash facilities, including disposal and supplies.
37. Temporary window opening protection, and temporary walls and doors.
38. Cleaning service for GC and CM trailer once a week.
39. Snow and ice removal for the entire project site.
40. Cold weather procedures. Includes but is not limited to:
    a.Cold weather paving mix
    b.Cold weather Concrete mix
    c.tenting and heating of masonry
    d.blanketing of rebar
    e.blanketing and heating of concrete for curing
13. Hot weather procedures.
14. Project information sign 4’-0”hx8’-0”w metal sign with printed color rending with project name and address, mounted to existing support system located on site logistics plan.
15. All temp heating and fuel for temp heating. Refer to GC Contract Summary for more information.

16. OSHA required protection and safety, which includes but is not limited to:
    a.leading edge guardrails
    b.floor opening protection
    c.elevator shaft protection
    d.controlled access zones
    e.OSHA compliant scaffolding, hanging scaffold, hydro mobile, baker scaffold
    f.stair guard rails
    g.fire extinguishers
    h.flagman
    g.Temp safety and construction signage as well as directional signage
17. Excuvation and backfill for all trade work.

C. This GC Contract is responsible for the following:
    1. Night/day security camera system with DVR and monitoring for the purpose of the monitoring construction activity. Refer to GC Contract Summary for more information.
    2. Temp electric service for all temp offices. Refer to GC Contract Summary for more information.
    3. Temp electric service from existing owner provided temp service for all construction trade needs. Refer to GC Contract Summary for more information.
    4. Temp lighting as required by OSHA. Lighting needed for corridor, all rooms, stairs, staging area, site trailers.

D. This GC Contract is responsible for the following:
    1. Water distribution from RPZ at hydrant. Provide hose connect and splitters to service the various trade work and temp potable and washing station service till permanent water is established.

PART 2 PRODUCTS

2.1 MATERIALS

A. General: The GC shall provide new materials. If acceptable to the Architect, undamaged, previously used materials in serviceable condition may be used. Provide materials suitable for use intended.

B. Lumber and Plywood: Comply with requirements in Division 6 Section "Rough Carpentry."

C. For job-built sheds within the construction area, provide UL-labeled, fire-treated lumber and plywood for framing, sheathing, and siding. Metal is an option as well.

D. For safety barriers, sidewalk bridges, and similar uses, provide minimum 5/8-inch- thick exterior plywood.

E. Gypsum Wallboard: Provide 5/8 type x gypsum wallboard on interior walls of temporary offices or temporary partitions.

F. Roofing Materials: Provide UL Class A standard-weight asphalt shingles or UL Class C mineral-surfaced roll roofing on roofs of job-built temporary offices, shops, and sheds.

G. 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.

H. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-mil minimum thickness, with flame-spread rating of 15 or less per ASTM E 84 and passing NFPA 701 Test Method 2.

I. Dust-Control Adhesive-Surface Walk-off Mats: Provide mats minimum 36 by 60 inches.

J. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

K. Water: Provide potable water approved by local health authorities.

L. Pole driven Chain-Link Fencing: Minimum 2-inch, 0.148-inch- thick, galvanized-steel, chain-link fabric fencing; minimum 8 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch- OD top and bottom rails. Provide galvanized-steel bases for supporting posts.

M. Open-Mesh Fencing: Provide 0.12-inch- thick, galvanized 2-inch chain link fabric fencing 8 feet high and galvanized steel pipe posts, 1-1/2 inches I.D. for line posts and 2-1/2 inches I.D. for corner posts.

2.2 EQUIPMENT

A. General: The GC shall provide new equipment. If acceptable to the Architect, undamaged, previously used equipment in serviceable condition may be used. Provide equipment suitable for use intended.

B. 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.

C. Electrical Outlets: Provide properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-V plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button, and pilot light for connection of power tools and equipment.

D. Electrical Power Cords: Provide grounded extension cords. Use hard-service cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.

E. Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered-glass enclosures, where exposed to breakage. Provide exterior fixtures where exposed to moisture.

F. Heating and ventilating units: Provide temporary heating and ventilating units that have been tested and labeled by UL, FM, or another recognized trade association related to the type of fuel being consumed.

G. Air Filtration Units: HEPA primary and secondary filter-equipped portable units with four-stage filtration. Provide single switch for emergency shutoff. Configure to run continuously.

H. Temporary Toilet Units: The General Contractor shall provide self-contained, single-occupant toilet units of the chemical, aerated recirculation, or combustion type. Provide units properly vented and fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material. One unit per ten workers on site. Provide one separate toilet unit for the use of the construction manager and one separate unit of women on site. Includes costs to provide construction managers trailer with an operational bathroom if construction managers trailer is equipped with one. Provide separate handicap temp toilet to be locked and used separate for construction manager.

I. Fire Extinguishers: GC will provide hand-carried, portable, UL-rated; Class A fire extinguishers for temporary offices and similar spaces. General Contractor is responsible for providing throughout the construction building as required by code for life safety and hung on temp wall hooks. Provide hand-carried, portable, UL-rated, Class ABC, dry-chemical extinguishers or a combination of extinguishers of NFPA-recommended classes for the exposures.
   1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

2.3 TEMPORARY SUPPORT FACILITIES

A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.

B. Temporary Field Offices: The GC shall provide its own prefabricated or mobile units or similar job-built construction with lockable entrances, operable windows, and serviceable finishes. Provide heated and air-conditioned units on foundations adequate for normal loading.

C. General contractor to provide labor to clean and dispose of garbage from construction managers trailer once a week.

D. Electrical contractor to provide all temp power for the project.

E. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

F. Store combustible materials apart from building.

2.4 TEMPORARY UTILITIES

A. Telephone Service: GC is responsible for telephone service.

B. Provide at least one telephone at each site with answering machine.

C. Display construction-related phone numbers at each phone.
1. Fire emergency number.
2. Rescue emergency number.
3. Physician.
4. GC home offices.
5. Owner's representative.
6. Architect's representative.

PART 3 EXECUTION

3.1 INSTALLATION

A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.

B. GC 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.

3.2 TEMPORARY UTILITY INSTALLATION

A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.

B. The 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.

C. Drinking-Water Facilities: Each Contractor shall provide containerized, tap-dispenser, drinking-water units, including paper cup supply.

D. Temporary Lighting:
   1. The Electrical Contractor will install and operate temporary lighting that will fulfill security and protection requirements without operating the entire electrical system. Provide temporary lighting that will provide adequate illumination for construction operations and traffic conditions.
   2. Operate temporary lighting that will fulfill security and protection requirements without operating the entire system. Provide temporary lighting that will provide adequate illumination for construction operations and traffic conditions.

E. Security lighting for building exteriors shall be continuously operational and maintained.

F. Temporary lighting shall be maintained in accordance with OSHA standards for power and foot candle levels in all areas while workers occupy the space

G. The General Contractor will provide temporary lighting in the areas of renovation where the existing fixtures have been removed and the new lighting has not been installed

H. Temporary Telephones: The prime GC the construction period for all personnel engaged in construction activities. Install telephone on a separate line for each temporary office.

I. Separate Telephone Lines: Provide additional telephone lines for the following:
   1. Where an office has more than 2 occupants, install a telephone for each additional occupant or pair of occupants.
   2. Provide a dedicated telephone line for a fax machine in each subcontractor's field office.
   3. At each telephone, post a list of important telephone numbers.

J. Isolation of Work Areas: Prevent dust, fumes, and odors from entering outside our work areas.

K. Each Contractor will perform daily construction cleanup and final cleanup using approved, HEPA-filter-equipped vacuum equipment.

3.3 SUPPORT FACILITIES INSTALLATION

A. Each subcontractor will locate field offices, storage trailers, sanitary facilities, and other temporary construction and support facilities for easy access.

B. Maintain support facilities until near Substantial Completion. Remove prior to Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to the Owner.

C. Refer to the phasing plans for locations of storage trailers

D. Storage trailers/ containers: If required, each subcontractor will install storage containers equipped to accommodate materials and equipment involved. Storage trailers are to be located at each site in the designated staging areas located on the phasing plans.

E. Dewatering Facilities and Drains: GC Contractor will comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
   1. The General Contractor will remove snow and ice as required to minimize accumulations.

F. The General Contractor will provide waste-collection containers in sizes adequate to handle waste from construction operations.

G. Comply with requirements of authorities having jurisdiction. Comply with Division 01 Section "Execution" for progress cleaning requirements.

H. Temporary Lifts and Hoists: GC shall coordinate the facilities for hoisting materials and employees at the expense of either its subcontractors and or included in the bid, there is no additional cost to the owner.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Temporary Facility Changeover: Except for using permanent fire protection as soon as available, do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion, or longer, as requested by the Architect.

B. Protection of Existing Facilities: Each contractor will protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

C. Environmental Protection: GC contractor will provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.. Avoid using tools and equipment that produce harmful noise. Restrict use of noise-making tools and equipment to hours that will minimize complaints from persons or firms near the site.

D. Comply with work restrictions specified in Division 01 Section "Summary."

E. Stormwater Control: The General Contractor will comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.

F. Tree and Plant Protection: The General Contractor will install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

G. Enclosure Fence: The General Contractor when excavation begins will install an enclosure fence with lockable entrance gates. Install in a manner that will prevent the public and animals from easily entering the site, except by the entrance gates.
   1. Provide open-mesh, 8' high chain link fence with posts.
   2. Extent of Fence: As required to enclose entire excavation.
   3. Provide min. 2 double swing access gates and man gates. Each gate is to have a chain and padlock.
   4. Provide (2) keys for each lock to the Construction Manager.
   5. Remove fence upon completion of all exterior activities or sooner if directed by Construction Manager.

H. Creating a controlled access zone around demo area.

I. Providing overhead protection at all entry doors withing 30 feet of demo operations.

J. Barricades, Warning Signs, and Lights: The General Contractor will comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed, provide lighting, including flashing red or amber lights.

K. Temporary Signs: The General Contractor will prepare signs to provide directional information to construction personnel and visitors for each site. Unauthorized signs are not permitted.
   1. For construction traffic control/flow at entrances/exits, as designated by the Owner.
   2. For warning signs as required
   3. Per OSHA standards as necessary
   4. For trailer identification
   5. For "No Smoking" safe work site at multiple locations.
   6. Project Information sign as designed by the architect.

L. Temporary Egress: The General Contractor will maintain temporary egress from the site as indicated and as required by authorities having jurisdiction. Provide man door in site fence for ingress and egress.

M. Temporary Enclosures: GC contractor will provide temporary enclosure for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities.
   1. Install tarpaulins securely, with incombustible wood framing and other materials. Close openings of 25 sq. ft. or less with plywood or similar materials.

2. Where temporary wood or plywood enclosure exceeds 100 sq. ft. in area, use UL labeled, fire-retardant-treated material for framing and main sheathing.

N. Temporary Fire Protection: GC contractor until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10, "Standard for Portable Fire Extinguishers," and NFPA 241, "Standard for Safeguarding Construction, Alterations, and Demolition Operations."
1. Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher on each floor at or near each usable stairwell.
2. Store combustible materials in containers in fire-safe locations.
3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for fighting fires. Prohibit smoking in hazardous fire-exposure areas.
4. Provide supervision of welding operations, combustion-type temporary heating units, and similar sources of fire ignition.

O. Security Enclosure and Lockup: The General Contractor will install substantial temporary enclosure of partially completed areas of construction. Provide temporary doors and locking entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
1. Storage: Each prime contractor is responsible for their materials and equipment to be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.

3.5 MOISTURE AND MOLD CONTROL

A. Contractor's Moisture-Protection Plan: GC Contractor is to avoid trapping water in finished work. Document visible signs of mold that may appear during construction.

B. Exposed Construction Phase: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
1. Protect porous materials from water damage.
2. Protect stored and installed material from flowing or standing water.
3. Keep porous and organic materials from coming into prolonged contact with concrete.
4. Remove standing water from decks.
5. Keep deck openings covered or dammed.

C. Partially Enclosed Construction Phase: After installation of weather barriers but before Permanent Enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:

1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
2. Keep interior spaces reasonably clean and protected from water damage.
3. Periodically collect and remove waste containing cellulose or other organic matter.
4. Discard or replace water-damaged material.
5. Do not install material that is wet.
6. Discard, replace or clean stored or installed material that begins to grow mold.
7. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

3.6 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.

B. Maintenance: Maintain facilities and good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
2. Protection: Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

D. Termination and Removal: Unless the Architect requests that it be maintained longer the GC

E. will remove each temporary facility when the need has ended, when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed 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 property of each contractor.
2. At Substantial Completion, GC contractor will be responsible to clean and renovate permanent facilities related to the work of their contact and used during the construction period including, but not limited to, the following:
   a. Replace air filters and clean inside of ductwork and housings.
   b. Replace significantly worn parts and parts subject to unusual operating conditions.
   c. Replace lamps burned out or noticeably dimmed by hours of use.

END OF SECTION

SITE LOGISTICS STUDY PLAN

NOTE: THIS PLAN SHOWN IS TO USED AS A CONCEPT PLAN WITH THE MINIMUM SHOWN. GC CONTRACT SHALL SHOW SITE LOGISTIC PLANNING FOR EACH PHASE OF THE MAJOR WORK RELATED TO THE CONSTRUCTION OF THIS BUILDING. THESE LOGISTIC PLANS SHALL INCLUDE:

1) EXCAVATION OF BUILDING
2) ALL CONCRETE POURS-SHOWN IN PHASES
3) STEEL ERECTION
4) GENERAL CONSTRUCTION
5) SITE WORK/UTILITY WORK

1

GENERAL CONTRACTOR TO FURNISH AND INSTALL ADDITIONAL 300 LF OF TEMPORARY POST DRIVEN FENCING 6'-0" HIGH WITH (2) SETS OF DOUBLE GATES 8' W X 6' H. LOCATION OF FENCING AND GATES ARE UNDEFINED AND ARE TO BE USED AS DIRECTED AND COORDINATED WITH THE CONSTRUCTION MANAGER. PROVIDE UPDATED LOGISTICS PLANS TO CONSTRUCTION MANAGER AND ARCHITECT FOR REVIEW AND APPROVAL. ANY LOCAL PERMITS REQUIRED SHALL BE PART OF THIS CONTRACT.

1

QTY. 12

LEGEND

- POST-MOUNTED SECURITY CAMERA
- EXISTING CONSTRUCTION FENCE
- NEW CONSTRUCTION FENCE TO MATCH HEIGHT OF EXISTING CONSTUCTION FENCE
- EXISTING TEMPORARY ELECTRICAL SERVICE
- NEW TEMPORARY ELECTRICAL SERVICE

HORIZONTAL SCALE
40 0 20 40 80
SCALE: 1"=40'

GENERAL CONTRACTOR TO FIX 10 LOCATIONS LOCATION OF EXISTING TEMPORARY POST DRIVEN CHAIN LINK SITE FENCING THAT IS FALLING, RESECURE EXISTING WIND SCREENING, AND PROVIDE 200 LF OF REPLACEMENT WIND SCREEN TO MATCH. THE CONSTRUCTION MANAGER AND DISTRICT MUST BE NOTIFIED AND AUTHORIZE ANY MODIFICATION TO EXISTING FENCING OR GATES. GENERAL CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EXISTING SITE FENCING AND GATES THROUGHOUT THE COURSE OF CONSTRUCTION.

THE LOCATION OF THE PROPOSED CONSTURCTION FENCING IS APPROXITE, GENERAL CONTRACTOR TO PROVIDE CONSTRUCTION FENCING IN A LOCATION THAT COMPLETELY ENCLOSES THE CONSTRUCTION AREA AND SHALL MODIFY CONSTRUCTION FENCING AS NECESSARY TO EXECUTE WORK.

2ND MEANS CONSTRUCTION ENTRANCE WITH LOCKABLE GATES

TRAFFIC CONTROL FLAGGER

PROPOSED MOBLE CRANES LOCATIONS

MAIN CONSTRUCTION ENTRANCE WITH LOCKABLE GATES

TEMP PROJECT SIGN HERE

MATERIAL STORAGE TRAILERS

EXISTING TEMPORARY ELECTRICAL SERVICE

MATERIAL LAYDOWN LOCATIONS FOR HOISTING

NEW TEMPORARY ELECTRICAL SERVICE

CONSTRUCTION TRAILERS ON GRAVEL SUB BASE

CONTRACTOR PARKING

TRAFFIC CONTROL FLAGGER

WEST STREET (ASPHALT ROADWAY) (TWO WAY TRAFFIC)

ASSUMED BOUNDARY LINE PER R.O.W. WIDTH (PER OFFICIAL MAP OF THE CITY OF NEWBURGH DATED 10/09/1936)

LIMIT OF DISTURBANCE 42.679± SF (9.80 AC.)

NEW CTE BUILDING 70,984 SF FOOTPRINT FFE = 266.00

FFE = 266.00

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Jacobs

If you excavate anywhere in New York State, except NYC or Long Island, call Dig Safely. New York 1-800-962-7962 i-Notice = www.DigSafelyNewYork.com

SITE LOGISTIC CONCEPT PLAN STUDY

SECTION 042000 – STRUCTURAL UNIT MASONRY

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Mortar and grout.

B. Reinforcement and anchorage.

1.2 REFERENCE STANDARDS

A. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; 2020.

B. ASTM C90 - Standard Specification for Loadbearing Concrete Masonry Units; 2016a.

C. ASTM C150/C150M - Standard Specification for Portland Cement; 2021.

D. ASTM C270 - Standard Specification for Mortar for Unit Masonry; 2019a.

E. ASTM C476 - Standard Specification for Grout for Masonry; 2020.

F. ASTM C1714/C1714M - Standard Specification for Preblended Dry Mortar Mix for Unit Masonry; 2016.

G. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2016.

1.3 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by all relevant installers.

1.4 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data for masonry units, mortar, and masonry accessories.

C. Shop Drawings: Provide shop drawings the following:

1. Reinforcing Steel: Detail bending, lap lengths, and placement of unit masonry reinforcing bars. Comply with ACI 315. Show elevations of reinforced walls.

D. Statement of Compressive Strength of Masonry: For each combination of masonry unit type and mortar type, provide statement of average net-area compressive strength of masonry units, mortar units, and resulting net-area compressive strength of masonry determined according to TMS 602/ACI 530.1

E. Submit samples for masonry and mortar, illustrating color and texture.

F. Manufacturer's Certificate: Certify that masonry units meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

A. Comply with provisions of TMS 402/602, except where exceeded by requirements of Contract Documents.

B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials.

B. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.

C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

D. Deliver preblended, dry mortar mix in moisture-resistant containers. Store preblended, dry mortar mix in delivery containers on elevated platforms in a dry location or in covered weatherproof dispensing silos.

E. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.7 FIELD CONDITIONS

A. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.

1. Extend cover a minimum of 24 inches down both sides of walls, and hold cover securely in place.

B. Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least three days after building masonry walls or columns.

C. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.

D. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.

PART 2 PRODUCTS

2.1 UNIT MASONRY, GENERAL

A. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated. Do no use units where such defects are exposed in the completed work.

B. Fire-Resistance Ratings: Comply with requirements for fire-resistance-rated assembly designs indicated.

2.2 CONCRETE MASONRY UNITS

A. Concrete Block: Comply with referenced standards and as follows:

1. Size: Standard units with nominal face dimensions of 16 by 8 inches and nominal depths as indicated on drawings for specific locations.

2. Load-Bearing Units: ASTM C90, normal weight.

2.3 MORTAR AND GROUT MATERIALS

A. Portland Cement: ASTM C150/C150M, Type I; color as required to produce approved color sample.

B. Water: Clean and potable.

C. Packaged Dry Material for Mortar for Unit Masonry: Premixed Portland cement, hydrated lime, and sand; complying with ASTM C1714/C1714M and capable of producing mortar of the specified strength in accordance with ASTM C270 with the addition of water only.

1. Type: Types as scheduled in this section.

2. Color: Mineral pigments added as required to produce approved color sample.

D. Packaged Dry Material for Grout for Masonry: Premixed cementitious materials and dried aggregates; capable of producing grout of the specified strength in accordance with ASTM C476 with the addition of water only.

2.4 REINFORCEMENT AND ANCHORAGE

A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi), deformed billet bars; uncoated.

B. Joint Reinforcement: Use ladder type joint reinforcement where vertical reinforcement is involved and truss type elsewhere, unless otherwise indicated.

2.5 MORTAR AND GROUT MIXING

A. Mortar for Unit Masonry: ASTM C270, using the Proportion Specification.

1. Masonry below grade and in contact with earth: Type M.

2. Exterior, loadbearing masonry: Type S.

3. Exterior, non-loadbearing masonry: Type S.

4. Interior, loadbearing masonry: Type N.

5. Interior, non-loadbearing masonry: Type O.

B. Colored Mortar: Proportion selected pigments and other ingredients to match Architect's sample, without exceeding manufacturer's recommended pigment-to-cement ratio.

C. Grout: ASTM C476; consistency required to fill completely volumes indicated for grouting; fine grout for spaces with smallest horizontal dimension of 2 inches or less; coarse grout for spaces with smallest horizontal dimension greater than 2 inches.

D. Admixtures: Add to mixture at manufacturer's recommended rate and in accordance with manufacturer's instructions; mix uniformly.

E. Mixing: Use mechanical batch mixer and comply with referenced standards.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive masonry.

B. Verify that related items provided under other sections are properly sized and located.

C. Verify that built-in items are in proper location, and ready for roughing into masonry work.

3.2 PREPARATION

A. Direct and coordinate placement of metal anchors supplied for installation under other sections.

B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.3 COLD AND HOT WEATHER REQUIREMENTS

A. Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

3.4 COURSING

A. Establish lines, levels, and coursing indicated. Protect from displacement.

B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.

C. Concrete Masonry Units:

1. Bond: Running.

2. Coursing: One unit and one mortar joint to equal 8 inches.

3. Mortar Joints: Concave.

3.5 PLACING AND BONDING

A. Lay hollow masonry units with face shell bedding on head and bed joints.

B. Buttering corners of joints or excessive furrowing of mortar joints is not permitted.

C. Remove excess mortar and mortar smears as work progresses.

D. Interlock intersections and external corners.

E. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.

F. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.

3.6 BUILT-IN WORK

A. As work progresses, install built-in metal door frames and anchor bolts and other items to be built into the work and furnished under other sections.

B. Install built-in items plumb, level, and true to line.

C. Bed anchors of metal door frames in adjacent mortar joints. Fill frame voids solid with grout.

1. Fill adjacent masonry cores with grout minimum 12 inches from framed openings.

D. Do not build into masonry construction organic materials that are subject to deterioration.

3.7 TOLERANCES

A. Maximum Variation From Unit to Adjacent Unit: 1/16 inch.

B. Maximum Variation from Plane of Wall: 1/4 inch in 10 ft and 1/2 inch in 20 ft or more.

C. Maximum Variation from Plumb: 1/4 inch per story non-cumulative; 1/2 inch in two stories or more.

D. Maximum Variation from Level Coursing: 1/8 inch in 3 ft and 1/4 inch in 10 ft; 1/2 inch in 30 ft.

E. Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 inch.

3.8 CUTTING AND FITTING

A. Obtain approval prior to cutting or fitting masonry work not indicated or where appearance or strength of masonry work may be impaired.

3.9 FIELD QUALITY CONTROL

A. An independent testing agency will perform field quality control tests, as specified in Section 014000 - Quality Requirements.

3.10 CLEANING

A. Remove excess mortar and mortar droppings.

B. Replace defective mortar. Match adjacent work.

C. Clean soiled surfaces with cleaning solution.

D. Use non-metallic tools in cleaning operations.

3.11 PROTECTION

A. Without damaging completed work, provide protective boards at exposed external corners that are subject to damage by construction activities.

END OF SECTION 042000

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SECTION 083473 - SOUND CONTROL DOOR ASSEMBLIES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Sound control door assemblies.
   1. Wood doors and metal frames.
   2. Interior doors and frames, non-fire-rated.

1.2 REFERENCE STANDARDS

A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.

B. ANSI/SDI A250.6 - Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames; 2020.

C. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames (SDI-100); 2017.

D. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 2020.

E. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009 (Reapproved 2016).

F. ASTM E413 - Classification for Rating Sound Insulation; 2022.

G. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).

H. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.

I. BHMA A156.115 - Hardware Preparation in Steel Doors and Steel Frames; 2016.

J. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.

K. NAAMM HMMA 830 - Hardware Selection for Hollow Metal Doors and Frames; 2002.

L. NAAMM HMMA 831 - Hardware Locations for Hollow Metal Doors and Frames; 2011.

M. NAAMM HMMA 865 - Guide Specifications for Sound Control Hollow Metal Door and Frames Assemblies; 2013.

N. SDI 117 - Manufacturing Tolerances for Standard Steel Doors and Frames; 2019.

O. WDMA I.S. 1A - Interior Architectural Wood Flush Doors; 2021, with Errata.

1.3 SUBMITTALS

A. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, fire-protection ratings for fire-rated doors. and finishes.

B. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and any indicated finish requirements.

C. Samples: Submit two samples of door veneer, 8 inch by ___ inch in size showing factory finishes, colors, and surface texture.

D. Installation Instructions: Manufacturer's published instructions, including any special installation instructions relating to this project.

E. Manufacturer's Qualification Statement.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years documented experience.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Protect wood doors in compliance with WDMA I.S. 1A and specified requirements.

B. Store wood doors with resilient packaging sealed with heat shrunk plastic; do not store in damp or wet areas, or in areas where sunlight might bleach veneer; seal top and bottom edges with tinted sealer if stored more than one week, and break seal on site to permit ventilation.

C. Remove doors and frames from resilient packaging upon delivery on site and inspect for damage, provide cover over doors for protection until installed, and store in vertical position properly braced with blocking to permit air circulation between components.

D. Mark each door on bottom rail with opening number used on Shop Drawings.

1.6 FIELD CONDITIONS

A. Environmental Limitations: Do not deliver or install doors until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during remainder of construction period.

1.7 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.
   1. Failures include, but are not limited to, the following:
      a. Warping (bow, cup, or twist) more than 1/4 inch (6.4 mm) in a 42-by-84-inch (1067-by-2134-mm) section.
      b. Telegraphing of core construction in face veneers exceeding 0.01 inch in a 3-inch (0.25 mm in a 76.2-mm) span.
   2. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
   3. Warranty Period for Solid-Core Interior Doors: Life of installation.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Wood Sound Control Door Assemblies:
   1. IAC Acoustics; Noise-Lock..

2.2 REGULATORY REQUIREMENTS

A. Accessibility: Comply with ICC A117.1 and ADA Standards.

B. Opening Force of Sound Control Doors, Non-Fire Rated: 5 lbs, maximum, in compliance with ADA Standards.

C. Hardware Preparations, Selections and Locations: Comply with NAAMM HMMA 830 and NAAMM HMMA 831 or BHMA A156.115 and ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.

D. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with specified requirements for each type; for instance, a sound control door is also indicated as being an exterior door must comply with requirements specified for sound control doors and exterior doors; where two requirements conflict, comply with most stringent.

2.3 COMPONENTS

A. Panels: Same construction, performance, and finish as doors.

B. Door Edge Profile: Manufacturer's standard for application indicated.

C. Glazed Lights: Factory installed, with removable stops on secure side; sizes and configurations as indicated on drawings.
   1. Style: Manufacturer's standard.

2.4 SOUND CONTROL DOORS

A. Wood Sound Control Interior Doors: Provide fire-rated door construction as indicated.
   1. Wood Doors: Refer to drawings for locations and additional requirements.
      a. ~~Quality Standard: Custom Grade, Heavy Duty performance, in accordance with AWI/AWMAC/WI (AWS), AWMAC/WI (NAAWS) or WDMA I.S. 1A.~~ ***Addendum 2***
      b. Wood Veneer Faced Doors: 5-ply or 7-ply unless otherwise indicated.
         1) Wood veneer facing with factory transparent finish.
   2. Sound Transmission Class (STC) Rating of Sound Control Door Assembly: STC of 61, minimum, calculated in accordance with ASTM E413, and tested in accordance with ASTM E90.
   3. Door Face Sheets: Flush.
   4. Door Finish: Factory finished.
   5. Sound Seals: As required by manufacturer to meet indicated sound control ratings.
   6. Interior Doors, Non-Fire Rated:
      a. Door Core Material: As required by manufacturer to meet indicated sound control ratings.

2.5 SOUND CONTROL DOOR FRAMES

A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.

B. Metal Sound Control Interior Door Frames: Face welded type.
   1. Frame Finish: Factory primed and field finished.

C. Provide mortar guard boxes for hardware cut-outs in frames installed in masonry or being grouted.

D. Frames in Masonry Walls: Size to suit masonry coursing with head member 4 inch high to fill opening without cutting masonry units.

E. Frames Wider than 48 inches: Reinforce with steel channel fitted tightly into frame head, flush with top.

2.6 DOOR HARDWARE ***Addendum 2***

A. ***Hinges: IAC, cam-lift, butt-type, hinges, US26D finish (Hinge manufacturer to furnish laboratory test data certifying that hinges of identical design have been cycled a minimum of 125,000 times while supporting a door leaf weighing a minimum of 350 lbs.)***
   1. ***Quantities of hinges as follows:***

a. ***For door leaf thickness less than or equal to 2 ½" (64):***
b. ***Two (2) hinges required per leaf for openings up to and including 96" (2438 mm) high***
c. ***Three (3) hinges required per leaf for openings up to and including 120" (3048 mm) high***
d. ***For door leaf thickness greater than 2 ½" (64):***
e. ***Three (3) hinges required per leaf for openings up to and including 96" (2438 mm) high***
f. ***Four (4) hinges required per leaf for openings up to and including 120" (3048 mm) high***

B. ***Closers: "LCN" or "Norton", factory installed.***

C. ***Pull Handles: 1" (25 mm) diameter x 9" (229 mm) overall length, 3" (76 mm) projection, US28 finish, factory installed.***

D. ***Push Plates: 4" (102 mm) wide x 16" (406 mm) high x .050" (1 mm) thick, US32D finish, factory installed.***

E. ***Hardware Reinforcement***
1. ***Hinges: Minimum of ¼" (6 mm) thick x 2" (51 mm) wide x 7 ½" (191 mm) lg.***
2. ***Frames: Minimum of 3/16" (5 mm) thick for strikes and #11 (3 mm) gauge for closers.***
3. ***Doors: Minimum of #11 (3 mm) gauge for lock boxes and closers.***

F. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, two on head of pairs without center mullions, and in compliance with sound control requirements.

G. ***~~Hinges: Type required by door manufacturer.~~***

H. Threshold: Provide sound control/acoustic seal for sill of door in closed position by door manufacturer.

I. Sound Control Seals: Provide sound control/acoustic seals for jambs and head of door in closed position by door manufacturer.

2.7 FINISHES

A. Primer, Metal Doors and Frames: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard, in compliance with local VOC requirements.

B. Wood Door Finish: Complying with WDMA I.S. 1A, premium grade, manufacturer's standard coating.
1. Color: As selected by Architect from manufacturer's standard range.

2.8 ACCESSORIES

A. Glazing: Clear Tempered glass, factory installed, and tested to comply with specified sound control and fire ratings as indicated.

B. Grout for Frames: Portland cement grout with maximum of 4 inch slump for hand troweling; thinner pumpable grout of higher slump is not permitted.
   1. Grouting of frames in drywall/gypsum board construction is not permitted.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that opening sizes and tolerances are acceptable.

C. Verify that finished walls are in plane to ensure proper door alignment.

3.2 PREPARATION

A. Coat inside of frames to be installed in masonry or to be grouted, with bituminous coating, prior to installation.

3.3 INSTALLATION

A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.

B. Coordinate frame anchor placement with wall construction.

C. Grout frames in masonry construction, using hand trowel methods; brace frames so that pressure of grout before setting will not deform frames.

D. Comply with recommended practice for hardware placement of doors and frames in accordance with ANSI/SDI A250.6 or NAAMM HMMA 865.

E. Factory installed glazing, comply with installation requirements; see Section 088000.

F. Touch up damaged factory finishes.

3.4 TOLERANCES

A. Clearances Between Door and Frame: Comply with related requirements of specified frame standards or custom guidelines indicated in accordance with SDI 117 or NAAMM HMMA 865.

B. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

3.5 FIELD QUALITY CONTROL

A. Repair or replace sound control door components that have failed designated field testing, and retest to verify performance complies with specified requirements.

3.6 ADJUSTING

A. Adjust for smooth and balanced sound control door movement.

B. Adjust sound control doors so that seals are fully engaged when door is closed.

C. Adjust sound control doors for force to close, latch, and unlatch; adjust as necessary in compliance with requirements.

3.7 SCHEDULE

A. Refer to Door and Frame Schedule on drawings.

END OF SECTION

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SECTION 087100 – DOOR HARDWARE

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 but not limited to the following:

1. Mechanical and/or electrical hardware.
2. Cylinder for hardware specified in other sections.

B. Related Requirements

1. Division 1 Section "Sustainable Design Requirements".
2. Division 01 Section “Closeout Procedures”
3. Division 06 Section “Rough Carpentry”.
4. Division 06 Section “Finish Carpentry”.
5. Division 08 Section “Hollow Metal Doors and Frames”.
6. Division 08 Section “Flush Wood Doors”.

C. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. NYS SED – Manual of Planning Standards (MPS).
8. State Building Codes, Local Amendments.

1.3 COORDINATION

A. Installation Templates: Distribute for doors, frames, and other work specified to be factory 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.

B. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.

C. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

1.4 COORDINATION AND MEETINGS

A. Location: Conduct conferences on project site or other location as directed by the Architect/Owner.

B. Preinstallation Conference

1. Purpose of the Preinstallation conference is to:

    a. Coordinate between trades, so all understand their responsibilities.
    b. To instruct the installing contractors' personnel on the proper installation and adjustment of their respective products.
        1. The hardware supplier is responsible for bringing the installation instructions to the meeting.
    c. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
    d. Review sequence of operation narratives for each unique access-controlled opening.
    e. Review the requirements for local and state building codes and how they apply to doors, frames, and hardware.
        1. Gap requirements around the doors to follow NFPA 80.
        2. Opening forces to follow DOJ’s “2010 ADA Standards for accessible design”.
    f. Review any special applications.

2. Conference participants shall include but not limited to:

    a. General Contractor.
    b. Installer for doors, frames, and hardware.
    c. Supplier Representative.
    d. Owner and/or Owners Representative.
    e. Construction Manager (if applicable).
    f. Architect and/or Architects Consultant.

C. Keying Conference:

1. Incorporate conference decisions into keying schedule after reviewing door hardware keying system including, but not limited to, the following:

    a. Flow of traffic and degree of security required.
    b. Preliminary key system schematic diagram.
    c. Requirements for key control system.
        1. This is to include the number of keys per keyset.
        2. Number of Master level keys.
        3. Use of keyed construction cores.
    d. Requirements for access control.
    e. Address for delivery of keys.

2. Keying Conference participants shall include but not limited to:

a. Supplier Representative.
b. Owner and/or Owners Representative.
c. Architect and/or Architects Consultant.

1.5 SUBMITTALS

A. Submittal Sequence to follow in this order and each are to be submitted under separate cover:
1. Information Submittal.
2. Door Hardware Schedule.
3. Hardware Product Data.
4. Samples.
5. Keying Schedule (Only after the keying meeting has taken place).
6. Closeout Submittals.
7. Submit door hardware schedule concurrent with submissions of Product Data, Samples, Riser Diagrams.

B. Information Submittals:

1. Qualification Data: Submit qualification data for the Installer and Supplier as defined under Quality Assurance of the Section.
2. Product Certifications:
a. Certify that door hardware for use on each type and size of labeled fire-rated doors complies with listed fire-rated door assemblies.
3. Product Test Reports: For compliance with accessibility requirements, for tests performed by manufacturer and witnessed by a qualified testing agency.

C. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Use same scheduling sequence and use same door numbers as in the Contract Documents.

2. Content: Include the following information:
a. Index of openings showing hardware set assignments.
b. Identification number, location, hand, fire rating, size, degree of opening, and material of each door and frame.
c. Locations of each door hardware set, cross-referenced to floor plans, and to door and frame schedule.
d. Complete designations, including name and manufacturer, type, style, function, size, quantity, function, and finish of each door hardware product.
e. Description of electrified door hardware sequences of operation and interfaces with other building control systems.
f. Fastenings and other installation information.
g. Explanation of abbreviations, symbols, and designations contained in door hardware schedule.
h. Mounting locations for door hardware.

i. Complete list of related door devices specified or supplied in other Sections for each door and frame.

D. Door Hardware Product Data: Prepared by or under the supervision of supplier.
1. Provide an index of products used grouped by manufacturer.
2. Each product shall be highlighted or marked accordingly.
a. Do not include pages or products that are not applicable to the project. If they appear on the same page as a product being used, they shall be crossed out.

E. Samples:

1. Provide a finish sample for each exposed product in each finish specified, in manufacturer's standard size.

2. Tag Samples with full product description to coordinate samples with the door hardware schedule.

F. Keying Schedule: Only after a keying meeting with the owner has taken place, prepare a keying schedule detailing final instruction. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions.

1. The owner must approve the submitted keying schedule prior to the ordering of permanent cylinders/cores.

G. Closeout Submittals:

1. After final approval is received from the architect, submit a Record Copy of the Door and Hardware Schedule with all the content as previously required.
a. Submittal must be stamped “RECORD COPY.”
b. The Record Copy will be given to the installer for the installation of the hardware.

2. Warranty Submittal: Warranty information to include the following information:
a. Original factory order number.
b. Date order was placed.
c. Date of installation (approximately if unknown).

3. Operating and Maintenance Manuals:
a. Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

H. Submittals that do not comply with all the requirements above will be rejected and will have to be resubmitted. Any project delays caused by incorrect/incomplete submittals will be the responsibility of the General Contractor and Hardware Supplier.

1.6 QUALITY ASSURANCE

A. Installer Qualifications:

1. A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

B. Door Hardware Supplier Qualifications:

1. Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project.
2. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity.
3. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

1.7 DELIVERY AND STORAGE

A. All hardware for field installation shall be delivered to the project site.

1. Any hardware that is required to be factory installed shall be delivered to the factory at the cost of the supplier of the doors or frames requiring the factory installation.

B. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site.

1. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
2. The storage area must maintain low humidity and a temperature between 60 to 90 degrees Fahrenheit.

C. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

D. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.8 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.

D. Special Warranty Periods:

1. Ten (10) years for mechanical mortise locks.
2. Five (5) years for mechanical exit hardware.
3. Thirty (30) years for mechanical, manual overhead door closers.
4. Two (2) years for electromechanical door hardware.

1.9 MAINTENANCE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

Part 2 – PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain each type of door hardware from single manufacturer.

1. Provide electrified door hardware from same manufacturer as mechanical door hardware unless otherwise indicated. Manufacturers that perform electrical modifications and that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.

2.2 PERFORMANCE REQUIREMENTS

A. Fire-Rated Door Assemblies: Where fire-rated doors are indicated, provide door hardware complying with NFPA 80 that is listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.

B. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that complies with requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.

C. Means of Egress Doors: Latches do not require more than 15 lbf to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.

D. Accessibility Requirements: For door hardware on doors in an accessible route, comply with the DOJ's "2010 ADA Standards for Accessible Design".

1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf.
2. Comply with the following maximum opening-force requirements:
   a. Interior, Hinged Doors: 5 lbf applied perpendicular to door.
   b. Sliding or Folding Doors: 5 lbf applied parallel to door at latch.
   c. Provide thresholds not more than 1/2 inch high.
   d. Adjust door closer sweep periods so that, from an open position of 90 degrees, the door will take at least 5 seconds to move to a position of 12 degrees from the latch.
   e. Adjust spring hinges so that, from an open position of 70 degrees, the door will take at least 1.5 seconds to move to the closed position.

2.3 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

B. For products furnished, but not installed, under this Section, Coordinating, purchasing, delivering, and scheduling remain requirements of this Section.

C. Equals: Requests for equals and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

D. Substitutions: Are not allowed unless the specified product(s) are no longer available.

2.4 HINGES

A. Hinges are to meet or exceed ANSI/BHMA A156.1 requirements.

B. Provide template-produced hinges for hinges installed on hollow-metal doors and hollow-metal frames.

C. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

1. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
2. Sizes from 3’1” to 4’0”: 5” heavy weight.

D. Hinge Type: Provide the type listed in the hardware sets.

E. Hinge Options:

1. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.

F. Manufacturers:

1. Hager Companies (HA).

2. McKinney Products (MK).
3. Stanley Hardware (ST).

2.5 CONTINUOUS HINGES

A. General Requirements:

1. Continuous Hinges are to meet or exceed ANSI/BHMA A156.26 Grade 1 Requirements.
2. Fabricated to full height of door and to template screw locations; with components finished after milling and drilling are complete.
3. Hinges are to be non-handed.
4. Factories to prepare for electrical cut-outs.
5. Hinge Type: Provide the type listed in the hardware sets.
6. Coordinate with door manufacturers for the exact type required, as it varies between door manufacturers and application.
7. Fasteners: All of the fasteners are to be fabricated from corrosion resistant materials.
   a. Provide either 12-24 x 3/4" self-drilling, thread-forming or 12-24 x 1/2" thread-forming screws that are made of 410 stainless-steel with an undercut head.

B. Continuous, Gear-Type Hinges:

1. Manufactured out of 6063-T6 extruded-aluminum, pin-less, geared hinge leaves joined by a continuous extruded-aluminum channel cap; with concealed, self-lubricating bearings.
2. Manufacturers:

   a. Architectural Builders Hardware (AH).
   b. Hager Companies (HA).
   c. Markar (MK).
   d. Select (SE)

2.6 MANUAL FLUSH AND SURFACE BOLTS

A. Bolts are to meet or exceed ANSI/BHMA A156.3 and A156.16, Grade 1 requirements.

B. Furnish Dustproof Strikes for all bottom bolts.

C. Provide related accessories or mounting brackets as required for appropriate installation and operation.

D. Manufacturers:

1. Architectural Builders Hardware (AH).
2. Rockwood Manufacturing (RO).
3. Trimco (TC).

2.7 CYLINDERS AND KEYING

A. Cylinders: Original manufacturer cylinders complying with the following:

1. Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver.

2. Meet or exceed ANSI/BHMA A156.5 Grade 1 requirements.
3. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
4. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
   a. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes. Stamped collars are not allowed.
5. Face finished to match lockset.
6. Core Type: Interchangeable.
7. Keyway: Match Existing.
8. Keying: Factory Keyed, per approved Keying Schedule.
9. Key Quantity:
   a. Change keys per cylinder/core: Two (2).
   b. Master keys per level: Five (5).
   c. Control Keys (where required): Five (5).

B. Construction Cores:

1. Construction Cores: Provide keyed construction cores that are replaceable by permanent cores.
   a. Provide 10 construction master keys.
   b. Provide 2 Construction Core Removal Keys.

C. Key Registration List:

1. Provide transcript list in writing or electronic file (proper format) as directed by the Owner.
2. Furnish a list of opening numbers with locking devices, showing cylinder types and quantities required when cylinders or cores are to be owner furnished.

D. Manufacturers:

1. Best (BE). NO SUBSTITUTION

2.8 MECHANICAL LOCK AND LATCHING DEVICE

A. Mortise Locksets:

1. Locks shall meet or exceed ANSI/BHMA A156.13, Series 1000, Operational Grade 1, and Security.
2. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.
3. Extended cycle test: Locks to have been cycle tested in ordinance with ANSI/BHMA 156.13 requirements to a minimum of 10 million cycles.
4. Lock trim and function as shown in hardware sets.
5. Manufacturers:

   a. Best (BE) 45H Series.
   b. Sargent Manufacturing (SA) 8200 Series.
   c. Schlage (SC) L9000 Series.

2.9 LOCK AND LATCH STRIKES

A. Standards:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Dustproof Strikes: BHMA A156.16.

B. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame.

C. Finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
   a. Provide at paired openings with metal edges and astragals.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Dustproof Strikes: Provide for all bottom flush bolts or latches, exit devices, and where thermal pins are required from the door to the floor at fire rated openings.

2.10 EXIT DEVICES

A. Exit Devices and Auxiliary Items shall meet or exceed ANSI/BHMA A156.3, Grade 1 requirements.

B. On fire rated doors, provide Exit Devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware".

C. Exit Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar.

1. Provide solid filler plate(s) where gap behind the Exit Device exists.
2. When used on full glass door applications provide a filler plate that fills in the gap between the Exit Device and the Glass.

D. Provide exit latches with deadlocking feature.

E. Where function of the Exit Device requires a cylinder, provide a cylinder per the requirements of the Keying System.

F. Function and Trim design as listed in the Hardware Sets.

G. Provide mounting brackets or spacers as required for proper installation and operation.

H. Extended cycle test: Devices to have been cycle tested to 10 million cycles.

I. Provide Through Bolts for All Exit Devices installed on wood doors.

J. Do not cut perimeter gasket to mount the Exit Device Strikes. Adjust template accordingly.

K. Coordinate the mounting centerline of the Exit Devices with the Door Elevations.

1. Exit Devices shall not be mounted over vision kits, unless approved by the Architect.

L. Manufacturers:

1. Sargent (SA) 80 Series.
2. Precision (PR) Apex Series.
3. Von Duprin (VD) 99 Series.

2.11 SURFACE CLOSERS

A. Surface Closers shall meet or exceed ANSI/BHMA A156.4, Grade 1 requirements.

B. Surface Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.

C. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use.

D. Provide Surface Closers complying the Americans with Disabilities Act, ANSI ICC/A117.1.

E. Extended cycle test: Surface Closers to have been cycle tested to 10 million cycles.

F. Provide metal closer covers.

G. Closers shall not be installed on exterior or corridor side of doors.

1. Where a conflict exists, bring it to the attention of the Architect prior to installation.

H. Provide accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation and operation.

I. Coordinate with Overhead Holder/Stop installation, provide special templates as required to avoid hardware conflicts.

J. When installing Mullions in Aluminum or Fiberglass Framing, install using Rivnuts and Stainless-Steel machine screws.

K. Provide Through Bolts for Surface Closers installed on wood doors.

L. Manufacturers:

1. LCN (LC) 4010/4110Series.
2. Norton (NO) 9500 Series.
3. Stanley (ST) EDH9000 Series.

2.12 OVERHEAD STOPS AND HOLDERS

A. Stops and Holders shall meet or exceed ANSI/BHMA A156.8, Grade 1 requirements.

B. Provide units that are through bolted on all Wood Door applications.

C. Coordinate with door closer installation, special templating may be required.

D. Where stops and holders are specified, coordinate with door manufacturer to insure proper application, installation, and operation.

E. Function as show in Hardware Sets.

F. Manufacturers:

1. Architectural Builders Hardware (AH).
2. Glynn Johnson (GJ).
3. Rixson (RF).

2.13 ARCHITECTURAL TRIM

A. Protective Plates (kick, armor, or mop):

1. Shall meet ANSI/BHMA A156.6 requirements.

2. Protective plates, fabricated from the following:
   a. Stainless Steel: 300 grade, 050-inch thick.

3. Where plates are applied to fire rated doors with the top of the plate more than 16” above the bottom of the door, provide plates complying with NFPA 80.
4. Kick and Armor Plates are to be installed on the push side of the door, unless stated otherwise.

5. Mop Plates are to be installed on the pull side of the door.

6. Size: Fabricate protection plates not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.

7. Provide adhesive mounting that meets UL fire rating requirements.

8. Provide Plates are to be beveled on all 4 edges.

9. Height: 10”, unless noted otherwise.

10. Manufacturers:

    a. Burns Manufacturing (BU).
    b. Rockwood Products (RO).
    c. Trimco (TC).

B. Metal Edges and Astragals:

1. Provide Metal Edges and Astragals on both leaf’s of doors that have flush bolts.
2. Fabricated from the following:

a. Steel: 050-inch thick.

3. Size: Height to match door Height.

4. Finish: Standard Color as selected by Architect.

5. Prepare Metal Edges and Astragals for hardware as required.

6. Provide Metal Edges and Astragals to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.

7. Manufacturers:

a. Architectural Builders Hardware (AH).
b. National Guard (NG).
c. Rockwood Products (RO).

2.14 DOOR STOPS AND HOLDERS

A. Door Stops and Holders shall comply with ANSI/BHMA A156.16, Grade 1 requirements.

B. Provide wall bumpers, either convex or concave types as required.

C. Provide Door stops with anchorage required based upon wall or floor application.

D. Do not mount floor stops where they will impede traffic.

E. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

F. Manufacturers:

1. Burns Manufacturing (BU).
2. Rockwood Products (RO).
3. Trimco (TC).

2.15 THRESHOLDS

A. Thresholds shall comply with ANSI/BHMA A156.21 requirements.

B. Thresholds shall be fabricated to full width of opening.

C. Provide non-slip surface.

D. Provide Stainless Steel Fasteners, type as detailed or required for specific floor conditions.

E. Manufacturers:

1. National Guard (NG).
2. Pemko (PE).
3. Reese (RE).

2.16 GASKETING

A. Door Gasketing shall comply with ANSI/BHMA A156.22 requirements.

B. Provide with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.

C. Perimeter gasketing should not be cut around door hardware. Gaskets must maintain a continuous seal at the top and vertical edges. Adjust hardware templates accordingly.

D. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

E. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

F. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

G. Maximum Air Leakage: When tested according to ASTM E 283 with tested pressure differential of 0.3-inch wg (75 Pa), as follows:

1. Smoke-Rated Gasketing: 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) of door opening.
2. Gasketing on Single Doors: 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) of door opening.
3. Gasketing on Double Doors: 0.50 cfm per foot (0.000774 cu. m/s per m) of door opening.

H. Manufacturers:

1. National Guard (NG).
2. Pemko (PE).
3. Reese (RE).

2.17 FABRICATION

A. Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location except in conjunction with required fire-rating labels and as otherwise approved by Architect.

1. Manufacturer's identification is permitted on rim of lock cylinders only.

B. Base Metals: Produce door hardware units of base metal indicated, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18.

1. The use of Aluminum or Brass/Bronze based screws is not acceptable.

C. Fasteners: Provided by door hardware manufacturer, to comply with published installation instructions, templates and as test for fire rated applications.

1. The use of other fasteners will be rejected.

2. Provide Phillips flat-head screws with finished heads to match surface of door hardware unless otherwise indicated.

3. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners.

4. Where hardware is being attached to Aluminum or FRP doors and frames Rivnuts (Rivet Nuts) and machine screws must be used.

5. Exit Devices, Surface Door Closers, Pulls, and Overhead Stops that are installed on wood doors shall be installed using through-bolts.

6. Gasket Fasteners: Provide Stainless Steel fasteners.

7. Threshold Fasteners:

a. Concrete floors: Provide ¼-20 Stainless Steel Machine Screws and Expansion Shields.
b. Wood floors: Provide #10 Stainless Steel Wood Screws.

8. Continuous Hinge Fasteners:

a. All of the fasteners are to be fabricated from corrosion resistant materials.
b. Provide either 12-24 x 3/4" self-drilling, thread-forming or 12-24 x 1/2" thread-forming screws that are made of 410 stainless-steel with an undercut head.

9. Butt Hinge Fasteners:

a. Provide screws our of steel or stainless Steel to match hinge base material.
b. Provide Wood Screws for wood door and frame applications.
c. Provide Machine Screws for metal door and frame applications.

2.18 FINISHES

A. Provide finishes complying with ANSI/BHMA A156.18 as indicated in door hardware schedule.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

Part 3 – EXECUTION

3.1 EXAMINATION

A. 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 of the Work.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware.

C. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

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: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.

B. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.

C. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames".
2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors".
3. Comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities".

D. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

E. Self-closing doors must close and latch completely from the fully opened position.

F. Lock Cylinders:

1. Install keyed construction cores to secure building and areas during construction period.
2. Replace construction cores with permanent cores as directed by Owner.

G. Thresholds: Set thresholds in full bed of sealant, and caulk around all edges, complying with requirements specified in Section 079200 "Joint Sealants."

H. Gaps: Gaps around the head and vertical edges of the doors shall meet the following requirements:

1. Wood Doors: 1/8” top, vertical edge, and in between paired doors.

2. Hollow Metal Doors: 1/8” +/- 1/16” top, vertical edge, and in between paired doors.

3. Where shimming is required to adjust the gaps the shim material must be steel. Cardboard, paper, and other materials are not acceptable.

4. Bottom of door (Undercut) shall not exceed 1” on non-rated openings and ¾” on rated openings.

I. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

1. Do not notch or cut perimeter gasketing to install other surface-applied hardware.

J. Pressure Sensitive Gasketing:

1. Do not install until the frame and door have been finished painted/stained.

2. Surface must be cleaned with alcohol wipes and dry before Gasketing is applied. Follow manufacturer’s instructions.

K. Door Bottoms: Apply to bottom of door, forming seal with floor or threshold when door is closed.

L. Door Closers: Adjust closers to follow opening forces listed under this section’s Performance Requirements.

1. Degree of opening: Template the closer to allow for the maximum degree of opening the conditions will allow.

2. Back Check valve shall be adjusted so it engages 10 degrees prior to the door reaching full swing.

3. The Latch Speed valve shall be adjusted so the door latches properly without slamming.

4. When through-bolts are used on wood doors, do not overtighten, and crush the door. If this happens the door is to be replaced.

5. Where closers or arms are installed on Aluminum or FRP doors and/or frames, install using Rivnuts (Rivet Nuts).

M. Wall Bumpers or Stops: Note that blocking in drywall partitions where wall stops, or other wall mounted hardware is located is required.

3.4 FIELD QUALITY CONTROL

A. Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating, and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.

B. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.
   1. Submit documentation of incomplete items in PDF electronic format.

C. Fire Door Assembly Inspection: Reference Division 01 Sections "Closeout Procedures" for stipulations requiring an initial fire door assembly inspection, including documentation reporting, upon completion of door hardware installation according to NFPA 80 Standard for Fire Doors and Other Opening Protectives, paragraph 5.2.4, requirements.

3.5 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. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.

3.6 CLEANING AND PROTECTION

A. Clean adjacent surfaces soiled by door hardware installation.

B. Clean operating items as necessary to restore proper function and finish.

C. Provide final protection and maintain conditions that ensure that door hardware is without damage or deterioration at time of Substantial Completion.

3.7 MAINTENANCE SERVICE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

3.8 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.9 DOOR HARDWARE SCHEDULE

A. The hardware sets represent the design intent and direction of the owner and architect. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process.

B. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required.

C. HARDWARE SETS:

Set: 1.0

1	Continuous Hinge	A240HD 083	C	AH
1	Fire Rated Rim Exit	99 L F -2SI SNB 996L 06	626	VD
2	Rim Cylinder	12E-72 Patented	626	BE
1	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Gasket	700SA		NG

Set: 2.0

1	Continuous Hinge	A240HD 083	C	AH
1	Fire Rated Rim Exit	99 L F -2SI SNB 996L 06	626	VD
2	Rim Cylinder	12E-72 Patented	626	BE
1	Closer, Spring Stop Arm	4111 SCUSH MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Gasket	700SA		NG

Set: 3.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 NRP 4-1/2" x 4-1/2"	US26D	HA
1	Intruder Lock w/indicator inside only	45H7IND 15J Patented VIN (inside only)	626	BE
1	Closer, Spring Stop Arm	4111 SCUSH MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC
1	Gasket	700SA (head only)		NG
1	Gasket	700EN (Jambs only)		NG

Set: 4.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 NRP 4-1/2" x 4-1/2"	US26D	HA
1	Intruder Lock w/indicator inside only	45H7IND 15J Patented VIN (inside only)	626	BE
1	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC

1	Gasket	700SA (head only)		NG
2	Gasket	700EN (Jambs only)		NG

Set: 5.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Intruder Lock w/indicator inside only	45H7IND 15J Patented VIN (inside only)	626	BE
1	Surf Overhead Stop	9022A	US32D	AH
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Gasketing	137NA		NG

Set: 6.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Intruder Lock w/indicator inside only	45H7IND 15J Patented VIN (inside only)	626	BE
1	Surf Overhead Stop	9022A	US32D	AH
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Gasket	700SA (head only)		NG
1	Gasket	700EN (Jambs only)		NG

Set: 7.0

1	Continuous Hinge	A110HD 095	C	AH
1	Intruder Lock w/indicator inside only	45H7IND 15J Patented VIN (inside only)	626	BE
1	Conc Overhead Stop	1023SA	US32D	AH
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Perimeter Gasket	By Frame Manufacturer		OT

Set: 8.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 NRP 4-1/2" x 4-1/2"	US26D	HA
1	Intruder Lock w/indicator inside only	45H7IND 15J Patented VIN (inside only)	626	BE
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC
3	Silencer	1229A		TC

Set: 9.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 NRP 4-1/2" x 4-1/2"	US26D	HA

1	Intruder Lock w/indicator inside only	45H7IND 15J Patented VIN (inside only)	626	BE
1	Surf Overhead Stop	9022A	US32D	AH
1	Kick Plate	K0050 HB ADH	630	TC
3	Silencer	1229A		TC

Set: 10.0

2	Continuous Hinge	A240HD 083	C	AH
1	Mullion	KR9954 7'5	689	VD
2	Fire Rated Rim Exit	99 L F -2SI SNB 996L 06	626	VD
4	Rim Cylinder	12E-72 Patented	626	BE
1	Mortise Cylinder	1E-74 Patented	626	BE
2	Closer, Parallel Arm	4111 EDA MC	689	LC
2	Kick Plate	K0050 HB ADH	630	TC
2	Wall Stop	1270WX	630	TC
2	Gasket	700SA		NG
1	Mullion Gasket	5100N		NG

Set: 11.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Office Lock	45H7A 15J Patented	626	BE
1	Wall Stop	1270WX	630	TC
1	Gasket	700EN		NG

Set: 12.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Office Lock	45H7A 15J Patented	626	BE
1	Surf Overhead Stop	9022A	US32D	AH
1	Gasket	700EN		NG

Set: 13.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Office Lock	45H7A 15J Patented	626	BE
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Wall Stop	1270WX	630	TC
1	Gasket	700EN		NG

Set: 14.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Privacy Lock	45H0L 15J VIN VIT	626	BE
1	Wall Stop	1270WX	630	TC
3	Silencer	1229A		TC

Set: 15.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 NRP 4-1/2" x 4-1/2"	US26D	HA
1	Storeroom Lock	45H7D 15J Patented	626	BE
1	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC
1	Gasket	700SA (head only)		NG
2	Gasket	700EN (Jambs only)		NG

Set: 16.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 NRP 4-1/2" x 4-1/2"	US26D	HA
1	Storeroom Lock	45H7D 15J Patented	626	BE
1	Closer, Spring Stop Arm	4111 SCUSH MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Gasket	700SA (head only)		NG
2	Gasket	700EN (Jambs only)		NG

Set: 17.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Storeroom Lock	45H7D 15J Patented	626	BE
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC
1	Gasket	700EN		NG

Set: 18.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 5" x 4-1/2"	US26D	HA
1	Intruder Lock w/indicator inside only	45H7IND 15J Patented VIN (inside only)	626	BE
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC

1	Gasket	700EN		NG

Set: 19.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Storeroom Lock	45H7D 15J Patented	626	BE
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC
3	Silencer	1229A		TC

Set: 20.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 NRP 4-1/2" x 4-1/2"	US26D	HA
1	Storeroom Lock	45H7D 15J Patented	626	BE
1	Surf Overhead Stop	9022A	US32D	AH
1	Kick Plate	K0050 HB ADH	630	TC
3	Silencer	1229A		TC

Set: 21.0

2	Continuous Hinge	A240HD 083	C	AH
1	Dust Proof Strike	1870	US32D	AH
1	Flush Bolt	1857P	US32D	AH
1	Storeroom Lock	45H7D 15J Patented	626	BE
1	Closer, Regular Arm	4011 REGARM MC	689	LC
2	Kick Plate	K0050 HB ADH	630	TC
2	Wall Stop	1270WX	630	TC
1	Astragal	560 7'0" Cut Out-Strike Cut Out-Flush Bolt	BPR	NG
1	Edge Guard	542 7'0" Cut Out-Lock Face	BPR	NG
1	Gasket	700SA (head only)		NG
2	Gasket	700EN (Jambs only)		NG
1	Astragal Gasket	5020	b	NG

Set: 22.0

6	Hinge, Full Mortise, Hvy Wt	BB1168 NRP 4-1/2" x 4-1/2"	US26D	HA
1	Dust Proof Strike	1870	US32D	AH
1	Flush Bolt	1857P	US32D	AH
1	Storeroom Lock	45H7D 15J Patented	626	BE
2	Surf Overhead Stop	9022A	US32D	AH
2	Kick Plate	K0050 HB ADH	630	TC

1	Astragal (Active Leaf)	562 7'0" Cut Out-Lock Face	*	NG
1	Edge Guard (Inactive Leaf)	540 7'0" Cut Out-Strike Cut Out-Flush Bolt	*	NG
2	Silencer	1229A		TC

Set: 23.0

6	Hinge, Full Mortise, Hvy Wt	BB1168 NRP 4-1/2" x 4-1/2"	US26D	HA
1	Dust Proof Strike	1870	US32D	AH
1	Flush Bolt	1857P	US32D	AH
1	Storeroom Lock	45H7D 15J Patented	626	BE
2	Kick Plate	K0050 HB ADH	630	TC
2	Wall Stop	1270WX	630	TC
1	Astragal (Active Leaf)	562 7'0" Cut Out-Lock Face	*	NG
1	Edge Guard (Inactive Leaf)	540 7'0" Cut Out-Strike Cut Out-Flush Bolt	*	NG
2	Silencer	1229A		TC

Set: 24.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Classroom Lock	45H7R 15J Patented	626	BE
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC
3	Silencer	1229A		TC

Set: 25.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Classroom Lock	45H7R 15J Patented	626	BE
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC
1	Gasket	700EN		NG

Set: 26.0

1	Continuous Hinge	A110HD 095	C	AH
1	Storeroom Lock	45H7D 15J Patented	626	BE
1	Electric Strike	4100	US32D	TR
1	Conc Overhead Stop	1023SA	US32D	AH
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Perimeter Gasket	By Frame Manufacturer		OT

1	Door Release	TS-18		AK

Notes: Theory of operation:
Door to be closed and locked at all times
entry allowed by remote push button release or mechanical key override.
When remote push button activated the electric strike shall release for 5 seconds allowing entry. After 5 seconds the electric strike will return to the secure state.
Free egress at all times.
Fail secure

Set: 27.0

3	Hinge, Full Mortise, Hvy Wt	SEC.ST FBB168 NRP 4-1/2" x 4-1/2"	US26D	ST
1	Dormitory Lock	45H7TD 15J Patented	626	BE
1	Wall Stop	1270WX	630	TC
3	Silencer	1229A		TC

Set: 28.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Passage Latch	45H0N 15J	626	BE
1	Wall Stop	1270WX	630	TC
3	Silencer	1229A		TC

Set: 29.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Passage Latch	45H0N 15J	626	BE
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Gasket	700EN		NG
3	Silencer	1229A		TC

Set: 30.0

1	Continuous Hinge	A110HD 095	C	AH
1	Dormitory Lock	45H7TD 15J Patented	626	BE
1	Conc Overhead Stop	1023SA	US32D	AH
1	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG

1	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT
1	Latch Protector	5001	630	TC

Set: 31.0

1	Continuous Hinge	A110HD 083	C	AH
1	Storeroom Lock	45H7D 15J Patented	626	BE
1	Conc Overhead Stop	1023SA	US32D	AH
1	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
1	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT
1	Latch Protector	5001	630	TC

Set: 32.0

2	Continuous Hinge	A110HD 095	C	AH
1	Dust Proof Strike	1870	US32D	AH
1	Flush Bolt	1855S 24"	US32D	AH
1	Flush Bolt	1855S	US32D	AH
1	Storeroom Lock	45H7D 15J Patented	626	BE
2	Conc Overhead Stop	1023SA	US32D	AH
1	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT
1	Latch Protector	5001	630	TC

Set: 33.0

2	Continuous Hinge	A110HD 083	C	AH
1	Flush Bolt	1855P	US32D	AH
1	Dust Proof Strike	1870	US32D	AH
1	Storeroom Lock	45H7D 15J Patented	626	BE

2	Conc Overhead Stop	1023SA	US32D	AH
1	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
1	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT
1	Latch Protector	5001	630	TC

Set: 34.0

2	Continuous Hinge	A110HD 083	C	AH
1	SVR Nightlatch	9927 LNL LBR 996L-NL 06 LD	626	VD
1	SVR Exit Only	9927 EO LBR LD	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Astragal	A605A(SET)		NG
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

Set: 35.0

2	Continuous Hinge	A110HD 083	C	AH
1	Mullion	5654 7'2	628	VD
1	Stabilizer	154	689	VD
2	Rim Exit Only	LD 99 EO	626	VD
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Astragal	A605A(SET)		NG
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Mullion Gasket	5100N		NG
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT

1	Request to Exit	Per section 281300		OT

Set: 36.0

2	Continuous Hinge	A110HD 083	C	AH
1	Flush Bolt	1855P	US32D	AH
1	Dust Proof Strike	1870	US32D	AH
1	Passage Latch	45H0N 15J	626	BE
2	Conc Overhead Stop	1023SA	US32D	AH
1	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

Set: 37.0

2	Continuous Hinge	A110HD 095	C	AH
1	Stabilizer	154	689	VD
1	Mullion	5654 8'2	628	VD
2	Rim Exit Only	LD 99 EO	626	VD
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Astragal	A605A(SET)		NG
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Mullion Gasket	5100N		NG
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

Set: 38.0

2	Continuous Hinge	A110HD 095	C	AH
1	Stabilizer	154	689	VD
1	Mullion	5654 8'2	628	VD
1	Rim Exit Only	LD 99 EO	626	VD
1	Rim Exit Nightlatch	LD 99 LNL 996L-NL	626	VD

1	Rim Cylinder	12E-72 Patented	626	BE
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Astragal	A605A(SET)		NG
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

Set: 39.0

2	Continuous Hinge	A110HD 083	C	AH
1	Mullion	5654 7'2	628	VD
1	Stabilizer	154	689	VD
1	Rim Exit Only	LD 99 EO	626	VD
1	Rim Exit Nightlatch	LD 99 LNL 996L-NL	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Astragal	A605A(SET)		NG
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

Set: 40.0

2	Continuous Hinge	A240HD 083	C	AH
1	SVR Exit, Nightlatch	9927 LNL F SNB LBR 996L-NL 06	626	VD
1	SVR Exit, Exit Only	9927 EO F SNB LBR-AFL	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
2	Closer, Parallel Arm	4111 EDA MC	689	LC
2	Kick Plate	K0050 HB ADH	630	TC
2	Wall Stop	1270WX	630	TC
1	Astragal	A605A(SET)		NG
1	Gasket	700SA (head only)		NG
2	Gasket	700EN (Jambs only)		NG

Set: 41.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Classroom Lock	45H7R 15J Patented	626	BE
1	Surf Overhead Stop	9022A	US32D	AH
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Gasket	700SA (head only)		NG
1	Gasket	700EN (Jambs only)		NG

Set: 42.0

1	Rim Cylinder	12E-72 Patented	626	BE

Set: 43.0

1	Continuous Hinge	A240HD 083	C	AH
1	Rim Exit, Nightlatch	99 LNL F SNB 996L-NL 06	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
1	Closer, Spring Stop Arm	4111 SCUSH MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Gasket	700SA		NG

Set: 44.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Storeroom Lock	45H7D 15J Patented	626	BE
1	Electric Strike	4100	US32D	TR
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Wall Stop	1270WX	630	TC
1	Gasket	700EN		NG
1	Card Reader	Per section 281300		OT
1	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

Notes: The access control panel is to power the electric strike.

Theory of operation:
Door to be closed and locked at all times
entry allowed through access control system or mechanical key override.
When valid credentials are presented the electric strike shall release for 5 seconds allowing

entry. After 5 seconds the electric strike will return to the secure state.
Free egress at all times.
Fail secure

Set: 45.0

2	Continuous Hinge	A240HD 083	C	AH
2	SVR Exit Only	9927 EO LBR LD	626	VD
2	Closer, Spring Stop Arm	4111 SCUSH MC	689	LC
2	Kick Plate	K0050 HB ADH	630	TC
2	Silencer	1229A		TC

Set: 46.0

2	Continuous Hinge	A240HD 083	C	AH
2	Rim Exit Only	99 EO F SNB	626	VD
2	Closer, Parallel Arm	4111 EDA MC	689	LC
2	Kick Plate	K0050 HB ADH	630	TC
2	Electromagnetic Holder	2300	US28	AH
2	Gasket	700SA		NG

Set: 47.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Passage Latch	45H0N 15J	626	BE
1	Wall Stop	1270WX	630	TC
1	Gasket	700EN		NG
1	Door Bottom	522N		NG
1	Threshold	950N		NG

Set: 48.0

1	Acoustic Seals	Per Section 083473		OT
1	Hardware	Per section 083473		OT

Set: 49.0

2	Continuous Hinge	A110HD 095	C	AH
1	SVR Nightlatch	9927 LNL LBR 996L-NL 06 LD	626	VD
1	SVR Exit Only	9927 EO LBR LD	626	VD
2	Closer, Parallel Arm	4111 EDA MC	689	LC

2	Electromagnetic Holder	2300	US28	AH
1	Perimeter Gasket	By Frame Manufacturer		OT

Set: 50.0

1	Continuous Hinge	A110HD 083	C	AH
1	Rim Exit Device	99 L 996L 06	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Wall Stop	1270WX	630	TC
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
1	Door Contact	Per section 281300		OT

Set: 51.0

2	Continuous Hinge	A240HD 083	C	AH
1	SVR Exit, Nightlatch	9927 LNL F SNB LBR 996L-NL 06	626	VD
1	SVR Exit, Exit Only	9927 EO F SNB LBR-AFL	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
2	Closer, Parallel Arm	4111 EDA MC	689	LC
2	Kick Plate	K0050 HB ADH	630	TC
2	Electromagnetic Holder	2300	US28	AH
1	Astragal	A605A(SET)		NG
1	Gasket	700SA (head only)		NG
2	Gasket	700EN (Jambs only)		NG

Set: 52.0

3	Hinge, Full Mortise, Hvy Wt	BB1168 4-1/2" x 4-1/2"	US26D	HA
1	Dormitory Lock w/indicator both sides	45H7T 15J Patented VIB	626	BE
1	Closer, Regular Arm	4011 REGARM MC	689	LC
1	Kick Plate	K0050 HB ADH	630	TC
1	Wall Stop	1270WX	630	TC
1	Gasket	700SA		NG

Set: 53.0

1	Continuous Hinge	A110HD 095	C	AH

1	Continuous Hinge	A110HD 095 EA12-EZAL	C	AH
1	SVR Exit, Exit Only w/dogging	CD 9927 EO LBR	626	VD
1	SVR Exit, Latch Retraction w/dogging	SD-QEL 9927 NLOP CON 110MD-NL	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
2	Mortise Cylinder	1E-74 Patented	626	BE
2	Flush Pull	1111C	630	TC
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Wire Harness	EZAL-300-1		AH
1	Wire Harness	EZAL-12		AH
1	Door Release	TS-18		AK
1	Card Reader	Per section 281300		OT
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT
1	Power Supply	PS902 900-2RS-FA		VD

Notes: V101 LHR leaf is active

The power supply is shared between doors V101 and V101C

Theory of operation during student arrival and dismissal:
The exit devices are to be put in the dogged position allowing the doors to be freely pulled open.

Theory of operation other times:
Door to be closed and locked at all times.
Entry allowed through the access control system.
Upon valid credentials or remote release the exit device shall unlock for 5 seconds, return to the locked state.
Remote access is allowed through access control system
Free egress at all times
upon power failure the door shall remain secure, fail secure.

Set: 54.0

2	Continuous Hinge	A110HD 095	C	AH
2	SVR Exit, Exit Only w/dogging	CD 9927 EO LBR	626	VD
2	Mortise Cylinder	1E-74 Patented	626	BE
2	Flush Pull	1111C	630	TC
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Perimeter Gasket	By Frame Manufacturer		OT

Notes: Theory of operation during student arrival and dismissal:
The exit devices are to be put in the dogged position allowing the doors to be freely pulled open.

Theory of operation other times:
The exit devices will be in the undogged position.

Free egress at all times.

Set: 55.0

2	Continuous Hinge	A110HD 095	C	AH
1	Stabilizer	154	689	VD
1	Mullion	5654 8'2	628	VD
2	Rim Exit, Exit Only w/dogging	CD 99 EO	626	VD
2	Mortise Cylinder	1E-74 Patented	626	BE
2	Flush Pull	1111C	630	TC
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Astragal	A605A(SET)		NG
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Mullion Gasket	5100N		NG
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

Notes: Theory of operation during student arrival and dismissal:
The exit devices are to be put in the dogged position allowing the doors to be freely pulled open.

Theory of operation other times:
The exit devices will be in the undogged position.

Free egress at all times.

Set: 56.0

1	Continuous Hinge	A110HD 095	C	AH
1	Continuous Hinge	A110HD 095 EA12-EZAL	C	AH
1	SVR Exit, Exit Only w/dogging	CD 9927 EO LBR	626	VD
1	SVR Exit, Latch Retraction w/dogging	SD-QEL 9927 NLOP CON 110MD-NL	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
2	Mortise Cylinder	1E-74 Patented	626	BE

2	Flush Pull	1111C	630	TC
2	Closer, Parallel Arm	4111 EDA MC	689	LC
2	Wall Stop	1270WX	630	TC
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Wire Harness	EZAL-300-1		AH
1	Wire Harness	EZAL-12		AH
1	Door Release	TS-18		AK
1	Card Reader	Per section 281300		OT
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT
1	Power Supply	PS902 900-2RS-FA		VD

Notes: Theory of operation during student arrival and dismissal:
The exit devices are to be put in the dogged position allowing the doors to be freely pulled open.

Theory of operation other times:
Door to be closed and locked at all times.
Entry allowed through the access control system.
Upon valid credentials or remote release the exit device shall unlock for 5 seconds, return to the locked state.
Remote access is allowed through access control system
Free egress at all times
upon power failure the door shall remain secure, fail secure.

Set: 57.0

2	Continuous Hinge	A110HD 095	C	AH
1	Stabilizer	154	689	VD
1	Mullion	5654 8'2	628	VD
2	Rim Exit Only	LD 99 EO	626	VD
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Astragal	A605A(SET)		NG
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Mullion Gasket	5100N		NG
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

Set: 58.0

1	Continuous Hinge	A110HD 095	C	AH
1	Continuous Hinge	A110HD 095 EA12-EZAL	C	AH
1	Stabilizer	154	689	VD
1	Mullion	5654 8'2	628	VD
1	Rim Exit, Exit Only w/dogging	CD 99 EO	626	VD
1	Rim Exit, Latch Retraction w/dogging	SD-QEL 99 NLOP CON 110MD-NL	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
3	Mortise Cylinder	1E-74 Patented	626	BE
2	Flush Pull	1111C	630	TC
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Mullion Gasket	5100N		NG
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
1	Wire Harness	EZAL-300-1		AH
1	Wire Harness	EZAL-12		AH
1	Door Release	TS-18		AK
1	Card Reader	Per section 281300		OT
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

Notes: V101C LHR active.

The power supply is shared with door V101
Theory of operation during student arrival and dismissal:
The exit devices are to be put in the dogged position allowing the doors to be freely pulled open.

Theory of operation other times:
Doors are to be closed and locked at all times.
Entry allowed through the access control system.
Upon valid credentials or remote release the exit device shall unlock for 5 seconds, return to the locked state.
Remote access is allowed through access control system
Free egress at all times
upon power failure the door shall remain secure, fail secure.

Set: 59.0

1	Continuous Hinge	A240HD 083	C	AH
1	Continuous Hinge	A240HD 083 EA12-EZAL	C	AH
1	SVR Dummy	CD 9927 DT LBR 990DT 06	626	VD

1	SVR Nightlatch	SD-QEL 9927 LNL CON LBR 996L-NL 06	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
2	Mortise Cylinder	1E-74 Patented	626	BE
2	Flush Pull	1111C	630	TC
2	Closer, Parallel Arm	4111 EDA MC	689	LC
2	Wall Stop	1270WX	630	TC
1	Astragal	A605A(SET)		NG
1	Gasket	700EN		NG
1	Wire Harness	EZAL-300-1		AH
1	Wire Harness	EZAL-12		AH
1	Door Release	TS-18		AK
1	Card Reader	Per section 281300		OT
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT
1	Power Supply	PS902 900-2RS-FA		VD

Notes: Theory of operation during student arrival and dismissal:
The exit devices are to be put in the dogged position allowing the doors to be freely pulled open.

Theory of operation other times:
Door to be closed and locked at all times.
Entry allowed through the access control system.
Upon valid credentials or remote release the exit device shall unlock for 5 seconds, return to the locked state.
Remote access is allowed through access control system
Free egress at all times
upon power failure the door shall remain secure, fail secure.

Set: 60.0

2	Continuous Hinge	A110HD 095	C	AH
2	Flush Pull	1111C	630	TC
2	Push Bar	1741 30"	630	TC
1	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Wall Stop	1270WX	630	TC

Set: 61.0

2	Continuous Hinge	A110HD 095	C	AH
2	Flush Pull	1111C	630	TC
2	Push Bar	1741 30"	630	TC
2	Closer, Parallel Arm	4111 EDA MC	689	LC

2	Wall Stop	1270WX	630	TC

Set: 62.0

1	Continuous Hinge	A110HD 083	C	AH
1	Continuous Hinge	A110HD 083 EA12-EZAL	C	AH
1	Mullion	5654 7'2	628	VD
1	Stabilizer	154	689	VD
1	Rim Exit Only	LD 99 EO	626	VD
1	Rim Exit, Latch retraction	QEL 99 NLOP CON 110MD-NL	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE
1	Flush Pull	1111C	630	TC
2	Conc Overhead Stop	1023SA	US32D	AH
2	Closer, Parallel Arm	4111 EDA MC	689	LC
1	Astragal	A605A(SET)		NG
1	Drip Strip	16A		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Mullion Gasket	5100N		NG
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
1	Wire Harness	EZAL-300-1		AH
1	Wire Harness	EZAL-12		AH
1	Card Reader	Per section 281300		OT
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT
1	Power Supply	PS902 900-2RS-FA		VD

Notes: Theory of operation other times:
Doors are to be closed and locked at all times.
Entry allowed through the access control system.
Upon valid credentials the exit device shall unlock for 5 seconds, return to the locked state.
Free egress at all times
upon power failure the door shall remain secure, fail secure.

Set: 63.0

2	Continuous Hinge	A110HD 083	C	AH
1	Mullion	5654 7'2	628	VD
1	Stabilizer	154	689	VD
1	Rim Exit Only	LD 99 EO	626	VD
1	Rim Exit Device	99 L 996L 06	626	VD
1	Rim Cylinder	12E-72 Patented	626	BE

2	Closer, Regular Arm	4011 REGARM MC	689	LC
2	Wall Stop	1270WX	630	TC
1	Astragal	A605A(SET)		NG
1	Perimeter Gasket	By Frame Manufacturer		OT
1	Mullion Gasket	5100N		NG
2	Door Bottom	95WH		NG
1	Threshold	896HDN SIA		NG
2	Door Contact	Per section 281300		OT
1	Request to Exit	Per section 281300		OT

END OF SECTION

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SECTION 142100 - ELECTRIC TRACTION ELEVATORS

PART 1 GENERAL

1.1 Section Includes

See ***Addendum*** Items.

A. Electric traction elevator systems.

1.2 Reference Standards

A. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; 2020.

B. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.

C. AISC 360 - Specification for Structural Steel Buildings; 2022.

D. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.

E. ASME A17.1 - Safety Code for Elevators and Escalators Includes Requirements for Elevators, Escalators, Dumbwaiters, Moving Walks, Material Lifts, and Dumbwaiters with Automatic Transfer Devices; 2022.

F. ASME A17.2 - Guide for Inspection of Elevators, Escalators, and Moving Walks Includes Inspection Procedures for Electric Traction and Winding Drum Elevators, Hydraulic Elevators, Inclined Elevators, Limited-Use/Limited-Application Elevators, Private Residence Elevators, Escalators, Moving Walks, and Dumbwaiters; 2020.

G. ASME QEI-1 - Standard for the Qualification of Elevator Inspectors; 2018.

H. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2019.

I. ASTM A276/A276M - Standard Specification for Stainless Steel Bars and Shapes; 2017.

J. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2023.

K. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable; 2021a.

L. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021a.

M. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2021.

N. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2021.

O. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2020, with Errata (2022).

P. NEMA MG 1 - Motors and Generators; 2021.

Q. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

R. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2022.

1.3 Administrative Requirements

A. Coordination:
1. Coordinate work with other installers to provide necessary conduits for proper installation of wiring, including but not limited to the following:
a. Elevator equipment devices remote from elevator machine room or hoistway.
b. Remote group automatic panel in lobby from controller cabinet.
c. Telephone service for machine room.
d. Elevator pit for lighting and sump pump.
e. Automatic transfer switch from controller cabinet.
f. Fire alarm panel from controller cabinet.
2. Coordinate work with other installers for equipment provisions necessary for proper elevator operation, including but not limited to the following:
a. Automatic transfer switches with auxiliary contacts for emergency power transfer status indication.
b. Shunt trip devices for automatic disconnection of elevator power prior to fire suppression system activation; include provisions for shunt trip power monitoring.
c. Overcurrent protection devices selected to achieve required selective coordination.

B. Preinstallation Meeting: Convene meeting at least one week prior to start of this work.
1. Review schedule of installation, proper procedures and conditions, and coordination with related work.
2. Review use of elevator for construction purposes, hours of use, scheduling of use, cleanliness of car, employment of operator, and maintenance of system.

C. Construction Use of Elevator: Not permitted.

1.4 Submittals

A. Product Data: Submit data on following items:

1. Signal and operating fixtures, operating panels, and indicators.
2. Car design, dimensions, layout, and components.
3. Car and hoistway door and frame details.
4. Electrical characteristics and connection requirements.

B. Shop Drawings: Include appropriate plans, elevations, sections, diagrams, and details on following items:
1. Elevator Equipment and Machines: Size and location of driving machines, power units, controllers, governors, and other components.
2. Hoistway Components: Size and location of car machine beams, guide rails, buffers, ropes, and other components.
3. Rail bracket spacing; maximum loads imposed on guide rails requiring load transfer to building structural framing.
4. Individual weight of principal components; load reaction at points of support.
5. Loads on hoisting beams.
6. Clearances and over-travel of car and counterweight.
7. Locations in hoistway and machine room of traveling cables and connections for car lighting and telephone.
8. Location and sizes of hoistway and car doors and frames.
9. Calculated heat dissipation of elevator equipment in machine room.
10. Applicable seismic design data; certified by a licensed Professional Structural Engineer.
11. Interface with building security system.
12. Electrical characteristics and connection requirements.
13. Indicate arrangement of elevator equipment and allow for clear passage of equipment through access openings.

C. Samples: Submit samples illustrating car floor material, car interior finishes, car and hoistway door and frame finishes, and handrail material and finish in the form of cut sheets or finish color selection brochures.

D. Installer's qualification statement.

E. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

F. Operation and Maintenance Data:
1. Parts catalog with complete list of equipment replacement parts; identify each entry with equipment description and identifying code.
2. Operation and maintenance manual.
3. Schematic drawings of equipment and wiring diagrams of installed electrical equipment with list of corresponding symbols to identify markings on machine room and hoistway apparatus.

1.5 Quality Assurance

A. Maintain one copy of each quality standard document on site.

B. Installer Qualifications: Supervisor along with trained elevator installation personnel on staff of elevator equipment manufacturer.

C. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of type specified in this section.

1.6 Warranty

A. Provide manufacturer's warranty for elevator operating equipment and devices for one year from Date of Substantial Completion.

PART 2 PRODUCTS

2.1 Manufacturers

A. Electric Traction Elevators:
1. Otis Elevator Company; Gen3 Edge: www.otis.com/#sle.

B. Source Limitations: Provide elevator and associated equipment and components produced by the same manufacturer as the other elevator equipment used for this project and obtained from a single supplier.

2.2 Electric Traction Elevators

A. Electric Traction Passenger ***Service*** Elevator:
1. Electric Traction Elevator Equipment:
a. Gearless Traction Machine: Single wrapped traction driving sheave, with dual brake.
2. Interior Car Height: 93 inch.
3. Electrical Power: 480 volts; alternating current (AC); three phase; 60 Hz.
4. Rated Net Capacity: ***4000 pounds***~~3500 pounds.~~
5. Rated Speed: 100 feet per minute.
6. Hoistway Size: As indicated on drawings~~.~~
7. Interior Car Platform Size: ***5'-5" wide x 7'-4" deep***~~As indicated on drawings.~~
8. Elevator Pit Depth: 60 inch.
9. Travel Distance: As indicated on drawings.
10. Number of Stops: As indicated on drawings.
11. Traction Machine Location: Top of hoistway shaft.

B. Electric Traction Freight Elevator:

1. Rated Net Capacity: ~~3,500 lb~~. ***4,000 lbs.***

2.3 Components

A. Elevator Equipment:
   1. Motors, Controllers, Controls, Buttons, Wiring, Devices, and Indicators: Comply with NFPA 70 requirements; see Section 260583 for additional information.
   2. Guide Rails, Cables, Counterweights, Sheaves, Buffers, Attachment Brackets, and Anchors: Design criteria for components includes safety factors in accordance with applicable requirements of Elevator Code, ASME A17.1.
   3. Buffers:
      a. Spring type for elevators with speed less than or equal to 200 feet per minute.
   4. Lubrication Equipment:
      a. Provide grease fittings for periodic lubrication of bearings.
      b. Grease Cups: Automatic feed type.
      c. Lubrication Points: Visible and easily accessible.

B. Electrical Equipment:
   1. Motors: NEMA MG 1.
   2. Boxes, Conduit, Wiring, and Devices: Comply with NFPA 70 requirements; see Sections 260533.13 and 260583 for additional information.
   3. Spare Conductors: Provide ten percent in extra conductors and two pairs of shielded audio cables in traveling cables.
   4. Include wiring and connections to elevator devices remote from hoistway and between elevator machine room. Provide additional components and wiring to suit machine room layout. See Section 260583.

2.4 Performance Requirements

A. Regulatory Requirements: Comply with ASME A17.1, applicable local codes, and authorities having jurisdiction (AHJ).

B. Accessibility Requirements: Comply with ADA Standards.

C. Perform structural steel design, fabrication, and installation in accordance with AISC 360.

D. Comply with seismic design requirements in accordance with ASME A17.1, applicable local codes, and authorities having jurisdiction (AHJ).
   1. Comply with Elevator Safety Requirements for Seismic Risk Zone in accordance with ASME A17.1, ASCE 7, and other related requirements.
      a. Project Seismic Risk: As indicated on drawings.
   2. Provide earthquake emergency operations in accordance with ASME A17.1 requirements.

3. Provide seismic switch in accordance with ASME A17.1 and ASCE 7 requirements.

E. Perform welding of steel in accordance with AWS D1.1/D1.1M.

F. Fabricate and install door and frame assemblies in accordance with NFPA 80 and complying with requirements of authorities having jurisdiction (AHJ).

G. Perform electrical work in accordance with NFPA 70.

2.5 Operation Controls

A. Elevator Controls: Provide landing operating panels, landing indicator panels, and _____.
1. Landing Operating Panels: Metallic type, one for originating "Up" and one for originating "Down" calls, one button only at terminating landings; with illuminating indicators.
2. Landing Indicator Panels: Illuminating.
3. Comply with ADA Standards for elevator controls.

B. Interconnect elevator control system with building security, fire alarm, card access, smoke alarm, and building management control systems.

C. Door Operation Controls:
1. Program door control to open doors automatically when car arrives at floor landing.
2. Render "Door Close" button inoperative when car is standing at dispatch landing with doors open.
3. Door Safety Devices: Moveable, retractable safety edges, quiet in operation; equipped with photo-electric light rays.

D. ~~Lobby Monitoring Panel:~~
1. ~~Locate status indicator and control panel for each individual elevator and group of elevators as indicated on drawings.~~
2. ~~Etch face plate markings in panel, and fill with paint of contrasting color.~~
3. ~~Include direction indicator displaying landing "Up" and "Down" calls registered at each landing floor.~~
4. ~~Include position and motion display for direction of travel of each elevator; display appropriate graphic characters on non-glare screen; indicate position of cars at rest and in motion.~~
5. ~~Include "Remove From Service" switch for each elevator that then calls car to ground floor and parks car with doors open.~~
6. ~~Include emergency power selector switch for each group of elevators that overrides automatic emergency power selection.~~
7. ~~Include "Firefighter's Service Switch" that manually recalls each elevator to main floor.~~

E. Provide "Firefighter's Emergency Operation" in accordance with ASME A17.1, applicable building codes, and authorities having jurisdiction (AHJ).
   1. Designated Landing: Main Lobby.

2.6 Operation Control Type

A. Single Automatic (Push Button) Operation Control: Applies to car in single elevator shaft.
   1. Refer to description provided in ASME A17.1.
   2. Set system operation so that momentary pressure of landing button dispatches car from other landing to that landing.
   3. Allow call registered by momentary pressure of landing button at any time to remain registered until car stops in response to that landing call.
   4. If elevator car door is not opened within predetermined period of time after car has stopped at terminal landing, allow car to respond to call registered from other landing.

2.7 Emergency Power

A. Set up elevator operation to run with building emergency power supply when the normal building power supply fails and in compliance with ASME A17.1 requirements.

B. Building Emergency Power Supply: Supplied by backup generator; provide elevator system components as required for emergency power characteristics with phase rotation the same as for normal power.
   1. Provide transfer switches and auxiliary contacts.
   2. Install connections to power feeders.

C. Emergency Lighting: Comply with ASME A17.1 elevator lighting requirements.

D. Provide operational control circuitry for adapting the change from normal to emergency power.

E. Upon transfer to emergency power, advance one elevator at a time to a preselected landing, stop car, open doors, disable operating circuits, and hold in standby condition.

2.8 Materials

A. Rolled Steel Sections, Shapes, Rods: ASTM A36/A36M.

B. Steel Sheet: ASTM A1008/A1008M, Designation CS (commercial steel), with matte finish.

C. Stainless Steel Sheet: ASTM A666, Type 304; No. 4 Brushed finish unless otherwise indicated.

D. Stainless Steel Bars, Shapes and Moldings: ASTM A276/A276M, Type 304.

E. Extruded Aluminum: ASTM B221 (ASTM B221M), natural anodized finish unless otherwise indicated.

F. Aluminum Sheet: ASTM B209/B209M, 3105 alloy, O temper.

G. Resilient Flooring: Vinyl tile flooring, see Section 096500.

2.9 Car and Hoistway Entrances

A. Elevator, :
   1. Car and Hoistway Entrances:
      a. Hoistway Fire Rating: 1 Hour.
      b. Elevator Door Fire Rating: 1 Hour.
      c. Framed Opening Finish and Material: Brushed stainless steel.
      d. Car Door Material: Stainless steel, with rigid sandwich panel construction.
      e. Hoistway Door Material: Stainless steel, with rigid sandwich panel construction.
      f. Door Type: Double leaf.
      g. Door Operation: Side opening, two speed.
      h. Door Width: ~~36 inch~~. ***48 inch***
      i. Door Height: 84 inch.
      j. Sills: Extruded aluminum.

B. Sills/Thresholds: Configure to align with frame return and coordinate with floor finish.

C. Gasketing: Provide acoustic-type gasketing at hoistway doors and frames to eliminate audible noise due to car activities in the hoistway and air pressure differential between hoistway and landing floors.

2.10 Car Equipment and Materials

A. Elevator Car:
   1. Car Operating Panel: Provide main and auxiliary; flush-mounted applied face plate, with illuminated call buttons corresponding to floors served with "Door Open/Door Close" buttons, "Door Open" button, "Door Close" button, and alarm button.
      a. Panel Material: Integral with front return; one per car.
      b. Car Floor Position Indicator: Above door with illuminating position indicators.
      c. Locate alarm button where it is unlikely to be accidentally actuated; not more than 54 inch above car finished floor.
   2. Flooring: Resilient vinyl tile.

3. Front Return Panel: Match material of car door.
4. Door Wall: Stainless steel.
5. Hand Rail: Aluminum, at three side walls. Provide open clearance space 1-1/2 inch (38 mm) wide to face of wall.
    a. Aluminum Finish: Clear anodized.
6. Ceiling:
    a. Canopy Ceiling: ~~Plastic laminate on plywood.~~ ***Brushed Stainless Steel Ceiling.***
    b. Lighting: As selected from manufacturer's standard line.
7. Provide emergency access panel for egress from car at ceiling.

B. Car Accessories:
1. Certificate Frame: Stainless steel frame glazed with clear tempered glass, and attached with tamper-proof screws.
2. Protective Pads: Canvas cover, padded with impact-resistant fill material, sewn with piping edges; fire resistant in compliance with ASME A17.1; brass grommets for supports, covering side and rear walls and front return, with cut-out for control panel; provide one set for each elevator.
    a. Color: Grey.
    b. Provide at least 4 inch clearance from bottom of pad to finished floor.
    c. Pad Supports: Stainless steel studs, and mounted from ceiling frame.

2.11 Finishes

A. Clear Anodized Finish: Class I, AAMA 611 AA-M12C22A41 clear anodic coating with electrolytically deposited organic seal; not less than 0.7 mils, 0.0007 inch thick.

PART 3 EXECUTION

3.1 Examination

A. Verify existing conditions before starting this work.

B. Verify that hoistway, pit, and machine room are ready for work of this section.

C. Verify hoistway shaft and openings are of correct size and within tolerance.

D. Verify location and size of machine foundation and position of machine foundation bolts.

E. Verify that electrical power is available and of correct characteristics.

3.2 Preparation

A. Arrange for temporary electrical power for installation work and testing of elevator components. See Section 015000 - Temporary Facilities and Controls for additional requirements.

B. Maintain elevator pit excavation free of water.

3.3 Installation

A. Coordinate this work with installation of hoistway wall construction.

B. Install system components, and connect equipment to building utilities.

C. Provide conduit, electrical boxes, wiring, and accessories; see Sections 260533.13 and 260583.

D. Mount machines and motors on vibration and acoustic isolators.
   1. Place on structural supports and bearing plates.
   2. Securely fasten to building supports.
   3. Prevent lateral displacement.

E. Install hoistway, elevator equipment, and components in accordance with approved shop drawings.

F. Install guide rails to allow for expansion and contraction movement of guide rails.

G. Accurately machine and align guide rails, forming smooth joints with machined splice plates.

H. Install hoistway door sills, frames, and headers in hoistway walls; grout sills in place, set hoistway floor entrances in alignment with car openings, and align plumb with hoistway.

I. Fill hoistway door frames solid with grout.

J. Structural Metal Surfaces: Clean surfaces of rust, oil, or grease; wipe clean with solvent; prime with two coats.

K. Machine Room Components: Clean and degrease; prime one coat, finish with one coat of enamel.

L. Wood Surfaces not Exposed to Public View: Finish with one coat primer; one coat enamel.

M. Adjust equipment for smooth and quiet operation.

3.4 Tolerances

A. Guide Rail Alignment: Plumb and parallel to each other in accordance with ASME A17.1 and ASME A17.2.

B. Car Movement on Aligned Guide Rails: Smooth movement, without any objectionable lateral or oscillating movement or vibration.

3.5 Field Quality Control

A. Testing and inspection by regulatory agencies certified in accordance with ASME QEI 1 will be performed at their discretion.
   1. Schedule tests with agencies and notify Owner and Architect.
   2. Obtain permits as required to perform tests.
   3. Document regulatory agency tests and inspections in accordance with requirements.
   4. Perform tests required by regulatory agencies.
   5. Furnish test and approval certificates issued by authorities having jurisdiction (AHJ).

B. Perform testing and inspection in accordance with requirements.
   1. Inspectors shall be certified in accordance with ASME QEI-1.
   2. Perform tests in accordance with ASME A17.2.
   3. Provide at least two weeks written notice of date and time of tests and inspections.
   4. Supply instruments and execute specific tests.

C. Operational Tests:
   1. Perform operational tests in the presence of Owner and Architect.

3.6 Adjusting

A. Adjust for smooth acceleration and deceleration of car to minimize passenger discomfort.

B. Adjust with automatic floor leveling feature at each floor landing to reach 1/4 inch maximum from flush with sill.

3.7 Cleaning

A. Remove protective coverings from finished surfaces.

B. Clean surfaces and components in accordance with manufacturers written instructions.

3.8 Closeout Activities

A. Demonstrate proper operation of equipment to Owner's designated representative.

B. Training: Train Owner's personnel on cleaning and operation and maintenance of system.
   1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
   2. Provide minimum of two hours of training.

3.9 Protection

A. Do not permit construction traffic within car after cleaning.

B. Protect installed products until Date of Substantial Completion.

C. Touch up, repair, or replace damaged products and materials before Date of Substantial Completion.

END OF SECTION

SECTION 224000 - PLUMBING FIXTURES AND TRIM

PART 1 - GENERAL

1.1 WORK INCLUDED

A. Provide labor, materials, equipment and services to perform operations required for the complete installation and related Work as required in Contract Documents.

1.2 SUBMITTALS

A. Submit manufacturer's data in accordance with Basic Mechanical/Electrical Requirements. Obtain approval prior to ordering material.

B. Provide submittals for all items specified under Part 2 - Products of this section.

1.3 DESCRIPTION OF FIXTURES

A. Fixtures and trim shall be of those manufacturers listed, unless otherwise indicated. Fixtures for this project shall be of same manufacturer.

1. Fixtures: American Standard, Kohler, Mansfield, Sloan, Toto, Watts or Zurn.

2. Faucets: Chicago Faucets, Delta, Moen, Symmons, T&S Brass or Zurn. All faucets shall be lead-free in accordance with NSF 61 and NSF 372.

3. Flushometers: Sloan "Regal XL" or Zurn.

4. Closet Seats: Bemis, Beneke, Church or Olsonite.

5. Fixture Carriers: Jay R. Smith, Watts, Wade, Josam or Zurn.

6. Sinks: Elkay, Just or Kohler.

7. Water Coolers: Elkay, Halsey Taylor or Haws.

8. Supplies, Stops and Traps: Brasscraft, EBC, McGuire or Sanitary Dash.

B. Exposed parts of trim shall have polished chrome plated finish.

C. Tubular drainage products ("P" traps, nipples, etc.) shall be 17 gauge brass.

1.4 QUALITY ASSURANCE

A. Comply with requirements of the Plumbing Fixture Law of the New York State Department of Environmental Conservation.

B. Comply with the American Disabilities Act Guidelines and ANSI A117.1 "Accessible and Usable Buildings and Facilities".

C. All items here-in used to convey water for potable use shall be lead free in accordance with NSF Standard 61, Section 9 Standard for Drinking Water and Lavatory Faucets and NSF Standard 372 - Maximum Lead Requirements. Compliance shall be via third-party testing and certification.

D. All fixture trim used to convey water for potable use shall be lead free.

PART 2 - PRODUCTS

2.1 WATER CLOSETS

A. WC-A:

1. American Standard #2257.101 Afwall, wall hung, vitreous china, siphon jet, elongated bowl, 1.28 GPF, fully glazed 2 in. ball pass trapway, with 1-1/2 in. top spud, fitted with following:

a. FV-A flush valve as specified herein.

b. Church #9500SSC, extra heavy weight, white elongated solid plastic, open front closet seat with combination self-sustaining check hinges, less cover.

c. Jay R. Smith Series 200 closet fittings and carrier.

B. WC-B (HDCP):

1. American Standard #2257.101 Afwall, wall hung, vitreous china, siphon jet, elongated bowl, 1.28 GPF, fully glazed 2 in. ball pass trapway, with 1-1/2 in. top spud, fitted with following:

a. FV-A flush valve as specified herein.

b. Church #9500SSC, extra heavy weight, white elongated solid plastic, open front closet seat with combination self-sustaining check hinges, less cover.

c. Jay R. Smith Series 200 closet fittings and carrier.

d. Mount at ADA required height and location or as shown on Architectural drawings.

C. WC-C:

1. American Standard #2257.101 Afwall, wall hung, vitreous china, siphon jet, elongated bowl, 1.28 GPF, fully glazed 2 in. ball pass trapway, with 1-1/2 in. top spud, fitted with following:

a. FV-B flush valve as specified herein.

b. Church #9500SSC, extra heavy weight, white elongated solid plastic, open front closet seat with combination self-sustaining check hinges, less cover.

c. Jay R. Smith Series 200 closet fittings and carrier.

d. Mount at ADA required height and location or as shown on Architectural drawings.

2.2 FLUSH VALVES

A. FV-A: Sloan Royal #1111.6-HW, , sensor operated, hard wired powered, closet flushometer, for left or right hand supplies, exposed diaphragm type, 1 in. screwdriver angle stop with vandal resistant metal cap and replaceable sensor window, bumper on stop, vacuum breaker, adjustable tailpiece, sweat solder adaptor kit and cast wall flange with set screw, override button, with adjustable sensor on centerline of fixture and two (2) chrome plated double gang box covers with vandal resistant screws.

1. Solenoid extension nipple option to protect low voltage wiring from wall plate to solenoid.

2. Sloan #EL-485-A flushometer electrical box positioning and support kit.

3. Sloan #EL-154 120 volt transformer. Refer to plans for locations and quantity required.

4. Plumbing Contractor shall furnish transformer(s) and provide low voltage wiring. Electrical Contractor shall install transformer(s) and provide power to transformer.

B. FV-B: Sloan #BPW-8150, bedpan washer closet flushometer, 1.6 GPF, exposed diaphragm type, 1 in. screwdriver angle stop with vandal resistant cap, two wall bumpers, vacuum breaker, adjustable tailpiece, sweat solder adaptor kit, cast wall flange with set screw, ADA compliant handle and bedpan washer diverter assembly.

1. Solenoid extension nipple option to protect low voltage wiring from wall plate to solenoid.

2. Sloan #EL-518-A flushometer electrical box positioning and support kit.

3. Sloan EL-154 transformer. Refer to plans for quantity required.

4. P.C. shall furnish transformer(s) and provide low voltage wiring. E.C. shall install transformer(s) and provide power to transformer.

2.3 LAVATORIES

A. LV-A (HDCP):

1. Sloan BASYS AER-DEC one station wall mounted sink, Corian finish, deck mounted hand dryer, soap dispenser, concealed arm carrier, fitted with following:

a. F-A faucet as specified herein.

b. McGuire #155WC offset chrome plated P.O. plug with open grid strainer and 1-1/4 in., 17 gauge offset tailpiece.

c. McGuire #8902 chrome plated, 17 gauge, 1-1/4 in. x 1-1/2 in. "P" trap with cleanout plug and cast brass escutcheon with set screw.

d. McGuire # LF165LKF, lead-free, 3/8 in. chrome plated wall supplies with loose key angle stops, 12 in. long flexible risers, cast brass escutcheon with set screws.

e. Jay R. Smith Series 700 concealed arm floor mounted carrier with rectangular uprights.

f. Cover exposed waste, stops and supply piping with ADA conforming pipe covers, Truebro, Inc. "Lav-Guard".

g. Mount at ADA required height and location or as shown on Architectural drawings.

B. LV-B (HDCP):

1. Sloan BASYS AER-DEC THREE station wall mounted sink, Corian finish, deck mounted hand dryer, soap dispenser , concealed arm carrier, fitted with following:

a. F-A faucet as specified herein.

b. McGuire #155WC offset chrome plated P.O. plug with open grid strainer and 1-1/4 in., 17 gauge offset tailpiece.

c. McGuire #8902 chrome plated, 17 gauge, 1-1/4 in. x 1-1/2 in. "P" trap with cleanout plug and cast brass escutcheon with set screw.

d. McGuire # LF165LKF, lead-free, 3/8 in. chrome plated wall supplies with loose key angle stops, 12 in. long flexible risers, cast brass escutcheon with set screws.

e. Jay R. Smith Series 700 concealed arm floor mounted carrier with rectangular uprights.

f. Cover exposed waste, stops and supply piping with ADA conforming pipe covers, Truebro, Inc. "Lav-Guard".

g. Mount at ADA required height and location or as shown on Architectural drawings.

C. LV-C (HDCP):

1. Sloan BASYS AER-DEC FOUR station wall mounted sink, Corian finish, deck mounted hand dryer, soap dispenser, concealed arm carrier, fitted with following:

a. F-A faucet as specified herein.

b. McGuire #155WC offset chrome plated P.O. plug with open grid strainer and 1-1/4 in., 17 gauge offset tailpiece.

c. McGuire #8902 chrome plated, 17 gauge, 1-1/4 in. x 1-1/2 in. "P" trap with cleanout plug and cast brass escutcheon with set screw.

d. McGuire # LF165LKF, lead-free, 3/8 in. chrome plated wall supplies with loose key angle stops, 12 in. long flexible risers, cast brass escutcheon with set screws.

e. Jay R. Smith Series 700 concealed arm floor mounted carrier with rectangular uprights.

f. Cover exposed waste, stops and supply piping with ADA conforming pipe covers, Truebro, Inc. "Lav-Guard".

g. Mount at ADA required height and location or as shown on Architectural drawings.

2.4 SINKS

A. SK-A:

1. Elkay Lustertone LR2219, 22 in. x 19 in., 7-5/8 in. deep, nickel type 304 stainless steel single bowl sink, three (3) faucet holes, 18 gauge, self rimming, fitted with the following:

a. F-B faucet as specified herein.

b. Elkay #LK-18 stamped brass drain outlet with 3 in. perforated grid strainer and 1-1/2 in. O.D. tailpiece.

c. McGuire #8912 semi-cast brass adjustable "P" trap, 1-1/2 in. x 1-1/2 in., with cleanout plug and cast brass escutcheon with set screw.

d. McGuire #LF2167LKF, lead-free, 1/2 in. supplies with 1/2 in. O.D. flexible risers, loose key stops and cast brass escutcheons with set screws.

B. SK-B (HDCP):

1. Elkay Lustertone LRAD2219, 22 in. x 19 in. x 6 in. deep, nickel type 302 stainless steel single bowl sink, ADA compliant, three (3) faucet holes, 18 gauge, self rimming for countertop installation, fitted with the following:

   a. F-B faucet as specified herein.

   b. Elkay #LKAD18 stamped brass drain outlet with 3 in. perforated grid strainer and LKADOS 1-1/2 in. O.D. offset tailpiece.

   c. McGuire #8912 semi-cast brass adjustable "P" trap, 1-1/2 in. x 1-1/2 in., with cleanout plug and cast brass escutcheon with set screw.

   d. McGuire #LF2167LKF, lead-free, 1/2 in. copper sweat supplies with 1/2 in. OD flexible risers, loose key stops and cast brass escutcheons with set screws.

C. SK-C (HDCP):

1. Elkay Lustertone LRAD2219, 22 in. x 19 in. x 6 in. deep, nickel type 302 stainless steel single bowl sink, ADA compliant, three (3) faucet holes, 18 gauge, self rimming for countertop installation, fitted with the following:

   a. F-B faucet as specified herein.

   b. Elkay #LKAD18 stamped brass drain outlet with 3 in. perforated grid strainer and LKADOS 1-1/2 in. O.D. offset tailpiece.

   c. McGuire #8912 semi-cast brass adjustable "P" trap, 1-1/2 in. x 1-1/2 in., with cleanout plug and cast brass escutcheon with set screw.

   d. McGuire #LF2167LKF, lead-free, 1/2 in. copper sweat supplies with 1/2 in. OD flexible risers, loose key stops and cast brass escutcheons with set screws.

   e. EEW-B: Bradley S19274C Swing-Activated Halo Eyewash with S19-20000 EFX8 Emergency Thermostatic mixing valve and thermometer below counter.

D. SK-D:

1. Elkay Dependabilt Stainless Steel, 39” x 25-13/16” x 43-3/4”, two compartment, 18 gauge, center drain location, fitted with the following:

   a. F-C faucet as specified herein.

   b. Elkay #LK35 strainer with removable cup, tailpiece.

   c. McGuire #8912 semi-cast brass adjustable "P" trap, 1-1/2 in. x 1-1/2 in., with cleanout plug and cast brass escutcheon with set screw.

d. McGuire #LF2167LKF, lead-free, 1/2 in. copper sweat supplies with 1/2 in. OD flexible risers, loose key stops and cast brass escutcheons with set screws.

E. SK-E:

1. Elkay Sturdibilt Stainless Steel, 27” x 27-1/2” x 14”, one compartment, 18 gauge, center drain location, fitted with the following:

a. F-C faucet as specified herein.

b. Elkay #LK35 strainer with removable cup, tailpiece.

c. McGuire #8912 semi-cast brass adjustable "P" trap, 1-1/2 in. x 1-1/2 in., with cleanout plug and cast brass escutcheon with set screw.

d. McGuire #LF2167LKF, lead-free, 1/2 in. copper sweat supplies with 1/2 in. OD flexible risers, loose key stops and cast brass escutcheons with set screws.

F. SK-F (HDCP):

1. Durcon Epoxy Resin drop-in sink, 25” x 15” x 4.75”, ADA compliant, fitted with the following:

a. F-B faucet as specified herein.

b. Durcon S03 Epoxy Resin sink outlet

c. LKADOS 1-1/2 in. O.D. offset tailpiece.

d. McGuire #8912 semi-cast brass adjustable "P" trap, 1-1/2 in. x 1-1/2 in., with cleanout plug and cast brass escutcheon with set screw.

e. McGuire #LF2167LKF, lead-free, 1/2 in. copper sweat supplies with 1/2 in. OD flexible risers, loose key stops and cast brass escutcheons with set screws.

G. SK-C (HDCP):

1. Durcon Epoxy Resin drop-in sink, 25” x 15” x 4.75”, ADA compliant, fitted with the following:

a. F-B faucet as specified herein.

b. Durcon S03 Epoxy Resin sink outlet

c. LKADOS 1-1/2 in. O.D. offset tailpiece.

d. McGuire #8912 semi-cast brass adjustable "P" trap, 1-1/2 in. x 1-1/2 in., with cleanout plug and cast brass escutcheon with set screw.

e. McGuire #LF2167LKF, lead-free, 1/2 in. copper sweat supplies with 1/2 in. OD flexible risers, loose key stops and cast brass escutcheons with set screws.

f. EEW-B: Bradley S19274C Swing-Activated Halo Eyewash with S19-20000 EFX8 Emergency Thermostatic mixing valve and thermometer below counter.

2.5 FAUCETS

A. F-A:

1. Sloan BASYS EFX-200 solid cast brass electronic sensor faucet, hardwired, deck mounted, lead-free, cover plate, vandalproof non-aerating spray outlet, stainless steel braided hose supply, ADA compliant and fitted with the following:

a. 0.50 GPM aerator.

b. Chicago #131-ABNF, lead-free, thermostatic mixing valve, 3/8 in. connections.

c. 12 volt AC transformer.

d. ADA compliant.

B. F-B: Chicago Faucets #895-317FCABCP, lead-free manual close faucet, quarter-turn cartridges, deck mounted, 4 in. centers, 4 in. wrist blade handles with color coded indexes, rigid/swing plain end gooseneck spout with 1.5 GPM laminar flow control device in spout base, ADA compliant.

1. Chicago #131-ABNF, lead-free, thermostatic mixing valve, 3/8 in. connections.

C. F-C: American Standard 8351.076 Exposed yoke wall mounted utility faucet, 3” cast brass spout with vacuum breaker, ceramic disk valves, integral supply stops, with bucket hook, 8” centers

2.6 MOP BASINS

A. MB-A:

1. Fiat Model TSB, terrazzo, 36 in. x 36 in. x 12 in. deep, stainless steel flat strainer, 3 in. outlet, stainless steel cap on all sides, color as selected by the Architect, with the following:

a. T&S Brass #B-0665-BSTP, lead-free, exposed wall mounted faucet with integral stops, rough chrome finish, lever handles, top-brace spout with bucket hook, hose end and vacuum breaker.

b. Fiat # 832AA Hose and Hose Bracket.

c. Fiat #889CC Mop Hanger.

d. Fiat # E77AA Vinyl Bumper guard on exposed sides.

e. Fiat #MSG Stainless Steel Wall Guard.

f. Provide silicone sealant between wall, floor and mop basin.

2.7 SHOWERS

A. Type "A": Shower areas will be constructed and tiled by others. This Contractor shall provide the following trim and base for each shower.

1. Powers #413 "Hydroguard" mixing valve, pressure balanced type, chrome plated, metal lever and escutcheon plate, maximum temperature stop, one piece dial and lever assembly, checkstops on inlets.

2. Powers #141-376 showerhead, ball joint, self-cleaning showerhead with sturdy all brass construction and chrome plated finish: full range spray pattern adjustment, 2.5 gpm flow control with #141-198 chrome plated brass shower arm and wall flange.

3. Fiat receptor, Model MFT, 36 in. x 36 in. integral threshold, tilting flange, precast Terrazzo. Drain body, cast integral, caulked lead connection, 2 in. drain, stainless steel strainer.

B. Type "B": Shower areas will be constructed and tiled by others. This Contractor shall provide the following trim for each shower.

1. Powers "Hydroguard" Type #413 mixing valve, pressure balanced type, chrome plated, metal lever and escutcheon plate, maximum temperature stop, one piece dial and lever assembly, checkstops on inlets.

2. Powers "Institutional Ball Joint Showerhead" #141-337, chrome plated, spray adjustment, 2.5 gpm flow control, vandal resistant, rigid wall mounted head bracket with anchor plate and mounting screws.

2.8 EMERGENCY EYE WASH

A. EEW-A:

1. Bradley S19224 Series Wall-mount Halo Eye/face wash station. Provide with Navigator S19-2000 EFX8 Emergency Thermostatic Mixing Valve with thermometer. Include with 316 stainless steel bowl and cover.

2.9 ELECTRIC WATER COOLER

A. EWC-A:

1. Elkay #LZSTL8WSSK two level wheelchair access model, wall mounted, ADA compliant, lead-free construction, type 304 stainless steel cabinet, one piece stainless steel basin, flexible bubbler, self-closing front and side push bar control on each side with in-line stream regulator, adjustable temperature control,

permanently sealed and lubricated fan motor, hermetically sealed compressor and motor, 1/5 hp, 120V, capacity of 8.0 GPH at 80°F inlet water, 50°F outlet water with room temperature of 90°F, with optional #LKAPREZL apron, included with LZWSR Bottle Filler, fitted with the following:

a. McGuire #LF165LKE, lead-free, 3/8 in. lavatory wall supply with loose key angle stop, 3/8 in. flexible tube riser, cast brass escutcheon with set screw.

b. McGuire #8902, 1-1/4 in. x 1-1/2 in. semi-cast brass "P" trap with cleanout and cast brass escutcheon with set screw.

c. Jay R. Smith floor mounted carrier with rectangular uprights.

d. Acceptable Manufacturers: Elkay, Halsey Taylor.

B. EWC-B:

1. Elkay #LZS-8S, wall mounted, ADA compliant, lead-free construction, type 304 stainless steel cabinet, one piece stainless steel basin, flexible bubbler, self-closing front and side push bar control with in-line stream regulator, adjustable temperature control, permanently sealed and lubricated fan motor, hermetically sealed compressor and control, 1/5 HP, 120V, capacity of 8.0 gph at 80°F inlet water, 50°F outlet water with room temperature of 90°F, fitted with the following:

a. McGuire #LF165LKE, lead-free, 3/8 in. lavatory wall supply with loose key angle stop, 3/8 in. flexible tube riser, and cast brass escutcheons with set screws.

b. McGuire #8902, 1-1/4 in. x 1-1/2 in. semi-cast brass "P" trap with cleanout and cast brass escutcheon with set screw.

c. Jay R. Smith floor mounted carrier with rectangular uprights.

d. Acceptable Manufacturers: Elkay, Halsey Taylor.

C. BF-A:

1. Elkay #LZ8WSSSMC Bottle Filling Station, wall mounted, ADA compliant, lead-free construction, type 304 stainless steel cabinet, one piece stainless steel basin, adjustable temperature control, permanently sealed and lubricated fan motor, hermetically sealed compressor and motor, 1/5 hp, 120V, capacity of 8.0 GPH at 80°F inlet water, 50°F outlet water with room temperature of 90°F, , fitted with the following:

a. McGuire #LF165LKE, lead-free, 3/8 in. lavatory wall supply with loose key angle stop, 3/8 in. flexible tube riser, cast brass escutcheon with set screw.

b. McGuire #8902, 1-1/4 in. x 1-1/2 in. semi-cast brass "P" trap with cleanout and cast brass escutcheon with set screw.

c. Jay R. Smith floor mounted carrier with rectangular uprights.

d. Acceptable Manufacturers: Elkay, Halsey Taylor.

PART 3 - EXECUTION

3.1 FIXTURES, EQUIPMENT AND SYSTEMS

A. Install fixtures, equipment and systems as shown on Drawings or specified herein in accordance with provisions of each applicable Specification Section and all local and state codes having jurisdiction.

3.2 INSTALLATION OF PLUMBING FIXTURES

A. Install plumbing fixtures level and plumb, in accordance with fixture manufacturers written installation instructions.

B. Carefully drill holes for through bolts to avoid chipping blocks or plaster.

C. Except where carriers are specified, attach hangers or brackets to walls as follows:

1. Masonry Construction: Secure fixture hangers to partition by thru-bolts extending through a steel plate on opposite side of partition. Obtain Owner's Representative's approval prior to work.

2. Metal Stud Construction: Anchor backing for fixtures or equipment to 1/8 in. x 12 in. steel plate bolted or riveted to at least three studs. Obtain Owner's Representative's approval prior to work.

D. Anchor carriers to concrete floor with 1/2 in. x 3 in. anchor or thru-bolts and washers. Provide for drilling of floor and installation of expansion shields. Quantity of anchors:

1. Water Closets - Four (4).

2. Lavatories - Eight (8).

3. Urinals - Eight (8).

E. Seal fixtures in contact with walls, floors and counters using a sanitary-type, one-part, mildew-resistant, silicone caulk. Match color to fixture color.

F. Set self-rimming lavatories and sinks in a bed of silicone caulk.

G. Install floor-mounted, floor-outlet water closets with closet flanges and gasket seals.

H. Install wall-hanging, back-outlet water closets with support manufacturer's tiling frame or setting gage.

I. Install wall-hanging, back-outlet urinals with gasket seals.

J. Fasten wall-hanging plumbing fixtures securely to supports attached to building substrate when supports are specified and to building wall construction where no support is indicated.

K. Fasten counter-mounting-type plumbing fixtures to casework.

L. Metering faucets shall be adjusted for minimum ten (10) second run time, but not more than 0.25 gallons per cycle.

M. Immediately after installation, provide protective covering over fixtures and trim.

3.3 MOUNTING HEIGHT AND LOCATION

A. Mount fixtures at height and location as indicated on Architectural plans and elevations.

B. Mount accessible fixtures in conformance with the requirements of ANSI A117.1.

3.4 CONNECTIONS

A. Install piping connections between plumbing fixtures and piping systems and plumbing equipment specified in other sections of Division 22.

3.5 ADJUSTING AND CLEANING

A. Operate and adjust faucets and controls. Replace damaged and malfunctioning fixtures, fittings and controls.

B. Adjust water pressure at electric water coolers, faucets and flush valves to provide proper flow and stream.

C. Replace washers of leaking and dripping faucets and stops.

D. Clean fixtures, fittings, spout and drain strainers with manufacturers' recommended cleaning methods and materials.

E. Test fixtures to demonstrate proper operation upon completion of installation and after units are water pressurized. Replace malfunctioning fixtures and components and retest. Repeat procedure until all units operate properly.

F. Adjust all flush valves, faucets, etc. for proper operation following commissioning of booster pump system.

END OF SECTION 224000

APPENDIX A

TAG	MOUNT TYPE	FLUSH TYPE	ADA	HEALTH CARE	K-12	HIGHER ED	COMMERCIAL	RES.	LEED	REMARKS
WATER CLOSETS										
WC-A	WALL	FV 1.6		X	X	X	X			MANUAL/BATTERY/WIRED
WC-B	WALL	FV 1.6	X	X	X	X	X			MANUAL/BATTERY/WIRED
WC-C	FLOOR	FV 1.6		X	X	X	X			MANUAL
WC-D	FLOOR	FV 1.6	X	X	X	X	X			MANUAL
WC-E	FLOOR	TANK					X	X		
WC-F	FLOOR	TANK	X				X	X		
WC-G	FLOOR	FV 1.6			X					CHILD HEIGHT
WC-H	WALL	FV 3.5	X	X						BEDPAN WASHER
WC-I	FLOOR	FV 3.5	X	X						BEDPAN WASHER
WC-J	FLOOR	TANK				X	X			PRESSURE ASSIST
WC-K	FLOOR	TANK				X	X			PRESSURE ASSIST
WC-L	WALL	FV 1.6	X	X						BARIATRIC
WC-M	FLOOR	FV 1.6	X	X						BARIATRIC
WC-N	WALL	FV 1.28			X	X	X		X	HETS MANUAL
WC-O	WALL	FV 1.28	X		X	X	X		X	HETS MANUAL
WC-P	WALL	FV 1.28			X	X	X		X	HETS BATTERY
WC-Q	WALL	FV 1.28	X		X	X	X		X	HETS BATTERY
WC-R	FLOOR	FV 1.28			X	X	X		X	HETS MANUAL
WC-S	FLOOR	FV 1.28	X		X	X	X		X	HETS MANUAL

TAG	MOUNT TYPE	FLUSH TYPE	ADA	HEALTH CARE	K-12	HIGHER ED	COMMERCIAL	RES.	LEED	REMARKS
URINALS										
UR-A	WALL	FV 1.0		X	X	X	X			MANUAL/BATTERY/ WIRED

UR-B	WALL	FV 1.0	X	X	X	X	X			MANUAL/BATTERY/ WIRED
UR-C	WALL	WATERLESS							X	
UR-D	WALL	WATERLESS	X						X	
UR-E	FLOOR	FV 1.0	X							REPLACEMENT ONLY

FLUSH VALVES										
FV-A										
FV-B										
FV-C										
FV-D										
FV-E										
FV-F										
FV-G										
FV-H										

TAG	MOUNT TYPE	DRAIN STYLE	ADA	HEALTH CARE	K-12	HIGHER ED	COMMERCIAL	RES.	LEED	FAUCET STYLE & TYPE
LAVATORIES										
LAV-A	WALL	GRID		X	X	X	X			MANUAL/METERING/ BATTERY/HARDWIRED
LAV-B	WALL	GRID	X	X						GOOSENECK W/WRIST BLADES
LAV-C	WALL	POP-UP						X		SINGLE HANDLE LEVER
LAV-D	WALL	GRID	X					X		SINGLE HANDLE LEVER
LAV-E	SELF-RIMMING	GRID			X	X	X	X		MANUAL/METERING/ BATTERY/HARDWIRED
LAV-F	SELF-RIMMING	GRID	X	X						GOOSENECK W/WRIST BLADES

LAV-G	UNDER-MOUNT	GRID								MANUAL/METERING/ BATTERY/HARDWIRED
LAV-H	UNDER-MOUNT	GRID	X							MANUAL/METERING/ BATTERY/HARDWIRED

TAG	MANUF.	MODEL #	FLOW RATE (GPM)	TYPE	ADA	LEED	REMARKS
LAVATORY FAUCETS							
F-A	CHICAGO						
F-B	CHICAGO						
F-C	CHICAGO						
F-D	CHICAGO						
F-E	CHICAGO						
F-F	CHICAGO						
F-G	CHICAGO						
F-H	CHICAGO						
F-I	CHICAGO						
F-J	CHICAGO						
F-K	CHICAGO						
F-L	CHICAGO						
F-M	CHICAGO						
F-N	CHICAGO						
F-O	CHICAGO						

TAG	MOUNT TYPE	DRAIN STYLE	ADA	HEALTH CARE	K-12	HIGHER ED	COMMERCIAL	RES.	LEED	FAUCET STYLE & TYPE
SINKS										
SK-A	SELF-RIMMING SINGLE BOWL	GRID/BASKET		X	X	X	X	X		MANUAL, SINGLE & DUAL HANDLE

SK-B	SELF-RIMMING SINGLE BOWL	GRID/BASKET	X	X	X	X	X	X		MANUAL, SINGLE & DUAL HANDLE
SK-C	SELF-RIMMING DOUBLE BOWL	GRID/BASKET		X	X	X	X	X		MANUAL, SINGLE HANDLE
SK-D	SELF-RIMMING SINGLE BOWL	BASKET	X	X	X	X	X	X		MANUAL, SINGLE HANDLE

TAG	MOUNT TYPE	ADA	HEALTH CARE	K-12	HIGHER ED	COMMERCIAL	RES.	LEED	REMARKS
SERVICE SINKS									
SS-A	WALL/TRAP STANDARD	X	X	X	X	X			ENAMELED CAST IRON

TAG	MOUNT TYPE	ADA	HEALTH CARE	K-12	HIGHER ED	COMMERCIAL	RES.	LEED	REMARKS
MOP BASINS									
MB-A	FLOOR	X	X	X	X	X			TERAZZO
MB-B	FLOOR	X	X	X	X	X			MOLDED STONE

TAG	MOUNT TYPE	ADA	HEALTH CARE	K-12	HIGHER ED	COMMERCIAL	RES.	LEED	REMARKS
ELECTRIC WATER COOLERS									
EWC-A	WALL, SURFACE	X	X	X	X	X			SINGLE LEVEL
EWC-B	WALL, SURFACE	X	X	X	X	X			BI-LEVEL
EWC-C	WALL, RECESSED	X	X	X	X	X			BI-LEVEL
EWC-C	WALL, RECESSED	X	X	X	X	X			SINGLE LEVEL

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SECTION 275113 – PUBLIC ADDRESS SYSTEM - PA

PART 1 – GENERAL

1.1 GENERAL REQUIREMENTS

A. The conditions of the General Contract (General, Supplementary, and Other Conditions) and the General Requirements are hereby made a part of this Section.

B. All bids shall be based on the equipment as specified herein. The catalog numbers and model designations are those of the CH2000IP Life Safety Communication Platform.

C. The contractor for this work shall be held to have read all bidding requirements, the general requirements of Division 1 and contract proposal forms and complete the execution of this work. The contractor shall be bound by all conditions and requirements therein.

D. The contractor shall be responsible for providing a complete functional system including all necessary components whether included in this specification or not.

E. In preparing the bid, the contractor should consider that no claim will be made against the owner for any costs incurred by the contractor for any equipment demonstrations that the owner requests.

1.2 SCOPE OF WORK

A. Provide all labor, tools, transportation, taxes, and related items, essential for installation of the work and necessary to make work, complete, and operational. All equipment and devices shall be provided by the owner through a state contract. Provide new equipment and material unless otherwise called for. References to codes, specifications and standards called for in the specification sections and on the drawings mean, the latest edition, amendment and revision of such referenced standard in effect on the date of these contract documents. All materials and equipment shall be installed in accordance with the manufacturer's recommendations. All new equipment shall be fully compatible with the new system being installed. The new system shall be purchased through state contract from Dutchess Tel-Audio.

1. Provide new headend, speakers, wiring, hardware and programming, as well as all associated auxiliary equipment to facilitate installation of the new PA system.

B. Install all equipment, accessories, and materials (purchased by the district through state contract) per these specifications and drawings to provide a complete and operating school communications system including, but not limited to:

1. Administrative Console with a color touchscreen display and intuitive GUI.

2. An Administrative Display Application able to receive call-ins and establish two-way audio communication between call-signaling audio endpoints. Capable of calling and receiving calls from other network-connected administrative consoles, consisting of a map-based GUI (Graphical User Interface) and capable of running on a 22” (or larger) LCD touchscreen computer.

3. Call initiation switches capable of placing normal and emergency calls.

4. Built-in calendar with configurable time zone (including Daylight Saving Time), unlimited events and supporting a minimum of 80 schedules.

5. IP-based system software with LAN/WAN access for Voice over IP (VoIP) communications and remote management.

6. Public Switched Telephone Network (PSTN) or VOIP switch can be connected to the system via an inbound SIP Trunk.

1.3 SUBMITTALS

A. Specification sheets on all items including cable types.

B. Shop drawings that detail the integrated electronic communications network system.

C. Wiring diagrams showing typical connections for all equipment.

D. Numbered Certificate of Completion for installation, programming, and service training, which identifies the installing technician(s) as having successfully completed the technical training course(s) provided by the system manufacturer.

1.4 QUALITY ASSURANCE

A. All items of equipment shall be designed by the manufacturer to function as a complete system and shall be accompanied by the manufacturer's complete service notes and drawings detailing all interconnections.

B. The contractor shall be an established communications and electronics contractor who currently maintains and for at least fifteen years has had a locally run and operated business. The contractor shall be a duly authorized distributor of the equipment supplied with full manufacturer's warranty privileges.

C. The contractor shall show satisfactory evidence, upon request, that he or she maintains a fully equipped service organization that can furnish adequate inspection and service to the system. The contractor shall maintain at his or her facility the necessary spare parts in the proper proportion as recommended by the manufacturer to maintain and service the equipment being supplied. Upon request, the contractor shall show satisfactory evidence that he or she maintains a fully equipped service organization.

1.5 SINGLE SOURCE RESPONSIBILITY

A. Except where specifically noted otherwise, all PA equipment supplied shall be the standard product of a single manufacturer of known reputation and with a minimum of 10 years' experience in the industry. The supplying contractor shall have attended the manufacturer's installation and service school. A certificate of this training shall be provided with the contractor's submittal.

1.6 SAFETY/COMPLIANCE TESTING

A. The mains-powered communications system shall bear the label of a Nationally Recognized Testing Laboratory (NRTL), such as TUV or UL, and shall be listed by their re-examination

service. All work must be completed in accordance with all applicable electrical codes under the direction of a qualified and factory-approved distributor with the owner's approval.

B. The system is to be designed and configured for ease of service and repair.

1.7 IN-SERVICE TRAINING

A. The contractor shall provide at least eight (8) hours of in-service training with this system. These sessions shall be broken into up to four (4) segments that facilitate the training of individuals in the operation of this system. Operator manuals and user guides shall be provided at the time of this training.

1.8 WIRING

A. System wiring and equipment installation shall be in accordance with good engineering practices as established by the EIA and the NEC/CSA. Wiring shall meet all local electrical codes. All wiring shall be tested and verified to meet the requirements.

B. All communication system wiring shall be labelled at both ends of the cable. All labelling shall be based on the designators indicated in the architectural graphics package.

1.9 PROTECTION

A. The contractor shall provide all necessary transient protection on the AC power feed and all port lines leaving or entering the building.

B. The contractor shall note in the system drawings the type and location of these protection devices and all wiring information. Such devices are not to be installed above the ceiling.

1.10 SERVICE AND MAINTENANCE

A. The contractor shall provide a one-year equipment hardware warranty for the installed system against defects in material and workmanship. All materials subject to warranty repair/replacement shall be provided at no expense to the owner during normal working hours. The warranty period shall begin on the date of acceptance by the owner/engineer.

B. The contractor shall, at the owner's request, make available a maintenance contract offering continuing factory-authorized service of this system after the initial warranty period.

C. The system manufacturer shall maintain engineering and service departments that are capable of rendering advice regarding the installation and final adjustment of the system.

1.11 USER ROLES AND ACCESS

A. The system shall include the ability to configure user roles and access for permission-based functionality.

1.12 DATA AND COMMUNICATION ENCRYPTION

A. The system shall include a minimum of AES-128 encryption for communications and data transfers.

1.13 QUALIFICATIONS

A. The equipment furnished and major work described herein must be provided and performed by an established audio contracting firm, which must document its ability to execute the contract in a timely, competent, and acceptable manner. All bids must contain proof that the proposed firm:

1. Has been in the business of this specific type of work (school inter-communications and clock systems) for at least 15 continuous years.

2. Operates from an office within 20 miles of Newburgh Enlarged Central School District, and is equipped with a dedicated repair shop.

3. Is not a private residence. Parties who operate from private residences will not be considered qualified as prospective bidders for this project

4. Has satisfactorily performed intercommunication and clock system work of the type specified herein, at a minimum of 10 similar projects.
5. Operates from an office that is fully equipped with test equipment, spare parts, a dedicated service and repair facility and service vehicles to render proper service. The Engineer/Owner reserves the right to inspect Bidder's facilities to verify these criteria.
6. Has a factory-trained service department on call 24 hours a day, 365 days a year, to service the specified product.
7. Is capable of being bonded to ensure the owner of performance and satisfactory service during the guarantee period.

B. The authorized PA vendor for the Newburgh Enlarged Central School District is:
Dutchess Tel-Audio, Inc.
10 Steele Road, New Windsor, NY 12553
Tel: (845) 462-1700
Email: info@dutchesstelaudio.com

PART 2 - EQUIPMENT SPECIFICATION

2.1 MANUFACTURERS

A. Subject to compliance with requirements specifications, provide the following system:

1. CH2000IP manufactured by CareHawk Inc.

B. This specification is intended to establish a standard of quality, function, and features.It is the bidder's responsibility to ensure that the proposed product meets or exceeds every standard outlined in these specifications.

C. The functions and features specified are vital to the operation of this facility; therefore, inclusion in the list of acceptable manufacturers does not release the contractor from strict compliance with this specification's requirements.

2.2 EQUIPMENT

A. SYSTEM EQUIPMENT

1. CH2000IP Life Safety Communication Platform Server:

a. Intel I5 or higher processor
b. 99 simultaneous tasks capable of 200 call-ins in the queue
c. Linux OS
d. CH2000IP software

2. PoE+ Switch(es).

3. GW2WIP1/GW2WIP2 SIP Enabled POE Gateway

4. Program Sources:

a. External audio source interfaced through a 3.5mm connection.

5. Administrative Equipment:

a. Spotlight Administrative Display Application with map-based user interface.
b. ADMIN7 Administrative Console.

6. Optional Equipment:

a. CLKMSL10(D) Messaging display POE.
b. CLKMSL10(D)-SPK Messaging display with SIP speakerPOE+
c. CLKMSL22A Messaging display (12V, 35W).
d. DAF100-25/70 100-Watt remote Class D amplifier 25V or 70V (For use with GW2WIP1/GW2WIP2).
e. DAF300-25/70 300-Watt remote Class D amplifier 25V or 70V(For use with GW2WIP1/GW2WIP2).
f. VCall+ Mobile application.
g. AS-3B-LWE Alert Station.
h. CS2-C(-FR), CS2-CE(-FR), CS55, CS-D30-IP Call Stations.
i. GPIO-8I-8O Integration Hub (General Purpose Inputs and Outputs).

2.3 COMPONENTS AND DESCRIPTIONS

A. The system must support analog speakers with IP-based cable infrastructure.

B. Central Equipment:

1. The system shall have a maximum of 256 SIP audio endpoints and 16 administrative devices.

2. The system shall be capable of expanding capacity using additional systems.

3. The software shall be upgraded via web interface. After rebooting the system, the software upgrade is complete. The system shall allow for a manual revert to the previous working software.

4. The system shall facilitate the playing of pre-recorded audio files.

5. The system shall facilitate the live recording, naming, and storage of user-generated audio files.

6. The built-in calendar shall facilitate automatic control of class changes and other events.

7. The system shall be capable of retrieving ("pulling") calendars from other connected systems as well as sending ("pushing") a calendar or day schedule from one or more designated systems to a single or multiple connected systems (Mass Calendar Update).

8. The system shall be capable of displaying active calendars from connected systems.

9. Network Time Synchronization. The system shall be capable of synchronizing the time with a Network Time Server running NTP via the school's LAN network. Systems that cannot provide Network Time Synchronization will not be deemed equivalent.

10. The system shall have user management with configurable permission-based roles and access to system functionality.

C. Spotlight Administrative Display Application:

1. The system shall show the time of day and date.

2. The system shall display a facility map(s)/floorplan(s).

3. The system shall include a tool to create and update facility maps.

4. The system shall highlight, with distinct colors, system communications on the map including intercom, paging, tones, and music distribution.

5. The system shall have the ability to provide Lockdown Acknowledgement per endpoint. This is to be highlighted on the map as the endpoints report back to the system as secure.

6. The system will use a GUI to activate intercoms, security alerts, zone pages, external functions, select program sources, and distribute or cancel the source to any or all endpoints or zones.

7. The system shall allow for the generation of user-created zones and dynamic zone creation.

8. The system shall display call-in extensions/room numbers and the call-in priority of calls placed.

9. The system shall allow for the management of users, roles, and permissions.

10. The system shall allow for the management of user-defined tones and preannounce tones.

11. The system shall facilitate the distribution of configurable email alerts based on triggered tones/events.

12. The system shall be accessible on supported browser-based devices connected to the local network.

13. The system shall enable bi-directional communication with system audio endpoints, Spotlight, and Administrative Consoles.

D. ADMIN7 Administrative Console:

1. The console shall clearly distinguish between normal and emergency call-ins.

2. The console shall use a priority-based call-in display queue, where critical call-ins are placed at the top of the call queue.

3. The console shall allow the user to select call-ins out of queue order.

4. The console shall display active critical alert badges such as Lockdown.

5. The console shall facilitate quick access to color-coded emergency tones and alerts, including Lockdown and All Clear.

6. The console shall facilitate two-way intercom calls, phone-to-phone calls, paging to zones, tones to zones, and music distribution to zones.

7. The console shall display its IP address and other system information and connectivity status.

8. The console shall include a minimum display size of 7” with a color touch-screen display.

9. The console shall not require the use of phone codes for the operation of daily or emergency communications.

E. Spotlight Calendar:

1. The system shall include a browser-based Calendar interface.

2. The calendar shall have unlimited events that may be programmed into any of the unlimited day schedules.

3. The schedules shall be calendar-based and allow for programming years in advance.

4. The calendar shall facilitate on-the-fly day schedule changes in a calendar-based interface.

5. The calendar shall facilitate the use of exclusion dates for holidays and other special circumstances.

6. The calendar interface shall have options for import, export, and schedule editing.

7. Users shall have configurable role-based access to Calendar with all scheduling functions.

F. External Phones:

1. External phones shall be integrated with the system through an inbound SIP trunk.

G. Call Stations:

1. Call Stations shall be CareHawk Model:

a. CS55 Rocker Style Call-in Switch

b. CS2-C Push button Call-In Switch

c. CS2-CE Push button Call-in/Emergency switch

d. CS-D30-IP Silicone Button Call-in switch

2. Shall be capable of Normal and Emergency Calls.

3. The system must have Emergency Call escalation.

a. If the emergency call is unanswered by the designated extension and the emergency call escalation is programmed, the emergency call shall be forwarded to all the other administrative extensions. Systems that do not provide Emergency call escalation will not be considered equal.

4. The stations shall be able to provide Lockdown Acknowledgement

a. This shall be provided through the pressing of any button on the station following the initiation of a Lockdown.

b. After acknowledgement, the buttons revert to the default functionality.

H. Alert Stations:

1. Alert stations shall be CareHawk Model:

a. AS-3B-LWE

2. Alert stations shall be capable of triggering a Lockdown, Weather/Tornado or Evacuate critical tones.

3. Alert stations shall include a minimum of two software-programmable buttons.

I. VCall+

1. The mobile application will initiate normal and emergency call-ins to Spotlight and ADMIN7 consoles from the selectable classroom endpoints.

2. Call-ins initiated by the mobile application will be displayed on the Spotlight and ADMIN7 consoles as VCall+ triggered (with mobile device callback number if configured).

3. This system shall not provide direct audio communication to the mobile application.

4. The system shall initiate Lockdown and up to 10 custom tones from the mobile application.

5. The mobile application will initiate Lockdown Acknowledgement from the selectable classroom endpoints.

6. The system shall allow for the configuration of users, roles and permissions based on login credentials.

7. The mobile application will indicate any active alerts through a graphical display and vibration.

J. GPIO-8I-8O Integration Hub:

1. The system shall include 8 contact closure inputs and 8 relay outputs.

2. The system shall allow for a combined 16 contact closure inputs and 16 relay outputs (2 x GPIO-8I-8).

3. The GPIO-8I-8O Hub shall be powered by POE or an optional external 12V power supply.

4. The GPIO-8I-8O Hub shall support LLMNR addressing.

5. The GPIO-8I-8O Hub shall include runtime communication with AES-128 encryption.

6. The GPIO-8I-8O Hub shall allow for remote browser-based firmware updates.

7. The GPIO-8I-8O Hub shall allow for supervision and firmware fatal error reporting and logging.

8. The GPIO-8I-8O Hub shall allow additional criteria configuration for event processing.

2.4 SYSTEM PARAMETERS

A. The communication system shall provide an IP-based communication network between administrative areas and indoor and outdoor locations throughout the facility over VLANs.

B. The system shall provide integrated criteria-based contact closure inputs and relay outputs for communication with third-party systems. Systems that do not contain event-processing communication ports shall not be considered.

C. The system shall provide no less than the following features and functions:

1. IP Based communication between the SS32IP, Spotlight, and ADMIN7 Consoles. Each SS32IP port shall be capable of supporting 32 Watts, 3 Call in buttons, and duplex communication.

2. Paging only speaker locations such as hallways or common areas shall be homerun to the SS32IP or to a Class D amplifier integrated with the SS32IP.

3. System amplifiers shall be Class D only.

4. ADMIN7 IP Administrative Console.

5. Spotlight Administrative Display.

6. Classroom and hallway locations needing visual displays shall use CLKMSL10(D)-(SPK) messaging displays. The SPK version shall support a 4” 4-watt speaker and microphone with echo suppression. Use of a remote call switch shall be supported (applicable to -SPK versions only). 10-inch LCDs shall show visual graphics for emergency and non-emergency events. Four integrated RGB multicolor strobe LEDsper display shall be available to enhance any visual alert.

7. Communal areas (Cafeterias/Gymnasiums) needing visual displays shall use CLKMSL22A messaging displays. The display shall support 15W(@4ohms) or 9W (@8ohms) external speakers with the internal amplifier. This unit shall provide AGC based on ambient audio levels. The unit shall provide a line out for use with external amplifiers and a configurable dry contact closure.

D. The Emergency Page All-Call function shall have the highest system priority that will suspend security alert audio for additional announcements.

1. Systems that do not treat Emergency Page All-Call page with the highest priority shall not be deemed as equal.

E. There shall be at least 100 user tone slots available for pre-recorded tones/announcements. Any of these can be dedicated Emergency Alarm Tones. Each shall be accessed from the Spotlight Administrative Display, ADMIN7 console, or any authorized PBX. Systems using external alarm generators or having less than 100pre-recorded tones/announcements shall not be acceptable.

F. The system shall provide for three-, four-, five-, or six-digit architectural room numbers with description.

G. There shall be an automatic level control for return speech during amplified voice communications.

H. Each room's loudspeaker shall be assigned to any single, any combination, or all of 64 multi-purpose zones per facility. Systems with less than 64 multi-purpose zones shall not be acceptable.

I. There shall be unlimited Time-Signaling Schedules with unlimited user-programmed events per facility. Each event shall trigger one of the user-selected tones or program sources. It shall be possible to assign each schedule to a day in an unlimited calendar or to manually change

schedules from the Spotlight Administrative Display. Systems that do not provide unlimited time-signaling schedules or a choice of 100-time tones and external audio shall not be acceptable.

J. There shall be a zone-page/all-page feature that is accessible by Spotlight Administrative Display, ADMIN7 console, and authorized PBX.

1. There shall be a preannounce tone signal at any loudspeaker selected for voice paging.

K. There shall be a voice intercom feature that is accessible by Spotlight Administrative Display, ADMIN7 console and authorized PBX.

1. There shall be a privacy tone every 15 seconds to signal that any loudspeaker selected for amplified-voice intercom is active.

2. There shall be a preannounce tone signal at any loudspeaker selected for voice intercom communication.

3. Privacy and pre-announce tone signals shall be capable of being disabled during system initialization.

L. Each Classroom call station shall support two call-in types, as follows:

1. Normal.

2. Emergency.

3. Emergency Call-ins from Classroom Call Switch Stations shall jump to the top of the call-in queue and alert the Spotlight Administrative Display via a distinctive ring and the map location flashing red. If the Spotlight Administrative Display is busy, the user shall be alerted via a tone. Systems which interrupt calls shall not be acceptable.

4. Normal calls shall be logged into a queue for the designated Spotlight Administrative Display.

5. Each queue shall first be sorted by call priority (emergency calls, and then normal calls). Calls are sorted within each priority level on a first-in, first-out basis. When a call is answered, it shall automatically be removed from the queue. Systems that do not sort calls according to priority and order received shall not be acceptable.

6. It shall be possible to answer any incoming call simply by clicking the map location while it is ringing. It shall not be necessary to hit any buttons to answer a call unless the call has dropped into the queue.

M. Spotlight Administrative Display:

1. Incoming calls can be directed to the desired administrative console via call groups.

2. The display shall, by default, show the time of day, day of the week, the current time, and the locations of all stations calling with the call-in status of each station (normal or emergency).

3. When dialing from Spotlight, the console shall indicate the room number being dialed.

4. The display shall provide user-friendly menu selections to assist the operator when paging and distributing program material. Systems that require the operator to memorize long lists of operating symbols or control codes shall not be acceptable.

5. Program selection and its distribution or cancellation shall be accomplished from a designated Spotlight Administrative Displaywith the assistance of the menu display system. Distribution and cancellation shall be to any one or combination of speakers, any zone(s), or all zones. It shall be possible to provide multiple program channels at the same time.

6. It shall be possible, via a Spotlight Administrative Display, to manually initiate any of 100 tones. The tones shall be separate and distinct.

7. Each Spotlight Administrative Display shall maintain a unique queue of all stations calling that phone.

8. Provide the ability to mass update calendars across multiple servers including IP and Analog based systems.

9. Provide the system status of the various IP and analog-based systems.

10. Provide custom configurable instant access buttons to initiate alerts.

N. System programming shall be from the CH2000IP browser-based interface. All system programming data shall be stored in nonvolatile memory.

1. Diagnostics shall be built into the system and be accessible via a web browser and only by authorized personnel. Diagnostics shall show all activity with a 30-day log of all events. Logs shall be exportable for in-depth system analysis. Systems that do not provide a summary of the activity shall not be deemed equal.

2. All programming and data access shall be through an Ethernet connection. Systems that do not have a built-in Ethernet port shall not be deemed equal.

O. IP Endpoint Supervision:

1. The system shall include supervision of IP endpoints including:

   a. GW2WIP1/GW2WIP2 Gateways
   b. CLKMSL Messaging Displays
   c. GPIO-8I-8O Integration Hubs
   d. ADMIN7Administrative Consoles
   e. Spotlight Administrative Display

2. The system shall attempt automatic active recovery of IP endpoints should a malfunction or error occur.

3. The system shall include the ability to alert end users via software and/or automated emails if an IP endpoint is offline.

P. Each IP system shall be capable of integrating with a minimum of 20 existing analog systems from the same manufacturer. IP system shall be capable of detecting the online status of each analog system, receiving call-ins from, and initiating all audio activity types to (intercom, page, emergency page, tone, emergency tone and music distribution) each connected analog system. IP system shall be capable of global page and tone operations encompassing all endpoints on the IP system and all endpoints on all connected analog systems.

1. Functionality includes:

a. ADMIN7 administrative consoles can be contacted anywhere in the multisystem network (IP-based systems)
b. Intercom to any IP-controlled endpoint (analog endpoints are controlled through a connected IP system)
c. Initiate critical alerts (i.e. Lockdown, Weather, Evacuate, etc.) on multiple systems automatically based on a configured grouping.
d. Initiate Global Page, Zone Page, Emergency Page, and Music distribution across the multisystem network.

Q. Software License:

1. All software shall be perpetual with no recurring license fees for any of the equipment provided, central equipment or endpoint devices, or for any of the future expansion equipment.

2.5 PERIPHERY EQUIPMENT & DEVICES

A. Standard constant voltage speakers for paging in hallways, communal areas, and outside paging. Groups of speakers are connected via the SS32IP. These speakers do not support intercom/talkback communication, only one-way paging.

B. Standard constant voltage speakers for intercom/talkback communication in classrooms and other areas requiring intercom with talkback. Groups of speakers are connected via the SS32IP.

1. Ceiling speakers shall be an 8-inch seamless cone type, with an additional cone mounted in the apex of the large cone to extend the high frequency response. The ceramic magnet shall weigh at least 10 ounces. The normal wattage rating shall be 15 watts with a program rating of 25 watts. The loudspeaker shall be equipped with a universal matching transformer suitable for use on a 25-volt or a 70-volt output line with taps at ¼, ½, 1, 2, or 5 watts.

a. The flush speaker baffle shall be 12-7/8 inches in diameter, and the circular design shall match the surrounding motif. It shall be constructed of 22 gauge cold-rolled steel and finished in solid white. The surface shall be coated with a baked on powdered epoxy that is highly resists to scratches and other surface blemishes. It shall be pre-drilled to accept an 8” loudspeaker. The baffle weight shall not exceed 20 ounces.

b. The speaker support truss shall be constructed of 28 gauge or heavier hot dipped non-corrosive cold rolled steel. It shall be punched to accept 8” speaker grilles if 9-1/8”, 11-1/4” or 12-1/2” in diameter. The truss shall provide attachment for 9-1/8” square enclosure. The truss shall have integral slots to accommodate torsion

spring type baffles. Length of truss shall be 23-1/2" size to fit standard 24" tile suspension grids. The speaker support truss shall have convenient holes for support wires where required for safety. The weight of the truss shall be a slight as 15 ounces with breakdown strength of over 100 pounds when suspended as in a typical T-Bar suspended ceiling.

c. The metal protective enclosure shall have four 8-32 J-Clips installed in the mounting flange. The enclosures shall have 4 combination knock-outs 1⁄2" – 3⁄4" (13mm -19mm) spaced 90° apart and shall be of one piece construction. Interior of enclosure shall be undercoated to prevent mechanical and acoustical resonances. Enclosure shall be finished in textured epoxy.

2. Wall speakers shall be an 8-inch seamless cone type, with an additional cone mounted in the apex of the large cone to extend the high frequency response. The ceramic magnet shall weigh at least 10 ounces. The normal wattage rating shall be 15 watts with a program rating of 25 watts. The loudspeaker shall be equipped with a universal matching transformer suitable for use on a 25-volt or a 70-volt output line with taps at ¼, ½, 1, 2, or 5 watts.

a. The speaker baffle shall be fabricated of ½ inch particle board, 60 pound density, overlaid with a ¼ inch photo etched, walnut grained finish. The faceplate shall slope at an angle of 15degrees with the assembly measuring be 10-12 inches high, 13-1/2 inches wide and 6-5/8 inches deep at the top and 4 inches deep at the bottom. It shall have a volume of 594 cubic inches. The assembly shall weigh 6 pounds, 4-1/2 ounces.

3. Horns shall have a continuous power rating of 15 watts. The frequency range shall be 400Hz to 14,000Hz. The trumpet shall have a screwdriver adjustable switch that can be set externally to select 15, 7.5, 3.8, 2, 1 watts on a 70 volt line or 15, 7.8, 1.8, .94, .48 watts on a 25 volt line. Available impedances shall be 5000, 2500, 1300, 666, 333, 89 and 45ohms. The sound pressure level shall be 116dB at 3.3feet on axis with 15 watts input. Sound dispersion shall be 115 degrees (-6dB, 1000Hz), 70 degrees (-6dB, 2000Hz) and 40 degrees (-6dB, 4000Hz) octave band.

a. The trumpet shall be 7-7/8 inches wide, 8-3/4 inches high and 9-5/16 inches deep. The finish shall be beige baked epoxy. External connections shall be to screw terminals. The terminal housing and transparent cover shall function together as a cable strain relief. The trumpet shall be provided with a three way adjustable mounting bracket. The assembly weight shall not exceed 4 pounds.

b. Horns should be shockproof and weatherproof.

C. Call-Station shall be a momentary normally open call-in button that provides a method to initiate a normal call-in or an emergency call-in. Call-Station shall consist of a rocker type push button mounted to a brushed stainless steel plate for durability.

D. VCall+ Software shall provide the customer with the ability to place normal or emergency calls to the administrator via the classroom PC and answer via the classroom speaker. The software must provide redundancy to the traditional wired call points and an easy to use one click interface.

E. A CareHawk model ADMIN7 IP Administrative Console(s) shall be furnished and installed to initiate intercom calls to the classroom, play tones to zones, perform and respond to emergency communications. The ADMIN7 IP shall be the control center for communications, paging, program distribution, and signaling. The ADMIN7 IP shall feature (but not limited to):

1. Priority-based call queue.
2. Two-way intercom to the classroom.
3. Broadcast pages or tones to zones.
4. HD audio on speakerphone and handset.
5. 7-inch capacitive touchscreen display.
6. Built-in Bluetooth for connecting Bluetooth headset or use the wired headset/mic jack.
7. Dual Gigabit ports.
8. Integrated PoE.
9. Stand with two adjustable angles of 40 and 50 degrees.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions with the installer present for compliance with requirements and other conditions affecting the performance of the Integrated Telecommunications/Time/Audio/Media System.

B. Do not proceed until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Installation shall conform to local electrical requirements and be sized and installed in accordance with the manufacturer’s approved shop drawings.

B. Low-voltage wiring may be run exposed above ceiling areas where easily accessible but must be installed and supported in compliance with current codes and standards.

C. All Administrative Consoles shall be desk- or counter-mounted.

1. Verify the exact location with the Architect.

D. System Configuration:

1. All configuration parameters need to be gathered from the facility administration for the system configuration.

3.3 GROUNDING

A. Provide equipment grounding connections for Integrated Telecommunications/Time/Audio/Media System as indicated. Tighten connections to comply with tightening torques specified in UL Standard 486A to ensure permanent and effective grounds.

B. Ground equipment, conductor, and cable shields to eliminate shock hazards and to minimize to the greatest extent possible, ground loops, common mode returns, noise pickup, cross talk, and other impairments.

C. Provide all necessary transient protection on the AC power feed and all audio lines leaving or entering the building.

D. Note in the drawing the type and locations of these protection devices as well as all wiring information.

E. Furnish and install a dedicated, isolated earth ground from the central equipment rack and bond to the incoming electrical service ground bus bar.

PART 4 - EXECUTION

4.1 DIVISION OF WORK

A. While all work included under this specification is the complete responsibility of the contractor, the following division of actual work listed shall occur.

1. The conduit, outlets, terminal cabinets, etc., which form part of the rough-in work shall be furnished and installed completely by the electrical contractor. The balance of the system, including installation of speakers and equipment, making all connections, etc., shall be performed by the manufacturer's authorized representative. The entire responsibility of the system, its operation, function, testing, and complete maintenance for one year after final acceptance of the project by the owner shall also be the responsibility of the manufacturer's authorized representative.

4.2 EQUIPMENT MANUFACTURER'S REPRESENTATIVE

A. All work described herein to be done by the manufacturer's authorized representative shall be provided by a documented factory-authorized representative of the basic line of equipment to be used.

B. The manufacturer's representative shall provide a letter with submittals from the manufacturer of all major equipment stating that the manufacturer's representative is an authorized distributor. This letter shall also state that the manufacturer guarantees service performance for the life of the equipment and that there will always be an authorized distributor assigned to service the area in which the system has been installed.

C. The contractor shall furnish a letter from the manufacturer of the equipment that certifies that the equipment has been installed according to factory-intended practices, that all the components used in the system are compatible, and that all new portions of the systems are operating satisfactorily.

4.3 INSTALLATION

A. Plug disconnect: All major equipment components shall be fully pluggable using multi-pin receptacles and matching plugs to provide ease of maintenance and service.

B. Protection of cables: Cables within terminal cabinets, equipment racks, etc.

C. Cable identification: Cable conductors shall be color-coded, and each cable shall be individually identified. Each cable identification shall have a unique number located about 1 1/2" from the cable connections at both ends. Numbers shall be approximately 1/4" in height. These unique numbers shall appear on the As-Built Drawings.

D. Instructions: Provide complete "in service" instructions of system operation to school personnel.

4.4 DOCUMENTATION

A. Provide the following directly to the Supervisor of Technology Service:

1. A printed copy of all field programming for all system components.

2. One copy of all diagnostic software with a copy of field program for each unit.

3. One copy of all service manuals, parts list, and internal wiring diagrams of each system component.

4. One copy of all field wiring runs, location, and end designation of the system.

END OF SECTION 275113

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SECTION 281350 - DOOR ACCESS CONTROL SYSTEM

PART 1 - GENERAL

1.1 WORK INCLUDED

A. Provide labor, materials, equipment and services to perform operations required for the complete installation and related Work as required in Contract Documents.

1.2 SECURITY CONTRACTOR

A. The security system shall be installed by a qualified security system contractor experienced in the installation, testing and adjusting of security cameras, door access systems similar to the system specified herein. The security system contractor shall be responsible for providing a complete operating system, including all materials, wire, software, hardware, labor, testing and certification.

B. The security system contractor shall be an authorized dealer/vendor and servicing agent for all the equipment furnished, shall have a minimum of ten years experience in security system installation, guarantee daily on-call service with a response time of no more that twelve hours at the project site, and shall have a place of operation not more than 75 miles from the project site.

C. The security system contractor shall provide a list of eight (8) similar installations using like equipment over the last three (3) years. Provide names of responsible personnel at the installations given.

D. Installer Qualifications: Shall have at least three years of successful installation experience on projects with video surveillance work similar to that required for the project. Shall be licensed to engage in the business of installing security or fire alarm systems in the State of New York. The installation contractor shall provide a copy of his license with identification number as a "Duly Licensed Alarm Installer".

1.3 SUBMITTALS

A. Schedule of all equipment and services supplied.

B. Schematic diagram of the complete systems. Diagram shall indicate size, wiring requirements and number and mounting of all components. Standard diagrams will not be acceptable.

C. Product data sheets for all components.

D. Name, address and phone number of nearest fully equipped service organization.

E. Manufacturer's recommended practices for maintaining and adjusting the system and all peripheral devices.

1.4 DESCRIPTION OF WORK

A. Extent as indicated by the drawings and specifications.

B. Furnish material, labor, wire, conduit and any miscellaneous hardware or material required for complete system operation.

C. Furnish and install an access control system as outlined herein and indicated on contract drawings. System shall be complete utilizing compatible manufacturers, wire, cable, hardware, software and accessories.

1.5 QUALITY ASSURANCE

A. Source Quality Control: The system shall be the standard product(s) of one vendor who has been engaged in supply of this type equipment for at least (3) years and have installed (5) similar systems within 150 miles of this project. The manufacturer shall maintain a fully staffed and equipped service facility within 150 miles of the job location, capable of providing service 24 hours a day.

B. Installer Qualifications: Shall have at least three years of successful installation experience on projects with door access work similar to that required for the project. Shall be licensed to engage in the business of installing security or fire alarm systems in the State of New York. The installation contractor shall provide a copy of his license with identification number as a "Duly Licensed Alarm Installer".

C. Compliance with Local Requirements: Comply with the applicable building code, local ordinances and regulations, and the requirements of the authority having jurisdiction.

1.6 OPERATION

A. Access control system shall restrict and monitor access to exterior access doors as indicated on the contract drawings. The system shall be programmable allowing full, limited or non-access through any or all points of control. In full access mode the electric door latches are deactivated allowing access without code or card authorization. In limited access mode the electric door latches are deactivated upon entry of the pre-assigned pass code into the access key pad or a user authorized identification card is entered at a card proximity reader. An access approved LED indicator is lit upon approved entry of either the authorized pass code or authorized identification card. In the non-access mode the electric door latches can not be deactivated by the pre-assigned pass code into the access key pad or a user authorized identification card is entered at a card proximity reader.

B. Provide a connection from door access system output to an input on the fire alarm panel to trigger canned lockdown or lockout message and turn on the blue light strobes. This contractor shall hirer the Districts Fire Alarm Vendor to coordinate programming and exact requirements. Pay the fire alarm vendor for required input cards in FA panel if required. This Contractor shall provide all required equipment and interconnecting cabling required to make this connection to FA panel.

C. Provide an output connection from door access system to new VOIP phone system. This connection shall work with singlewire informacast software being provide by VOIP Telephone System Contractor. This contractor shall provide all equipment and interconnecting cabling to make this connection. Coordinate with VOIP Contractor for programming and exact requirements and location of connections.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. The basis of design system shall be manufactured as listed or equal. Components of differing manufacturers required for a complete system shall be supplied and assembled by one vendor. The material listed, herein, shall be considered the standard of quality for approval of alternate equipment manufacturers.

2.2 ACCESS CONTROL SYSTEM

A. Software House CCURE 9000 Site server access control system will provide full access control, alarm monitoring, video monitoring, and temperature monitoring. System must be capable of controlling 32 access control doors with expansion to 64. The appliance shall be embedded with Linux operating system, a SQL database, and a web server, as well as the Security management application for mobile devices. Server must be rack mounted. Part number SSVR3-64. Acceptable Manufacturers:

1. Software House (Basis of Design)

2. Kantech

3. S2

B. iClass Reader: HID iClass Reader color, black. Part #HID-SE-R10. (CR).

C. Cables: All wire, cables, except branch circuit wiring, and fittings furnished by manufacturer, as required for a complete operating system.

D. Key Fobs: HID iClass SE key II, HID Part #3250 with key chain ring. Provide 300 Fobs and rings for RFP. Exact quantity as directed by owner.

E. This contractor shall register all HID products for site registration to establish a site code.

2.3 ACCESS CONTROL PANEL

A. iSTAR Access control panels shall be wall mounted by each access control door, powered POE+, up to 2-door readers, 2 inputs, 2 outputs. Model ESTAR002-POE1.

B. Acceptable Manufacturers:

1. Software House (Basis of Design)

2. Approved equal.

2.4 DOOR CONTACTS (DOUBLE POLE DOUBLE THROW)

A. Provide double pole double throw magnetic contacts GE part number 1076D or approved equal.

PART 3 - EXECUTION

3.1 GENERAL

A. Provide access control system for door as indicated on contract drawings.

B. iClass Reader to be mounted at 48" above finished grade minimum.

3.2 START-UP SERVICE

A. Secure the services of the manufacturer's representative for minimum of (2) working days (not necessarily consecutive) for the following:

1. Supervision of system installation

2. Program all key fobs as required by owner.

3. Start-up and adjustment of system.

4. Supervise and witness the final system test.

5. Train facility personnel on the operation/programming and maintenance of the system.

6. Develop door access schedule for all buildings.

7. Develop users' levels as directed by owner.

B. Notify the Engineer two days prior to when the manufacturer's representative will perform the final system test.

3.3 OWNERS MANUAL

A. Provide the Owner with (3) manuals including equipment cuts, installation instructions, and maintenance instructions, "as built" drawings of work installed under this contract.

3.4 WIRING

A. All wiring shall be installed in raceway refer to specification section 270528.

3.5 SPARE EQUIPMENT

A. Upon completion of installation present to the Owner spare material, as listed below. Provide the Architect with a signed receipt from the Owner for the following:

1. (3) - Card iClass Readers.

END OF SECTION 281350

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DEMOLITION NOTES:

1. SECURITY **PROVIDE, INSTALL AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.**
2. DIG SAFE **THE CONTRACTOR IS RESPONSIBLE TO CALL DIG SAFE PRIOR TO BEGINNING DEMOLITION.**
3. VERIFICATION **THE CONTRACTOR TO VERIFY VERTICAL AND HORIZONTAL LOCATION OF ALL UTILITIES WITHIN THE WORK AREA OR THOSE EXPECTED TO BE AFFECTED BY NEW WORK, AND SUBSURFACE FEATURES. THE SITE CONTRACTOR MUST BRING ANY ISSUES TO THE DESIGN ENGINEER AND OBTAIN WRITTEN APPROVAL FROM THE OWNER'S ONSITE REPRESENTATIVE UPON COMPLETION OF VERIFICATION PRIOR TO THE START OF DEMOLITION OR CONSTRUCTION.**
4. APPLICABILITY **THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION WORK SHOWN ON THE "C" SERIES DRAWINGS AND AS DEFINED IN THE SPECIFICATIONS UNLESS SPECIFICALLY DEFINED OTHERWISE. THIS INCLUDES ALL REMOVALS AS NECESSARY FOR THE CONSTRUCTION OF NEW WORK EVEN IF NOT SPECIFICALLY NOTED ON THE CONTRACT DOCUMENTS.**
5. RECORD MAP **- DURING REMOVAL/DEMOLITION PROCESS THE CONTRACTOR SHALL OBTAIN DETAILED RECORD INFORMATION TO ACCURATELY LOCATE ALL EXISTING UNDERGROUND UTILITIES ENCOUNTERED. THIS INFORMATION SHALL BE INCLUDED ON THE RECORD/AS-BUILT MAPS TO BE SUPPLIED BY THE CONTRACTOR TO THE SCHOOL DISTRICT.**
6. SHUTDOWNS **THE CONTRACTOR TO COORDINATE ALL UTILITY SHUT DOWNS, RELOCATIONS, SERVICE INSTALLATIONS WITH THE SCHOOL DISTRICT AND LOCAL UTILITY COMPANIES.**
7. COORDINATION **THE CONTRACTOR SHALL COORDINATE THE REMOVAL OF DEMOLISHED MATERIAL WITH THE OWNER'S REPRESENTATIVE. SITE FURNISHINGS AND MATERIAL DETERMINED TO BE REMOVED SHALL BE REMOVED AND EXPORTED OFFSITE IN A LEGAL MANNER AND IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.**
8. PROTECT **ALL EXISTING FEATURES TO REMAIN. DAMAGE TO EXISTING ASPHALT, LAWN AND OTHER FEATURES TO REMAIN SHALL BE REPAIRED AT THE SITE CONTRACTOR'S EXPENSE.**
9. DISTURBANCE **ALL SURFACES THAT ARE DISTURBED DUE TO UTILITY CONSTRUCTION, OUTSIDE OF THE MAJOR WORK AREAS, ARE TO BE RESTORED TO PRE-CONSTRUCTION CONDITION, IN ACCORDANCE WITH THE ASPHALT AND CONCRETE SECTION DETAILS INCLUDED IN THESE PLANS. LAWN AREAS ARE TO BE RE-ESTABLISHED WITH A MINIMUM OF 4 INCHES OF TOPSOIL AND SEED.**
10. HAZARDOUS MATERIAL **ANY MATERIALS CONTAINING ASBESTOS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. NOTE THIS MAY INCLUDE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE TO NOTIFY THEM OF ANY UNDOCUMENTED HAZARDOUS MATERIAL.**
11. EXISTING SERVICE **THE CONTRACTOR SHALL MAINTAIN SERVICE FROM ALL UTILITIES NOT SLATED FOR DEMOLITION AND SHALL REMAIN FUNCTIONAL UPON COMPLETION OF DEMOLITION.**
12. EXISTING UTILITIES **THAT ARE PROPOSED TO BE REMOVED, UNLESS OTHERWISE INDICATED, SHALL BE EXCAVATED, UTILITY MATERIAL REMOVED, AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE SPECIFICATIONS. ALL TRENCHES SHALL BE BACKFILLED WITH GRANULAR FILL, COMPACTED IN 12" LIFTS TO 95% MODIFIED PROCTOR TEST. ALL DISTURBED AREAS SHALL BE RESTORED IN KIND IN ACCORDANCE WITH THE DETAILS IN THESE PLANS AND AT A MINIMUM TO THEIR ORIGINAL STATE.**
13. SAWCUT **AREAS OF ASPHALT AND CONCRETE REMOVAL SHALL BE SAWCUT WITH A NEAT STRAIGHT LINE AT ALL REMOVAL LIMITS.**
14. PERMITS **THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION AND CONSTRUCTION, INCLUDING ALL FEES ASSOCIATED WITH THOSE PERMITS, IN THE BID.**
15. ENVIRONMENTAL CONDITIONS **OR ISSUES, NOT PREVIOUSLY IDENTIFIED, ARE ENCOUNTERED DURING DEMOLITION, THE CONTRACTORS(S) SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER BEFORE CONTINUING THE DEMOLITION PROCESS.**
16. RECYCLE **ALL MATERIALS WHEN APPROPRIATE.**
17. SPOIL MATERIALS **FROM DEMOLITION OR EARTHWORK, SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT THE SITE CONTRACTOR'S EXPENSE.**
18. EXISTING STRUCTURES **THAT ARE ABANDONED IN PLACE SHALL BE REMOVED TO A DEPTH OF 2 FEET BELOW FINISHED GRADE. STRUCTURES SHALL BE FILLED WITH CRUSHED STONE, (MEETING NYSDOT STANDARD SPECIFICATION SECTION 304) COMPACTED IN 12" LIFTS TO 95% MODIFIED PROCTOR TEST.**
19. FIELD TILE **IN THE EVENT FIELD TILE IS ENCOUNTERED, THE SITE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER. UNDER NO CIRCUMSTANCES SHALL FIELD TILE BE PERMITTED TO EXIST NEAR BUILDING FOUNDATIONS.**
20. ELECTRICAL DEMOLITION - **THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK REQUIRED TO COMPLETE THE DEMOLITION OF EXISTING ELECTRICAL FEATURES, INCLUDING BACKFILLING OF TRENCHES, AND SHALL COORDINATE WITH THE SITE CONTRACTOR ON BACKFILLING TRENCHES TO MEET THE SPECIFICATIONS OUTLINED WITHIN THE CONTRACT DOCUMENTS.**

MAP REFERENCE:

ALL EXISTING CONDITIONS PROVIDED ON THE BASEMAP INCLUDING PROPERTY LINE INFORMATION, TOPOGRAPHY AND UTILITIES WERE TAKEN FROM MAP PROVIDED BY CONTROL POINT ASSOCIATES, INC DATED NOVEMBER 17, 2023.

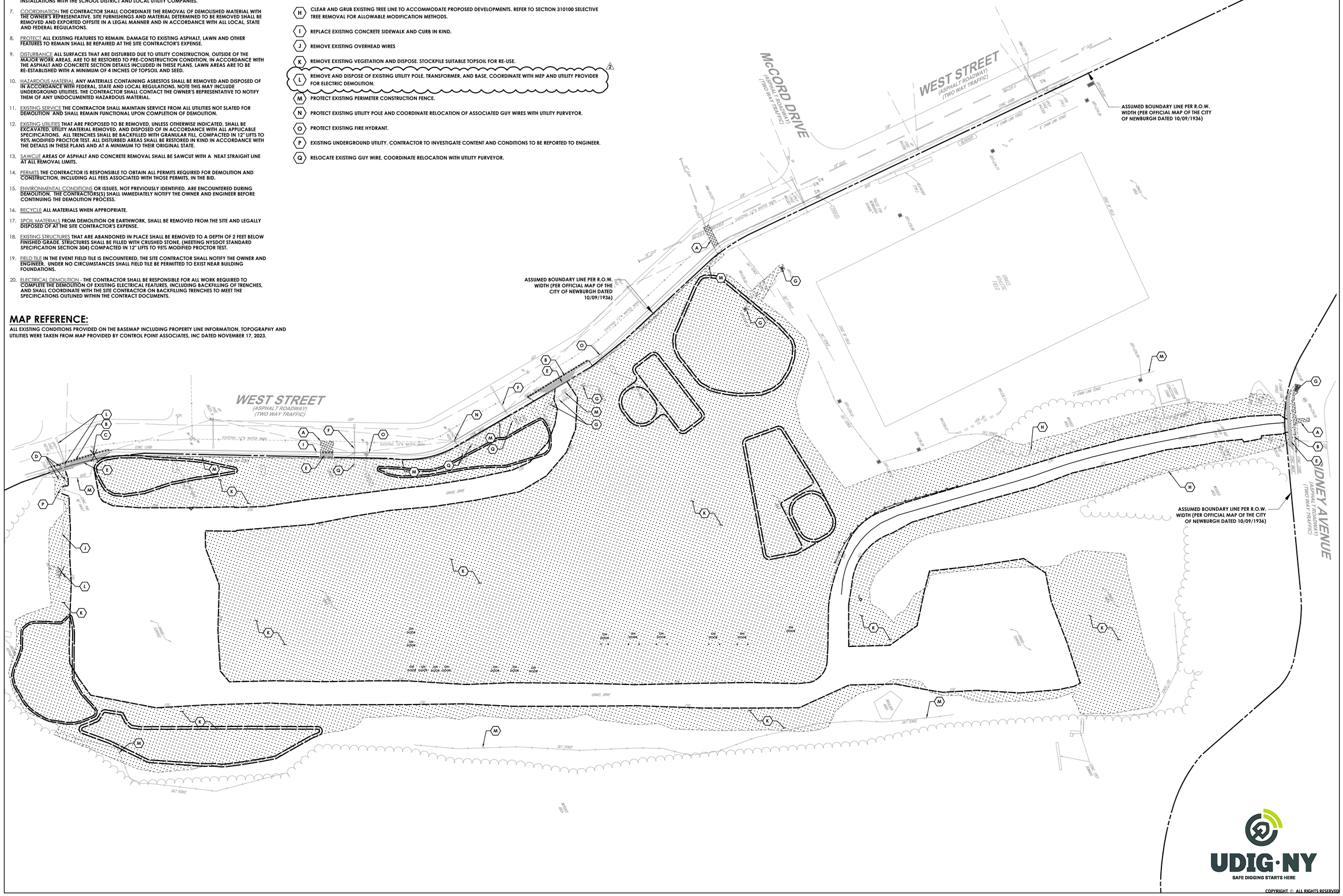
DEMOLITION KEY:

- (A) SAWCUT EXISTING ASPHALT PAVEMENT.
- (B) MODIFY EXISTING CURB CUT TO ACCOMMODATE PROPOSED DEVELOPMENT (AS SHOWN ON SHEET C130).
- (C) RELOCATE EXISTING FIRE HYDRANT. (CONTRACTOR TO COORDINATE WITH UTILITY FIRE DEPARTMENT PURVEYOR FOR NEW LOCATION).
- (D) RELOCATE EXISTING UTILITY POLE. (CONTRACTOR TO COORDINATE WITH UTILITY PURVEYOR FOR NEW LOCATION).
- (E) REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK AND ASSOCIATED SUBBASE TO THE NEAREST JOINT AND DEPTH NECESSARY FOR PROPOSED INSTALLATION.
- (F) PROTECT EXISTING LIGHT POLE AND ASSOCIATED BASE.
- (G) EXISTING STORM SEWER STRUCTURE AND ASSOCIATED PIPING TO BE MODIFIED (AS SHOWN SHEET C140 - C142 & C150 - C152).
- (H) CLEAR AND GRUB EXISTING TREE LINE TO ACCOMMODATE PROPOSED DEVELOPMENTS. REFER TO SECTION 310100 SELECTIVE TREE REMOVAL FOR ALLOWABLE MODIFICATION METHODS.
- (I) REPLACE EXISTING CONCRETE SIDEWALK AND CURB IN KIND.
- (J) REMOVE EXISTING OVERHEAD WIRES
- (K) REMOVE EXISTING VEGETATION AND DISPOSE. STOCKPILE SUITABLE TOPSOIL FOR RE-USE.
- (L) REMOVE AND DISPOSE OF EXISTING UTILITY POLE, TRANSFORMER, AND BASE, COORDINATE WITH MEP AND UTILITY PROVIDER FOR ELECTRIC DEMOLITION. 2
- (M) PROTECT EXISTING PERIMETER CONSTRUCTION FENCE.
- (N) PROTECT EXISTING UTILITY POLE AND COORDINATE RELOCATION OF ASSOCIATED GUY WIRES WITH UTILITY PURVEYOR.
- (O) PROTECT EXISTING FIRE HYDRANT.
- (P) EXISTING UNDERGROUND UTILITY. CONTRACTOR TO INVESTIGATE CONTENT AND CONDITIONS TO BE REPORTED TO ENGINEER.
- (Q) RELOCATE EXISTING GUY WIRE, COORDINATE RELOCATION WITH UTILITY PURVEYOR.

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- EXISTING FEATURE TO BE REMOVED
- EXISTING FEATURE TO BE REMOVED
- EXISTING ASPHALT TO BE REMOVED
- EXISTING CONCRETE SIDEWALK TO BE REMOVED TO NEAREST JOINT
- CLEARING AND GRUBBING
- SAWCUT EDGE OF PAVEMENT

HORIZONTAL SCALE
40 0 20 40 80
SCALE: 1"=40'



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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH

STATE OF NEW YORK
CHRISTOPHER J. CASEY
102592
LICENSED PROFESSIONAL ENGINEER

No.	DATE	DESCRIPTION
2	5/3/2024	BID ADDENDUM #2

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Sheet Title
EXISTING CONDITIONS & DEMOLITION PLAN

Sheet No.
CTE
C120

CONSTRUCTION DOCUMENTS

HORIZONTAL SCALE
20 0 10 20 40
SCALE: 1"=20'

PLAN LEGEND:

	EXISTING	PROPOSED
PROPERTY BOUNDARY		
BUILDING		
MAJOR CONTOUR	520	520
MINOR CONTOUR	521	521
LIGHT POLE	LP	
SIGN		
STORM SEWER, INLET MH, CB & END SECTION	CB	D
SANITARY SEWER & MANHOLE	S	S
WATER LINE		W
SANITARY SEWER		SA
NATURAL GAS (SEE DWG. P101)		G
ELECTRIC (SEE DWG. ES100 & E111)		E

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STANDARD SANITARY SEWER EXTENSION NOTES:

1. MAXIMUM ALLOWABLE INFILTRATION OR EXFILTRATION SHALL NOT EXCEED 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER DAY FOR THE SANITARY SEWER. IF AN AIR TEST IS USED, THE TEST AS A MINIMUM SHALL CONFORM TO THE PROCEDURE DESCRIBED IN ASTM DESIGNATION C828-86 ENTITLED PRACTICE FOR LOW-PRESSURE AIR TEST OF VITRIFIED CLAY PIPE LINES. SANITARY MANHOLES SHALL BE VISUALLY INSPECTED AND TESTED FOR LEAKAGE BY EXFILTRATION OR VACUUM. VACUUM TESTING OF MANHOLES SHALL COMPLY WITH THE METHOD OUTLINED IN THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION - TECHNICAL INFORMATION PAMPHLET (TIP) NO. 15 (LATEST REVISION).
2. FLOOR DRAINS, IF CONSTRUCTED IN THE PROJECT, MUST BE CONNECTED TO THE SANITARY SEWER. NOTE: FLOOR DRAINS DO NOT INCLUDE FOUNDATION OR FOOTER DRAINS INSTALLED TO INTERCEPT UNCONTAMINATED GROUND WATER. ALL DISCHARGES FROM THE FLOOR DRAINS TO THE SANITARY SEWER MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND/OR THE MONROE COUNTY SEWER USE LAW.
3. DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID BALL OR MANDREL IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
4. MINIMUM VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER LINES SHALL BE 18 INCHES MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. ONE FULL STANDARD LAYING LENGTH OF WATER MAIN PIPE SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IN ADDITION, WHEN THE WATER MAIN PIPELINE PASSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECTED FILL) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING OF THE SEWER ON THE WATER MAIN. MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER MAINS PIPES AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES, MANHOLES OR VAULTS.

UTILITY NOTES:

1. PRIOR TO THE START OF UTILITY INSTALLATION THE SITE CONTRACTOR (AND ANY SUBSITE CONTRACTORS) IS RESPONSIBLE FOR COORDINATION OF ALL UTILITY CONNECTIONS WITH MECHANICAL/ARCHITECTURAL DRAWINGS FOR INCLUDING BUT NOT LIMITED TO VERTICAL AND HORIZONTAL LOCATION, PENETRATIONS, AND SIZES. THE SITE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH UTILITY INSTALLATION BY THE OWNER'S ONSITE REPRESENTATIVE UPON COMPLETION OF COORDINATION WITH SITE CONTRACTORS AND PLANS.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRICAL, CABLE, TELEPHONE AND ANY OTHER UTILITIES NOT SPECIFICALLY SHOWN WITHIN THIS PLAN SET WITH THE MECHANICAL/ELECTRICAL/PLUMBING PLAN SET AND THE APPROPRIATE AGENCY. PASSERO ASSOCIATES ASSUMES NO RESPONSIBILITY FOR THE DESIGN OR PERFORMANCE OF UTILITIES NOT SPECIFICALLY SHOWN WITHIN THIS PLAN SET.
3. PRIOR TO THE START OF UTILITY INSTALLATION THE SITE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY AND COORDINATE WITH EXISTING UTILITIES SHOWN ON THE PLANS AND REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER. THE SITE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH UTILITY INSTALLATION BY THE OWNER'S ONSITE REPRESENTATIVE UPON COMPLETION OF EXISTING UTILITY VERIFICATION.
4. UTILITY CROSSINGS THE SITE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF EXISTING UTILITIES AT ALL PROPOSED CROSSINGS AND NOTIFY THE OWNERS ONSITE REPRESENTATIVE OF ANY CONFLICTS PRIOR TO UTILITY INSTALLATION. THE SITE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH INSTALLATION UPON UTILITY VERIFICATION COMPLETION.
5. FLUSH EXISTING STORM SEWER THE SITE CONTRACTOR SHALL FLUSH THE EXISTING STORM SEWER PRIOR TO PROJECT COMPLETION FOR REVIEW.
6. LATERALS ALL STORM, SANITARY, WATER ETC. LATERALS SHALL BE CONSTRUCTED TO 5' FROM THE FACE OF THE BUILDING, VERTICAL AND HORIZONTAL LOCATION SHALL BE COORDINATED WITH THE PLUMBING/MEP SITE CONTRACTORS.

STANDARD WATER MAIN EXTENSION NOTES:

WATER DISTRIBUTION SYSTEM MAY NOT BE PLACED INTO SERVICE UNTIL AN APPROVAL OF COMPLETED WORKS IS ISSUED BY THE ULSTER COUNTY DEPARTMENT OF HEALTH.

WATER MAINS AND APPURTENANCES TO BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND SPECIFICATIONS OF THE ULSTER COUNTY DEPARTMENT OF HEALTH:

MATERIAL

1. WATER MAIN(S) SHALL BE 8 INCH PVC MEETING AWWA STANDARD C900.
2. WATER METER(S) AND BACKFLOW PREVENTION DEVICES SHALL BE LOCATED ON THE INTERIOR OF EACH BUILDING.
3. ALL GATE VALVES SHALL HAVE STAINLESS STEEL BODY AND BONNET BOLTS.

TESTS

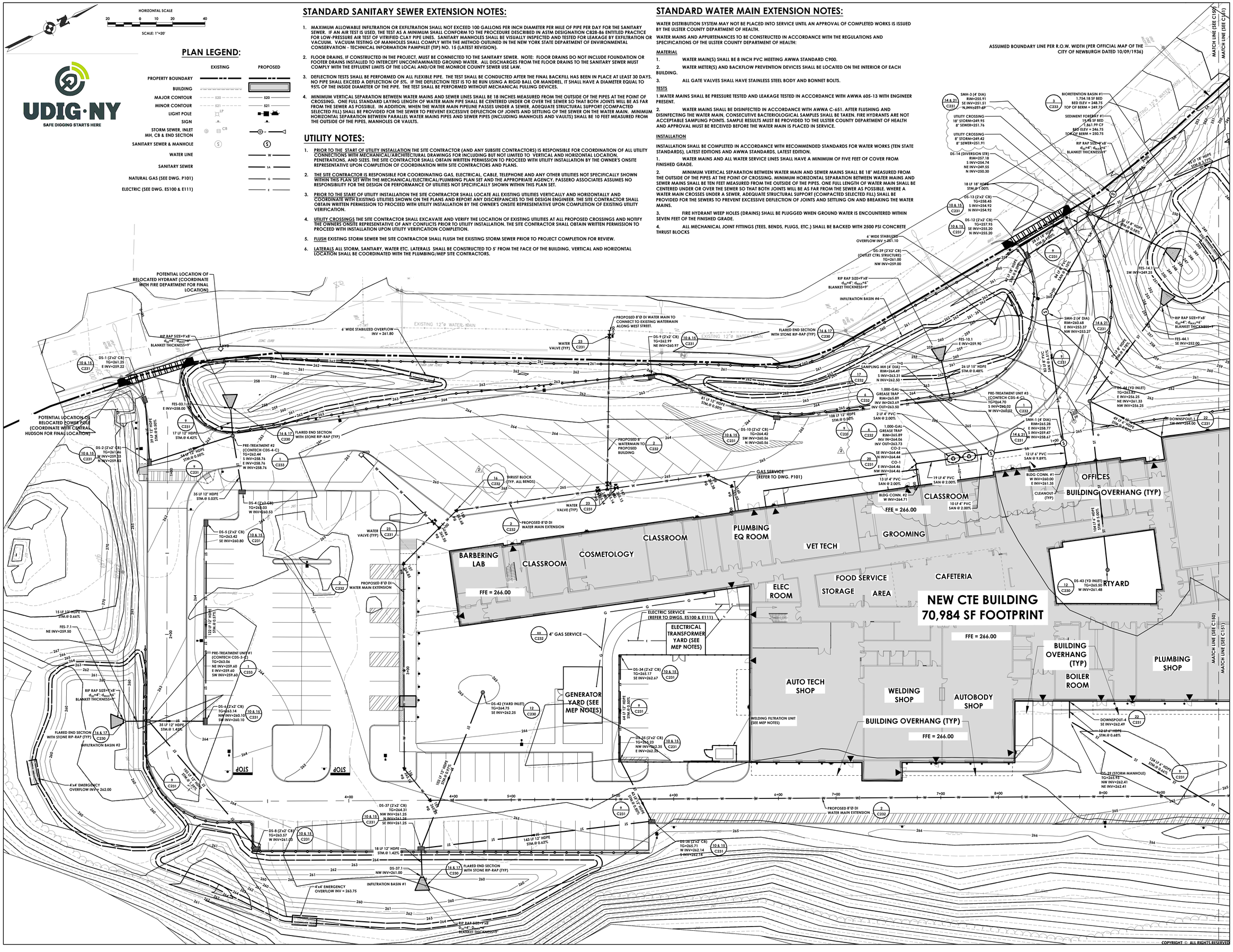
1.WATER MAINS SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA 605-13 WITH ENGINEER PRESENT.

2. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C-651. AFTER FLUSHING AND DISINFECTING THE WATER MAIN, CONSECUTIVE BACTERIOLOGICAL SAMPLES SHALL BE TAKEN. FIRE HYDRANTS ARE NOT ACCEPTABLE SAMPLING POINTS. SAMPLE RESULTS MUST BE PROVIDED TO THE ULSTER COUNTY DEPARTMENT OF HEALTH AND APPROVAL MUST BE RECEIVED BEFORE THE WATER MAIN IS PLACED IN SERVICE.

INSTALLATION

INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH RECOMMENDED STANDARDS FOR WATER WORKS (TEN STATE STANDARDS), LATEST EDITIONS AND AWWA STANDARDS, LATEST EDITION.

1. WATER MAINS AND ALL WATER SERVICE LINES SHALL HAVE A MINIMUM OF FIVE FEET OF COVER FROM FINISHED GRADE.
2. MINIMUM VERTICAL SEPARATION BETWEEN WATER MAIN AND SEWER MAINS SHALL BE 18" MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SEWER MAINS SHALL BE TEN FEET MEASURED FROM THE OUTSIDE OF THE PIPES. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECTED FILL) SHALL BE PROVIDED FOR THE SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING ON AND BREAKING THE WATER MAINS.
3. FIRE HYDRANT WEEP HOLES (DRAINS) SHALL BE PLUGGED WHEN GROUND WATER IS ENCOUNTERED WITHIN SEVEN FEET OF THE FINISHED GRADE.
4. ALL MECHANICAL JOINT FITTINGS (TEES, BENDS, PLUGS, ETC.) SHALL BE BACKED WITH 2500 PSI CONCRETE THRUST BLOCKS



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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH

STATE OF NEW YORK
CHRISTOPHER J. LADOR
102593
LICENSED PROFESSIONAL ENGINEER

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Sheet Title
UTIILTY PLAN

Sheet No.
CTE
C150

CONSTRUCTION DOCUMENTS

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PLAN LEGEND:

	EXISTING	PROPOSED
PROPERTY BOUNDARY		
BUILDING		
MAJOR CONTOUR	520	520
MINOR CONTOUR	521	521
LIGHT POLE	LP	
SIGN		
STORM SEWER, INLET MH, CB & END SECTION	CB	D
SANITARY SEWER & MANHOLE	S	S
WATER LINE		W
SANITARY SEWER		SA
NATURAL GAS (SEE DWG. P101)		G
ELECTRIC (SEE DWG. ES100 & E111)		E

HORIZONTAL SCALE
20 0 10 20 40
SCALE: 1"=20'

MATCH LINE (SEE C150)
MATCH LINE (SEE C151)

SMH-5 (EXIST. SMH RIM=243.87 E INV=234.00 — 14 & 21 C231)
SMH-4 (4' DIA) RIM=244.00 S INV=237.76 W INV=237.66 — 14 & 21 C231
6' WIDE STABILIZED OVERFLOW ELEV = 244.50
FLUSH EXISTING PIPE NETWORK
DS-18 (YD INLET) TG=238.76 S INV=237.23
71 LF 18" HDPE STM.@ 2.50%
DS-17 (2'X2' CB) (OUTLET CTRL STRUC.) TG=244.00 N INV=239.00 6" ORIFICE=239.00 12"x6" ORIFICE=239.55 18"x6" ORIFICE=240.60
16 & 17 C230 FLARED END SECTION WITH STONE RIP-RAP (TYP)
RIP RAP SIZE=9'x8' d_{50}=4" d_{MAX}=6" BLANKET THICKNESS=9"
DETENTION BASIN
FES-41.1 E INV=244.00
FES-16.2 S INV=246.73
20' WIDE STABILIZED OVERFLOW ELEV= 249.5
FES-15.1 S INV=243.00
RIP RAP SIZE=9'xB' d_{50}=4" d_{MAX}=6" BLANKET THICKNESS=9"
12' WIDE STABILIZED OVERFLOW ELEV = 249.0
27 LF 12" HDPE STM.@ 0.25%
FES-40.1 E INV=248.00
DS-15 (2'X2' CB) (OUTLET CTRL STRUCTURE) TG=249.25 N INV=245.75
DS-40 (2'X2' CB) (OUTLET CTRL STRUCTURE) TG=257.40 SE INV=253.75 NE INV=253.75 S INV=253.75 W INV=253.75
45 LF 8" HDPE STM.@ 0.89%
18" HDPE STM.@ 4.90%
EMERGENCY OVERFLOW ELEVATION = 254.75
6" PVC UNDERDRAIN
BIORETENTION BASIN #2 4,806.48 SF/AED BED ELEV = 257.00 TOP OF BERM = 258.00
12' WIDE STABILIZED OVERFLOW ELEV = 257.50
SEDIMENT FOREBAY #2 1,130.13 SF BED 3,138.48 CF BED ELEV = 254.00 TOP OF BERM = 258.00
FLUSH EXISTING PIPE NETWORK
16 & 17 C230 FLARED END SECTION WITH STONE RIP-RAP (TYP)
FES-1.1 NE INV=256.00
78 LF 12" HDPE STM.@ 0.50%
DS-19 (2'x2' CB) TG=258.34 S INV=256.18 — 10 & 15 C231
DS-41 (DIVERSION STR) TG=260.04 SE INV=256.04 N INV=256.04 W INV=257.04 SW INV=256.04
PROPOSED 8"Ø DI WATER MAIN EXTENSION — 2 C232
DS-24 (2'x2' CB) TG=264.30 SE INV=261.55 — 10 & 15 C231
RIP RAP SIZE=9'x8' d_{50}=4" d_{MAX}=6" BLANKET THICKNESS=9"
GYMNASIUM
RIP RAP SIZE=9'x8' d_{50}=4" d_{MAX}=6" BLANKET THICKNESS=9"
FES-1.2 S INV=259.50
98 LF 4" HDPE STM.@ 14.09%
22 C231 DOWNSPOUT-2 N INV=264.00
DS-20 (30"x42" CB) TG=264.34 SE INV=257.55 SE INV=262.21 NW INV=257.55
39 LF 6" HDPE STM.@ 3.00%
FFE = 266.00
CONSTRUCTION SHOP
22 C231 DOWNSPOUT-3 NE INV=264.00
HVAC SHOP
ELECTRICAL SHOP
WELDING FILTRATION UNIT (SEE MEP NOTES)
12 LF 6" HDPE STM.@ 3.50%
134 LF 15" HDPE STM.@ 1.00%
PROPOSED 8"Ø DI WATER MAIN EXTENSION — 2 C232
19 LF 15" HDPE STM.@ 2.75%
DS-25 (2'x2' CB) TG=263.07 NW INV=260.57 SE INV=260.57 — 10 & 15 C231
24 LF 6" HDPE STM.@ 1.00%
DS-38 (2'x2' CB) TG=262.81 NW INV=260.06 SE INV=260.06 — 10 & 15 C231
DS-27 (30"x42" CB) TG=263.60 SE INV=260.48 SW INV=260.48 N INV=260.48 — 10 & 15 C231
PROPOSED 8"Ø DI WATER MAIN EXTENSION — 2 C232
65 LF 15" HDPE STM.@ 2.50% — 9 C231
DS-29 (2'x2' CB) TG=264.35 SW INV=261.60 NE INV=261.60 — 10 & 15 C231
112 LF 12" HDPE STM.@ 1.00%
18 LF 12" HDPE STM.@ 1.59% — 9 C231
DS-28 (5'x2' CB) TG=263.52 NW INV=260.77 — 10 & 15 C231
88 LF 15" HDPE STM.@ 1.00%
DS-21 (30"x42" CB) TG=263.21 N INV=258.78 S INV=258.78 NW INV=258.78 — 10 & 15 C231
DS-22 (30"x42" CB) TG=262.41 NE INV=259.66 NW INV=259.66 S INV=259.66 — 10 & 15 C231
24A 43 LF 12" HDPE STM.@ 7.11%
DS-23 (2'x2' CB) TG=264.13 NE INV=262.69 SW INV=262.69 — 10 & 15 C231
108 LF 12" HDPE STM.@ 1.00% — 7 C231
DS-24 (2'x2' CB) TG=266.22 SW INV=263.72 — 10 & 15 C231

CONTRACTOR TO VERIFY FIELD CONDITION AND REPORT TO ENGINEER PRIOR TO ORDERING STRUCTURE
DS-33 (EXIST CB)
DS-31 (2'x2' CB) TG=234.08 SE INV=230.30 W INV=230.40 — 10 & 15 C231
42 LF 15" HDPE STM.@ 0.48% — 9 C231
DS-32 (2'x2' CB) TG=231.67 N INV=230.40 E INV=230.48 — 10 & 15 C231
WATER VALVE (TYP) — 23 C231
FES-32.1 N INV=267.50
DRY SWALE WITH (5) 6x6 PRESSURE TREATED WEIR (TYP) — 2 C233
54 LF 8" HDPE STM.@ 1.41%
FES-32.2 S INV=237.00
29 LF 12" HDPE STM.@ 0.25%
17+00
16+00
15+00
14+00
13+00
12+00
11+00
10+00
9+00
STOP
DS-30 (2'x2' CB) TG=234.75 NW INV=231.82 — 10 & 15 C231
PROPOSED 8"Ø DI WATER MAIN EXTENSION TO CONNECT TO EXITING 12" WATERMAIN WITHIN GIDNEY AVENUE. CONTRACTOR TO COORDINATE CONNECTION WITH THE CITY OF NEWBURGH DPW AND WATER DEPARTMENT.
PROPOSED 8"Ø DI WATER MAIN EXTENSION — 2 C232
ASSUMED BOUNDARY LINE PER R.O.W. WIDTH (PER OFFICIAL MAP OF THE CITY OF NEWBURGH DATED 10/09/1936)

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH

Project Title

STATE OF NEW YORK CHRISTOPHER J. DROPP 102592 LICENSED PROFESSIONAL ENGINEER

2	5/3/2024	BID ADDENDUM #2
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Sheet Title
UTIILTY PLAN

Sheet No.
CTE C151

CONSTRUCTION DOCUMENTS

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- PROPOSED ACCESS RAMP
- PROPOSED CURB
- PROPOSED SIGN / EXISTING SIGN
- PROPOSED LIGHT POLE
- 3.0 FOOT CONTOUR
- 1.0 FOOT CONTOUR
- 0.25 FOOT CONTOUR

LUMINAIRE SCHEDULE (SEE LIGHTING NOTES #3)										
LABEL	SYMBOL	QUANITITY	LIGHT FIXTURE CATALOG NUMBER	DESCRIPTION	POLE CATALOG NUMBER	MOUNT HEIGHT (SEE LIGHTING NOTES #5)	LUMENS	INPUT WATTAGE	B.U.G. RATING	CORRELATED COLOR TEMPERATURE
A		25	A17-5T70N	RAB LIGHTING POLE MOUNTED AREA LIGHT	PS4-11-15D2	17 FT	±9385	70.8	B3-U0-G3	4000K
B		SEE ELECTRICAL PLANS FOR WALL PACK LIGHTING								

LIGHTING NOTES:

1) LIGHTING PLAN DESIGN IS BASED ON SPECIFICATIONS FROM RAB LIGHTING.
2) UNLESS SPECIFIED OTHERWISE, CONCRETE PEDESTAL HEIGHTS SHALL BE AS FOLLOWS:
   -WHERE LIGHT HEIGHT IS INDICATED @ 17', CONCRETE PEDESTAL SHALL BE 2'-0" HIGH
3) APPROVED EQUALS ARE ACCEPTABLE.
4) CALCULATION VALUES SHOWN ON THIS PLAN ARE TAKEN ON A HORIZONTAL PLANE AT GROUND LEVEL. TOPOGRAPHICAL INFORMATION HAS NOT BEEN ACCOUNTED FOR IN THESE CALCULATIONS.
5) MOUNT HEIGHT SHOWN WAS MEASURES FROM GROUND LEVEL (INCLUDING CONCRETE PEDESTAL) TO THE TOP OF LUMINAIRE.

HORIZONTAL SCALE
40 0 20 40 80
SCALE: 1"=40'

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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH

STATE OF NEW YORK
CHRISTOPHER J. LADOR
102592
LICENSED PROFESSIONAL ENGINEER

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Sheet Title
LIGHTING & PHOTOMETRIC PLAN

Sheet No.
CTE C180

CONSTRUCTION DOCUMENTS

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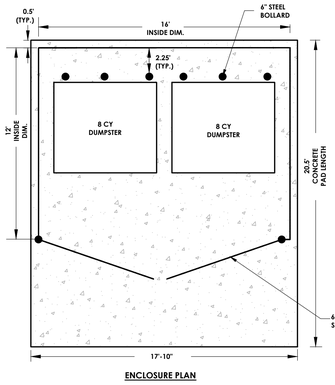
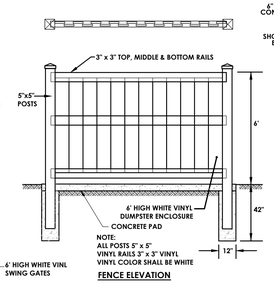
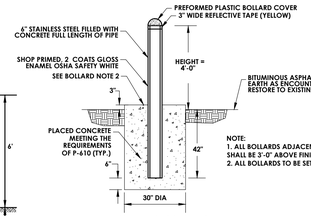


ENCLOSURE PLAN

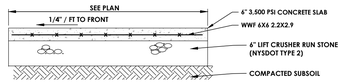


FENCE ELEVATION



NOTE:
1. ALL BOLLARDS ADJACENT TO GATE OPERATORS SHALL BE 3'-0" ABOVE FINISHED GRADE.
2. ALL BOLLARDS TO BE SET PLUMB.

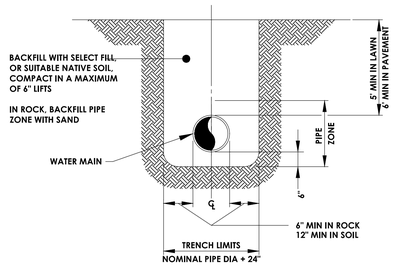
DUMPSTER ENCLOSURE BOLLARD
N.T.S.



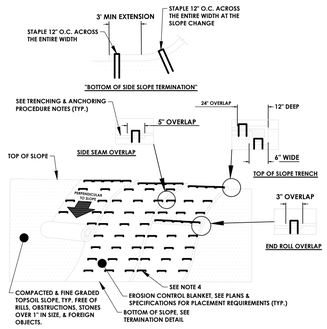
1. EACH LIFT TO BE COMPACTED WITH VIBRATORY ROLLER.

CONCRETE PAD DETAIL

1 DUMPSTER ENCLOSURE DETAIL
N.T.S.



2 WATERMAIN TRENCH DETAIL
N.T.S.



NOTES:

1. PREPARE THE TOPSOIL (SEEDBED) FIRST BY RAKING, SHAPING, FINE GRADING, COMPACTING, SEEDING & FERTILIZING THE SLOPES.
2. USE THE TRENCHING & ANCHORING PROCEDURES DETAILED HEREIN TO SECURE ANY EXPOSED MATERIAL ENDS. SECURE ALL PRODUCT OVERLAPS. OVERLAP IN THE DIRECTION OF WATER FLOW, PERPENDICULAR TO THE SLOPE.
3. KEEP EROSION CONTROL BLANKET IN SOLID CONTACT WITH THE TOPSOIL.
4. USE THE REQUIRED NUMBER OF STAPLES/STAKES TO SECURELY FASTEN THE EROSION CONTROL BLANKET TO THE SLOPE IN LOOSE SOIL CONDITIONS. THE USE OF STAPLES/STAKES LENGTHS GREATER THAN 6" MAYBE NECESSARY FOR PROPER SECURING. STAPLE PATTERNS & OVERLAPS ARE DEPENDENT ON SITE CONDITIONS & MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL CONSULT WITH MANUFACTURER FOR ACTUAL SITE SPECIFIC REQUIREMENTS.

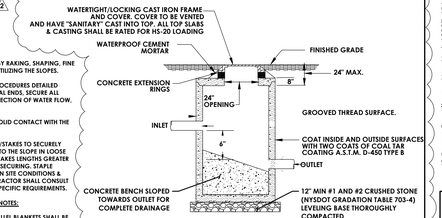
TRENCHING & ANCHORING PROCEDURE NOTES:

SIDE SEAM OVERLAP: THE EDGES OF PARALLEL BLANKETS SHALL BE STAPLED WITH A 5" OVERLAP.

TOP OF SLOPE TRENCH: BEGIN AT THE TOP OF SLOPE BY ANCHORING THE EROSION CONTROL BLANKET IN A 6"D X 6"W TRENCH WITH A 12" OVERLAP EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR WITH A ROW OF STAPLES/STAKES 12" O.C. IN THE BOTTOM OF THE TRENCH. BACKFILL & COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL & FOLD THE REMAINING 12" PORTION OF THE EROSION CONTROL BLANKET BACK OVER THE SEED & COMPACTED SOIL. SECURE THE EROSION CONTROL BLANKET BACK OVER THE SEED & COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED 12" O.C. ACROSS THE ENTIRE WIDTH.

END ROLL OVERLAP: CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE SHALL BE PLACED END OVER END (SINGLE-STYLE) WITH A 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREAS, 12" APART ACROSS THE ENTIRE WIDTH.

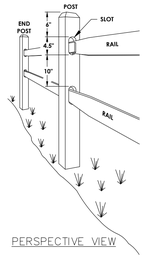
3 EROSION CONTROL BLANKET INSTALLATION DETAIL
N.T.S.



17 SAMPLING MANHOLE DETAIL
N.T.S.

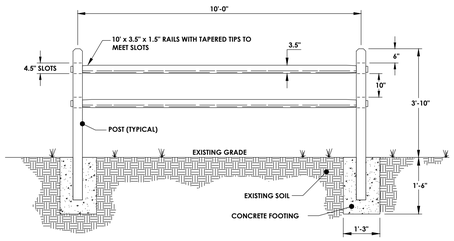
NOTES:

1. CONCRETE STRENGTH SHALL BE 4,500 PSI @ 28 DAYS.
2. MANHOLE SHALL BE RATED FOR H2-20 LOADING AND CONSTRUCTED WITH ASTM A-615 GRADE 60 REINFORCEMENT.
3. ALL FRAMES AND COVERS SHALL BE RATED FOR HS-20 LOADING.
4. CONSTRUCTION JOINTS SHALL HAVE A MINIMUM 1" BUTYL SEALANT.
5. A LAYER OF BITUMINOUS COATING SHALL BE APPLIED TO THE EXTERIOR OF THE CONCRETE SAMPLING MANHOLE.



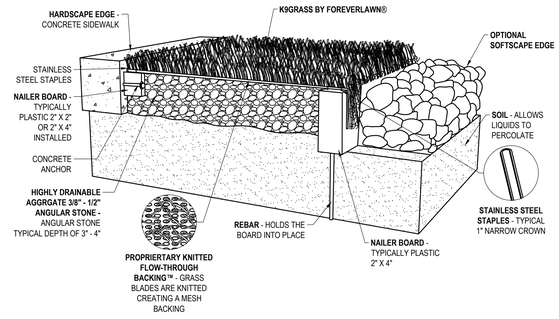
PERSPECTIVE VIEW

NOTES:
1) ALL WOOD FOR SPLIT RAIL FENCE TO BE PRESSURE TREATED.
2) END POST SHALL BE TERMINAL POST.



FRONT VIEW

4 STANDARD SPLIT-RAIL FENCE
(TO BE INSTALLED NEAR BIORETENTION AREAS)
N.T.S.



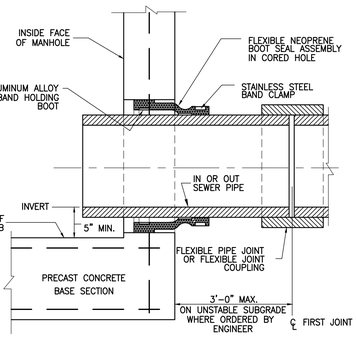
PERSPECTIVE

NOTES
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

5 ARTIFICIAL TURF DETAIL
(TO BE INSTALLED AT DOG RUN)
N.T.S.

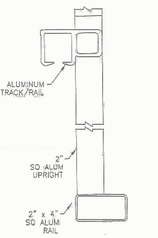
6 GREASE TRAP DETAIL
N.T.S.

NOTES:
1. BASIS OF DESIGN IS JOHN PROESTLER HPC-1000 2 TANKS SHALL BE INSTALLED IN SERIES. APPROVED EQUIVALENTS ACCEPTABLE.
2. UNIT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. SEE PLUMBING DRAWINGS FOR VENT CONNECTIONS
4. EXTENSION COLLAR TO BE SHORTED TO MEET FINISHED GRADE,CUT ON SITE FOR FINAL ADJUSTMENT AND CAULK WITH SIKAFLEX BY CONTRACTOR FOR WATERTIGHT SEAL.
5. 50 YEAR WARRANTY AGAINST LEAKS, AND STRUCTURAL FAILURE.

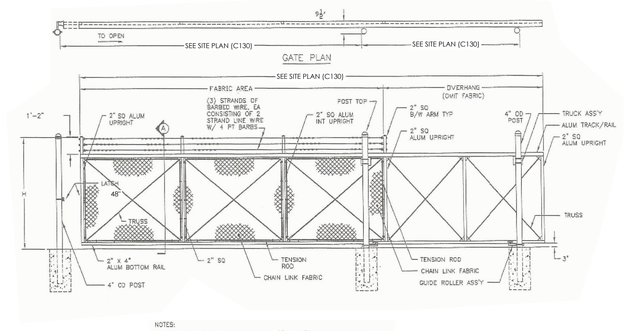


7 FLEXIBLE PIPE TO M.H./C.B. CONNECTION DETAIL
N.T.S.

OPENING	LENGTH (L)	GATE POSTS (G)	BAYS	OVERHANG
I/S POST FACE TO I/S POST FACE	O/S DIM OF GATE LEAF	O/S POST FACE TO O/S POST FACE	NUMBER OF BAYS WITH CHAIN LINK	NUMBER OF BAYS WITHOUT CHAIN LINK
6'-0"	1'-0"	5'-0"	(1) ONE	(1) ONE
7'-0"	1'-2"	5'-0"	(1) ONE	(1) ONE
8'-0"	1'-3"	5'-0"	(1) ONE	(1) ONE
9'-0"	1'-4"	5'-0"	(2) TWO	(1) ONE
10'-0"	1'-5"	8'-0"	(2) TWO	(1) ONE
12'-0"	1'-8"	8'-0"	(2) TWO	(2) TWO
14'-0"	2'-0"	8'-0"	(2) TWO	(1) ONE
16'-0"	2'-2"	7'-0"	(3) THREE	(2) TWO
18'-0"	2'-5"	7'-8"	(3) THREE	(2) TWO
20'-0"	2'-7"	8'-0"	(3) THREE	(2) TWO
22'-0"	3'-1"	9'-0"	(4) FOUR	(2) TWO
24'-0"	3'-4"	12'-0"	(4) FOUR	(2) TWO
26'-0"	3'-7"	11'-0"	(4) FOUR	(2) TWO
28'-0"	4'-0"	12'-0"	(5) FIVE	(2) TWO
30'-0"	4'-2"	12'-0"	(5) FIVE	(2) TWO

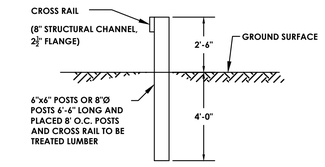


SECTION A-A
(6' THRU 30' OPENINGS)



NOTES:
1. FOOTING WIDTH TO BE (4)X POST WIDTH. MIN DEPTH TO BE 36".
2. GATES MAY BE MANUALLY OR ELECTRICALLY OPERATED.

8 ROLLING GATE DETAIL
N.T.S.



9 GUIDE RAIL DETAIL
N.T.S.

REQUIRED BEARING AREAS –b (SQFT) FOR BEARING BLOCKS*					
PIPE SIZE (INCHES)	TEE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4	2.0	2.8	1.5	0.8	0.4
6	4.2	5.9	3.2	1.6	0.8
8	7.2	10.1	5.5	2.8	1.4
10	10.9	15.4	8.3	4.2	2.1
12	15.4	21.8	11.8	6.0	3.0

*FACTOR OF SAFETY=1.5
SOIL BEARING OF 3,000 PSF
225 PSI DESIGN PRESSURE

THRUST REACTIONS–R(LB) PER 100PSI INTERNAL PRESSURE					
NOM PIPE DIA IN.	DEAD END	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1,810	2,559	1,385	706	355
6	3,739	5,288	2,862	1,459	733
8	6,433	9,097	4,923	2,510	1,261
10	9,677	13,685	7,406	3,776	1,897
12	13,685	19,353	10,474	5,340	2,683

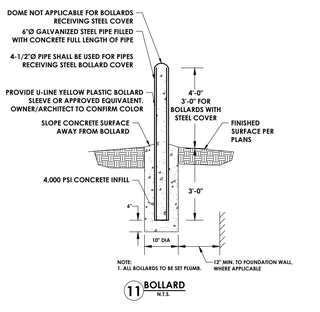
MINIMUM REQUIRED BEARING AREAS & DIMENSIONS FOR CONCRETE THRUST BLOCKS									
PIPE SIZE (IN.)	TEE (NOTE #1)		90° (1/4) BEND		45° (1/8) BEND		22.5° (1/16) BEND		11.25° (1/32) BEND	
	AREA SQ.FT.	DIMENSIONS D x L	AREA SQ.FT.	DIMENSIONS D x L	AREA SQ.FT.	DIMENSIONS D x L	AREA SQ.FT.	DIMENSIONS D x L	AREA SQ.FT.	DIMENSIONS D x L
3"	1.5	1.0x1.5	2.0	1.0x2.0	1.2	0.8x1.5	0.6	0.8x0.8	0.4	0.5x0.8
4"	2.6	1.3x2.0	3.2	1.6x2.0	1.7	1.3x1.3	1.0	0.8x1.3	0.5	0.5x1.0
6"	4.5	1.8x2.5	6.0	2.0x3.0	3.5	1.5x2.3	2.0	1.3x1.5	1.2	0.8x1.5
8"	7.5	2.5x3.0	10.6	2.8x3.8	5.8	2.3x2.5	3.0	1.5x2.0	1.5	1.0x1.5

NOTES:

1. VALUES FOR TEE APPLY TO TEES, END PLUGS, CAPS, AND TAPPING SLEEVES.
2. REQUIRED BEARING AREAS ARE DUE TO THRUSTS CAUSED BY 150PSI WORKING PRESSURE PLUS 50%(75 PSI) SURGE ALLOWANCE RESULTING IN 225 PSI TOTAL INTERNAL PRESSURE.
3. REQUIRED BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING CAPACITY OF 3,000 POUNDS PER SQUARE FOOT, DUE TO OTHER SOIL CONDITIONS ENCOUNTERED, BEARING AREAS MAY BE MODIFIED BY THE ENGINEER.

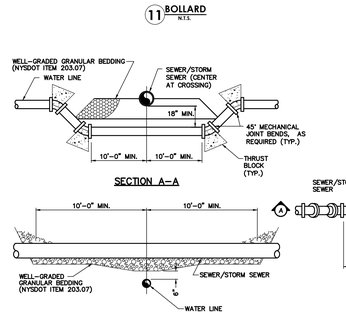
SOIL	BEARING STRENGTH ℊ (LB/SQ FT)
MUCK	0
SOFT CLAY	1,000
SILT	1,500
SANDY SILT	3,000
SAND	4,000
SANDY CLAY	6,000
HARD CLAY	9,000

4. IF MUCK, PEAT, OR RECENTLY PLACED FILL ARE ENCOUNTERED/REQUIRED, ALL THRUSTS SHALL BE RESISTED BY PILES OR TIE RODS TO SOLID FOUNDATIONS, OR BY REMOVAL OF SUCH UNSTABLE MATERIAL AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS, ALL AS REQUIRED BY THE ENGINEER.



NOTE:
1. ALL BOLLARDS TO BE SET PLUMB.

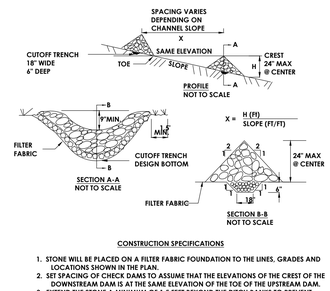
11 BOLLARD
N.T.S.



13 WATER LINE/SEWER LINE CROSSING DETAIL
N.T.S.

NOTES:

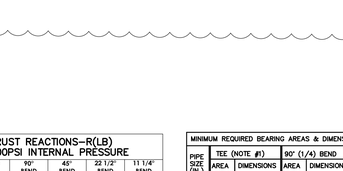
1. IF MUCK, PEAT, OR RECENTLY PLACED FILL ARE ENCOUNTERED/REQUIRED, ALL THRUSTS SHALL BE RESISTED BY PILES OR TIE RODS TO SOLID FOUNDATIONS, OR BY REMOVAL OF SUCH UNSTABLE MATERIAL AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS.



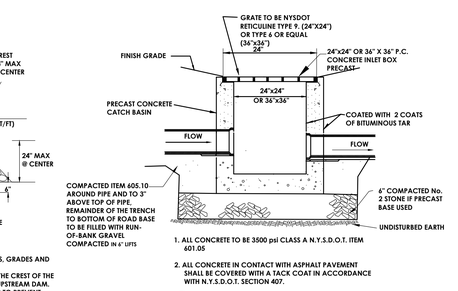
CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA 2 ACRES.

14 STONE CHECK DAM
N.T.S.



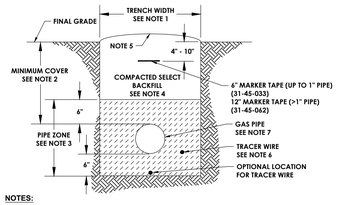
16 THRUST BLOCK RESTRAINTS
N.T.S.



COMPACTED ITEM 605.10 AROUND PIPE AND TO 3" ABOVE TOP OF PIPE. REMAINDER OF THE TRENCH TO BOTTOM OF ROAD BASE TO BE FILLED WITH RUN-OF-BANK GRAVEL COMPACTED IN 6" LIFTS

1. ALL CONCRETE TO BE 3500 psi CLASS A N.Y.S.D.O.T. ITEM 601.05
2. ALL CONCRETE IN CONTACT WITH ASPHALT PAVEMENT SHALL BE COVERED WITH A TACK COAT IN ACCORDANCE WITH N.Y.S.D.O.T. SECTION 407.

15 SHALLOW CATCH BASIN
N.T.S.



NOTES:

1. THE MINIMUM TRENCH WIDTH SHALL BE AS FOLLOWS:

PIPE SIZE UP TO 1" O/S	TRENCH WIDTH 4'
1 1/2" - 2"	12"
3" - 6"	PIPE O.D. + 12"

2. MINIMUM DEPTH OF COVER FROM FINAL GRADE TO TOP OF PIPE SHALL BE AS FOLLOWS:

IN EARTH	IN ROCK
18"	12"

REFER TO G 01 03.001.0 FOR SPECIAL COVER REQUIREMENTS IN CULTIVATED LAND OR NAVIGABLE WATERWAYS AND G 01 03.006.1 FOR SHALLOW COVER. GREATER DEPTHS MAY BE REQUIRED BY THE GOVERNING AUTHORITY.

3. SAND PADDING IS REQUIRED IN THE PIPE ZONE. REFER TO G 01 03.005.0 FOR THE DEFINITION OF SAND PADDING. IT SHALL BE THOROUGHLY COMPACTED IN 12" LIFTS OR AS REQUIRED BY THE GOVERNING AUTHORITY.
4. COMPACTED SELECT BACKFILL MAY BE ON-SITE MATERIAL PROVIDED IT CONTAINS NO ROCKS OR STONES OVER 6" IN DIAMETER, ROOTS, STUMPS, OR CONSTRUCTION DEBRIS. IT SHALL BE THOROUGHLY COMPACTED IN 12" LIFTS OR AS REQUIRED BY THE GOVERNING AUTHORITY.
5. THE BACKFILLED TRENCH SHALL BE CROWNED SLIGHTLY TO ALLOW FOR FUTURE SETTLEMENT.
6. FOR PLASTIC PIPE, TRACER WIRE SHALL BE INSTALLED PER G 02 03.005.0 AND G 02 03.006.0.
7. IN AREAS WHERE PLASTIC PIPE LESS THAN 6" IN DIAMETER IS INSTALLED BELOW THE WATER TABLE, AN UNOPENED 75 LB. BAG OF CONCRETE MIX SHALL BE PLACED DIRECTLY OVER THE PIPE EVERY 40 FEET TO PREVENT THE PIPE FROM FLOATING UP AFTER INSTALLATION. THE BAG SHALL BE BACKFILLED ALONG WITH THE PIPE.
8. REFER TO G 02 01.037.0 TO DETERMINE THE NEED FOR SHORING OR SLOPING.
9. REFER TO G 01 03.004.0 FOR MINIMUM BELOW GRADE CLEARANCES.
10. IN STEEP TERRAIN, TRENCH BREAKERS AND EROSION CONTROL MAY BE REQUIRED. CONSULT WITH GAS & MECHANICAL ENGINEERING.

12 TRENCHING AND BACKFILL REQUIREMENTS DISTRIBUTION SERVICES
N.T.S.
PER CENTRAL HUDSON GAS & ELECTRIC CORP.

PASSERO engineering architecture
40 Beaver St. Albany, New York 12207-1511
518 463 8068 www.csarchpc.com
CSARCH

Consultant

Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH

STATE OF NEW YORK
CHRISTOPHER J. LOPES
102591
LICENSED PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
2	5/3/2024	BID ADDENDUM #2

Drawn By: MP
Checked By: SK
Proj. #: 44-16-00-01-0-053-001
CSArch Proj. #: 108-2303
Issued for Bid: 4/15/2024

Sheet Title
SITE DETAILS

Sheet No.
CTE C232

CONSTRUCTION DOCUMENTS

STRUCTURAL DESIGN CRITERIA

		DESIGN CRITERIA
BUILDING DATA:		
LOCATION		201 FULLERTON AVE, NEWBURGH, NY 12550
BUILDING OCCUPANCY RISK CATEGORY		III
APPLICABLE BUILDING CODE		2020 BUILDING CODE OF NEW YORK STATE (IBC 2018)
GEOTECHNICAL INFORMATION:		
ALLOWABLE BEARING PRESSURE		3,000 PSF
FLOOR DEAD LOADING:		
SUPERIMPOSED FLOOR	DL1	15 PSF
ROOF DEAD LOADING:		
ROOF	DLr	25 PSF
FLOOR LIVE LOADING:		
FIRST FLOOR CORRIDORS / STAIRS / LOBBIES / GYMNASIUM / CAFETERIA	LL1	100 PSF
CORRIDORS ABOVE FIRST FLOOR	LL2	80 PSF
RESTROOMS	LL3	60 PSF
STORAGE, LIGHT	LL4	125 PSF
ELEVATOR MACHINE ROOM	LL5	150 PSF
VAULTS, IN OFFICES	LL6	250 PSF
CLASSROOMS	LL7	40 PSF
OFFICES	LL8	50 PSF
LABORATORIES	LL9	150 PSF
COMPUTER ROOMS	LL10	150 PSF
KITCHENS	LL11	150 PSF
FIRST FLOOR COOLER / FREEZER	LL12	150 PSF
SECOND FLOOR COOLER / FREEZER	LL13	250 PSF
MEP ROOMS	LL14	125 PSF
PARTITIONS	LL15	15 PSF
ROOF LIVE LOADING:		
ROOF	Llr	20 PSF
RAIN LIVE LOADING:		
RAIN INTENSITY	i	2.8 INCHES/HR
STATIC HEAD	Ds	2.75 INCHES
FLOW RATE	Q	113.6 GAL/MIN
HYDRAULIC HEAD	Dh	1.8 INCHES
PONDING HEAD	Dp	1 INCH
DESIGN RAIN LOAD		30 PSF*
		* NOTE: DESIGN RAIN LOAD INCLUDES PONDING ON STRUCTURAL STEEL AND OPEN WEB STEEL JOISTS.
SNOW LOADING:		
SNOW IMPORTANCE FACTOR	Is	1.1
GROUND SNOW LOAD	Pg	30.0 PSF
SNOW EXPOSURE FACTOR	Ce	1.0
ROOF THERMAL FACTOR	Ct	1.0
FLAT ROOF SNOW LOAD	Pf	23.1 PSF
DRIFTING SNOW		AS REQUIRED PER ASCE 7-16, SEE SHEET S007.
WIND LOADING (MAIN WIND FORCE RESISTING SYSTEM):		
ANALYSIS PROCEDURE		DIRECTIONAL PROCEDURE
ULTIMATE DESIGN WIND SPEED (3-SECOND GUST)	Vult	120 mph
NOMINAL DESIGN WIND SPEED (3-SECOND GUST)	Vasd	93 mph
EXPOSURE CATEGORY		B
ENCLOSURE CLASSIFICATION		ENCLOSED
INTERNAL PRESSURE COEFFICIENT	GCpi	+0.18/-0.18
WIND LOADING (COMPONENTS AND CLADDING):		
COMPONENTS AND CLADDING WIND PRESSURE:		SEE SHEETS S005 AND S006
SEISMIC LOADING (GENERAL):		
SEISMIC IMPORTANCE FACTOR	Ie	1.25
MAPPED SHORT PERIOD SPECTRAL RESPONSE ACELERATION	Ss	0.231g
MAPPED 1-SEC PERIOD SPECTRAL RESPONSE ACELERATION	S1	0.057g
SHORT PERIOD DESIGN SPECTRAL RESPONSE ACELERATION	Sds	0.200g
1-SEC PERIOD DESIGN SPECTRAL RESPONSE ACELERATION	Sd1	0.057g
SOIL SITE CLASS		C
SEISMIC DESIGN CATEGORY		B
ANALYSIS PROCEDURE		EQUIVALENT LATERAL FORCE
SEISMIC LOADING (AREA 1):		
SEISMIC FORCE RESISTING SYSTEM		INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
RESPONSE MODIFICATION FACTOR	R	4.0
DEFLECTION AMPLIFICATION FACTOR	Cd	4.0
OVERSTRENGTH FACTOR	Oo	2.5
SEISMIC RESPONSE COEFFICIENT	Cs	0.059
DESIGN BASE SHEAR	V	96 KIP
SEISMIC LOADING (AREA 2):		
SEISMIC FORCE RESISTING SYSTEM		INTERMEDIATE REINFORCED MASONRY SHEAR WALLS + STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SESIMIC RESISTANCE
RESPONSE MODIFICATION FACTOR	R	3.0 (GOVERNING)
DEFLECTION AMPLIFICATION FACTOR	Cd	4.0 (GOVERNING)
OVERSTRENGTH FACTOR	Oo	3.0 (GOVERNING)
SEISMIC RESPONSE COEFFICIENT	Cs	0.083
DESIGN BASE SHEAR	V	437 KIP
SEISMIC LOADING (AREA 3):		
SEISMIC FORCE RESISTING SYSTEM		INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
RESPONSE MODIFICATION FACTOR	R	4.0
DEFLECTION AMPLIFICATION FACTOR	Cd	4.0
OVERSTRENGTH FACTOR	Oo	2.5
SEISMIC RESPONSE COEFFICIENT	Cs	0.063
DESIGN BASE SHEAR	V	295 KIP
SEISMIC (GYM):		
SEISMIC FORCE RESISTING SYSTEM		INTERMEDIATE REINFORCED MASONRY SHEAR WALLS (BEARING WALL SYSTEM)
RESPONSE MODIFICATION FACTOR	R	3.5
DEFLECTION AMPLIFICATION FACTOR	Cd	2.25
OVERSTRENGTH FACTOR	Oo	2.5
SEISMIC RESPONSE COEFFICIENT	Cs	0.075
DESIGN BASE SHEAR	V	117 KIP

CONCRETE STRENGTH AND MATERIAL SCHEDULE

STRUCTURAL ELEMENT	*MIN COMPRESSIVE STRENGTH AT 28 DAYS (PSI)*	*MAX WATER/CEMENT RATIO*	*AIR CONTENT (%)*	COURSE AGGREGATE	SPECIFIED WEIGHT
FOOTINGS, INTERIOR SLAB-ON-GRADE	4,000	0.50	N/A	-	-
FNDN WALLS, PIERS, EXT SLAB-ON-GRADE	4,500	0.45	6 +/- 1.5	-	-
LW CONCRETE SLAB-ON-DECK	4,000	0.50	5 +/- 1.5	ASTM C330	113 PCF

NOTES:

1. PREPARE DESIGN MIXES FOR EACH TYPE, AND STRENGTH OF CONCRETE BY EITHER LABORATORY TRIAL BATCH OR FIELD EXPERIENCE METHODS AS SPECIFIED IN ACI 318.
2. CONCRETE SHALL BE READY MIXED PER ASTM C94, JOBSITE MIXING SHALL NOT BE PERMITTED.
3. MAXIMUM NOMINAL AGGREGATE SIZE IS 3/4".
4. SEE REINFORCED CONCRETE NOTES ON S001 FOR ADDITIONAL REQUIREMENTS.
5. ENSURE ENTRAPPED AIR IN SLAB CONCRETE TO BE TROWEL FINISHED DOES NOT EXCEED 3%.
6. DO NOT HARD-TROWEL SLABS THAT ARE TO BE AIR-ENTRAINED. COORDINATE SLAB FINISH WITH ARCHITECTURAL AND/OR OWNER REQUIREMENTS. CARE SHALL BE TAKEN FOR FINISHING SLABS WITH AIR-ENTRAINMENT.
7. *SPECIFIED WEIGHT IS MAXIMUM DRY UNIT WEIGHT TO MEET UL FIRE RATING ASSEMBLY REQUIREMENTS (D919), 125 PCF IS MAXIMUM WET UNIT WEIGHT DURING PLACEMENT.

FOOTING SCHEDULE

MARK	FOOTING DIMENSIONS			BOTTOM REINFORCING		TOP REINFORCING	REMARKS
	LENGTH	WIDTH	DEPTH	LONGITUDINAL	TRANSVERSE		
F4	4' - 0"	4' - 0"	1' - 0"	(6) #4 BARS	(6) #4 BARS	-	-
F5	5' - 0"	5' - 0"	1' - 0"	(7) #4 BARS	(7) #4 BARS	-	-
F6	6' - 0"	6' - 0"	1' - 0"	(6) #5 BARS	(6) #5 BARS	-	-
F6.1	6' - 0"	9' - 0"	1' - 0"	(7) #6 BARS	(10) #5 BARS	-	
F7	7' - 0"	7' - 0"	1' - 6"	(9) #5 BARS	(9) #5 BARS	-	-
F8	8' - 0"	8' - 0"	1' - 6"	(8) #6 BARS	(8) #6 BARS	-	-
F8.1	8' - 0"	11' - 0"	1' - 6"	(9) #6 BARS	(11) #6 BARS	-	
F9	9' - 0"	9' - 0"	1' - 6"	(10) #6 BARS	(10) #6 BARS	-	-
F10	10' - 0"	10' - 0"	1' - 6"	(9) #7 BARS	(9) #7 BARS	-	-
F11	11' - 0"	11' - 0"	2' - 0"	(10) #7 BARS	(10) #7 BARS	-	-
F12	12' - 0"	12' - 0"	2' - 0"	(11) #7 BARS	(11) #7 BARS	-	-
F13	13' - 0"	13' - 0"	2' - 0"	(13) #7 BARS	(13) #7 BARS	-	-

WALL FOOTING SCHEDULE

MARK	FOOTING DIMENSIONS		BOTTOM REINFORCING		TOP REINFORCING	REMARKS
	WIDTH	DEPTH	LONGITUDINAL	TRANSVERSE		
WF24	2' - 0"	1' - 0"	(3) #5 BARS	#5 BARS @ 12" OC	-	-
WF30	2' - 6"	1' - 0"	(3) #5 BARS	#5 BARS @ 12" OC	-	-
WF36	3' - 0"	1' - 0"	(4) #5 BARS	#5 BARS @ 12" OC	-	-
WF42	3' - 6"	1' - 0"	(4) #5 BARS	#5 BARS @ 12" OC	-	-
WF48	4' - 0"	1' - 0"	(5) #5 BARS	#5 BARS @ 12" OC	-	-
WF60	5' - 0"	1' - 6"	(6) #6 BARS	#6 BARS @ 12" OC	(6) #6 BARS	3' - 6" EXTENSIONS PAST WALL ENDS AT SHEAR WALL LOCATIIONS, TYPICAL
WF78	6' - 6"	2' - 0"	(7) #6 BARS	#6 BARS @ 12" OC	(7) #6 BARS LONG, #6 BARS @ 12" OC TRANSVERSE	3' - 0" EXTENSIONS PAST WALL ENDS AT SHEAR WALL LOCATIIONS, TYPICAL
WF84	7' - 0"	2' - 0"	(8) #6 BARS	#6 BARS @ 12" OC	(8) #6 BARS LONG, #6 BARS @12" OC TRANSVERSE	5' - 0" EXTENSIONS PAST WALL ENDS AT SHEAR WALL LOCATIIONS, TYPICAL

FOUNDATION WALL SCHEDULE

MARK	TYPE	THICKNESS	WALL REINFORCING		REMARKS
			HORIZONTAL	VERTICAL	
CW8	CONC FOUNDATION WALL	8"	#5 BARS @ 12" OC	#5 BARS @ 12" OC	-
CW12	CONC FOUNDATION WALL	1' - 0"	#5 BARS @ 12" OC, EF	#5 BARS @ 12" OC, EF	-
CW15	CONC FOUNDATION WALL	1' - 3"	#5 BARS @ 12" OC, EF	#5 BARS @ 12" OC, EF	-
CW16	CONC FOUNDATION WALL	1' - 4"	#5 BARS @ 12" OC, EF	#5 BARS @ 12" OC, EF	-
CW17	CONC FOUNDATION WALL	1' - 5"	#5 BARS @ 12" OC, EF	#5 BARS @ 12" OC, EF	-
CW21	CONC FOUNDATION WALL	1' - 9"	#5 BARS @ 12" OC, EF	#5 BARS @ 12" OC, EF	-
CW22	CONC FOUNDATION WALL	1' - 10"	#5 BARS @ 12" OC, EF	#5 BARS @ 12" OC, EF	-

MASONRY WALL SCHEDULE

MARK	TYPE	THICKNESS	WALL REINFORCING			REMARKS
			HORIZONTAL	VERTICAL	BOND BEAM REINF AND SPACING	
MW8	EXTERIOR / SHAFT WALL	7 5/8"	9 GA LADDER TYP REINF @ 16" OC	#5 BARS @ 32" OC	(2) #5 BARS @ 10' - 0" OC, MAX	SEE SECTIONS FOR ADDITIONAL BOND BEAM LOCATIONS
MW8.1	EXTERIOR / SHAFT WALL	7 5/8"	9 GA LADDER TYP REINF @ 16" OC	#5 BARS @ 8" OC	(2) #5 BARS @ 5'-0" OC, MAX	SEE SECTIONS FOR ADDITIONAL BOND BEAM LOCATIONS
MW8F	2 HR MASONRY FIRE WALL	7 5/8"	9 GA LADDER TYP REINF @ 16" OC	#5 BARS @ 32" OC	(2) #5 BARS @ 10' - 0" OC, MAX	2 HR FIREWALL
MW8FS	MASONRY SHEAR WALL/FIRE WALL	7 5/8"	9 GA LADDER TYP REINF @ 16" OC	#5 BARS @ 32" OC	(2) #5 BARS @ 5' - 0" OC, MAX	SEE SECTIONS FOR ADDITIONAL BOND BEAM LOCATIONS
MW8S.1	MASONRY SHEAR WALL	7 5/8"	9 GA LADDER TYP REINF @ 16" OC	#5 BARS @ 32" OC	(2) #5 BARS @ 5' - 0" OC, MAX	SEE SECTIONS FOR ADDITIONAL BOND BEAM LOCATIONS
MW8S.2	MASONRY SHEAR WALL	7 5/8"	9 GA LADDER TYP REINF @ 16" OC	#5 BARS @ 16" OC	(2) #5 BARS @ 5' - 0" OC, MAX	SEE SECTIONS FOR ADDITIONAL BOND BEAM LOCATIONS
MW8S.3	MASONRY SHEAR WALL	7 5/8"	9 GA LADDER TYP REINF @ 16" OC	#5 BARS @ 8" OC	(2) #5 BARS @ 5' - 0" OC, MAX	SEE SECTIONS FOR ADDITIONAL BOND BEAM LOCATIONS
MW10F	2 HR MASONRY FIRE WALL	9 5/8"	9 GA LADDER TYP REINF @ 16" OC	#5 BARS @ 32" OC	(2) #5 BARS @ 10' - 0" OC, MAX	2 HR FIREWALL
MW12S	MASONRY BEARING / SHEAR WALL	11 5/8"	9 GA LADDER TYP REINF @ 16" OC	(2) #5 BARS @ 32" OC	(2) #5 BARS @ 5' - 0" OC, MAX	SEE SECTIONS FOR ADDITIONAL BOND BEAM LOCATIONS

SLAB-ON-GRADE SCHEDULE

MARK	TYPE	THICKNESS	SLAB REINFORCING	REMARKS
SOG1	TYPICAL INTERIOR SLAB ON GRADE	5"	#4 BARS @ 18" OC	-
SOG2	WORKSHOP FLOORS	6"	#5 BARS @ 12" OC	-
SOG3	EXTERIOR COURTYARD SLAB	5"	#4 BARS @ 12" OC	-

ELEVATED FLOOR SLAB SCHEDULE

MARK	TYPE	GAUGE	SLAB REINFORCEMENT	ATTACHMENT PATTERN		REMARKS
				SUPPORT PATTERN	SIDELAP PATTERN	
FD1	3 1/2" LW CONCRETE ON 2" (2VLI-36) COMPOSITE METAL DECK (5 1/2" TOTAL THICKNESS)	20	6x6 W2.1xW2.1 WWF	5/8" DIA PUDDLE WELDS @ 36/4 PATTERN	#10 SCREWS @ 12" OC	SHOP PRIME UNDERSIDE OF DECK, EXECPT WHERE DECK IS TO RECIEVE SPRAY APPLIED FIREPROOFING OR ACOUSTIC TREATMENT (COORD WITH ARCH FOR LOCATIONS)

ROOF DECK SCHEDULE

MARK	TYPE	GAUGE	ATTACHMENT PATTERN		REMARKS
			SUPPORT PATTERN	SIDELAP PATTERN	
RD1	1.5B-36 GRADE 50 METAL DECK	20	5/8" DIA PUDDLE WELDS @ 36/5 PATTERNS	#12 SCREWS @ 12" OC	G90 FINISH, SHOP PRIME UNDERSIDE OF DECK, EXECPT WHERE DECK IS TO RECIEVE SPRAY APPLIED FIREPROOFING OR ACOUSTIC TREATMENT (COORD WITH ARCH FOR LOCATIONS)
RD1a	1.5B-36 GRADE 50 METAL DECK	20	5/8" DIA PUDDLE WELDS @ 36/9 PATTERN	#12 SCREWS @ 6" OC	SHADED REGION INDICATES AREA WHERE THIS ATTACHMENT PATTERN APPLIES, PROVIDE G90 FINISH AND SHOP PRIME UNDERSIDE OF DECK, EXECPT WHERE DECK IS TO RECIEVE SPRAY APPLIED FIREPROOFING OR ACOUSTIC TREATMENT (COORD WITH ARCH FOR LOCATIONS)
RD2	1.5B-36 GRADE 50 METAL DECK	20	3/4" DIA PUDDLE WELDS @ 36/7 PATTERNS	#12 SCREWS @ 12" OC	G90 FINISH, UL P710, SPRAY FIREPROOFED

CONCRETE REINF SPLICE & DEVELOPMENT LENGTHS SCHEDULE

f'c = 4,000 psi

BAR SIZE	LAP SPLICE LENGTHS (IN.)				DEVELOPMENT LENGTHS (IN.)			
	TENSION LAP LENGTH							
	TOP BARS		OTHER		COMP.	TENSION	COMP.	HOOKED
CLASS	A	B	A	B				
#3	19	24	15	19	12	SAME AS CLASS A TENSION LAP SPLICE	8	8
#4	25	33	19	25	15		10	10
#5	31	41	24	31	19		12	12
#6	37	49	29	37	23		15	15
#7	54	71	42	54	27		17	17
#8	62	81	48	62	30		19	19
#9	70	91	54	70	34		22	22
#10	79	102	61	79	39		25	25
#11	87	113	67	87	43		27	27

f'c = 4,500 psi

BAR SIZE	LAP SPLICE LENGTHS (IN.)				DEVELOPMENT LENGTHS (IN.)			
	TENSION LAP LENGTH							
	TOP BARS		OTHER		COMP.	TENSION	COMP.	HOOKED
CLASS	A	B	A	B				
#3	18	23	14	18	12	SAME AS CLASS A TENSION LAP SPLICE	8	7
#4	24	31	18	24	15		9	9
#5	30	38	23	30	19		12	12
#6	35	46	27	35	23		14	14
#7	51	67	40	51	27		16	16
#8	59	76	45	59	30		18	18
#9	66	86	51	66	34		21	21
#10	74	96	57	74	39		23	23
#11	82	107	64	82	43		26	26

NOTES:

1. TOP BARS ARE HORIZONTAL BARS, PLACED SO THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS PLACED BELOW THE BAR.
2. ALL LAP SPLICES SHALL BE CLASS "B" UNLESS OTHERWISE NOTED.
3. LENGTHS IN THE TABLE ARE FOR UNCOATED OR ZINC-COATED (GALVANIZED) BARS.
4. CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2Db AND CLEAR COVER NOT LESS THAN Db.
5. VALUES IN TABLE ARE FOR NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT CONCRETE, DIVIDE VALUES BY $\lambda = 0.75$.
6. SPACING REQUIREMENTS AND END ANCHORAGE SHALL BE SPACED PER THE REQUIREMENTS OF ACI-318.

REINFORCED CONCRETE COVER SCHEDULE

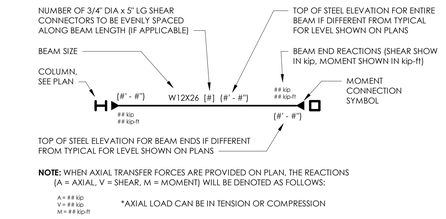
STRUCTURAL ELEMENT		*MIN COVER (IN)*
CAST AGAINST EARTH		3"
EXPOSED TO EARTH OR WEATHER	#5 BARS AND SMALLER, WWF	1-1/2"
	#6 BARS AND LARGER	2"
NOT EXPOSED TO EARTH OR WEATHER	SLABS & WALLS: #11 BARS AND SMALLER, WWF	3/4"
	SLABS & WALLS: #14 BARS AND LARGER	1-1/2"
	BEAMS AND COLUMNS	1-1/2"

STRUCTURAL ABBREVIATION LEGEND

AB	ANCHOR BOLT
ABV	ABOVE
ACI	AMERICAN CONCRETE INSTITUTE
ADDL	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
AHR	ANCHOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
APPROX	APPROXIMATELY
ARCH	ARCHITECT/ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
B/	BOTTOM OF
BD	BOARD
BFE	BASE FLOOD ELEVATION
BLKG	BLOCKING
BM	BEAMS
BN	BOUNDARY NAILING
BO	BOTTOM OF
BOT	BOTTOM
BRG	BEARING
BTWN	BETWEEN
C/C	CENTER TO CENTER
CFMF	COLD FORMED METAL FRAMING
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTER LINE
CLR	CLEAR(ANCE)
CMU	CONCRETE MASONRY UNIT
CNJ	CONSTRUCTION JOINT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECT(ED)(ION)
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CTR	CENT(ER)(ERED)(TRAL)
DEG	DEGREE(S)
DEMO	DEMO(LISH)(LITION)
DFE	DESIGN FLOOD ELEVATION
DIA	DIAMETER
DIAG	DIAGONAL
DIF	DIFFEREN(CE)(TIAL)
DIM	DIMENSION
DIV	DIVI(DE)(DED)(DER)(SION)
DL	DEAD LOAD
DN	DOWN
DTL	DETAIL
DWG(S)	DRAWING(S)
DWL	DOWEL(REBAR)
(E)	EXISTING
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
ELEV	ELEVATION
EMBED	EMBEDMENT
ENG	ENGINEER
EOD	EDGE OF DECK
EOR	ENGINEER OF RECORD
EOS	EDGE OF SLAB
EQ	EQUAL
EW	EACH WAY
EXIST	EXISTING
EXP	EXPAN(D)(SION)
EXT	EXTERIOR
FD	FLOOR DRAIN
FFE	FINISHED FLOOR ELEVATION
FIN	FINISHED
FNDN	FOUNDATION
FP	FIREPROOF(ING)
FRMG	FRAMING
FS	FAR SIDE
FS	FOOTING STEP
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR/ CONSRTUCTION MANAGER
HD	HEAVY DUTY
HDG	HOT-DIPPED GALVANIZED
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HS	HIGH STRENGTH
HSS	HOLLOW STRUCTURAL SECTION (STRUCTURAL SHAPE)
HT	HEIGHT

STRUCTURAL ABBREVIATION LEGEND

IF	INSIDE FACE
INFO	INFORMATION
INSUL	INSULATION
INTMD	INTERMEDIATE
JT	JOINT
K	KIP (1000 POUNDS)
KLF	KIPS PER LINEAR FOOT
KSI	KIPS PER SQUARE INCH
LB/LBS	POUNDS
LF	LINEAR FOOT,FEET
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION(S)
LP	LOW POINT
LVL	LEVEL
LW	LIGHTWEIGHT
MANUF	MANUFACTURER
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEZZ	MEZZANINE
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
(N)	NEW
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER/DIMENSION
OF	OUTSIDE FACE
OH	OPPOSITE HAND
OPN'G	OPENING(S)
OPP	OPPOSITE
P	PIER (SEE SCHEDULE)
PAF	POWDER ACTUATED FASTENER
PCC	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PEMB	PRE-ENGINEERED METAL BUILDING
PERF	PERFORATE(D)
PERIM	PERIMETER
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PREFAB	PREFABRICATED
PREFIN	PREFINISH(ED)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POST TENSION(FD)(ING)
QTY	QUANTITY
R	RADIUS,RADII
RC	REINFORCED CONCRETE
RD	ROOF DRAIN
REINF	REINFORCING, REINFORCEMENT
REQ'D	REQUIRE(D)
REV	REVIS(E)(ED)(ION)
RTU	ROOF TOP UNITS
SCHED	SCHEDULE
SDI	STEEL DECK INSTITUTE
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SL	SNOW LOAD
SOG	SLAB ON GRADE
SPA	SPACE OR SPACING
SQ	SQUARE
SQ(FT)	SQUARE FOOT/FEET
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTUR(E)(AL)
T&B	TOP&BOTTOM
T/	TOP OF
TBE	TOP OF BEAM ELEVATION
TDE	TOP OF DECK ELEVATION
TEMP	TEMPORARY
TFE	TOP OF FOOTING ELEVATION
THRD	THREAD(ED)
TJE	TOP OF JOIST ELEVATION
TLE	TOP OF LEDGE ELEVATION
TME	TOP OF MASONRY ELEVATION
TO	TOP OF
TOS	TOP OF STEEL
TPG	TOPPING
TRTD	TREATED
TS	THICKENED SLAB
TSE	TOP OF SLAB ELEVATION
TWE	TOP OF WALL ELEVATION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
WF	WIDE FLANGE
WGHT	WEIGHT
WHS	WELDED HEADED STUD
WP	WORK POINT
WT	STRUCTURAL TEE(STRUCT SHAPE)
WWR	WELDED WIRE REINFORCEMENT



NOTE: WHEN AXIAL TRANSFER FORCES ARE PROVIDED ON PLAN, THE REACTIONS {A = AXIAL, V = SHEAR, M = MOMENT} WILL BE DENOTED AS FOLLOWS:

A= ## kip
V= ## kip
M= ## kip-ft

*AXIAL LOAD CAN BE IN TENSION OR COMPRESSION

TYPICAL BEAM PLAN ANNOTATIONS

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2	1/5/2024	BID ADDENDUM #2

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Sheet Title: DESIGN CRITERIA AND SCHEDULES

Sheet No.: CTE S002

CONSTRUCTION DOCUMENTS

COLUMN SCHEDULE - AREA 1

Levels: TOS 3RD FLR/ROOF 31' - 6 1/2"; TOS 2ND FLR 15' - 6 1/2"; TO SOG 0"

Column Locations	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	D-1	D-2	D-3	D-4
Column	HSS7X7X3/8	HSS6X6X3/8	HSS6X6X3/8	HSS8X8X3/8	HSS8X8X3/8	HSS8X8X3/8	HSS7X7X3/8	HSS6X6X3/8	HSS7X7X3/8	HSS7X7X3/8	HSS7X7X3/8	HSS8X8X3/8
BASE PLATE MARK	BP3	BP2	BP2	BP4	BP4	BP4	BP3	BP2	BP3	BP3	BP3	BP4
BASE PLATE THICKNESS	1"	1"	1"	1 1/4"	1 1/4"	1 1/4"	1"	1"	1"	1"	1"	1 1/2"
ANCHOR BOLT MARK	AB2	AB2	AB2	AB3	AB3	AB3	AB2	AB2	AB2	AB2	AB2	AB4

Column Locations	D-5	D-6	D-7	D-8	E-1	E-2	E-3	E-4	E-5	E-6	E-7	E-8
Column	HSS8X8X3/8	HSS8X8X1/2	HSS7X7X3/8	HSS7X7X3/8	HSS5X5X3/8	HSS5X5X3/8	HSS5X5X3/8	HSS5X5X3/8	HSS5X5X3/8	HSS5X5X3/8	HSS5X5X3/8	HSS6X6X3/8
BASE PLATE MARK	BP4	BP4	BP3	BP3	BP1	BP1	BP1	BP1	BP1	BP1	BP1	BP2
BASE PLATE THICKNESS	1 1/2"	1 1/2"	1"	1"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"
ANCHOR BOLT MARK	AB4	AB4	AB2	AB2	AB1	AB1	AB1	AB2	AB2	AB2	AB2	AB2

STEEL COLUMN SCHEDULE NOTES:
1. COLUMNS INDICATED TO BE FIREPROOFED "FP" ONLY REQUIRE FIREPROOFIING FROM BOTTOM OF SECOND FLOOR DECKING DOWN TO BASE PLATE.
2. TOP OF COLUMN ELEVATION SHALL FOLLOW SLOPED ROOF ELEVATIONS AS INDICATED ON ROOF FRAMING PLANS, UNLESS NOTED OTHERWISE.
3. COLUMN SPLICES SHOWN ARE AT CONTRACTOR'S OPTION.

COLUMN SCHEDULE LEGEND

⊥	DENOTES COLUMN BASEPLATE
	DENOTES OPTIONAL COLUMN SPLICE
	DENOTES COLUMN BREAKS AT BEAM
FP	DENOTES FIREPROOFING TREATMENT REQUIRED ON COLUMN (DO NOT SHOP PRIME). REFER TO ARCH FOR TYPE AND HOURLY RATING

COLUMN SCHEDULE - AREA 2

Levels: TOS HIGH ROOF 48' - 0"; TOS 3RD FLR/ROOF 31' - 6 1/2"; TOS LOW ROOF 24' - 11"; TOS 2ND FLR 15' - 6 1/2"; TO SOG 0"

INDICATES COLUMN SPLICE LOCATION, TYP (4'-0" TYP)

Column Locations	A-9	A-11	A-12	A-13	A-14	A(2' - 1")-14(1' - 3")	A-15	A(2' - 1")-15(-1' - 3")	D-9	D-11	D-12	D-13
Column	HSS7X7X3/8	HSS8X8X3/8	HSS8X8X3/8	HSS7X7X3/8	HSS7X7X3/8	HSS5X5X3/8	HSS7X7X3/8	HSS5X5X3/8	HSS8X8X3/8	HSS8X8X1/2	HSS8X8X1/2	HSS8X8X3/8
BASE PLATE MARK	BP3	BP4	BP4	BP3	BP3	BP1	BP3	BP1	BP4	BP4	BP4	BP4
BASE PLATE THICKNESS	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/8"	3/4"	1 1/8"	3/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"
ANCHOR BOLT MARK	AB3	AB3	AB3	AB3	AB3	AB1	AB3	AB1	AB3	AB4	AB4	AB4

Column Locations	D-14	D-15	E-9	E-11	E-12	E-13	E-14	E-16	K-9	K-29	L-16	M-11	M-12
Column	HSS8X8X3/8	HSS8X8X3/8	HSS7X7X3/8	HSS8X8X1/2	HSS8X8X1/2	HSS8X8X1/2	HSS8X8X1/2	HSS7X7X3/8	HSS7X7X3/8	HSS5X5X3/8	HSS7X7X3/8	HSS8X8X1/2	HSS8X8X1/2
BASE PLATE MARK	BP4	BP4	BP3	BP4	BP4	BP4	BP4	BP3	BP3	BP1	BP3	BP4	BP4
BASE PLATE THICKNESS	1 1/4"	1 1/4"	1 1/8"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/4"	1 1/8"	3/4"	1 1/4"	1 1/2"	1 1/2"
ANCHOR BOLT MARK	AB3	AB3	AB3	AB4	AB4	AB4	AB4	AB3	AB3	AB1	AB3	AB4	AB4

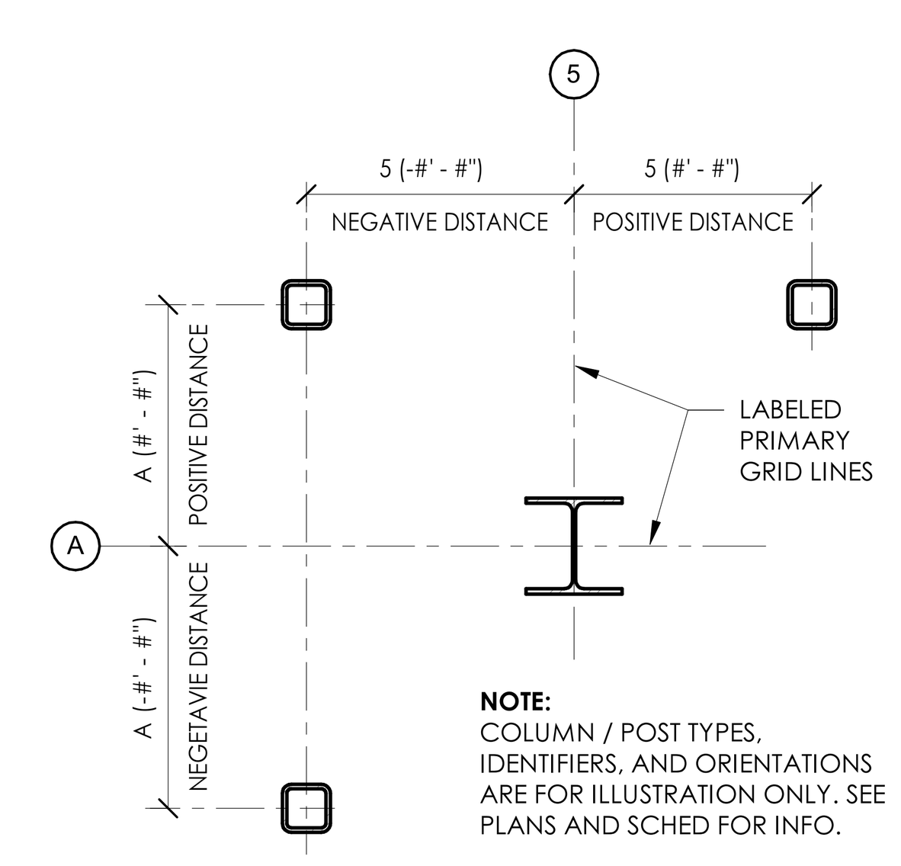
Column Locations	M-13	M-39	P-33	P-37	P-39	R-29	R-31	S-40	U-29	U-31	U-33	U-37
Column	HSS8X8X3/8	HSS8X8X3/8	HSS9X9X1/2	HSS9X9X5/8	HSS8X8X1/2	HSS6X6X3/8	HSS8X8X1/2	HSS8X8X1/2 (above splice: HSS8X8X1/2)	HSS6X6X3/8	HSS8X8X1/2	HSS9X9X5/8	HSS9X9X5/8
BASE PLATE MARK	BP4	BP4	BP5	BP6	BP4	BP2	BP4	BP4	BP2	BP4	BP6	BP6
BASE PLATE THICKNESS	1 1/2"	1 1/4"	1 3/4"	1 3/4"	1 1/4"	3/4"	1 1/2"	1 1/2"	7/8"	1 1/2"	2"	2"
ANCHOR BOLT MARK	AB4	AB3	AB4	AB4	AB3	AB1	AB4	AB4	AB2	AB4	AB4	AB4

COLUMN SCHEDULE - AREA 2

Levels: TOS HIGH ROOF 48' - 0"; TOS 3RD FLR/ROOF 31' - 6 1/2"; TOS LOW ROOF 24' - 11"; TOS 2ND FLR 15' - 6 1/2"; TO SOG 0"

Column Locations	U-39	W-40	X-29	X-33	X-37	X-39	Y-29
Column	HSS8X8X1/2	HSS8X8X3/8 (above splice: HSS8X8X3/8)	HSS5X5X3/8	HSS6X6X3/8	HSS6X6X3/8	HSS5X5X3/8	HSS6X6X3/8
BASE PLATE MARK	BP4	BP4	BP1	BP2	BP2	BP1	BP2
BASE PLATE THICKNESS	1 1/2"	1 1/4"	3/4"	1"	1"	3/4"	3/4"
ANCHOR BOLT MARK	AB4	AB3	AB1	AB2	AB2	AB1	AB1

Column Locations	Y-30	Y-32	Y-33	Y-36	Y-37	Y-38	Y-39
Column	HSS6X6X3/8	HSS6X6X3/8	HSS6X6X3/8	HSS5X5X3/8	HSS6X6X3/8	HSS6X6X3/8	HSS6X6X3/8
BASE PLATE MARK	BP2	BP2	BP2	BP1	BP2	BP2	BP2
BASE PLATE THICKNESS	1"	1"	7/8"	3/4"	7/8"	3/4"	3/4"
ANCHOR BOLT MARK	AB2	AB2	AB2	AB1	AB2	AB1	AB1



NOTE:
COLUMN / POST TYPES, IDENTIFIERS, AND ORIENTATIONS ARE FOR ILLUSTRATION ONLY. SEE PLANS AND SCHED FOR INFO.

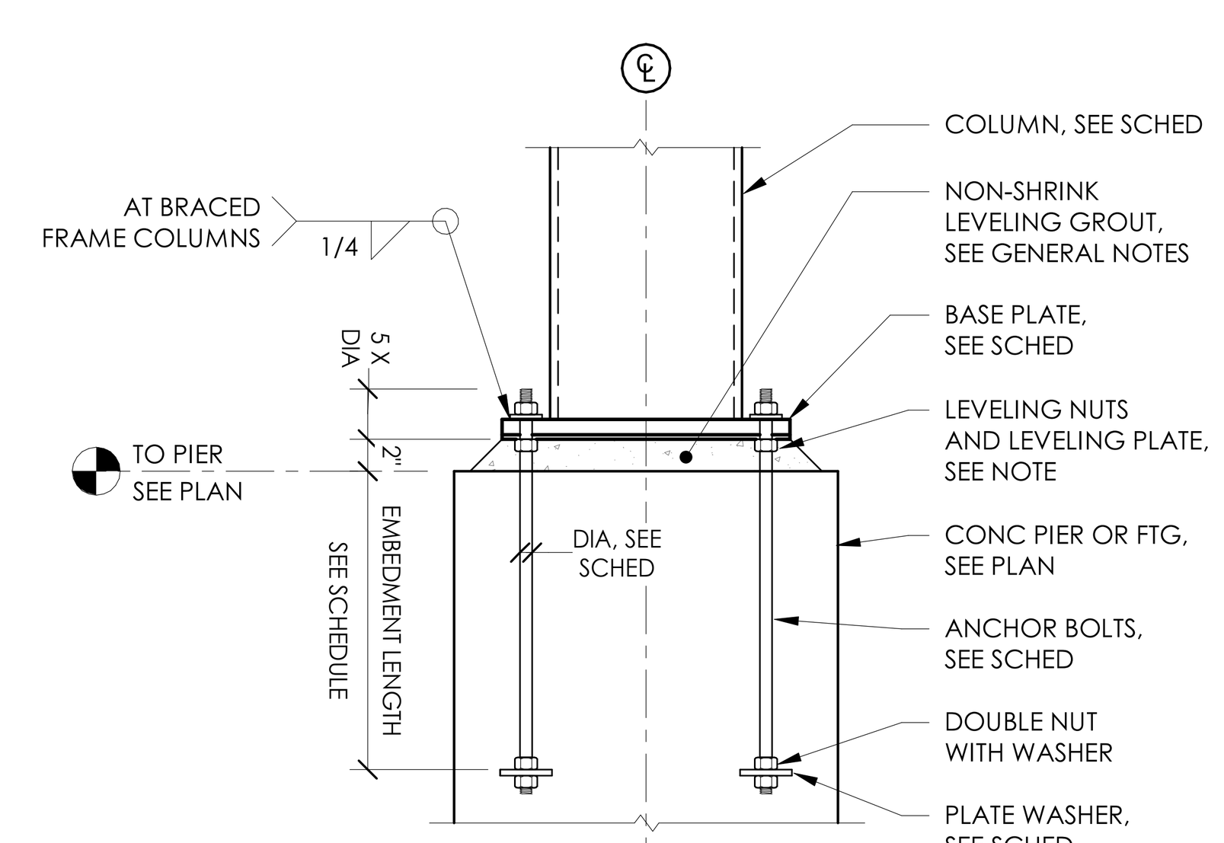
1 TYPICAL GRID OFFSET DETAIL
N.T.S.

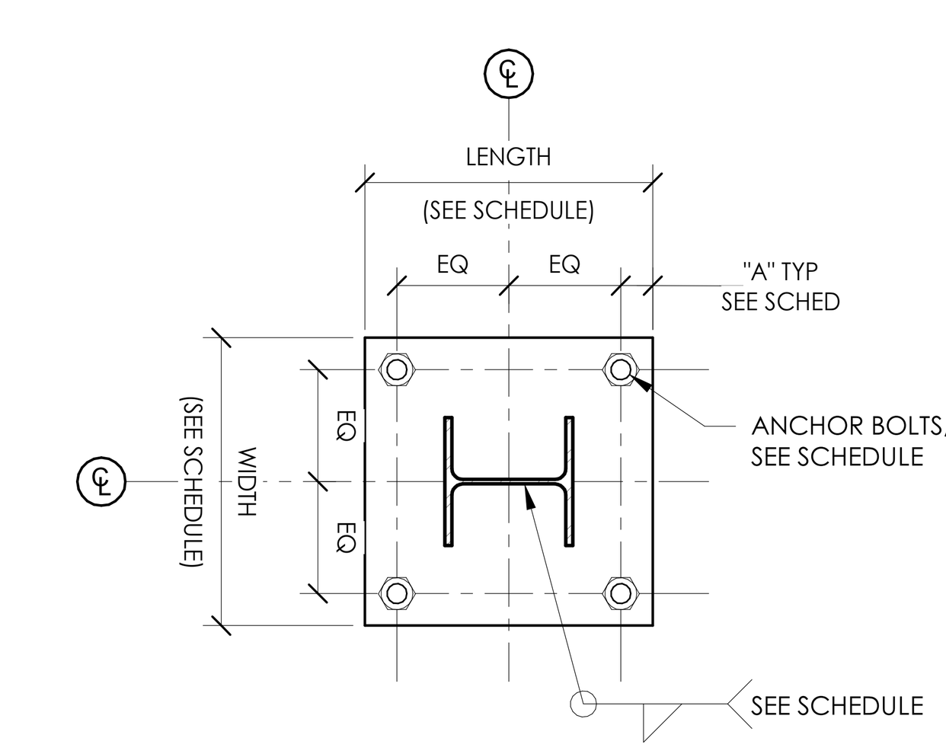
BASE PLATE SCHEDULE

MARK	BASE PLATE DIMENSIONS			COL WELD SIZE	REMARKS
	LENGTH	WIDTH	EDGE DISTANCE "A"		
BP1	1' - 0"	1' - 0"	2"	3/16"	
BP2	1' - 2"	1' - 2"	2 1/4"	3/16"	
BP3	1' - 3"	1' - 3"	2 1/4"	3/16"	
BP4	1' - 5"	1' - 5"	2 1/2"	3/16"	
BP5	1' - 8"	1' - 8"	3"	1/4"	
BP6	1' - 9"	1' - 9"	3 1/4"	1/4"	
BP7	1' - 10"	1' - 10"	3 1/4"	1/4"	

ANCHOR BOLT SCHEDULE

MARK	ANCHOR BOLT PROPERTIES		PLATE WAHSER PROPERTIES	
	DIA	EMBEDMENT	MIN DIMENSIONS	MIN THICKNESS
AB1	3/4"	9"	2"	1/4"
AB2	1"	1' - 0"	3"	3/8"
AB3	1 1/4"	1' - 0"	3 1/2"	1/2"
AB4	1 1/2"	1' - 0"	4"	1/2"





BP MARK#'S

NOTES:
1. LEVELING DEVICES ARE CONTRACTOR MEANS AND METHODS. CONTRACTOR TO PROVIDE MEANS AND METHODS FOR LEVELING/PLUMBING/RACKING THE STEEL FRAME. DO NOT GROUT UNDER BASE PLATES UNTIL STEEL FRAME IS LEVEL/PLUMB/RACKED.
2. WHERE ANCHOR ROD PROJECTIONS EXTEND BEYOND TOP OF SLAB, CONTRACTOR TO CUT PROJECTION TO 3/4" BELOW TOP OF SLAB ELEVATION AFTER ERECTION AND PRIOR TO POURING SLAB.

2 BASE PLATE DIAGRAM AND SCHEDULE
N.T.S.

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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · 100938 · LICENSED PROFESSIONAL ENGINEER

#	DATE	DESCRIPTION
2	5/3/2024	BID ADDENDUM #2

Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
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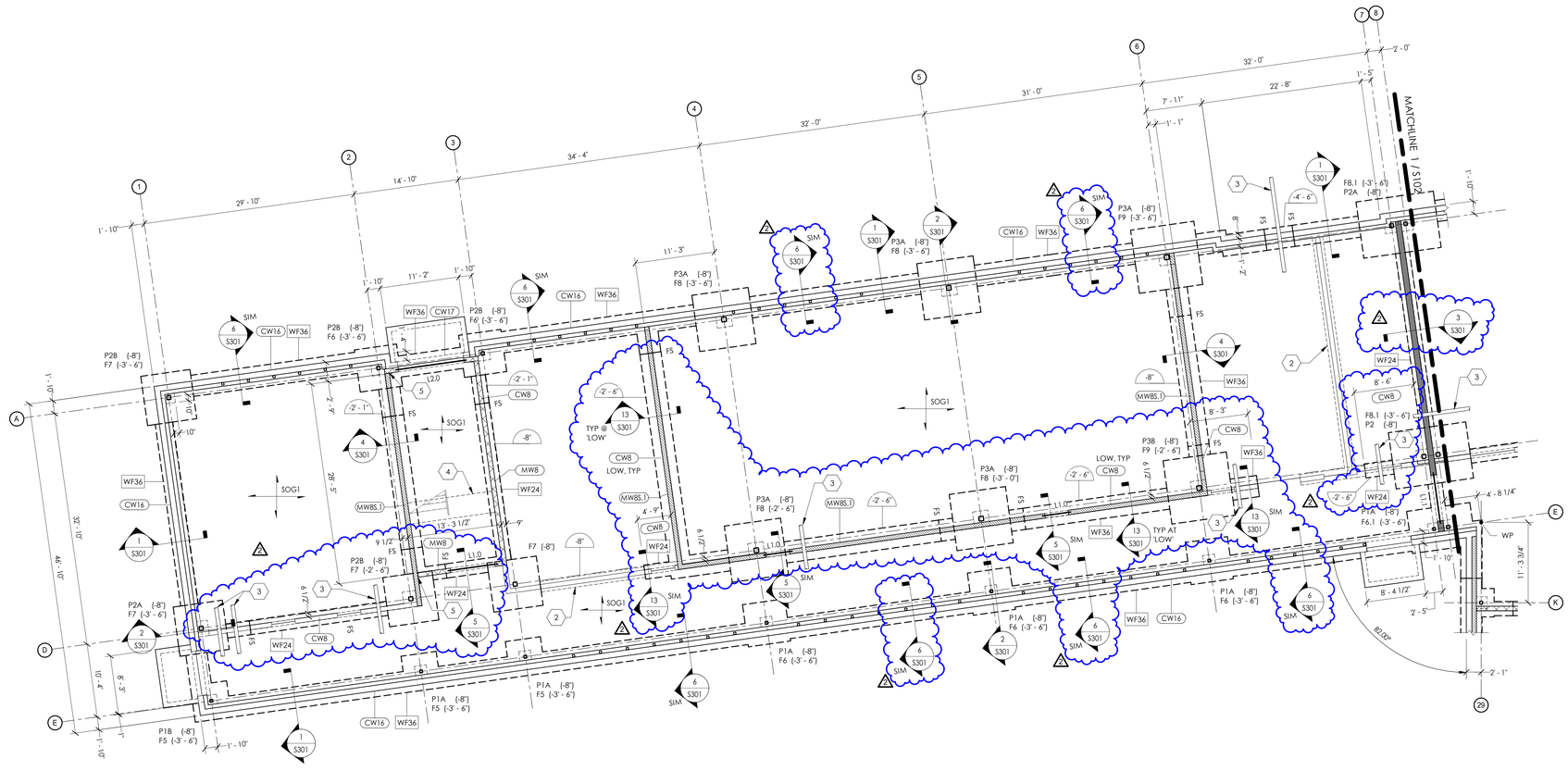
Sheet Title
COLUMN SCHEDULE

Sheet No.
CTE S003

CONSTRUCTION DOCUMENTS



FOUNDATION LEGEND

F# (-#' - #")	F# - DENOTES FOOTING MARK (SEE FOOTING SCHEDULE) (#' - #") - DENOTES TOP OF FOOTING ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
P# (#' - #")	P# - DENOTES PIER MARK (SEE PIER SCHEDULE) (#' - #") - DENOTES TOP OF PIER ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
CW#	CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE)
MW#	MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)
WF#	WF# - DENOTES WALL FOOTING MARK (SEE WALL FOOTING SCHEDULE)
#'-#"	#' - #" - DENOTES TOP OF WALL FOOTING ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
[#'-#"]	#' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	INDICATES LOCATION OF CMU FIREWALL.
	INDICATES LOCATION OF CMU SHEAR WALL. SEE SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
SOG# +/- #"	DENOTES CONCRETE SLAB MARK AND ELEVATION OFFSETWITH RESPECT TO DATUM ELEVATION = 0' - 0" (SEE SLAB ON GRADE SCHEDULE)
	INDICTES EDGE OF AREA FOR SLAB DEPRESSION

FOUNDATION PLAN NOTES

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS
3. FINISH FLOOR REFERENCE ELEVATION = 0' - 0" = 266.00' ABOVE SEA LEVEL, PER CIVIL DRAWINGS
4. TOP OF FOOTING IS (3' - 6") BELOW FINISH FLOOR REFERENCE ELEVATION, UNLESS OTHERWISE NOTED ON PLAN AS (-X' - X") RELATIVE TO TOP OF FINISHED FLOOR REFERENCE ELEVATION.
5. COORDINATE DOOR AND CURTAIN WALL WIDTHS AND LOCATING DIMENSIONS WITH ARCH.
6. COORDINATE WITH CIVIL, ARCH AND MEP DRAWINGS ON ANY REQUIRED PENETRATIONS THROUGH FOUNDATION WALLS OR FOOTINGS.
7. MASONRY LINTELS SHOWN ON PLAN ARE FOR THE HEAD OF OPENINGS ASSOCIATED WITH THE FIRST FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH ARCH DRAWINGS

FOUNDATION PLAN KEYNOTES

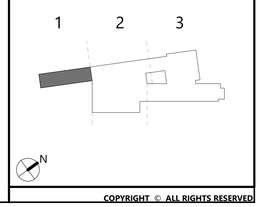
#	
1	2" EXPANSION JOINT IN CMU WALL. SEE ARCH FOR EJ COVER
2	FOOTING BELOW INTERIOR CMU PARTITION WALLS, TYP. SEE TYPICAL DETAIL
3	THROUGH FOUNDATION WALL PIPING, SEE PLUMB AND CIVIL DRAWINGS FOR LOCATION. STEP FOOTING AS REQUIRED PER TYPICAL PIPE PENETRATION DETAIL.
4	THICKENED SLAB BELOW STAIR STRINGER BEARING, TYP. SEE TYPICAL DETAIL
5	PROVIDE CONTROL JOINT BETWEEN SHEAR WALL AND NONSHEAR WALL, TYP. SEE TYPICAL DETAIL
6	SEE TYPICAL ELEVATOR PIT DETAIL FOR SUMP PIT AND FOUNDATION SLAB INFORMATION
7	ELECTRICAL DUCTBANK, COORDINATE WITH ELECTRICAL DRAWINGS, PROVIDE OPENING THRU FOUNDATION WALL AS REQUIRED. SEE TYPICAL DETAILS FOR ADDITIONAL WALL REINFORCING REQUIREMENTS.
8	PROVIDE FROST PROTECTED SLABS AT ALL EXTERIOR DOORWAYS. SEE TYPICAL DETAIL FOR ADDITIONAL INFORMATION.
9	6" EQUIPMENT PAD. COORDINATE EXACT LOCATION AND DIMENSIONAL REQUIREMENTS WITH MEP DRAWINGS. SEE TYPICAL DETAILS ON S500 SHEETS
10	SHOWER STALL SLOPE SLAB TO DRAIN. COORDINATE WITH ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS FOR EXTENTS AND REQUIREMENTS.

1 FOUNDATION / SLAB PLAN - AREA 1

0' 2' 4' 8' 16'

1/8" = 1'-0"

KEY PLAN



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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · LICENSED PROFESSIONAL ENGINEER · 100938

#	DATE	DESCRIPTION
2	5/1/2024	BID ADDENDUM #2

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Sheet Title

FOUNDATION/ SLAB PLAN - AREA 1

Sheet No.

CTE S101

CONSTRUCTION DOCUMENTS

FOUNDATION LEGEND

F# (-#' - #")	F# - DENOTES FOOTING MARK (SEE FOOTING SCHEDULE) (#' - #") - DENOTES TOP OF FOOTING ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
P# (#' - #")	P# - DENOTES PIER MARK (SEE PIER SCHEDULE) (#' - #") - DENOTES TOP OF PIER ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
CW#	CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE)
MW#	MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)
WF#	WF# - DENOTES WALL FOOTING MARK (SEE WALL FOOTING SCHEDULE)
#'-#"	#' - #" - DENOTES TOP OF WALL FOOTING ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
[#'-#"]	#' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	INDICATES LOCATION OF CMU FIREWALL.
	INDICATES LOCATION OF CMU SHEAR WALL. SEE SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
SOG# +/- #"	DENOTES CONCRETE SLAB MARK AND ELEVATION OFFSETWITH RESPECT TO DATUM ELEVATION = 0' - 0" (SEE SLAB ON GRADE SCHEDULE)
	INDICTES EDGE OF AREA FOR SLAB DEPRESSION

FOUNDATION PLAN NOTES

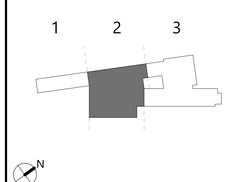
1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS
3. FINISH FLOOR REFERENCE ELEVATION = 0' - 0" = 266.00' ABOVE SEA LEVEL, PER CIVIL DRAWINGS
4. TOP OF FOOTING IS (3' - 6") BELOW FINISH FLOOR REFERENCE ELEVATION, UNLESS OTHERWISE NOTED ON PLAN AS (-X' - X") RELATIVE TO TOP OF FINISHED FLOOR REFERENCE ELEVATION.
5. COORDINATE DOOR AND CURTAIN WALL WIDTHS AND LOCATING DIMENSIONS WITH ARCH.
6. COORDINATE WITH CIVIL, ARCH AND MEP DRAWINGS ON ANY REQUIRED PENETRATIONS THROUGH FOUNDATION WALLS OR FOOTINGS.
7. MASONRY LINTELS SHOWN ON PLAN ARE FOR THE HEAD OF OPENINGS ASSOCIATED WITH THE FIRST FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH ARCH DRAWINGS

FOUNDATION PLAN KEYNOTES

#	
1	2" EXPANSION JOINT IN CMU WALL. SEE ARCH FOR EJ COVER
2	FOOTING BELOW INTERIOR CMU PARTITION WALLS, TYP. SEE TYPICAL DETAIL
3	THROUGH FOUNDATION WALL PIPING. SEE PLUMB AND CIVIL DRAWINGS FOR LOCATION. STEP FOOTING AS REQUIRED PER TYPICAL PIPE PENETRATION DETAIL.
4	THICKENED SLAB BELOW STAIR STRINGER BEARING, TYP. SEE TYPICAL DETAIL
5	PROVIDE CONTROL JOINT BETWEEN SHEAR WALL AND NONSHEAR WALL, TYP. SEE TYPICAL DETAIL
6	SEE TYPICAL ELEVATOR PIT DETAIL FOR SUMP PIT AND FOUNDATION SLAB INFORMATION
7	ELECTRICAL DUCTBANK. COORDINATE WITH ELECTRICAL DRAWINGS. PROVIDE OPENING THRU FOUNDATION WALL AS REQUIRED. SEE TYPICAL DETAILS FOR ADDITIONAL WALL REINFORCING REQUIREMENTS.
8	PROVIDE FROST PROTECTED SLABS AT ALL EXTERIOR DOORWAYS. SEE TYPICAL DETAIL FOR ADDITIONAL INFORMATION.
9	6" EQUIPMENT PAD. COORDINATE EXACT LOCATION AND DIMENSIONAL REQURIEMENTS WITH MEP DRAWINGS. SEE TYPICAL DETAILS ON S500 SHEETS
10	SHOWER STALL. SLOPE SLAB TO DRAIN. COORDINATE WITH ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS FOR EXTENTS AND REQUIREMENTS.

1 FOUNDATION / SLAB PLAN - AREA 2
1/8" = 1'-0"

KEY PLAN



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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK
PATRICK JAMES WILLIAMS
100935
LICENSED PROFESSIONAL ENGINEER

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Sheet Title
FOUNDATION/ SLAB PLAN - AREA 2

Sheet No.
CTE S102

CONSTRUCTION DOCUMENTS

FOUNDATION LEGEND

F# (-#' - #")	F# - DENOTES FOOTING MARK (SEE FOOTING SCHEDULE) (#' - #") - DENOTES TOP OF FOOTING ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
P# (#' - #")	P# - DENOTES PIER MARK (SEE PIER SCHEDULE) (#' - #") - DENOTES TOP OF PIER ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
CW#	CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE)
MW#	MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)
WF#	WF# - DENOTES WALL FOOTING MARK (SEE WALL FOOTING SCHEDULE)
#'-#"	#' - #" - DENOTES TOP OF WALL FOOTING ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
[#'-#"]	#' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	INDICATES LOCATION OF CMU FIREWALL.
	INDICATES LOCATION OF CMU SHEAR WALL. SEE SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
SOG# +/- #"	DENOTES CONCRETE SLAB MARK AND ELEVATION OFFSETWITH RESPECT TO DATUM ELEVATION = 0' - 0" (SEE SLAB ON GRADE SCHEDULE)
	INDICTES EDGE OF AREA FOR SLAB DEPRESSION

FOUNDATION PLAN NOTES

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS
3. FINISH FLOOR REFERENCE ELEVATION = 0' - 0" = 266.00' ABOVE SEA LEVEL, PER CIVIL DRAWINGS
4. TOP OF FOOTING IS (3' - 6") BELOW FINISH FLOOR REFERENCE ELEVATION, UNLESS OTHERWISE NOTED ON PLAN AS (-X' - X") RELATIVE TO TOP OF FINISHED FLOOR REFERENCE ELEVATION.
5. COORDINATE DOOR AND CURTAIN WALL WIDTHS AND LOCATING DIMENSIONS WITH ARCH.
6. COORDINATE WITH CIVIL, ARCH AND MEP DRAWINGS ON ANY REQUIRED PENETRATIONS THROUGH FOUNDATION WALLS OR FOOTINGS.
7. MASONRY LINTELS SHOWN ON PLAN ARE FOR THE HEAD OF OPENINGS ASSOCIATED WITH THE FIRST FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH ARCH DRAWINGS

FOUNDATION PLAN KEYNOTES

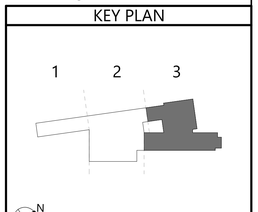
#	
1	2" EXPANSION JOINT IN CMU WALL. SEE ARCH FOR EJ COVER
2	FOOTING BELOW INTERIOR CMU PARTITION WALLS, TYP. SEE TYPICAL DETAIL
3	THROUGH FOUNDATION WALL PIPING. SEE PLUMB AND CIVIL DRAWINGS FOR LOCATION. STEP FOOTING AS REQUIRED PER TYPICAL PIPE PENETRATION DETAIL.
4	THICKENED SLAB BELOW STAIR STRINGER BEARING, TYP. SEE TYPICAL DETAIL
5	PROVIDE CONTROL JOINT BETWEEN SHEAR WALL AND NONSHEAR WALL, TYP. SEE TYPICAL DETAIL
6	SEE TYPICAL ELEVATOR PIT DETAIL FOR SUMP PIT AND FOUNDATION SLAB INFORMATION
7	ELECTRICAL DUCTBANK. COORDINATE WITH ELECTRICAL DRAWINGS. PROVIDE OPENING THRU FOUNDATION WALL AS REQUIRED. SEE TYPICAL DETAILS FOR ADDITIONAL WALL REINFORCING REQUIREMENTS.
8	PROVIDE FROST PROTECTED SLABS AT ALL EXTERIOR DOORWAYS. SEE TYPICAL DETAIL FOR ADDITIONAL INFORMATION.
9	6" EQUIPMENT PAD. COORDINATE EXACT LOCATION AND DIMENSIONAL REQUIREMENTS WITH MEP DRAWINGS. SEE TYPICAL DETAILS ON S500 SHEETS
10	SHOWER STALL. SLOPE SLAB TO DRAIN. COORDINATE WITH ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS FOR EXTENTS AND REQUIREMENTS.

⚠1

1 FOUNDATION / SLAB PLAN - AREA 3

0' 2' 4' 8' 16'
1/8" = 1'-0"

KEY PLAN



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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

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#	DATE	DESCRIPTION
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Sheet Title
FOUNDATION/ SLAB PLAN - AREA 3

Sheet No.
CTE S103

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/NECSD CTE - Struct.rvt

SLAB PLAN NOTES

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS
3. TOP OF SLAB ELEVATION = 0' - 0" UNLESS NOTED OTHERWISE ON PLAN AS (-X'-XX") RELATIVE TO REFERENCE ELEVATION.
4. SAW CUT CONTROL JOINTS IN SLAB ON GRADE AS SHOWN. BALANCE OF ALL REINFORCING (REENTRANT CORNER, DISCONTINUOUS JOINT, OPENINGS, ETC...) NOT SHOWN FOR CLARITY. REFER TO TYPICAL DETAILS.
5. COORDINATE WITH CIVIL, ARCH AND MEP DRAWINGS ON ANY REQUIRED PENETRATIONS THROUGH FOUNDATION WALLS OR FOOTINGS.

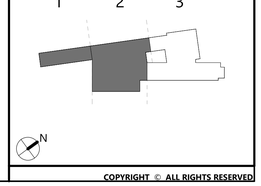
SLAB PLAN KEYNOTES

#	
1	REENTRANT CORNER BARS IN SLAB ON GRADE, SEE TYPICAL DETAIL. ENSURE REINFORCING DOES NOT CROSS CONTROL JOINT (CJ) SAW CUT LINE. LOCATIONS SHOWN APPLY TO ALL OTHER SAME/SIMILAR CONDITIONS NOT SHOWN FOR CLARITY.
2	REENTRANT CORNER BARS IN SLAB ON GRADE AT ALL DISCONTINUOUS CONTROL JOINTS, TYP. ENSURE REINFORCING DOES NOT CROSS CONTROL JOINT (CJ) SAW CUT LINE. LOCATIONS SHOWN APPLY TO ALL OTHER SAME/SIMILAR CONDITIONS NOT SHOWN FOR CLARITY.
3	REENTRANT CORNER BARS IN SLAB ON GRADE, SEE COLUMN ISOLATION JOINT DETAIL. ENSURE REINFORCING DOES NOT CROSS CONTROL JOINT (CJ) SAW CUT LINE. LOCATIONS SHOWN APPLY TO ALL OTHER SAME/SIMILAR CONDITIONS NOT SHOWN FOR CLARITY.
4	REENTRANT CORNER REINFORCING IN SLAB ON GRADE AT DOOR THRESHOLDS, SEE TYPICAL DETAIL. ENSURE REINFORCING DOES NOT CROSS CONTROL JOINT (C.J) SAW CUT LINE. LOCATIONS SHOWN APPLY TO ALL OTHER SAME/SIMILAR CONDITIONS NOT SHOWN FOR CLARITY.

SLAB-ON-GRADE LEGEND

SOG#	SOG# - DENOTES SLAB-ON-GRADE MARK (SEE SLAB-ON-GRADE SCHEDULE)
#'-#"	#' - #" - DENOTES TOP OF CONCRETE ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	CONTROL/CONSTRUCTION LINE
F.D.	FLOOR DRAIN (SEE MEP AND ARCH)
CW# MW#	W# - DENOTES WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE)
[#'-#"]	#' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES STEP IN SLAB
	DENOTES SLOPE IN SLAB
	DENOTES TYPICAL LOCATONS OF ADDITIONAL SLAB REENTRANT CORNER REINFORCING. SEE TYPICAL DETAILS.
A B	DENOTES COLUMN ISOLATION JOINT TYPE, SEE TYPICAL DETAILS

KEY PLAN



1 TO SOG - SLAB PLAN - PARTS 1 & 2

0" 4' 8' 16' 32'
3/32" = 1'-0"

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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK
PATRICK JAMES WILLIAMS
100936
LICENSED PROFESSIONAL ENGINEER

#	DATE	DESCRIPTION
2	5/1/2024	BID ADDENDUM #2

Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
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Sheet Title
SLAB ON GRADE PLAN

Sheet No.
CTE S104

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/NECSD CTE - Struct.rvt

1 TO SOG - SLAB PLAN - PART 3

0" 4" 8" 16" 32"
3/32" = 1'-0"

SLAB-ON-GRADE LEGEND

SOG#	SOG# - DENOTES SLAB-ON-GRADE MARK (SEE SLAB-ON-GRADE SCHEDULE)
#'-#"	#' - #" - DENOTES TOP OF CONCRETE ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	CONTROL/CONSTRUCTION LINE
F.D.	FLOOR DRAIN (SEE MEP AND ARCH)
CW# / MW#	W# - DENOTES WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE)
[#'-#"]	#' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES STEP IN SLAB
	DENOTES SLOPE IN SLAB
	DENOTES TYPICAL LOCATONS OF ADDITIONAL SLAB REENTRANT CORNER REINFORCING, SEE TYPICAL DETAILS.
A / B	DENOTES COLUMN ISOLATION JOINT TYPE, SEE TYPICAL DETAILS

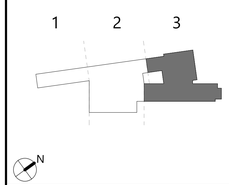
SLAB PLAN NOTES

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS
3. TOP OF SLAB ELEVATION = 0' - 0" UNLESS NOTED OTHERWISE ON PLAN AS (-X'-XX") RELATIVE TO REFERENCE ELEVATION.
4. SAW CUT CONTROL JOINTS IN SLAB ON GRADE AS SHOWN. BALANCE OF ALL REINFORCING (REENTRANT CORNER, DISCONTINUOUS JOINT, OPENINGS, ETC...) NOT SHOWN FOR CLARITY. REFER TO TYPICAL DETAILS.
5. COORDINATE WITH CIVIL, ARCH AND MEP DRAWINGS ON ANY REQUIRED PENETRATIONS THROUGH FOUNDATION WALLS OR FOOTINGS.

SLAB PLAN KEYNOTES

#	
1	REENTRANT CORNER BARS IN SLAB ON GRADE, SEE TYPICAL DETAIL. ENSURE REINFORCING DOES NOT CROSS CONTROL JOINT (CJ) SAW CUT LINE. LOCATIONS SHOWN APPLY TO ALL OTHER SAME/SIMILAR CONDITIONS NOT SHOWN FOR CLARITY.
2	REENTRANT CORNER BARS IN SLAB ON GRADE AT ALL DISCONTINUOUS CONTROL JOINTS, TYP. ENSURE REINFORCING DOES NOT CROSS CONTROL JOINT (CJ) SAW CUT LINE. LOCATIONS SHOWN APPLY TO ALL OTHER SAME/SIMILAR CONDITIONS NOT SHOWN FOR CLARITY.
3	REENTRANT CORNER BARS IN SLAB ON GRADE, SEE COLUMN ISOLATION JOINT DETAIL. ENSURE REINFORCING DOES NOT CROSS CONTROL JOINT (CJ) SAW CUT LINE. LOCATIONS SHOWN APPLY TO ALL OTHER SAME/SIMILAR CONDITIONS NOT SHOWN FOR CLARITY.
4	REENTRANT CORNER REINFORCING IN SLAB ON GRADE AT DOOR THRESHOLDS, SEE TYPICAL DETAIL. ENSURE REINFORCING DOES NOT CROSS CONTROL JOINT (CJ) SAW CUT LINE. LOCATIONS SHOWN APPLY TO ALL OTHER SAME/SIMILAR CONDITIONS NOT SHOWN FOR CLARITY.

KEY PLAN



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NEW CTE BUILDING

Project Title

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Sheet Title
SLAB ON GRADE PLAN

Sheet No.
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CONSTRUCTION DOCUMENTS

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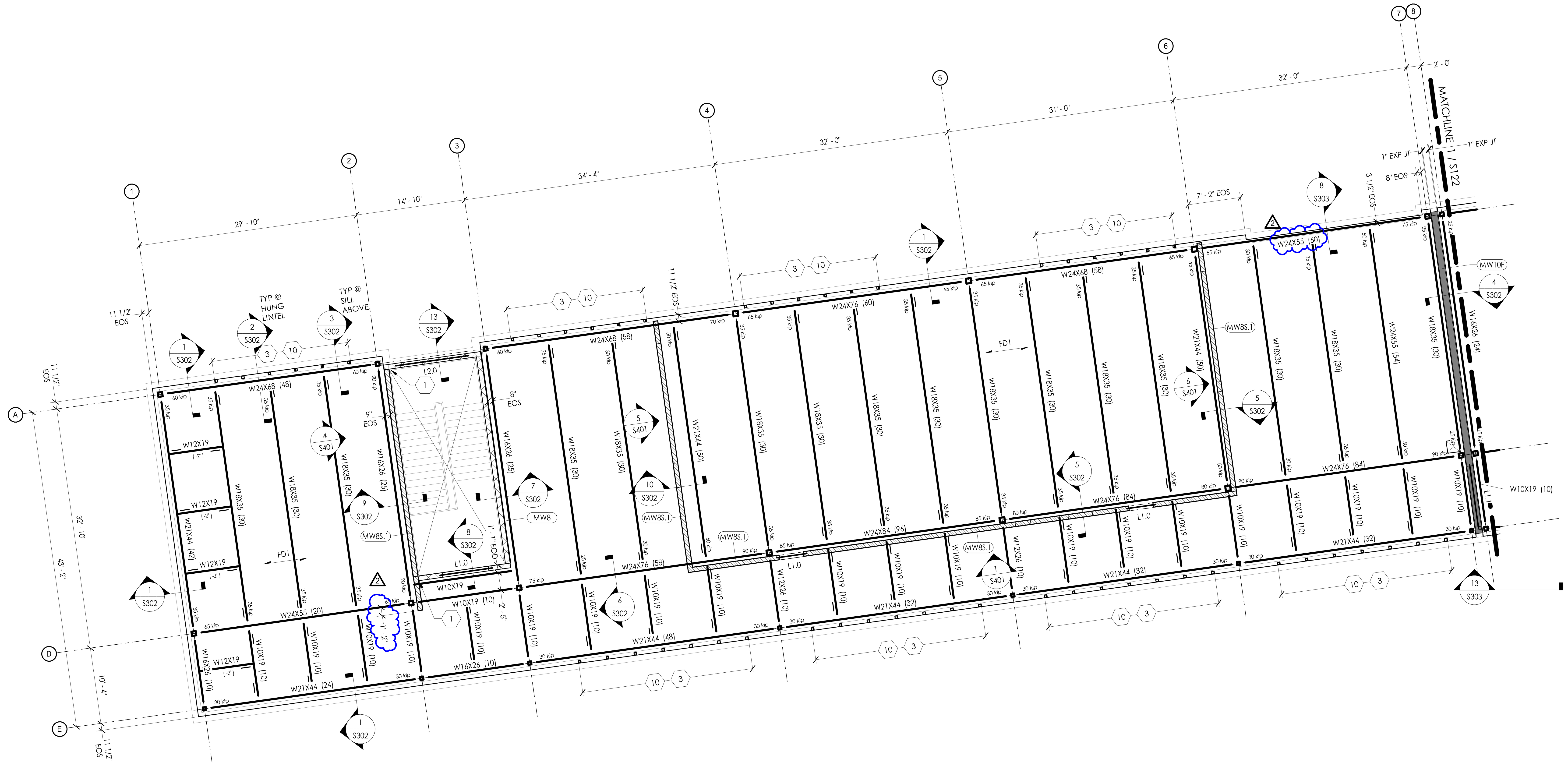


SECOND FLOOR FRAMING PLAN - AREA 1

0' 2' 4' 8' 16'
1/8" = 1'-0"

FRAMING LEGEND

FD# - DENOTES ELEVATED FLOOR SLAB MARK (SEE ELEVATED FLOOR SLAB SCHEDULE) ARROWS DENOTE SPAN DIRECTION

RD# - DENOTES ROOF DECK MARK (SEE ROOF DECK SCHEDULE) ARROWS DENOTE SPAN DIRECTION

#'-#" - #' - #" - DENOTES SPOT ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"

DENOTES MOMENT CONNECTION

DENOTES ROLL BEAM CONNECTION, SEE TYPICAL DETAIL

DENOTES BEAM SPLICE, SEE TYPICAL DETAIL

DENOTES BEAM BEARING PLATE ON MASONRY WALL (2)

(#'-#") DENOTES BEAM AT ELEVATION ABOVE OR BELOW PLAN ELEVATION (SEE PLAN NOTES)

(ABOVE/BELOW) DENOTES BEAM ABOVE OR BELOW ANOTHER BEAM IN PLAN

F.D. FLOOR DRAIN (SEE MECH AND ARCH)

C.O. CLEAN OUT (SEE MECH AND ARCH)

CW# MW# - CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE) MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)

[#'-#"] #' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"

DENOTES STEP IN SLAB

DENOTES SLOPE IN SLAB

L# - L# - DENOTES MASONRY OR STEEL LINTEL (SEE LINTEL SCHEUDLE)

DENTOES MASONRY SHEAR WALL

DENOTES MASONRY FIRE WALL LOCATION. SEE ARCHITECTURAL DRAWINGS.

DENOTES MASONRY SHEAR WALL BELOW

DENOTES UL ASSEMBLY RATING, REFER TO ARCH DRAWINGS FOR SPRAY FIREPROOFING REQUIREMENTS.

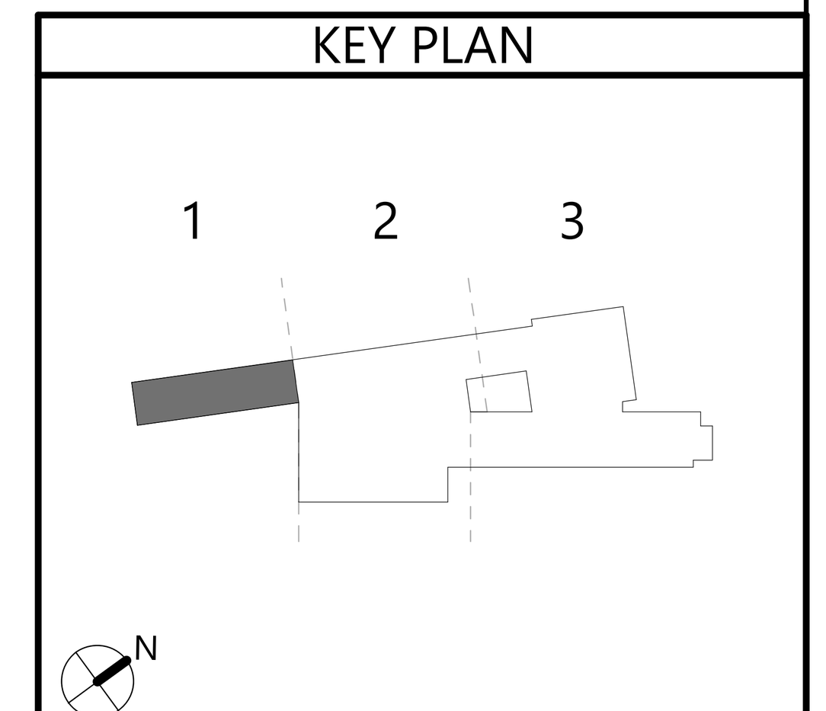
FRAMING PLAN NOTES:

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS.
3. TOP OF STEEL ELEVATION = + 15' - 6 1/2", UNLESS OTHERWISE NOTED ON PLAN AS (+/- X' - X") RELATIVE TO TOP OF STEEL REFERENCE ELEVATION.
4. SEE ARCH AND MEP DRAWINGS FOR REQUIRED THRU-DECK OPENINGS.
5. UNLESS NOTED OTHERWISE, ALL STEEL BEAMS ARE TO BE SPACED EQUALLY BETWEEN COLUMN GRID LINES.
6. COORDINATE ALL OPENINGS IN WALLS WITH ARCH AND MEP DRAWINGS. OPENINGS NOT INDICATED ON PLANS SHALL CONFORM TO S500 SERIES TYPICAL DETAIL REQUIREMENTS.
7. ALL BEAMS ATTACHED TO CONCRETE ON METAL DECK FLOOR CONSTRUCTION WITHOUT A STUD COUNT SHOWN, ARE TO RECEIVE 3/4" DIA x 4" LONG SHEAR STUDS @ 12" OC MAX.
8. ALL BEAMS INDICATED WITH A UL ASSEMBLY RATING ARE TO BE SPRAY FIREPROOFED ACCORDING TO UL ASSEMBLY REQUIRMENTS. NOT ALL BEAMS EXTENT IS REQUIRED TO BE FIREPROOFED, REFER TO ARCH DRAWINGS FOR AREA REQUIREMENTS/EXTENTS.
9. MASONRY LINTELS SHOWN ON PLAN ARE FOR THE HEAD OF OPENINGS ASSOCIATED WITH THE SECOND FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH ARCH DRAWINGS.

SECOND FLOOR PLAN KEYNOTES

1 CONTROL JOINT IN CMU WALL TO SEPARATE SHEAR WALL. SEE TYPICAL DETAILS
2 PREFABRICATED CANOPY, REFER TO ARCH FOR DIMENSIONS AND LOCATIONS
3 HUNG STEEL LINTEL FRAMING BELOW. SEE DETAIL 2/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
4 2" EXPANSION JOINT IN CMU WALL. SEE ARCH FOR EJ COVER
5 ROOF OPENING ANGLE SUBFRAMING, SEE TYPICAL DETAIL
6 VEHICLE EXAUST REEL, HUNG FROM JOISTS ABOVE. SEE DETAIL FOR HUNG STRUCTURE
7 STAIR AND RAILING FRAMING BY DELEGATED DESIGNER, TYP
8 CAST IN PLACE BOND BEAM AT SILL OF OPENING ABOVE. SEE APPLICABLE DETAIL
9 6" EQUIPMENT PAD, COORDINATE EXACT LOCATION AND DIMENSIONAL REQURIEMENTS WITH MEP DRAWINGS. SEE TYPICAL DETAILS ON S500 SHEETS
10 STEEL SILL FRAMING ABOVE. SEE DETAIL 3/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
11 STEEL SILL AND CANOPY CONNECTION FRAMING ABOVE. SEE DETAIL 11/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING AND CANOPY TIE BACKS WITH ARCH DRAWINGS.
12 STEEL CANOPY CONNECTION FRAMING ABOVE. SEE DETAIL 14/S304 FOR INFORMATION, AND COORDINATE EXTENT OF CANOPY TIE BACKS WITH ARCH DRAWINGS.
13 BRICK RELIEF ANGLE ALONG MASONRY WALL. BOTTOM OF ANGLE ELEVATION TO MATCH ADJACENT FLOOR SUPPORT RELIEF ANGLE. REFER TO APPLICABLE DETAILS FOR SIZE AND ATTACHMENT. (2)
14 FLOOR TROUGH, REFER TO FOOD SERVICE DRAWINGS.

KEY PLAN



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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · LICENSED PROFESSIONAL ENGINEER · 100938

#	DATE	DESCRIPTION
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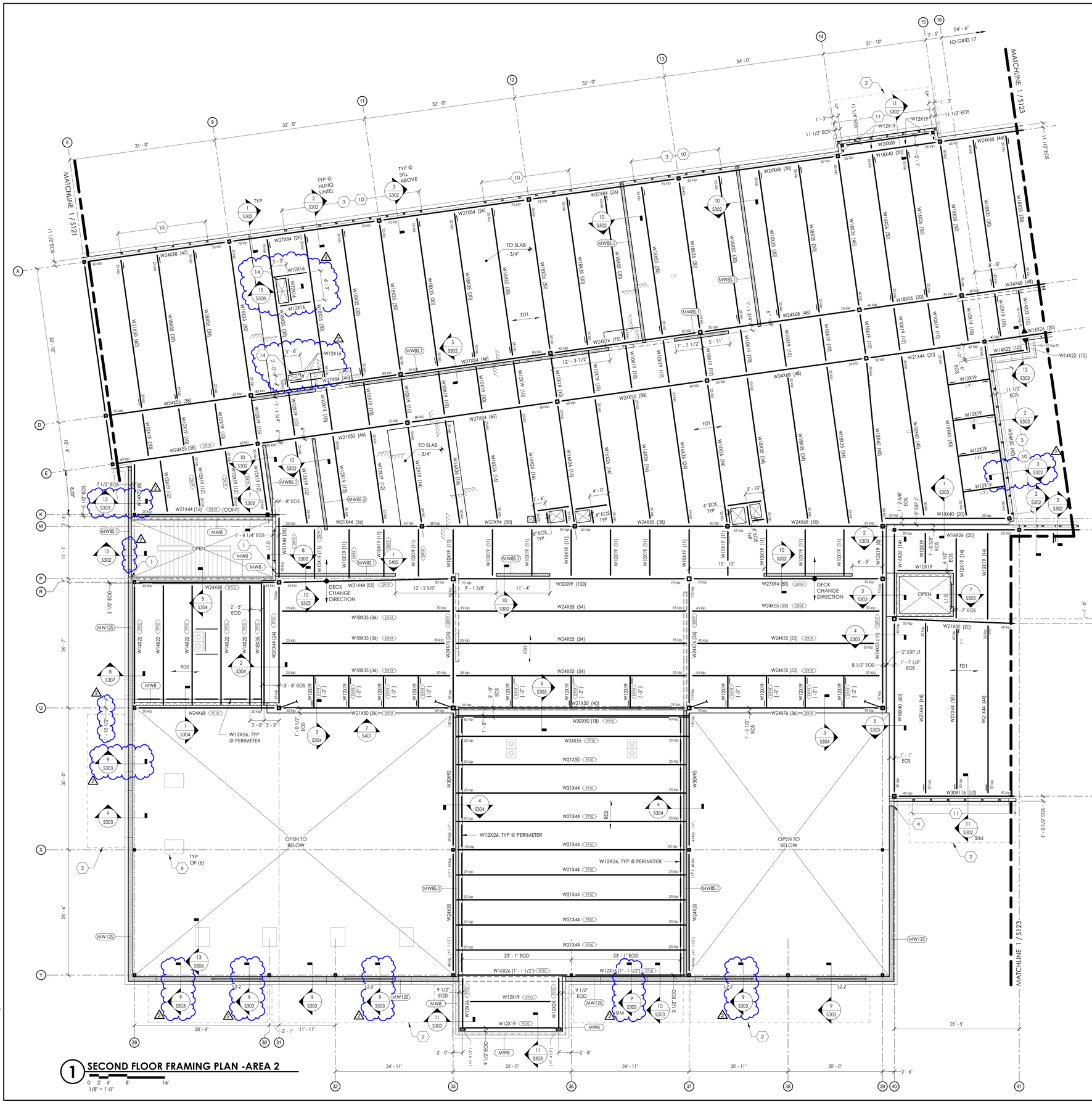
Sheet Title
SECOND FLOOR FRAMING PLAN - AREA 1

Sheet No.
CTE S121

CONSTRUCTION DOCUMENTS



FRAMING LEGEND

- FD# - FD# - DENOTES ELEVATED FLOOR SLAB MARK (SEE ELEVATED FLOOR SLAB SCHEDULE) ARROWS DENOTE SPAN DIRECTION
- RD# - RD# - DENOTES ROOF DECK MARK (SEE ROOF DECK SCHEDULE) ARROWS DENOTE SPAN DIRECTION
- #'-#" - #' - #" - DENOTES SPOT ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
- DENOTES MOMENT CONNECTION
- DENOTES ROLL BEAM CONNECTION, SEE TYPICAL DETAIL
- DENOTES BEAM SPLICE, SEE TYPICAL DETAIL
- DENOTES BEAM BEARING PLATE ON MASONRY WALL
- (#'-#") DENOTES BEAM AT ELEVATION ABOVE OR BELOW PLAN ELEVATION (SEE PLAN NOTES)
- (ABOVE/BELOW) DENOTES BEAM ABOVE OR BELOW ANOTHER BEAM IN PLAN
- F.D. FLOOR DRAIN (SEE MECH AND ARCH)
- C.O. CLEAN OUT (SEE MECH AND ARCH)
- CW# MW# - CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE) MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)
- [#'-#"] #' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
- DENOTES STEP IN SLAB
- DENOTES SLOPE IN SLAB
- L# - L# - DENOTES MASONRY OR STEEL LINTEL (SEE LINTEL SCHEUDLE)
- DENTOES MASONRY SHEAR WALL
- DENOTES MASONRY FIRE WALL LOCATION, SEE ARCHITECTURAL DRAWINGS.
- DENOTES MASONRY SHEAR WALL BELOW
- #### DENOTES UL ASSEMBLY RATING, REFER TO ARCH DRAWINGS FOR SPRAY FIREPROOFING REQUIREMENTS.

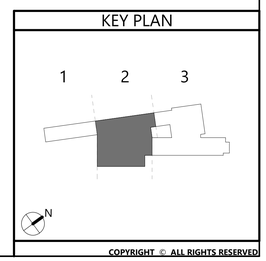
FRAMING PLAN NOTES:

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS.
3. TOP OF STEEL ELEVATION = + 15' - 6 1/2", UNLESS OTHERWISE NOTED ON PLAN AS (+/- X' - X") RELATIVE TO TOP OF STEEL REFERENCE ELEVATION.
4. SEE ARCH AND MEP DRAWINGS FOR REQUIRED THRU-DECK OPENINGS.
5. UNLESS NOTED OTHERWISE, ALL STEEL BEAMS ARE TO BE SPACED EQUALLY BETWEEN COLUMN GRID LINES.
6. COORDINATE ALL OPENINGS IN WALLS WITH ARCH AND MEP DRAWINGS. OPENINGS NOT INDICATED ON PLANS SHALL CONFORM TO S500 SERIES TYPICAL DETAIL REQUIREMENTS.
7. ALL BEAMS ATTACHED TO CONCRETE ON METAL DECK FLOOR CONSTRUCTION WITHOUT A STUD COUNT SHOWN, ARE TO RECEIVE 3/4" DIA x 4" LONG SHEAR STUDS @ 12" OC MAX.
8. ALL BEAMS INDICATED WITH A UL ASSEMBLY RATING ARE TO BE SPRAY FIREPROOFED ACCORDING TO UL ASSEMBLY REQUIRMENTS. NOT ALL BEAMS EXTENT IS REQUIRED TO BE FIREPROOFED, REFER TO ARCH DRAWINGS FOR AREA REQUIREMENTS/EXTENTS.
9. MASONRY LINTELS SHOWN ON PLAN ARE FOR THE HEAD OF OPENINGS ASSOCIATED WITH THE SECOND FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH ARCH DRAWINGS.

SECOND FLOOR PLAN KEYNOTES

#	
1	CONTROL JOINT IN CMU WALL TO SEPARATE SHEAR WALL, SEE TYPICAL DETAILS
2	PREFABRICATED CANOPY, REFER TO ARCH FOR DIMENSIONS AND LOCATIONS
3	HUNG STEEL LINTEL FRAMING BELOW, SEE DETAIL 2/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
4	2" EXPANSION JOINT IN CMU WALL, SEE ARCH FOR EJ COVER
5	ROOF OPENING ANGLE SUBFRAMING, SEE TYPICAL DETAIL
6	VEHICLE EXAUST REEL, HUNG FROM JOISTS ABOVE, SEE DETAIL FOR HUNG STRUCTURE
7	STAIR AND RAILING FRAMING BY DELEGATED DESIGNER, TYP.
8	CAST IN PLACE BOND BEAM AT SILL OF OPENING ABOVE. SEE APPLICABLE DETAIL
9	6" EQUIPMENT PAD. COORDINATE EXACT LOCATION AND DIMENSIONAL REQUIREMENTS WITH MEP DRAWINGS. SEE TYPICAL DETAILS ON S500 SHEETS
10	STEEL SILL FRAMING ABOVE. SEE DETAIL 3/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
11	STEEL SILL AND CANOPY CONNECTION FRAMING ABOVE. SEE DETAIL 11/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING AND CANOPY TIE BACKS WITH ARCH DRAWINGS.
12	STEEL CANOPY CONNECTION FRAMING ABOVE. SEE DETAIL 14/S304 FOR INFORMATION, AND COORDINATE EXTENT OF CANOPY TIE BACKS WITH ARCH DRAWINGS.
13	BRICK RELIEF ANGLE ALONG MASONRY WALL, BOTTOM OF ANGLE ELEVATION TO MATCH ADJACENT FLOOR SUPPORT RELIEF ANGLE. REFER TO APPLICABLE DETAILS FOR SIZE AND ATTACHMENT.
14	FLOOR TROUGH, REFER TO FOOD SERVICE DRAWINGS.

KEY PLAN



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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · 100935 · LICENSED PROFESSIONAL ENGINEER

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Sheet Title
SECOND FLOOR FRAMING PLAN - AREA 2

Sheet No.
CTE S122

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/NECSD CTE - Struct.rvt

SECOND FLOOR PLAN KEYNOTES

#	
1	CONTROL JOINT IN CMU WALL TO SEPARATE SHEAR WALL. SEE TYPICAL DETAILS
2	PREFABRICATED CANOPY. REFER TO ARCH FOR DIMENSIONS AND LOCATIONS
3	HUNG STEEL LINTEL FRAMING BELOW. SEE DETAIL 2/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
4	2" EXPANSION JOINT IN CMU WALL. SEE ARCH FOR EJ COVER
5	ROOF OPENING ANGLE SUBFRAMING, SEE TYPICAL DETAIL
6	VEHICLE EXAUST REEL, HUNG FROM JOISTS ABOVE. SEE DETAIL FOR HUNG STRUCTURE
7	STAIR AND RAILING FRAMING BY DELEGATED DESIGNER, TYP
8	CAST IN PLACE BOND BEAM AT SILL OF OPENING ABOVE. SEE APPLICABLE DETAIL
9	6" EQUIPMENT PAD. COORDINATE EXACT LOCATION AND DIMENSIONAL REQUIREMENTS WITH MEP DRAWINGS. SEE TYPICAL DETAILS ON S500 SHEETS
10	STEEL SILL FRAMING ABOVE. SEE DETAIL 3/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
11	STEEL SILL AND CANOPY CONNECTION FRAMING ABOVE. SEE DETAIL 11/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING AND CANOPY TIE BACKS WITH ARCH DRAWINGS.
12	STEEL CANOPY CONNECTION FRAMING ABOVE. SEE DETAIL 14/S304 FOR INFORMATION, AND COORDINATE EXTENT OF CANOPY TIE BACKS WITH ARCH DRAWINGS.
13	BRICK RELIEF ANGLE ALONG MASONRY WALL. BOTTOM OF ANGLE ELEVATION TO MATCH ADJACENT FLOOR SUPPORT RELIEF ANGLE. REFER TO APPLICABLE DETAILS FOR SIZE AND ATTACHMENT.
14	FLOOR TROUGH, REFER TO FOOD SERVICE DRAWINGS.

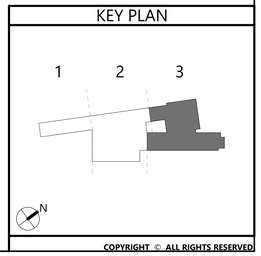
FRAMING LEGEND

FD#	FD# - DENOTES ELEVATED FLOOR SLAB MARK (SEE ELEVATED FLOOR SLAB SCHEDULE) ARROWS DENOTE SPAN DIRECTION
RD#	RD# - DENOTES ROOF DECK MARK (SEE ROOF DECK SCHEDULE) ARROWS DENOTE SPAN DIRECTION
#'-#"	#' - #" - DENOTES SPOT ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES MOMENT CONNECTION
	DENOTES ROLL BEAM CONNECTION, SEE TYPICAL DETAIL
	DENOTES BEAM SPLICE, SEE TYPICAL DETAIL
	DENOTES BEAM BEARING PLATE ON MASONRY WALL
(#'-#")	DENOTES BEAM AT ELEVATION ABOVE OR BELOW PLAN ELEVATION (SEE PLAN NOTES)
(ABOVE/BELOW)	DENOTES BEAM ABOVE OR BELOW ANOTHER BEAM IN PLAN
F.D.	FLOOR DRAIN (SEE MECH AND ARCH)
C.O.	CLEAN OUT (SEE MECH AND ARCH)
CW# MW#	CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE) MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)
[#'-#"]	#' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES STEP IN SLAB
	DENOTES SLOPE IN SLAB
L#	L# - DENOTES MASONRY OR STEEL LINTEL (SEE LINTEL SCHEUDLE)
	DENTOES MASONRY SHEAR WALL
	DENOTES MASONRY FIRE WALL LOCATION. SEE ARCHITECTURAL DRAWINGS.
	DENOTES MASONRY SHEAR WALL BELOW
####	DENOTES UL ASSEMBLY RATING, REFER TO ARCH DRAWINGS FOR SPRAY FIREPROOFING REQUIREMENTS.

FRAMING PLAN NOTES:

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS.
3. TOP OF STEEL ELEVATION = + 15' - 6 1/2", UNLESS OTHERWISE NOTED ON PLAN AS (+/- X' - X") RELATIVE TO TOP OF STEEL REFERENCE ELEVATION.
4. SEE ARCH AND MEP DRAWINGS FOR REQUIRED THRU-DECK OPENINGS.
5. UNLESS NOTED OTHERWISE, ALL STEEL BEAMS ARE TO BE SPACED EQUALLY BETWEEN COLUMN GRID LINES.
6. COORDINATE ALL OPENINGS IN WALLS WITH ARCH AND MEP DRAWINGS. OPENINGS NOT INDICATED ON PLANS SHALL CONFORM TO S500 SERIES TYPICAL DETAIL REQUIREMENTS.
7. ALL BEAMS ATTACHED TO CONCRETE ON METAL DECK FLOOR CONSTRUCTION WITHOUT A STUD COUNT SHOWN, ARE TO RECEIVE 3/4" DIA x 4" LONG SHEAR STUDS @ 12" OC MAX.
8. ALL BEAMS INDICATED WITH A UL ASSEMBLY RATING ARE TO BE SPRAY FIREPROOFED ACCORDING TO UL ASSEMBLY REQUIRMENTS. NOT ALL BEAMS EXTENT IS REQUIRED TO BE FIREPROOFED, REFER TO ARCH DRAWINGS FOR AREA REQUIREMENTS/EXTENTS.
9. MASONRY LINTELS SHOWN ON PLAN ARE FOR THE HEAD OF OPENINGS ASSOCIATED WITH THE SECOND FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH ARCH DRAWINGS.

KEY PLAN



1 SECOND FLOOR FRAMING PLAN - AREA 3

0' 2' 4' 8' 16'
1/8" = 1'-0"

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Project Title
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NEW CTE BUILDING

2	1/5/2024	BID ADDENDUM #2
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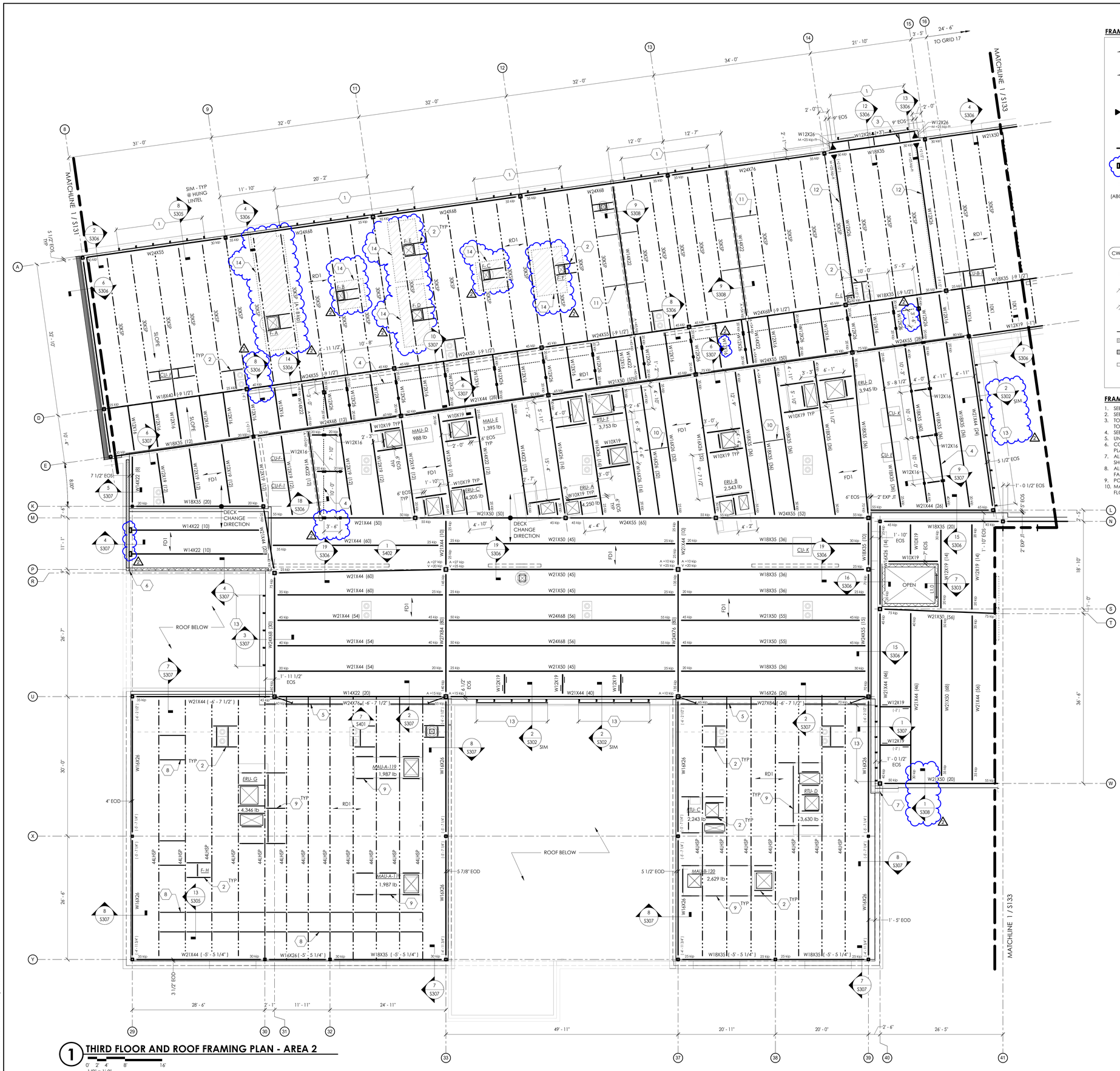
Sheet Title
SECOND FLOOR FRAMING PLAN - AREA 3

Sheet No.
CTE S123

CONSTRUCTION DOCUMENTS



1 THIRD FLOOR AND ROOF FRAMING PLAN - AREA 2

1/8" = 1'-0"

FRAMING LEGEND

FD#	FD# - DENOTES ELEVATED FLOOR SLAB MARK (SEE ELEVATED FLOOR SLAB SCHEDULE) ARROWS DENOTE SPAN DIRECTION
RD#	RD# - DENOTES ROOF DECK MARK (SEE ROOF DECK SCHEDULE) ARROWS DENOTE SPAN DIRECTION
#'-#"	#' - #" - DENOTES SPOT ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES MOMENT CONNECTION
	DENOTES ROLL BEAM CONNECTION, SEE TYPICAL DETAIL
	DENOTES BEAM SPLICE, SEE TYPICAL DETAIL
	DENOTES BEAM BEARING PLATE ON MASONRY WALL
(#'-#")	DENOTES BEAM AT ELEVATION ABOVE OR BELOW PLAN ELEVATION (SEE PLAN NOTES)
(ABOVE/BELOW)	DENOTES BEAM ABOVE OR BELOW ANOTHER BEAM IN PLAN
F.D.	FLOOR DRAIN (SEE MECH AND ARCH)
C.O.	CLEAN OUT (SEE MECH AND ARCH)
CW# MW#	CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE) MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)
[#'-#"]	#' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES STEP IN SLAB
	DENOTES SLOPE IN SLAB
L#	L# - DENOTES MASONRY OR STEEL LINTEL (SEE LINTEL SCHEUDLE)
	DENTOES MASONRY SHEAR WALL
	DENOTES MASONRY FIRE WALL LOCATION, SEE ARCHITECTURAL DRAWINGS.
	DENOTES MASONRY SHEAR WALL BELOW
####	DENOTES UL ASSEMBLY RATING, REFER TO ARCH DRAWINGS FOR SPRAY FIREPROOFING REQUIREMENTS.

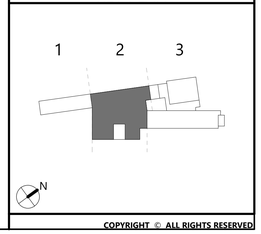
FRAMING PLAN NOTES:

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS.
3. TOP OF STEEL ELEVATION = + 31' - 6 1/2", UNLESS OTHERWISE NOTED ON PLAN AS (+/- X' - X") RELATIVE TO TOP OF STEEL ELEVATION.
4. SEE ARCH AND MEP DRAWINGS FOR REQUIRED THRU-DECK OPENINGS.
5. UNLESS NOTED OTHERWISE, ALL STEEL BEAMS ARE TO BE SPACED EQUALLY BETWEEN COLUMN GRID LINES.
6. COORDINATE ALL OPENINGS IN WALLS WITH ARCH AND MEP DRAWINGS. OPENINGS NOT INDICATED ON PLANS SHALL CONFORM TO S500 SERIES TYPICAL DETAIL REQUIREMENTS.
7. ALL BEAMS ATTACHED TO CONCRETE ON METAL DECK FLOOR CONSTRUCTION WITHOUT A STUD COUNT SHOWN, ARE TO RECEIVE 3/4" DIA X 4" LONG SHEAR STUDS AT 12" OC MAX.
8. ALL JOISTS WITH (A = ## kip) AFTER JOIST TAG ARE TO BE DESIGNED FOR THAT FORCE AS AN ADDITIONAL FACTORED TOP CHORD AXIAL FORCE IN TENSION OR COMPRESSION.
9. POINT LOADS SHOWN ON GYM ROOF FRAMING PLAN ARE SCHEDULED IN JOIST LOADING DETAIL 8/S506.
10. MASONRY LINTELS SHOWN ON PLAN ARE FOR THE HEAD OF OPENINGS ASSOCIATED WITH THE THIRD FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH ARCH DRAWINGS.

ROOF/THIRD FLOOR FRAMING PLAN KEYNOTES

#	
1	HUNG STEEL LINTEL FRAMING BELOW. SEE DETAIL 8/S305 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
2	ROOF OPENING ANGLE SUBFRAMING, SEE TYPICAL DETAIL
3	L2x2x3/8, TYP OF (3) INFILL FRAMING
4	MECHANICAL SCREEN CHANNEL SUPPORT FRAMING ABOVE, TYP, SEE DETAIL C/S305
5	PAIR OF CONTINUOUS ANGLES OVER JOISTS, SEE APPLICABLE DETAILS
6	CONTROL JOINT IN CMU WALL TO SEPARATE SHEAR WALL. SEE TYPICAL DETAILS
7	2" EXPANSION JOINT IN CMU WALL. SEE ARCH FOR EJ COVER
8	ANGLE SUB FRAMING TO SUPPORT HUNG VECHICLE EXAHUST REELS. SEE APPLICABLE DETAIL AND COORDINATE WITH MECH DRAWINGS.
9	L4x4x3/8 (LLV) SUBFRAMING BELOW RTU CURB. COORDINATE LOCATIONS/EXTENTS WITH FINAL SELECTED EQUIPMENT MANUFACTURER
10	L4x4x1/4 ANGLE BRACE FROM BOTTOM FLANGE OF CENTER BEAM TO ADJACENT BEAM TOP FLANGE.
11	L4x4x1/4 ANGLE BRACE FROM BOTTOM FLANGE OF BEAM TO ADJACENT JOIST TOP CHORD AT THIRD POINTS OF BEAM LENGTH, TYP AT SHEAR WALLS
12	SUPPLEMENTAL DECK SUPPORT ANGLES (SIM TO SECTION 8/S307) ON EACH SIDE OF BEAM FLANGE.
13	HUNG STEEL LINTEL FRAMING BELOW. SEE APPLICABLE DETAILS FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
14	EXHAUST HOOD HUNG FROM ROOF STRUCTURE. REFER TO FOOD SERVICE DRAWINGS FOR EXTENTS, ATTACHMENTS, AND MAXIMUM WEIGHT.

KEY PLAN



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Project Title

STATE OF NEW YORK PATRICK JAMES WILLIAMS 100938 LICENSED PROFESSIONAL ENGINEER

No.	DATE	DESCRIPTION
2	1/5/2024	BID ADDENDUM #2

Drawn By:	JRV
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2302
Issued for Bid:	4/15/2024

Sheet Title

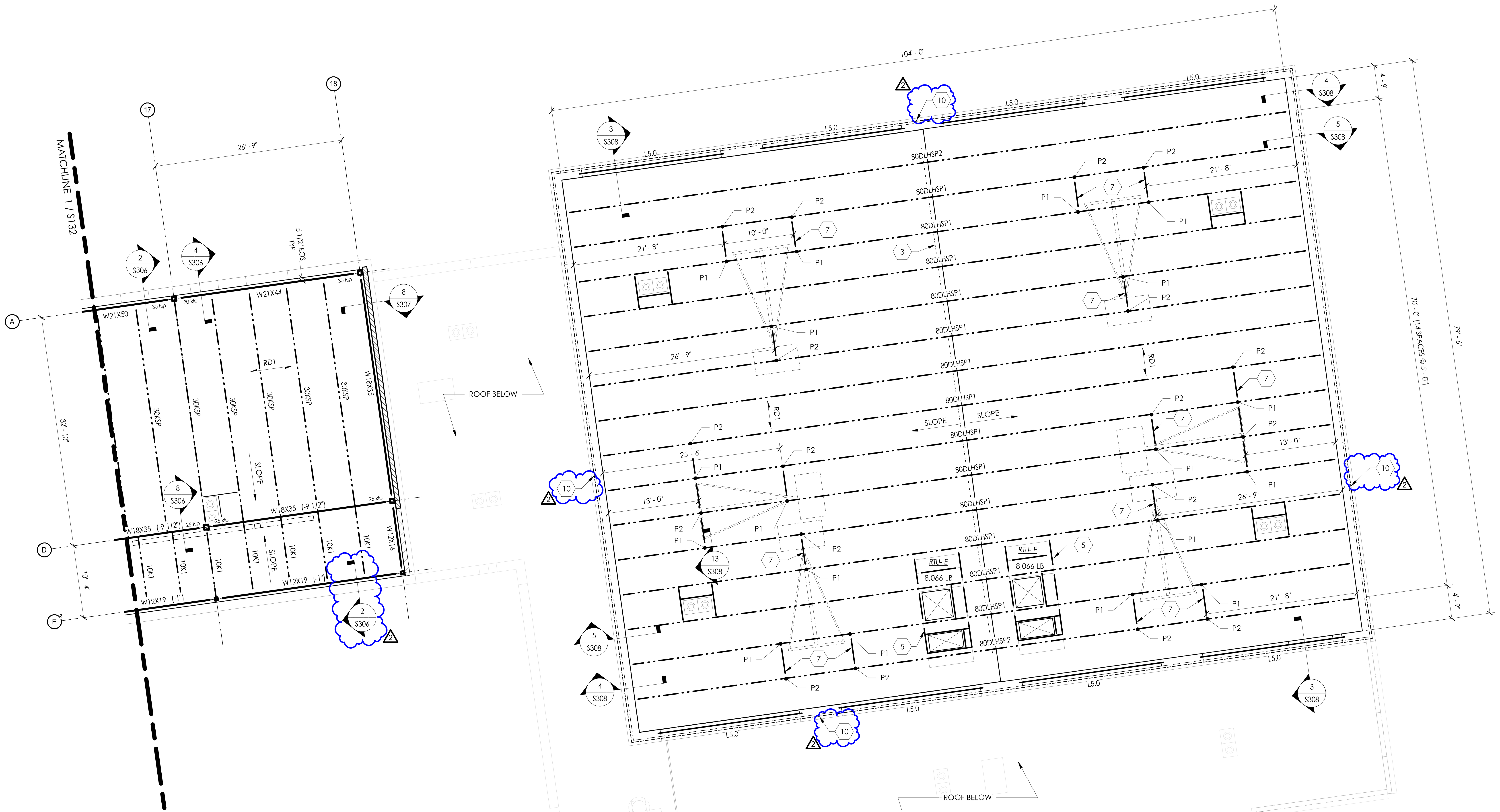
THIRD FLOOR/ ROOF FRAMING PLAN - AREA 2

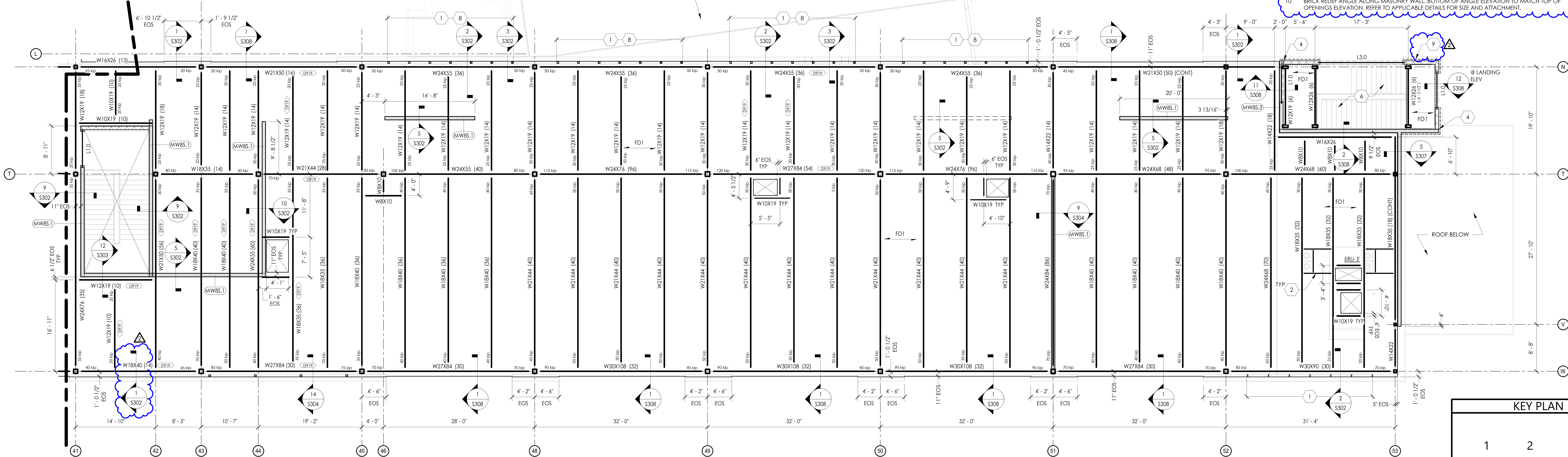
Sheet No.

CTE S132

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/NECSD CTE - Struct.rvt





1 THIRD FLOOR AND ROOF FRAMING PLAN - AREA 3

0' 2' 4' 8' 16'
1/8" = 1'-0"

FRAMING LEGEND

Symbol	Description
FD#	FD# - DENOTES ELEVATED FLOOR SLAB MARK (SEE ELEVATED FLOOR SLAB SCHEDULE) ARROWS DENOTE SPAN DIRECTION
RD#	RD# - DENOTES ROOF DECK MARK (SEE ROOF DECK SCHEDULE) ARROWS DENOTE SPAN DIRECTION
#'-#"	#' - #" - DENOTES SPOT ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES MOMENT CONNECTION
	DENOTES ROLL BEAM CONNECTION, SEE TYPICAL DETAIL
	DENOTES BEAM SPLICE, SEE TYPICAL DETAIL
	DENOTES BEAM BEARING PLATE ON MASONRY WALL (2)
(#'-#")	DENOTES BEAM AT ELEVATION ABOVE OR BELOW PLAN ELEVATION (SEE PLAN NOTES)
(ABOVE/BELOW)	DENOTES BEAM ABOVE OR BELOW ANOTHER BEAM IN PLAN
F.D.	FLOOR DRAIN (SEE MECH AND ARCH)
C.O.	CLEAN OUT (SEE MECH AND ARCH)
CW# MW#	CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE) MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)
[#'-#"]	#' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES STEP IN SLAB
	DENOTES SLOPE IN SLAB
L#	L# - DENOTES MASONRY OR STEEL LINTEL (SEE LINTEL SCHEUDLE)
	DENTOES MASONRY SHEAR WALL
	DENOTES MASONRY FIRE WALL LOCATION. SEE ARCHITECTURAL DRAWINGS.
	DENOTES MASONRY SHEAR WALL BELOW
####	DENOTES UL ASSEMBLY RATING, REFER TO ARCH DRAWINGS FOR SPRAY FIREPROOFING REQUIREMENTS.

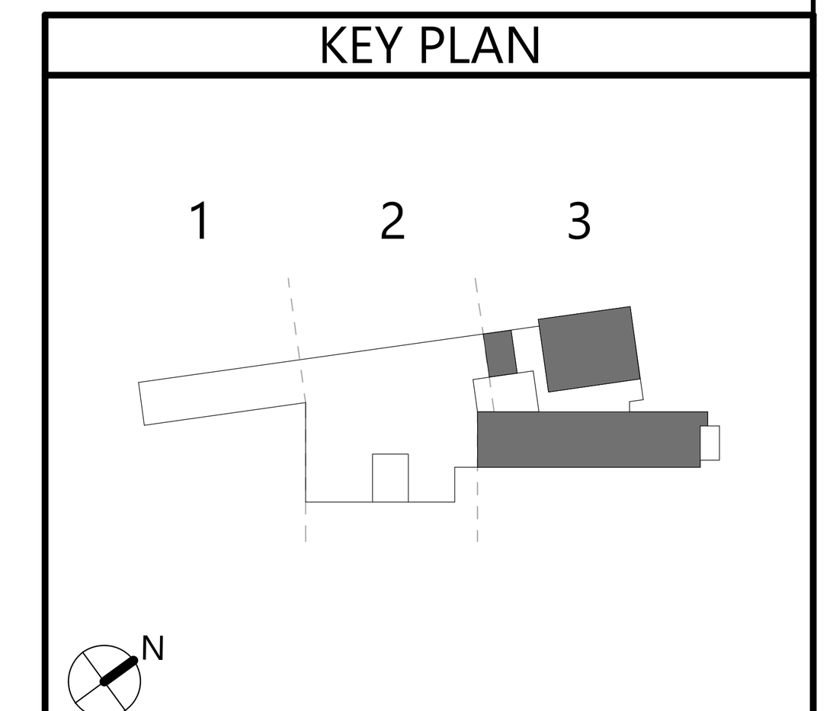
FRAMING PLAN NOTES:

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS.
3. TOP OF STEEL ELEVATION = + 31' - 6 1/2", UNLESS OTHERWISE NOTED ON PLAN AS (+/- X' - X") RELATIVE TO TOP OF STEEL ELEVATION.
4. SEE ARCH AND MEP DRAWINGS FOR REQUIRED THRU-DECK OPENINGS.
5. UNLESS NOTED OTHERWISE, ALL STEEL BEAMS ARE TO BE SPACED EQUALLY BETWEEN COLUMN GRID LINES.
6. COORDINATE ALL OPENINGS IN WALLS WITH ARCH AND MEP DRAWINGS. OPENINGS NOT INDICATED ON PLANS SHALL CONFORM TO S500 SERIES TYPICAL DETAIL REQUIREMENTS.
7. ALL BEAMS ATTACHED TO CONCRETE ON METAL DECK FLOOR CONSTRUCTION WITHOUT A STUD COUNT SHOWN, ARE TO RECEIVE 3/4" DIA x 4" LONG SHEAR STUDS AT 12" OC MAX.
8. ALL JOISTS WITH (A = ## kip) AFTER JOIST TAG ARE TO BE DESIGNED FOR THAT FORCE AS AN ADDITIONAL FACTORED TOP CHORD AXIAL FORCE IN TENSION OR COMPRESSION.
9. POINT LOADS SHOWN ON GYM ROOF FRAMING PLAN ARE SCHEDULED IN JOIST LOADING DETAIL 8/S506.
10. MASONRY LINTELS SHOWN ON PLAN ARE FOR THE HEAD OF OPENINGS ASSOCIATED WITH THE THIRD FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH ARCH DRAWINGS.

ROOF/THIRD FLOOR FRAMING PLAN KEYNOTES

1 HUNG STEEL LINTEL FRAMING BELOW. SEE DETAIL 2/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
2 ROOF OPENING ANGLE SUBFRAMING, SEE TYPICAL DETAIL
3 WALK-DRAW CURTAIN HUNG FROM BOTTOM CHORD OF ROOF JOISTS.
4 CONTROL JOINT IN CMU WALL TO SEPARATE SHEAR WALL. SEE TYPICAL DETAILS
5 L6x4x3/8 (LLV) SUBFRAMING BELOW RTU CURB. COORDINATE LOCATIONS/EXTENTS WITH FINAL SELECTED EQUIPMENT MANUFACTURER
6 STAIR AND RAILING FRAMING BY DELEGATED DESIGNER, TYP
7 C7X9.8 SUBFRAMING ABOVE BASKETBALL HOOP FRAME, SEE DETAIL. COORDINATE LOCATIONS/EXTENTS WITH FINAL SELECTED EQUIPMENT MANUFACTURER
8 STEEL SILL FRAMING ABOVE. SEE DETAIL 3/S302 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
9 BRICK RELIEF ANGLE ALONG STAIR TOWER WALL. BOTTOM OF ANGLE ELEVATION TO MATCH ADJACENT FLOOR SUPPORT RELIEF ANGLE. REFER TO DETAIL 12/S304 FOR SIZE AND ATTACHMENT.
10 BRICK RELIEF ANGLE ALONG MASONRY WALL. BOTTOM OF ANGLE ELEVATION TO MATCH TOP OF OPENINGS ELEVATION. REFER TO APPLICABLE DETAILS FOR SIZE AND ATTACHMENT.

KEY PLAN



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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · LICENSED PROFESSIONAL ENGINEER · 100938

#	DATE	DESCRIPTION
2	5/3/2024	BID ADDENDUM #2

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Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

Sheet Title
THIRD FLOOR/ ROOF FRAMING PLAN - AREA 3

Sheet No.
CTE S133

CONSTRUCTION DOCUMENTS

FRAMING LEGEND

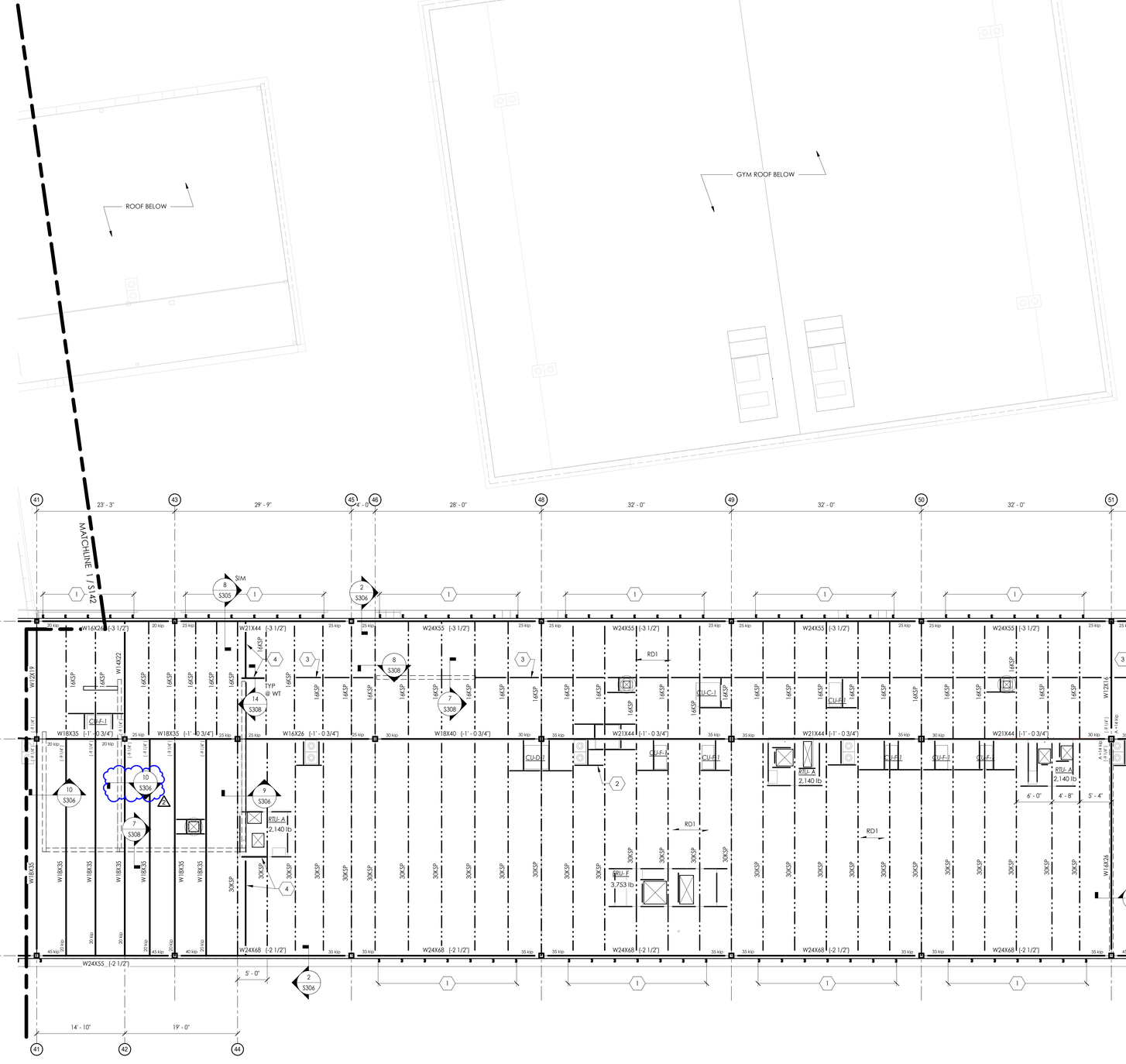
FD#	FD# - DENOTES ELEVATED FLOOR SLAB MARK (SEE ELEVATED FLOOR SLAB SCHEDULE) ARROWS DENOTE SPAN DIRECTION
RD#	RD# - DENOTES ROOF DECK MARK (SEE ROOF DECK SCHEDULE) ARROWS DENOTE SPAN DIRECTION
#'-#"	#' - #" - DENOTES SPOT ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES MOMENT CONNECTION
	DENOTES ROLL BEAM CONNECTION, SEE TYPICAL DETAIL
	DENOTES BEAM SPLICE, SEE TYPICAL DETAIL
2	DENOTES BEAM BEARING PLATE ON MASONRY WALL
(#'-#")	DENOTES BEAM AT ELEVATION ABOVE OR BELOW PLAN ELEVATION (SEE PLAN NOTES)
(ABOVE/BELOW)	DENOTES BEAM ABOVE OR BELOW ANOTHER BEAM IN PLAN
F.D.	FLOOR DRAIN (SEE MECH AND ARCH)
C.O.	CLEAN OUT (SEE MECH AND ARCH)
CW# MW#	CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE) MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)
[#'-#"]	#' - #" - DENOTES TOP OF WALL ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
	DENOTES STEP IN SLAB
	DENOTES SLOPE IN SLAB
L#	L# - DENOTES MASONRY OR STEEL LINTEL (SEE LINTEL SCHEUDLE)
	DENITOES MASONRY SHEAR WALL
	DENOTES MASONRY FIRE WALL LOCATION, SEE ARCHITECTURAL DRAWINGS.
	DENOTES MASONRY SHEAR WALL BELOW
####	DENOTES UL ASSEMBLY RATING, REFER TO ARCH DRAWINGS FOR SPRAY FIREPROOFING REQUIREMENTS.

FRAMING PLAN NOTES:

1. SEE SHEET S001 THROUGH S008 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S500 SERIES FOR TYPICAL DETAILS.
3. TOP OF STEEL ELEVATION = + 48' - 0", UNLESS OTHERWISE NOTED ON PLAN AS (+/- X' - X") RELATIVE TO TOP OF STEEL REFERENCE ELEVATION.
4. SEE ARCH AND MEP DRAWINGS FOR REQUIRED THRU-DECK OPENINGS.
5. UNLESS NOTED OTHERWISE, ALL STEEL BEAMS ARE TO BE SPACED EQUALLY BETWEEN COLUMN GRID LINES.
6. COORDINATE ALL OPENINGS IN WALLS WITH ARCH AND MEP DRAWINGS. OPENINGS NOT INDICATED ON PLANS SHALL CONFORM TO S500 SERIES TYPICAL DETAIL REQUIREMENTS.

(#) ROOF FRAMING PLAN

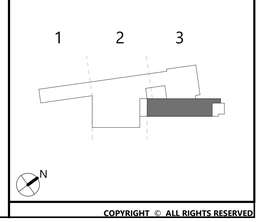
1 HUNG STEEL LINTEL FRAMING BELOW. SEE DETAIL 8/S305 FOR INFORMATION, AND COORDINATE EXTENT OF OPENING WITH ARCH DRAWINGS.
2 ROOF OPENING ANGLE SUBFRAMING, SEE TYPICAL DETAIL
3 2L8x4x7/16 SSBB. FASTEN DECK TO ANGLES WITH #12 SCREWS @ 12" OC.
4 WT8X20 CONNECTED TO ROOF DIAPHRAGM WITH (2) #12 SCREWS @ 6" OC



1 HIGH ROOF FRAMING PLAN - AREA 3

0 2 4 8 16
1/8" = 1'-0"

KEY PLAN



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NEW CTE BUILDING

STATE OF NEW YORK
PATRICK JAMES WILLIAMS
100938
LICENSED PROFESSIONAL ENGINEER

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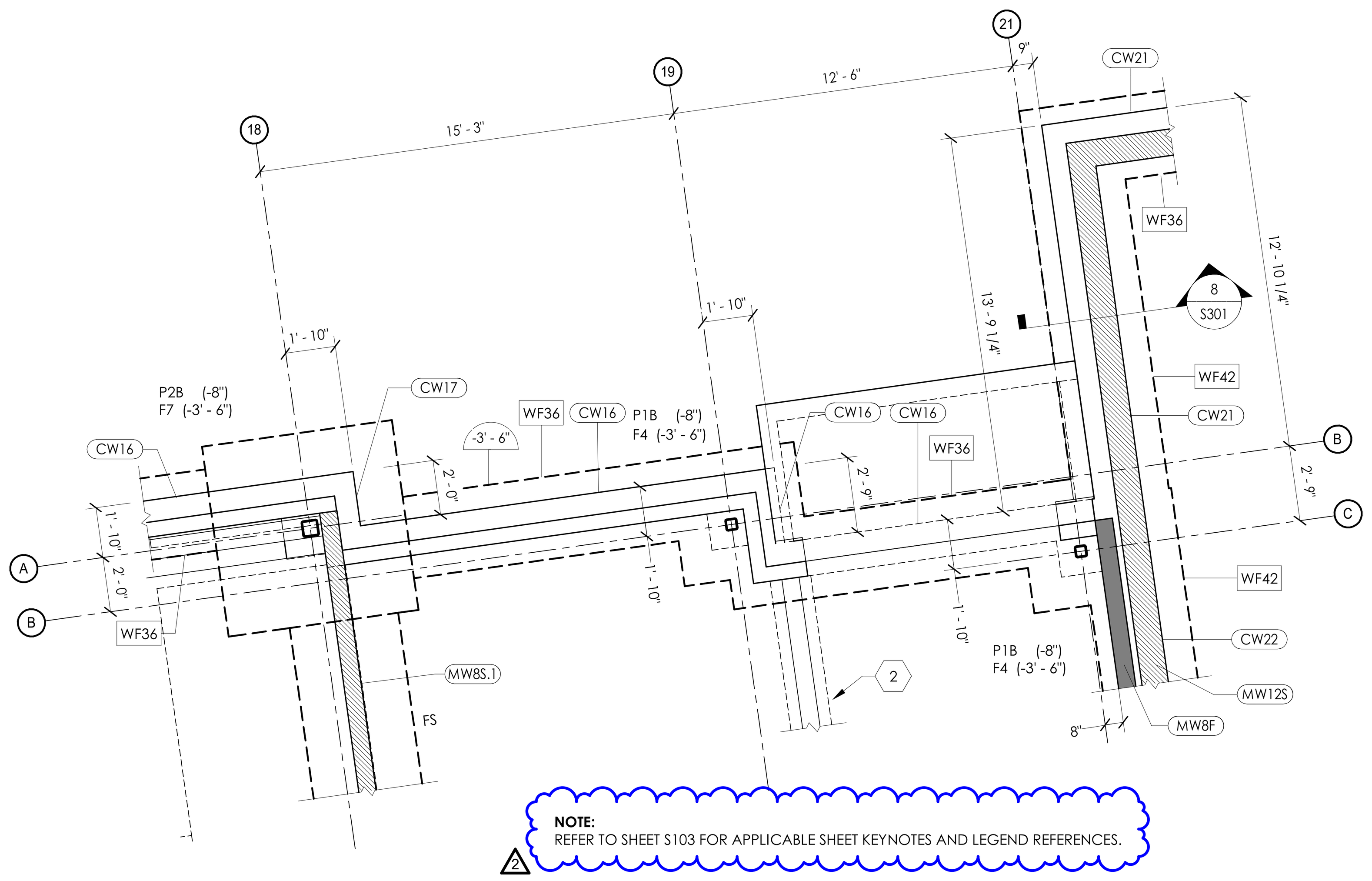
Sheet Title
HIGH ROOF FRAMING PLAN - AREA 3

Sheet No.
CTE S143

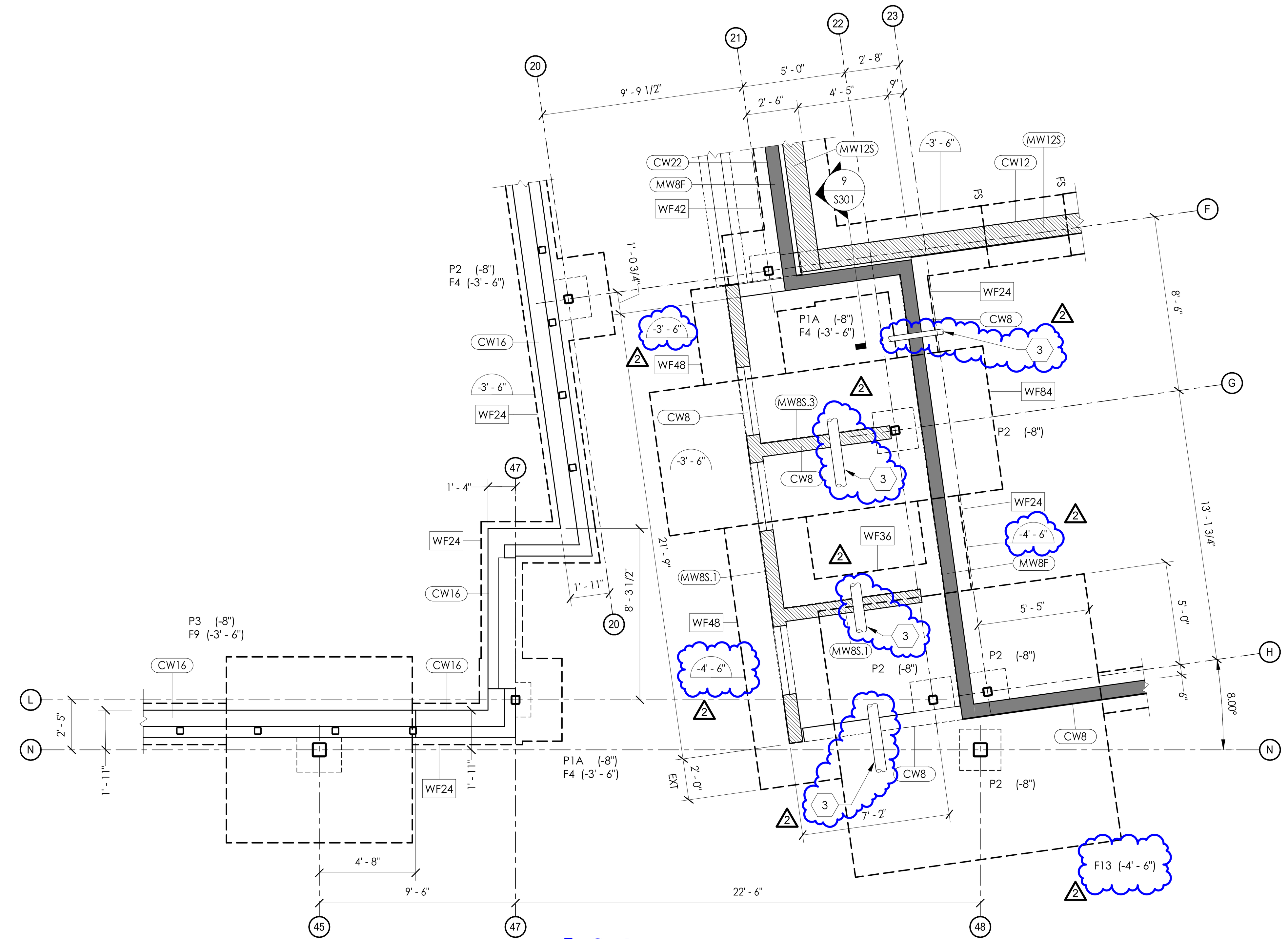
CONSTRUCTION DOCUMENTS



NOTE:
REFER TO SHEET S103 FOR APPLICABLE SHEET KEYNOTES AND LEGEND REFERENCES.

1 FOUNDATION PARTIAL PLAN

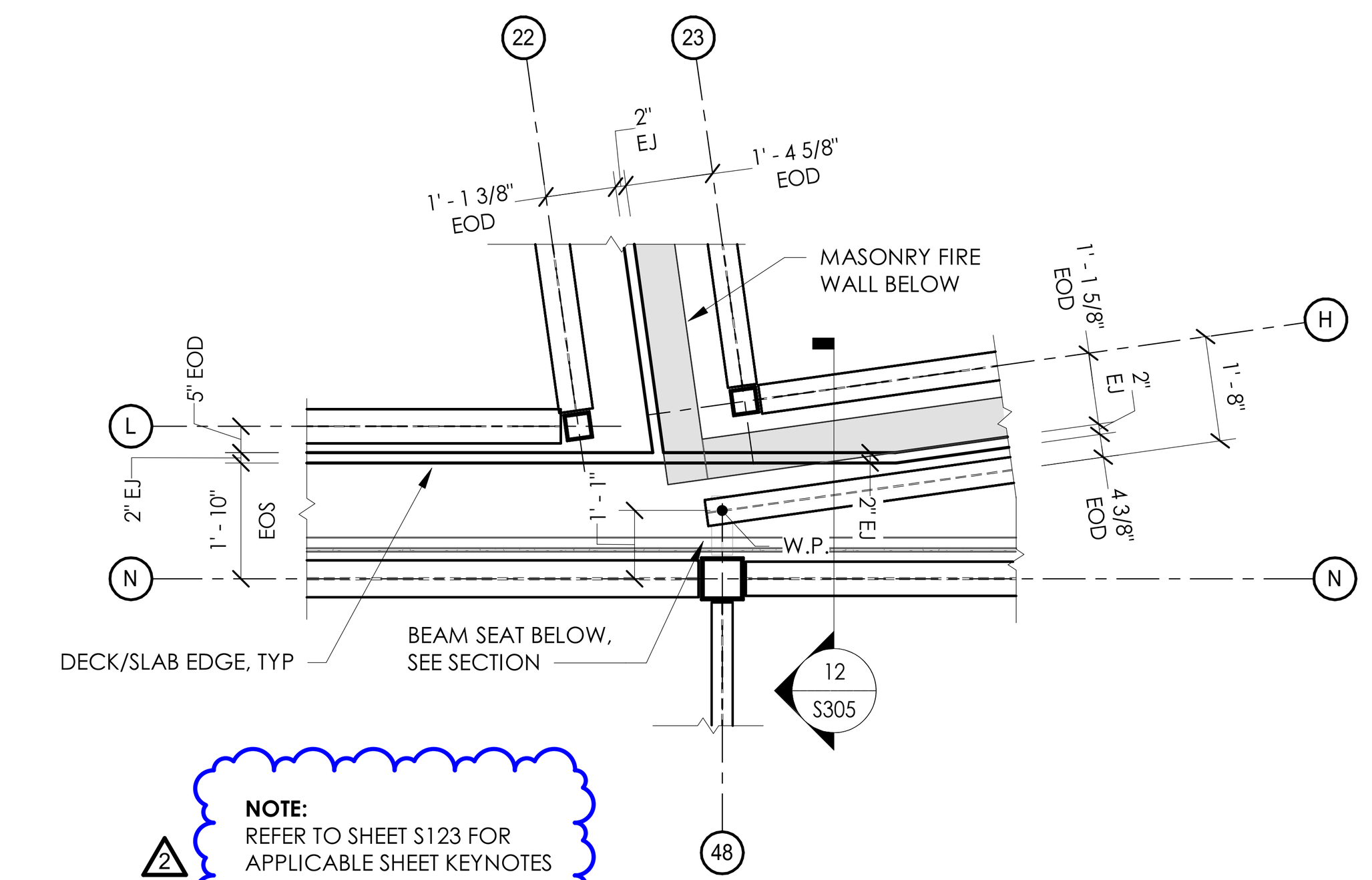
1/4" = 1'-0"



NOTE:
REFER TO SHEET S103 FOR APPLICABLE SHEET KEYNOTES AND LEGEND REFERENCES.

2 FOUNDATION PARTIAL PLAN

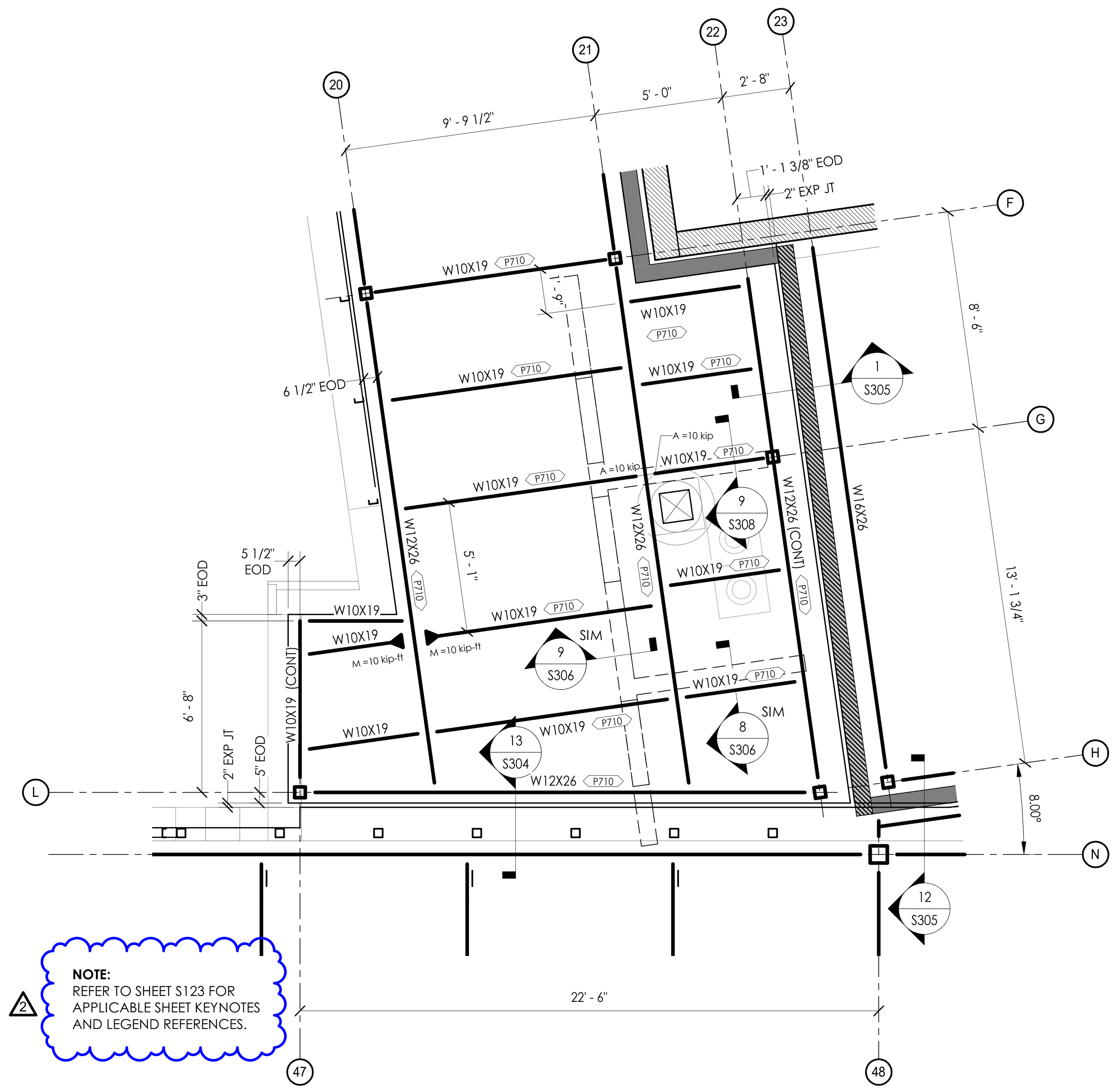
1/4" = 1'-0"



NOTE:
REFER TO SHEET S123 FOR APPLICABLE SHEET KEYNOTES AND LEGEND REFERENCES.

3 ENLARGED PARTIAL SECOND FLOOR FRAMING PLAN

3/8" = 1'-0"



NOTE:
REFER TO SHEET S123 FOR APPLICABLE SHEET KEYNOTES AND LEGEND REFERENCES.

4 SECOND FLOOR PARTIAL FRAMING PLAN

1/4" = 1'-0"

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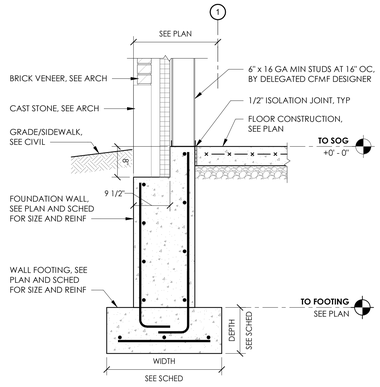
Sheet Title
PARTIAL PLANS AND DETAILS

Sheet No.
CTE S201

CONSTRUCTION DOCUMENTS



1 FOUNDATION SECTION

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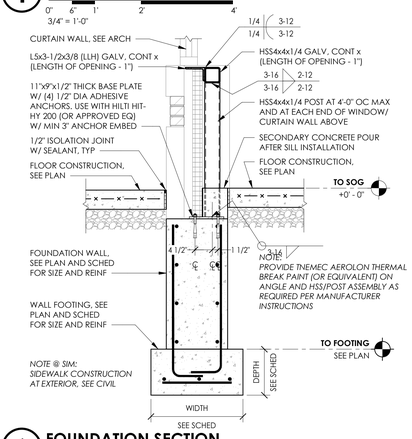
3/4" = 1'-0"



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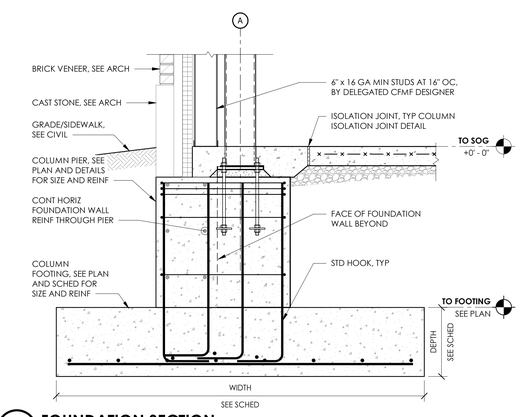

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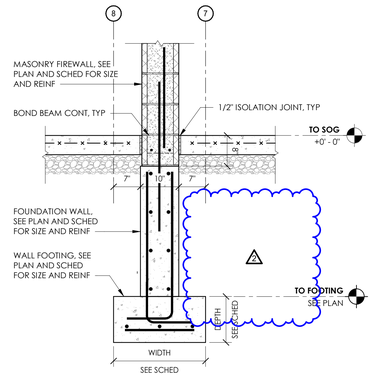
3/4" = 1'-0"



4 FOUNDATION SECTION

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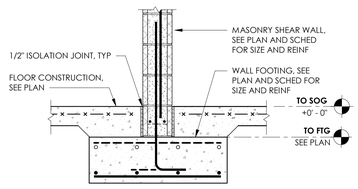
3/4" = 1'-0"



5 FOUNDATION SECTION

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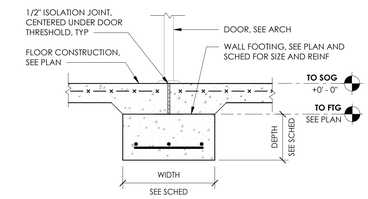
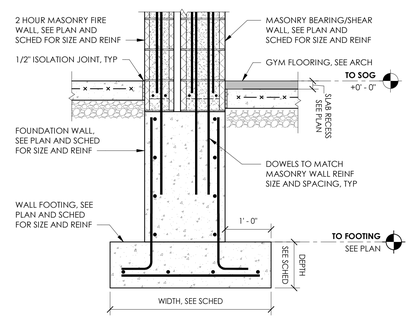
3/4" = 1'-0"





9 FOUNDATION SECTION

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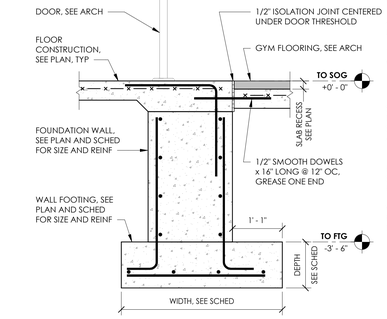
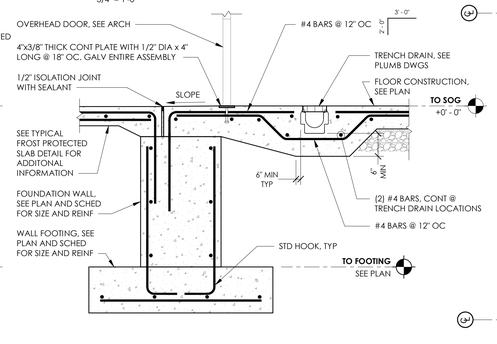
3/4" = 1'-0"



10 FOUNDATION SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



11 FOUNDATION SECTION

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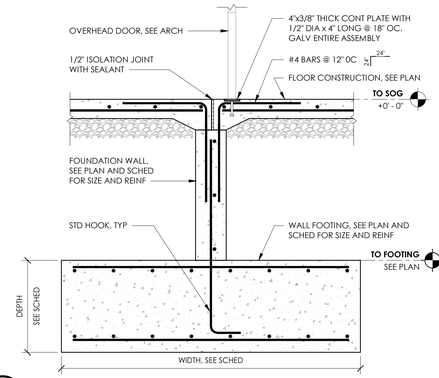
3/4" = 1'-0"



12 FOUNDATION SECTION

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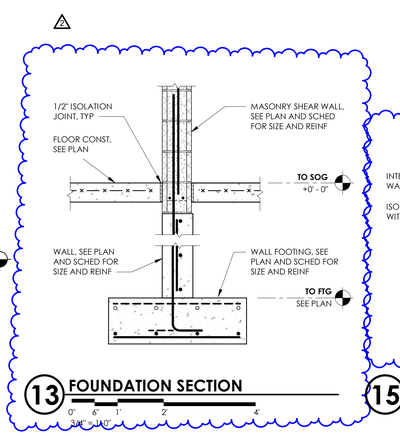
3/4" = 1'-0"



13 FOUNDATION SECTION

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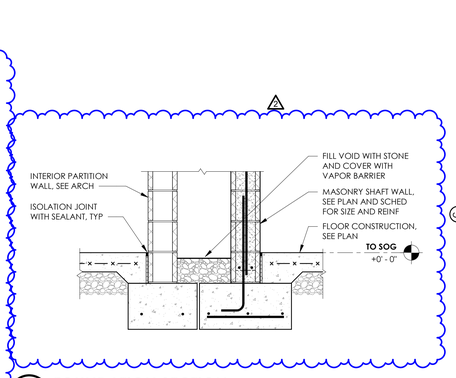
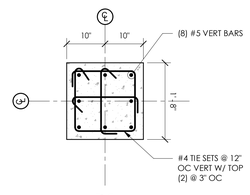
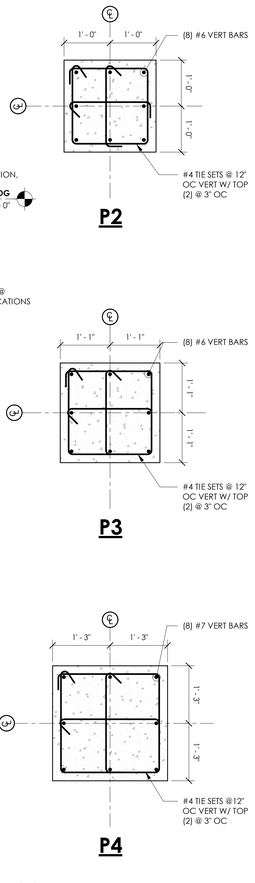
3/4" = 1'-0"

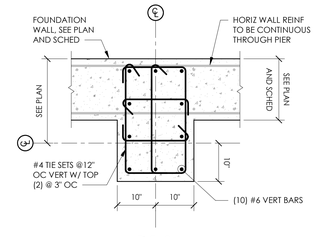


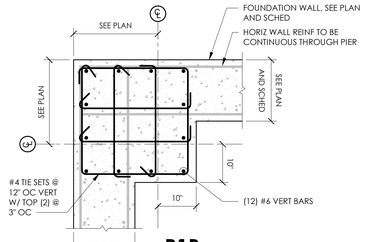
15 FOUNDATION SECTION

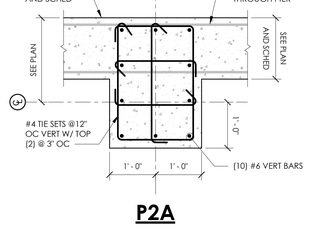
0" 6" 1' 2' 4'
3/4" = 1'-0"

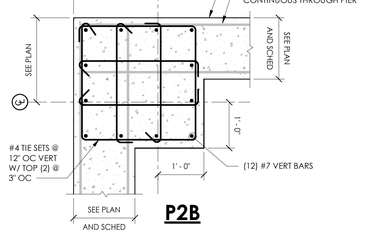


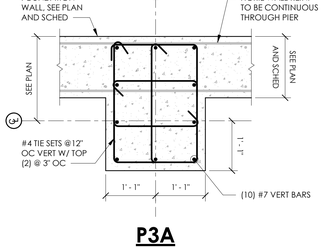


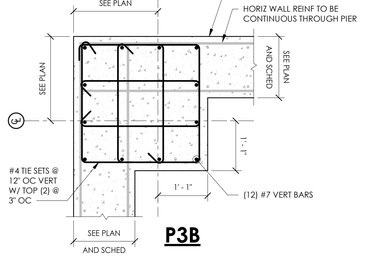


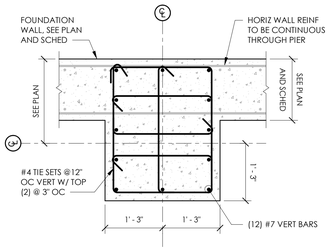


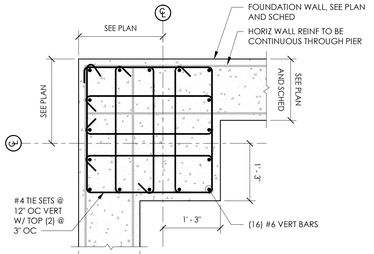












14 PIER AND PILASTER DETAILS

0" 6" 1' 2' 4'
3/4" = 1'-0"

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · 100938 · LICENSED PROFESSIONAL ENGINEER

No.	DATE	DESCRIPTION
2	1/5/2024	BID ADDENDUM #2

Drawn By:	JRV
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2302
Issued for Bid:	4/15/2024

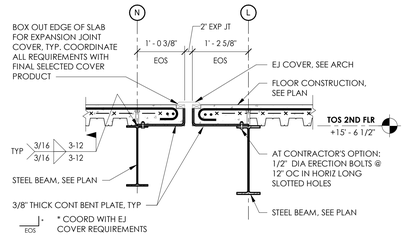
Sheet Title

FOUNDATION SECTIONS AND DETAILS

Sheet No.

CTE S301

CONSTRUCTION DOCUMENTS



1 FRAMING SECTION

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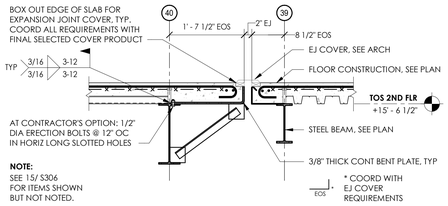
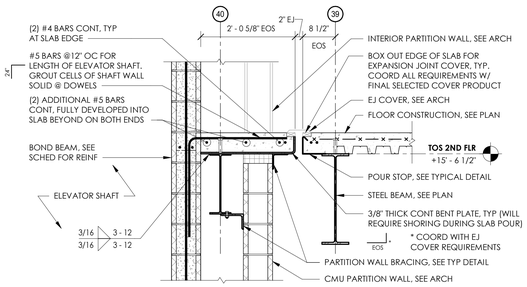
3/4" = 1'-0"



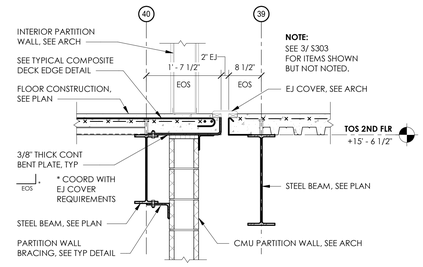
2 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



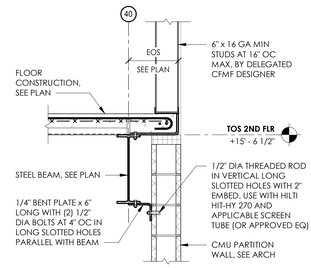
3 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



4 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



5 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

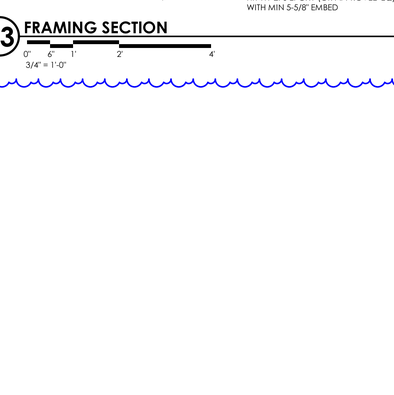
6 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

NOTES:
1. *DIMENSIONS WITH * ARE TO BE COORDINATED WITH ELEVATOR MANUFACTURER*
2. *ELEVATOR SYSTEM MAY NOT REQUIRE A SILL PLATE OR ANGLE. DETAIL IS TO BE COORDINATED WITH FINAL SELECTED ELEVATOR MANUFACTURER*

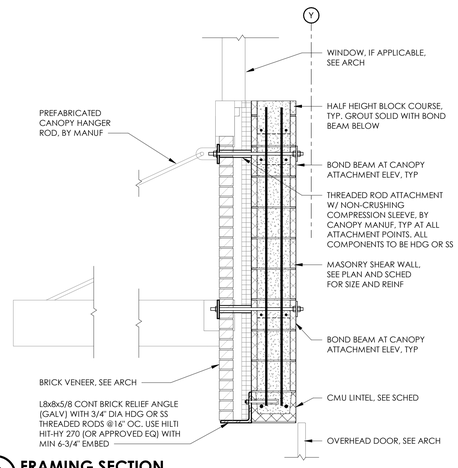
7 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



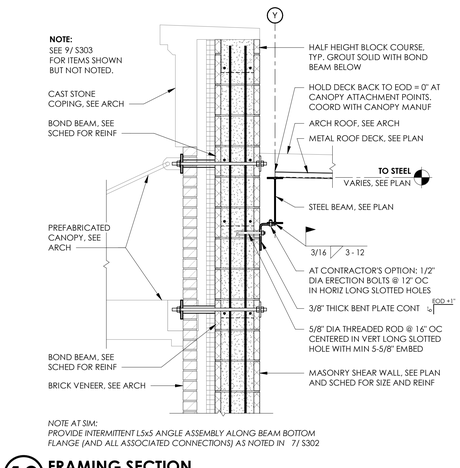
8 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



9 FRAMING SECTION

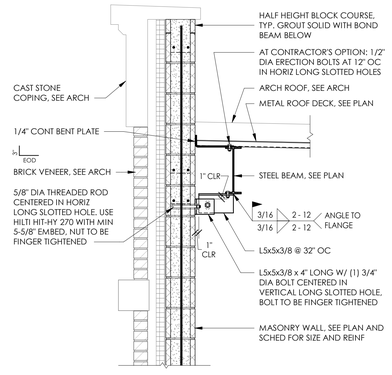
0" 6" 1' 2' 4'
3/4" = 1'-0"



NOTE AT SIM:
PROVIDE INTERMITTENT L5x5 ANGLE ASSEMBLY ALONG BEAM BOTTOM FLANGE (AND ALL ASSOCIATED CONNECTIONS) AS NOTED IN 7/ S302

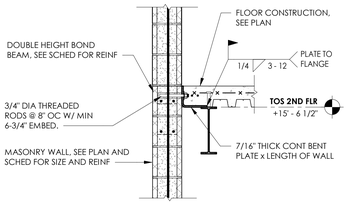
10 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



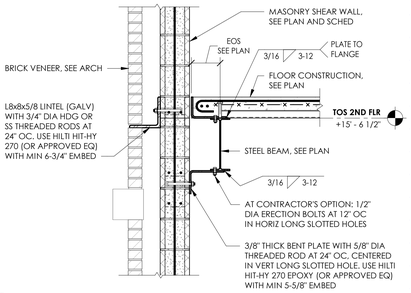
11 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



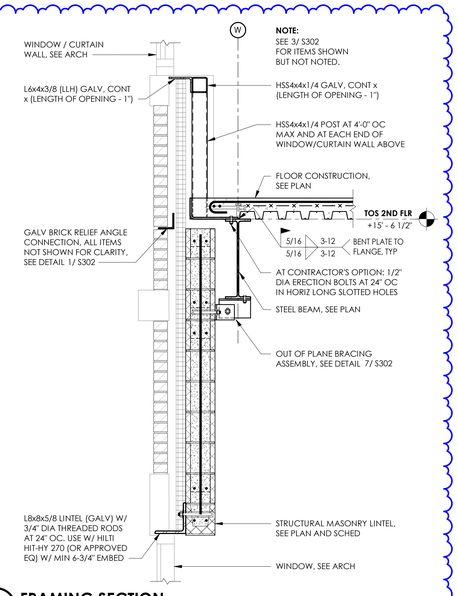
12 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



13 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



14 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

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NEW CTE BUILDING

Project Title

#	DATE	DESCRIPTION
2	5/1/2024	BID ADDENDUM #2

Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
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Issued for Bid:	4/15/2024

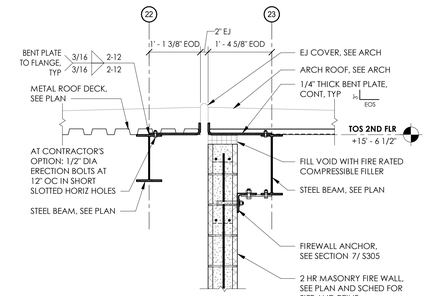
Sheet Title

FRAMING SECTIONS AND DETAILS

Sheet No.

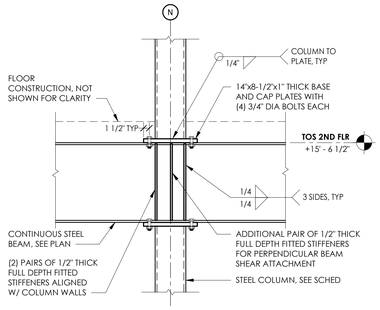
CTE S303

CONSTRUCTION DOCUMENTS



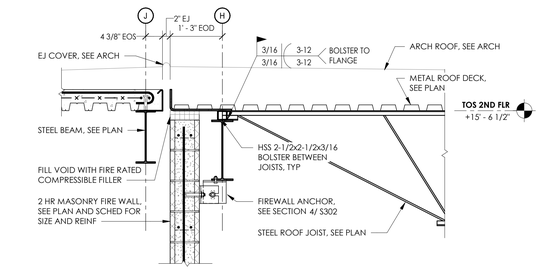
1 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



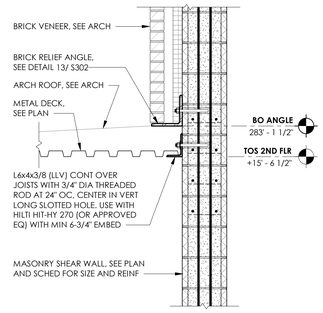
2 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



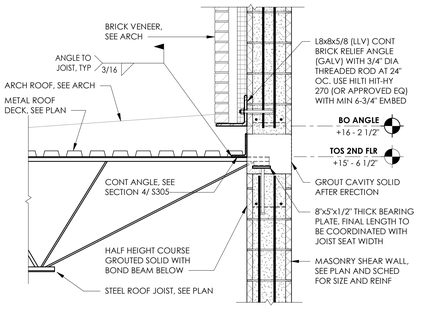
3 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



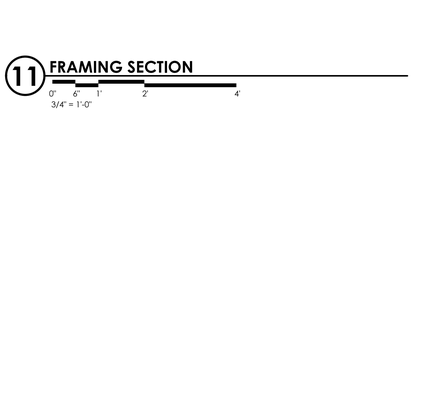
4 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



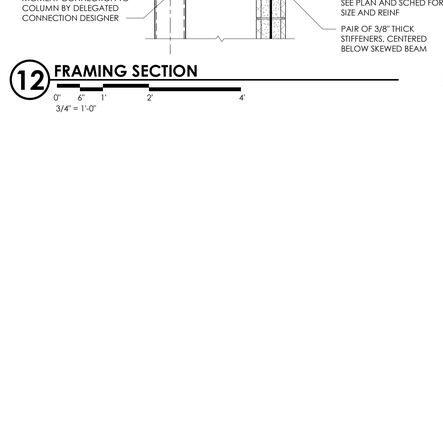
5 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



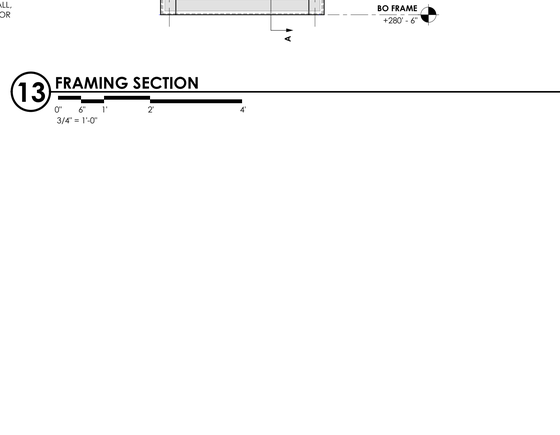
6 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



7 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



8 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

9 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

10 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

11 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

12 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

13 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

SECTION A-A

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · 100936 · LICENSED PROFESSIONAL ENGINEER

#	DATE	DESCRIPTION
2	5/1/2024	BID ADDENDUM #2

Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

Sheet Title

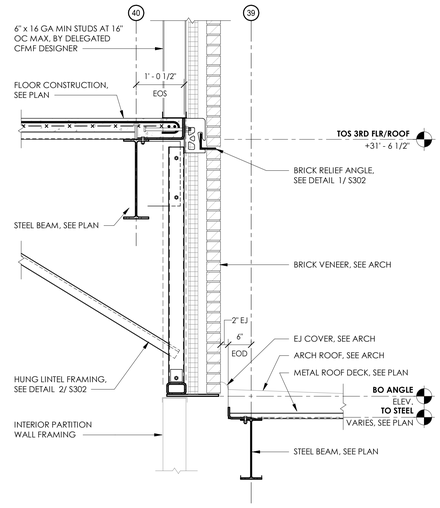
FRAMING SECTIONS AND DETAILS

Sheet No.

CTE S305

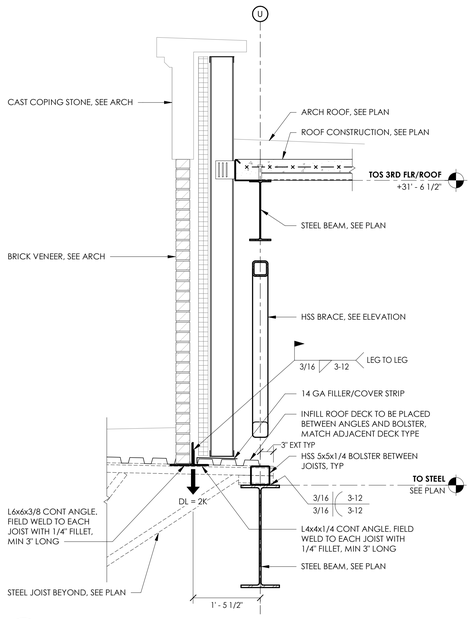
CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/NECSD CTE - Struct.rvt



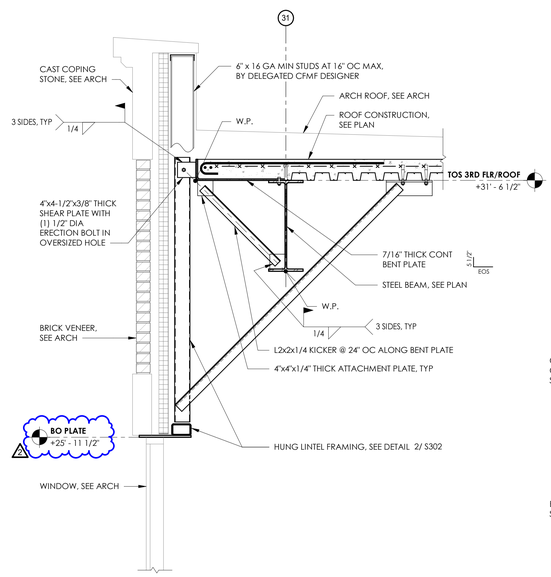
1 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



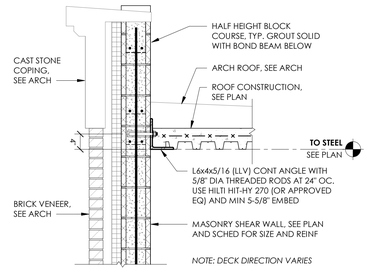
2 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



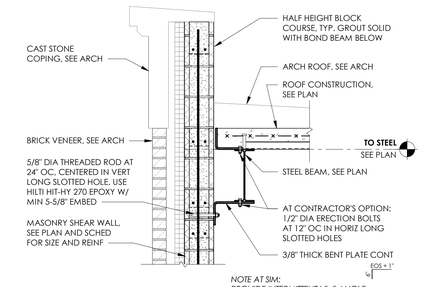
3 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



4 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



5 FRAMING SECTION

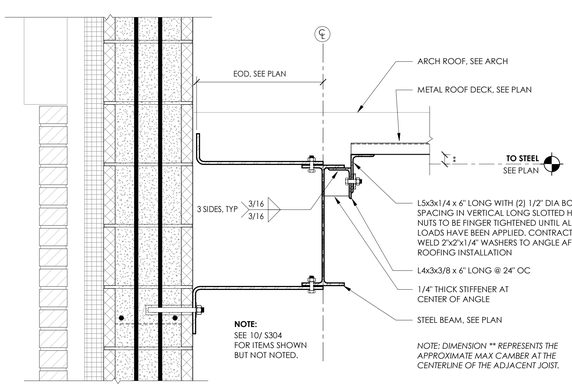
0" 6" 1' 2' 4'
3/4" = 1'-0"

6 FRAMING SECTION

0" 3" 6" 1' 2'
1 1/2" = 1'-0"

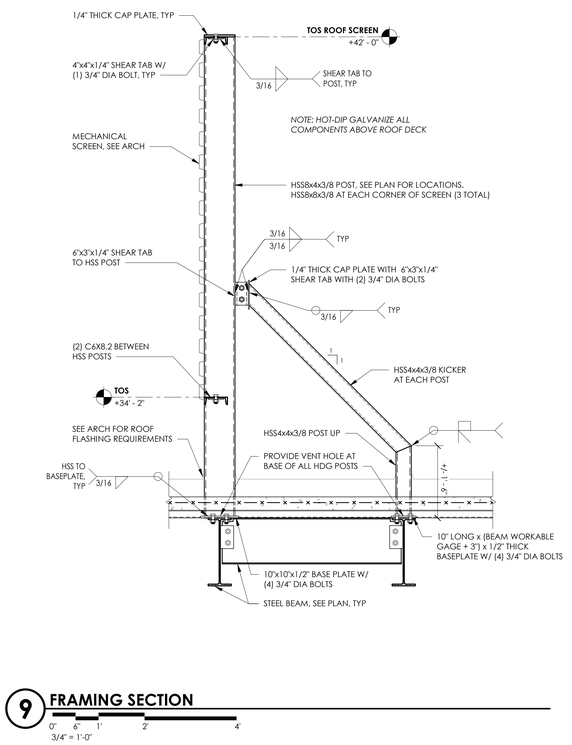
7 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



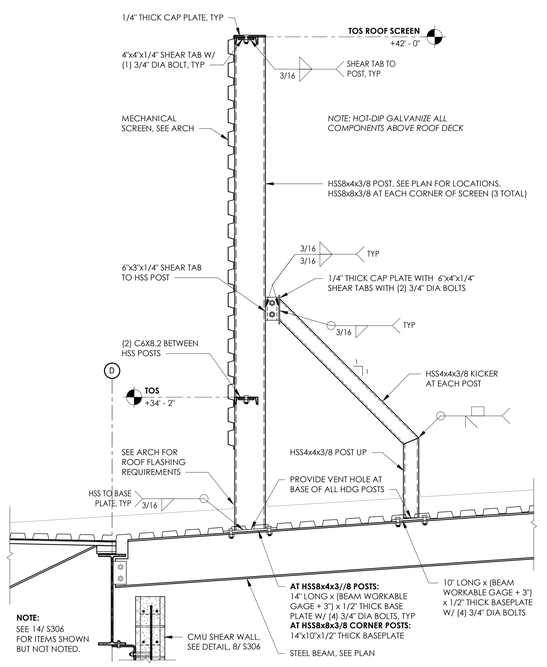
8 FRAMING SECTION

0" 3" 6" 1' 2'
1 1/2" = 1'-0"



9 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



10 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

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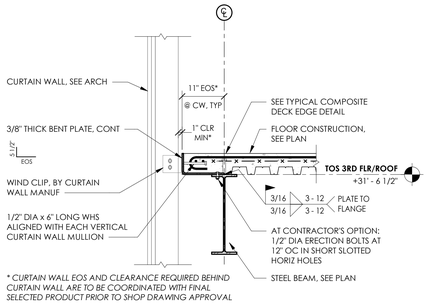
#	DATE	DESCRIPTION
2	5/1/2024	BID ADDENDUM #2

Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2302
Issued for Bid:	4/15/2024

Sheet Title
FRAMING SECTIONS AND DETAILS

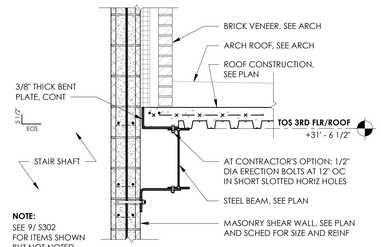
Sheet No.
CTE S307

CONSTRUCTION DOCUMENTS



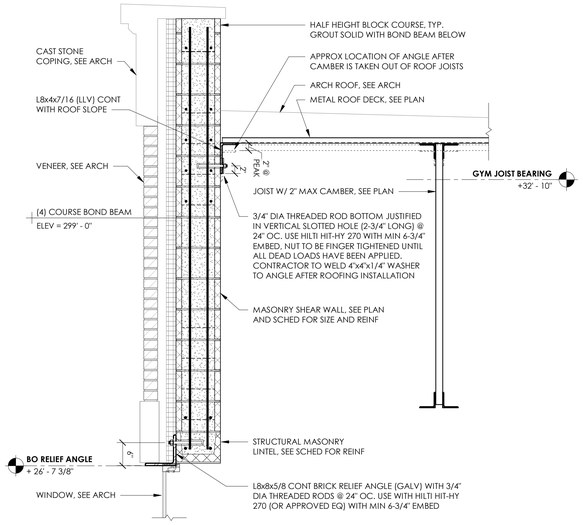
1 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



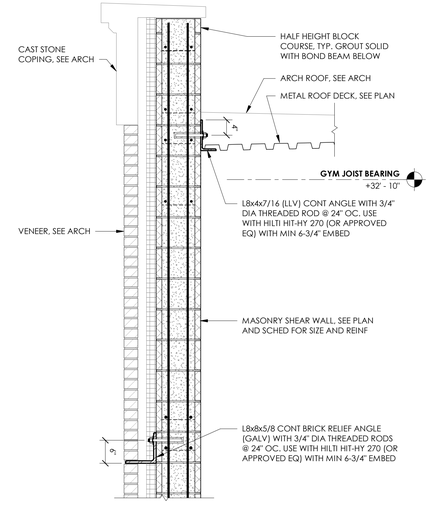
2 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



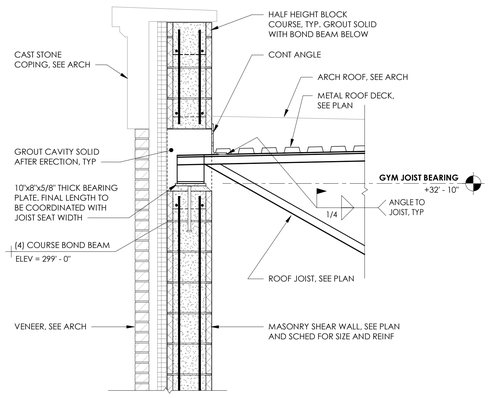
3 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



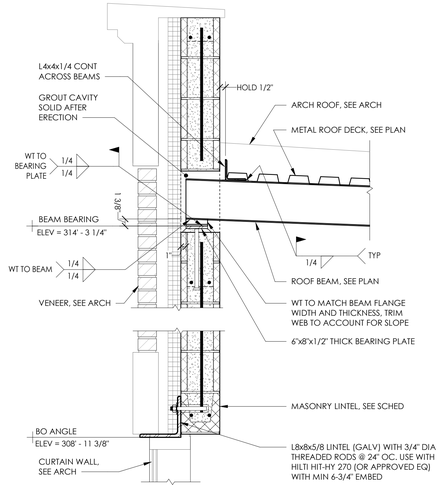
4 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



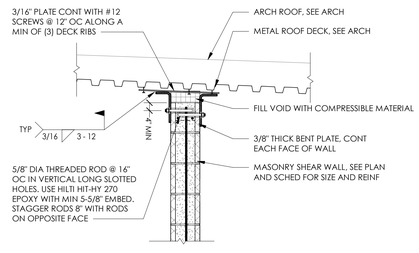
5 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



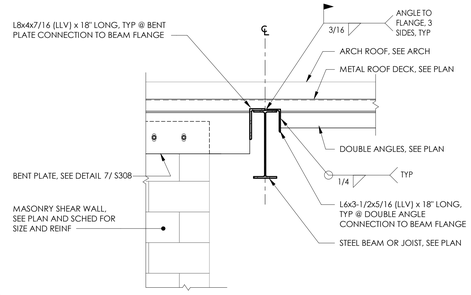
6 FRAMING SECTION

0" 3" 6" 1' 2'
1" = 1'-0"



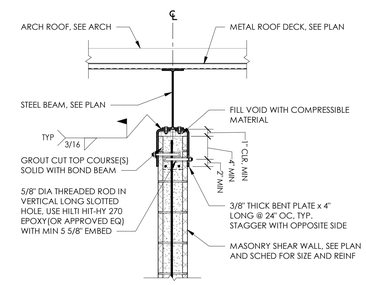
7 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



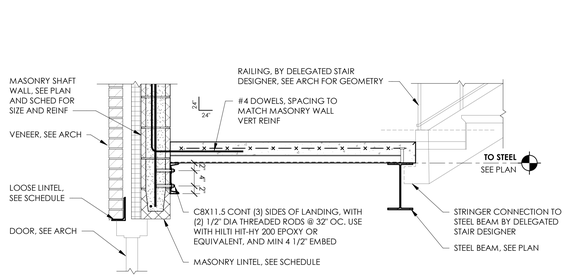
8 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



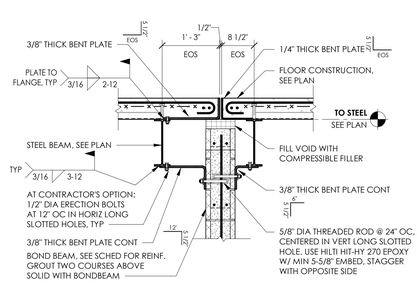
9 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



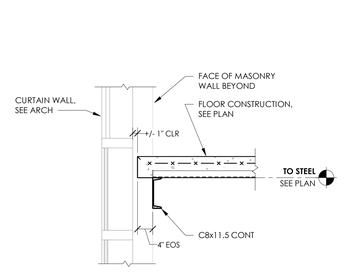
10 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



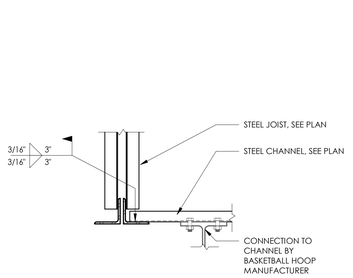
11 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



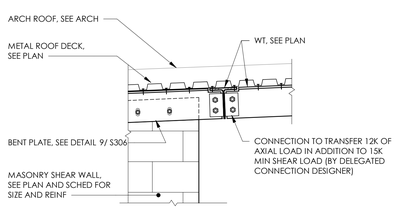
12 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



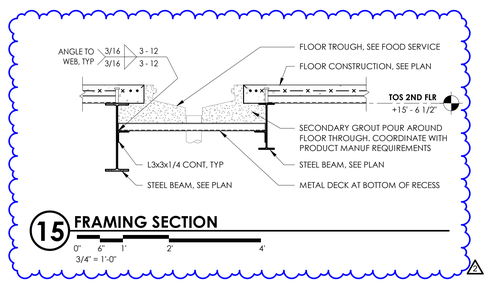
13 FRAMING SECTION

0" 3" 6" 1' 2'
1" = 1'-0"



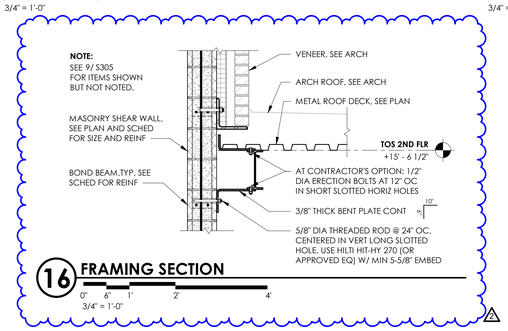
14 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



15 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"



16 FRAMING SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK PATRICK JAMES WILLIAMS LICENSED PROFESSIONAL ENGINEER 100938

No.	DATE	DESCRIPTION
2	5/1/2024	BID ADDENDUM #2

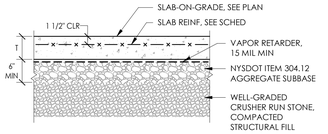
Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

Sheet Title
FRAMING SECTIONS AND DETAILS

Sheet No.
CTE S308

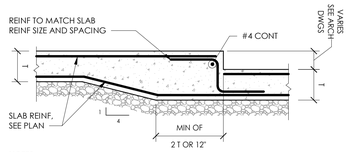
CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/NECSD CTE - Struct.rvt



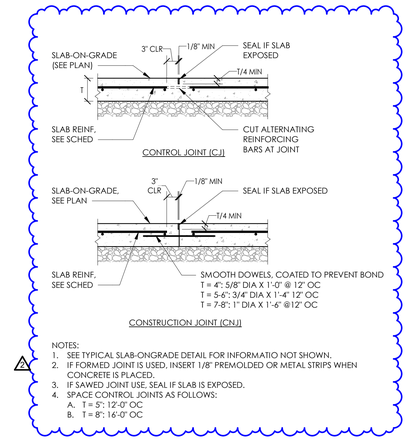
NOTES:
1. SEE SLAB-ON-GRADE SCHEDULE FOR SLAB THICKNESS, T.
2. PROVIDE CHAIRS TO SUPPORT SLAB REINFORCING AT SPECIFIED ELEVATION.
3. (E) FILL TYPE MATERIALS TO BE REMOVED WITHIN THE PROPOSED BUILDING FOOTPRINT AND AN ADDITIONAL HORIZONTAL DISTANCE OF 5'-0" BEYOND THE BUILDING FOOTPRINT. EXCAVATION TO BE BACKFILLED WITH COMPACTED STRUCTURAL FILL, AS SHOWN ABOVE.

1 SLAB-ON-GRADE
N.T.S.



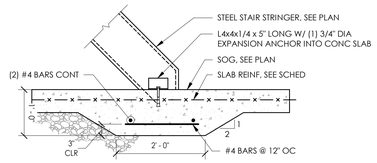
NOTES:
1. SEE ARCH DRAWINGS FOR LOCATION AND DEPTH OF SLAB DEPRESSION.
2. SEE TYPICAL STRUCTURAL SLAB DETAIL THIS SHEET, FOR SLAB DETAILS NOT SHOWN.
3. SEE STRUCTURAL SLAB SCHEDULE FOR SLAB THICKNESS.

2 SLAB ON GROUND DEPRESSION DETAIL
N.T.S.



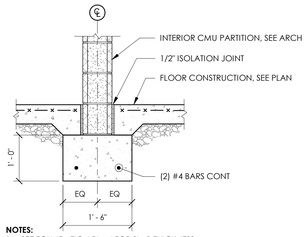
NOTES:
1. SEE TYPICAL SLAB-ONGRADE DETAIL FOR INFORMATIO NOT SHOWN.
2. IF FORMED JOINT IS USED, INSERT 1/8" PREMOLDED OR METAL STRIPS WHEN CONCRETE IS PLACED.
3. IF SAWED JOINT USE, SEAL IF SLAB IS EXPOSED.
4. SPACE CONTROL JOINTS AS FOLLOWS:
   A. T = 5": 12'-0" OC
   B. T = 8": 16'-0" OC

3 SOG CONTROL/CONSTRUCTION JOINT
N.T.S.



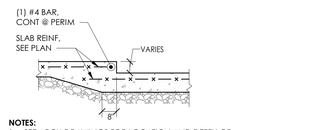
NOTE:
SEE TYPICAL SLAB-ON-GRADE DETAIL FOR INFORMATION NOT SHOWN.

4 THICKENED SLAB AT STEEL STAIR STRINGER
N.T.S.



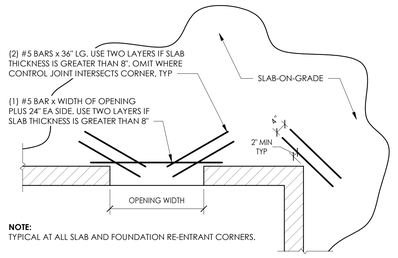
NOTES:
1. SEE FOUNDATION PLAN FOR SLAB THICKNESS.
2. PROVIDE CONTINUOUS FOOTING UNDER ALL INTERIOR CMU PARTITIONS EXCEEDING 8'-0" IN LENGTH.
3. SEE TYPICAL SLAB-ON-GRADE DETAIL, ON THIS SHEET, FOR SLAB DETAILS NOT SHOWN.

5 FOOTING DETAIL AT CMU PARTITION WALL
3/4" = 1'-0"



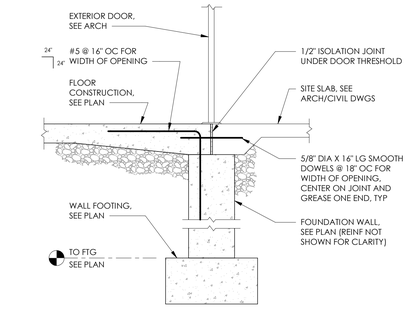
NOTES:
1. SEE ARCH DRAWINGS FOR LOCATION AND DEPTH OF SLAB DEPRESSION.
2. SEE TYPICAL SLAB-ON-GRADE DETAIL, ON THIS SHEET, FOR SLAB DETAILS NOT SHOWN.
3. SEE SLAB-ON-GRADE SCHEDULE FOR SLAB THICKNESS.

6 SLAB-ON-GRADE DEPRESSION
N.T.S.

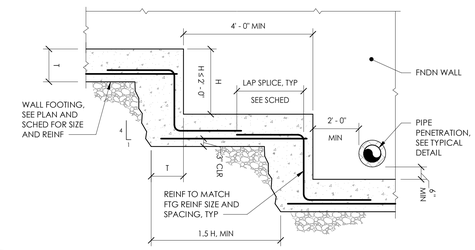


NOTE:
TYPICAL AT ALL SLAB AND FOUNDATION RE-ENTRANT CORNERS.

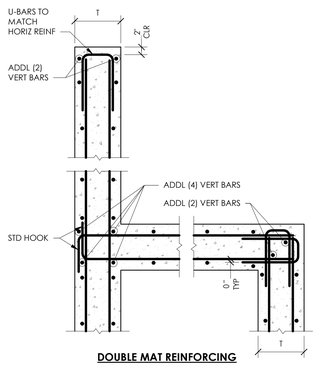
7 REENTRANT CORNER REINFORCEMENT
N.T.S.



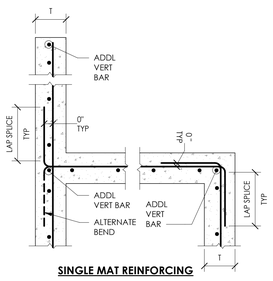
8 TYPICAL SLAB AT EXTERIOR DOOR
N.T.S.



9 TYPICAL WALL FOOTING STEP DETAIL
N.T.S.

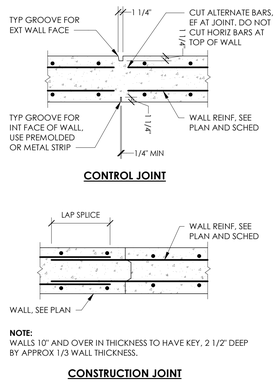


DOUBLE MAT REINFORCING



SINGLE MAT REINFORCING

10 TYPICAL CONCRETE WALL REINFORCING
N.T.S.

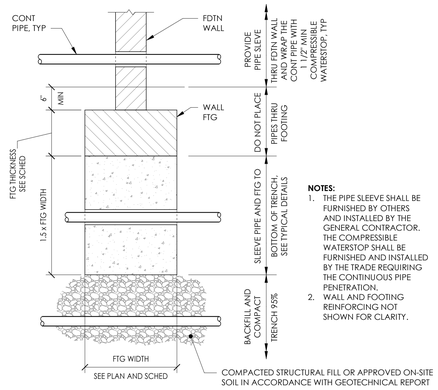


CONTROL JOINT

NOTE:
WALLS 10" AND OVER IN THICKNESS TO HAVE KEY, 2 1/2" DEEP BY APPROX 1/3 WALL THICKNESS.

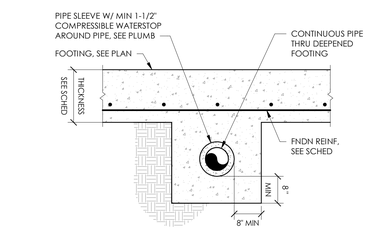
CONSTRUCTION JOINT

11 TYPICAL CONCRETE WALL JOINTS
N.T.S.



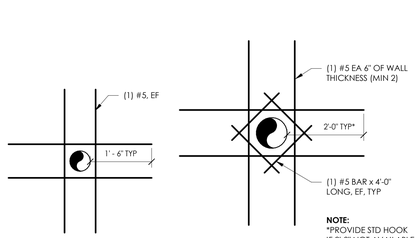
NOTES:
1. THE PIPE SLEEVE SHALL BE FURNISHED BY OTHERS AND INSTALLED BY THE GENERAL CONTRACTOR. THE COMPRESSIBLE WATERSTOP SHALL BE FURNISHED AND INSTALLED BY THE TRADE REQUIRING THE CONTINUOUS PIPE PENETRATION.
2. WALL AND FOOTING REINFORCING NOT SHOWN FOR CLARITY.

12 TYPICAL PIPES AT FOUNDATION
N.T.S.



NOTE:
THE PIPE SLEEVE SHALL BE FURNISHED BY OTHERS AND INSTALLED BY GENERAL CONTRACTOR. THE COMPRESSIBLE WATERSTOP SHALL BE FURNISHED AND INSTALLED BY THE TRADE REQUIRING THE CONTINUOUS PIPE PENETRATION.

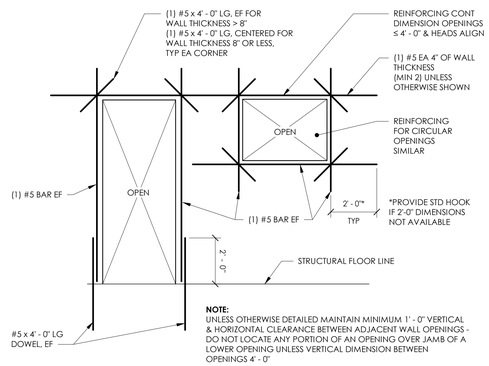
13 DEEPENED FOOTING AT PIPE
N.T.S.



NOTE:
*PROVIDE STD HOOK IF 2'-0" NOT AVAILABLE

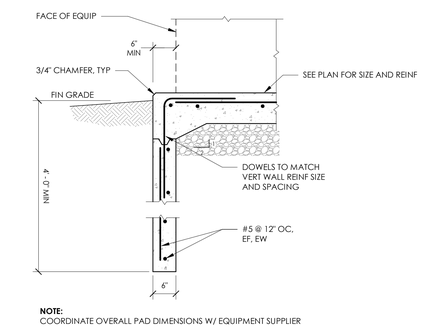
PIPES < 18" DIA **PIPES > 18" DIA**

14 PIPE OPENING IN CONCRETE WALL
N.T.S.



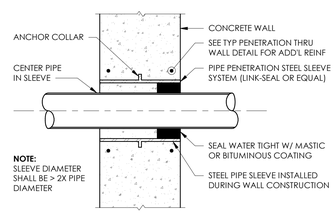
NOTE:
UNLESS OTHERWISE DETAILED MAINTAIN MINIMUM 1' - 0" VERTICAL & HORIZONTAL CLEARANCE BETWEEN ADJACENT WALL OPENINGS - DO NOT LOCATE ANY PORTION OF AN OPENING OVER JAMB OF A LOWER OPENING UNLESS VERTICAL DIMENSION BETWEEN OPENINGS 4' - 0"

16 REINF AT OPENING IN CONCRETE WALLS
3/4" = 1'-0"



NOTE:
COORDINATE OVERALL PAD DIMENSIONS W/ EQUIPMENT SUPPLIER

17 EXTERIOR EQUIPMENT PAD
N.T.S.



NOTE:
SLEEVE DIAMETER SHALL BE > 2X PIPE DIAMETER

15 PIPE SLEEVE BELOW GRADE
N.T.S.

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT NEW CTE

Project Title

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · 100936 · LICENSED PROFESSIONAL ENGINEER

2	1/3/2024	BID ADDENDUM #2
#:	DATE	DESCRIPTION

Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

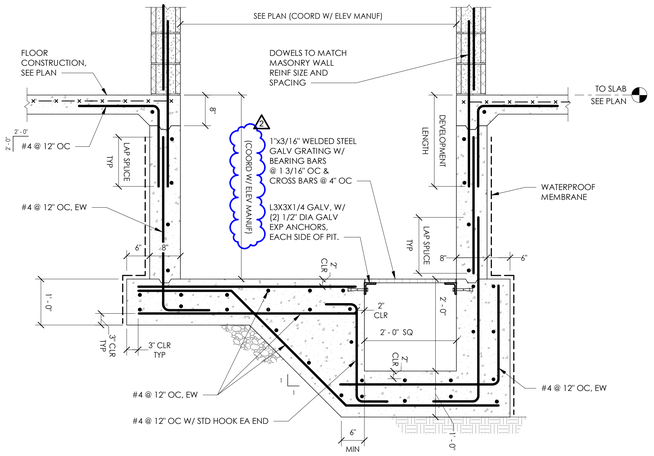
Sheet Title

TYPICAL CONCRETE DETAILS

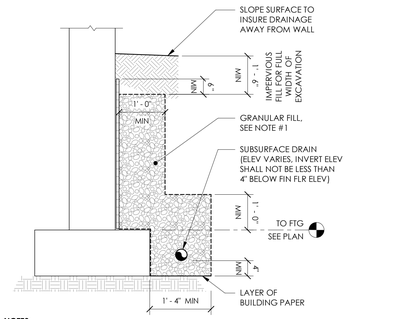
Sheet No.

CTE S501

CONSTRUCTION DOCUMENTS

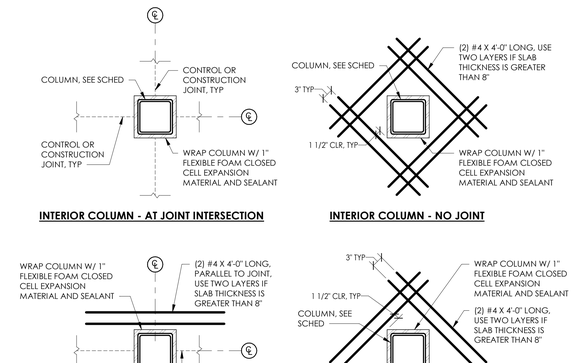


1 TYPICAL ELEVATOR PIT DETAIL
N.T.S.

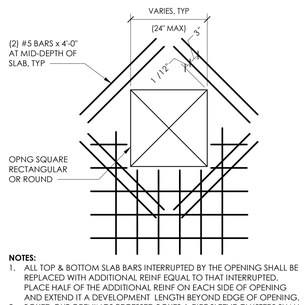


NOTES:
1. CONTRACTOR MAY SUBSTITUTE A PREFABRICATED DRAINAGE STRUCTURE FOR GRANULAR FILL & FILTER CLOTH. PREFABRICATED DRAINAGE STRUCTURE SHALL BE PLACED AGAINST THE WALL AND AROUND SUBSURFACE DRAIN IN ACCORDANCE WITH THE MANUF RECOMMENDED. THE FOLLOWING PREFABRICATED DRAINAGE STRUCTURES ARE ACCEPTABLE:
   A. MIRADRAIN 6200
   B. AMER DRAIN 500
   C. HYDRODUCT 200
2. SEE TYPICAL SLAB-ON-GRADE DETAIL THIS SHEET FOR SLAB DETAILS NOT SHOWN.

2 FOUNDATION DRAIN
N.T.S.



3 COLUMN ISOLATION WRAP (TYPE B)
N.T.S.



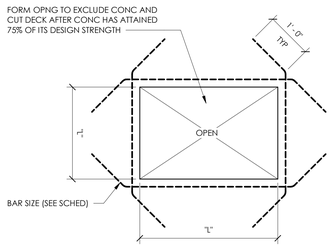
NOTES:
1. ALL TOP & BOTTOM SLAB BARS INTERRUPTED BY THE OPENING SHALL BE REPLACED WITH ADDITIONAL REINF EQUAL TO THAT INTERRUPTED. PLACE HALF OF THE ADDITIONAL REINF ON EACH SIDE OF OPENING AND EXTEND IT A DEVELOPMENT LENGTH BEYOND EDGE OF OPENING.
2. BOXED OUT OPENINGS RECESSED BOXES & PIPE SLEEVE CLUSTERS SHALL BE TREATED AS FOR SLAB OPENINGS.

4 REINFORCEMENT AT OPENING IN SLAB
N.T.S.

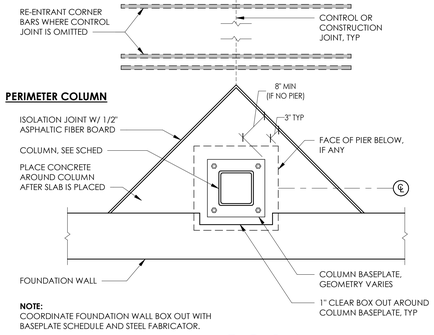
SUPPLEMENTAL REINFORCING SCHEDULE

"L"	REINFORCEMNT
TO 10"	NO ADDITIONAL REINFORCEMENT REQUIRED
10" TO 16"	(1) #4
16" TO 24"	(1) #5
24" TO 30"	(2) #5
OVER 30"	REQUIRES STRUCTURAL STEEL FRAME

"L" IS MEASURED AT RIGHT ANGLE TO FLOOR DECK SPAN. GREATER "L" DIMENSION CONTROLS.

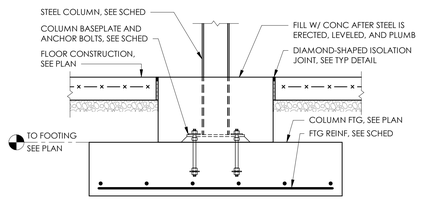


5 FLOOR OPENING AND SCHEDULE
N.T.S.

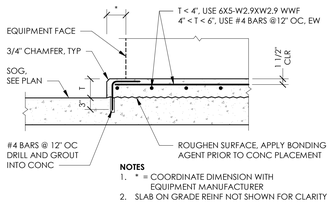


NOTE:
COORDINATE FOUNDATION WALL BOX OUT WITH BASEPLATE SCHEDULE AND STEEL FABRICATOR.

6 COLUMN ISOLATION JOINT (TYPE A)
N.T.S.

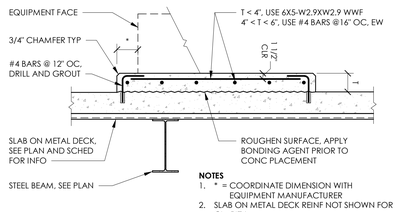


7 INTERIOR COLUMN FOOTING
N.T.S.



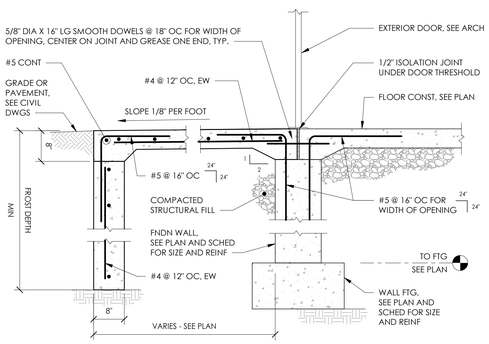
NOTES
1. * = COORDINATE DIMENSION WITH EQUIPMENT MANUFACTURER
2. SLAB ON GRADE REINF NOT SHOWN FOR CLARITY

8 EQUIPMENT PAD AT SLAB ON GRADE
N.T.S.



NOTES
1. * = COORDINATE DIMENSION WITH EQUIPMENT MANUFACTURER
2. SLAB ON METAL DECK REINF NOT SHOWN FOR CLARITY

9 EQUIPMENT PAD ON ELEVATED FLOOR
N.T.S.



10 FROST PROTECT SLABS AT EXTERIOR DOORWAYS
N.T.S.

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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

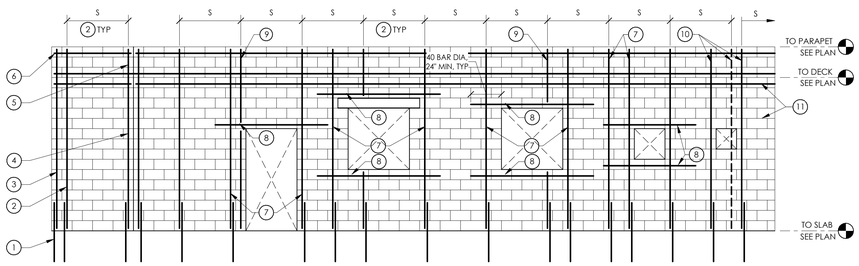
No.	DATE	DESCRIPTION
2	5/3/2024	BID ADDENDUM #2

Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

Sheet Title
TYPICAL CONCRETE DETAILS

Sheet No.
CTE S502

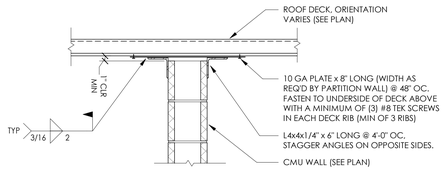
CONSTRUCTION DOCUMENTS



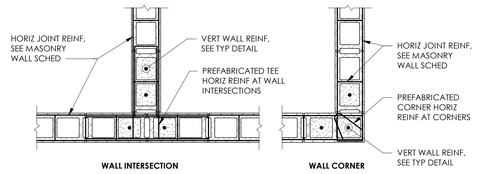
NOTES	
MARK	DESCRIPTION
1	DOWELS TO MATCH SIZE AND SPACING OF WALL REINFORCEMENT.
2	TYPICAL REINFORCEMENT, SEE SECTIONS FOR SIZE AND SPACING, S.
3	PROVIDE REINFORCEMENT AT WALL CORNER AND WITHIN 8" OF END OF WALL.
4	PROVIDE REINFORCEMENT WITHIN 8" OF EACH SIDE OF CONTROL/MOVEMENT JOINT.
5	PROVIDE CONTINUOUS REINFORCEMENT AT STRUCTURALLY CONNECTED ROOF AND FLOOR LEVELS.
6	PROVIDE REINFORCEMENT WITHIN 16 INCHES OF THE TOP OF WALL, DISCONTINUE AT CONTROL/MOVEMENT JOINT.
7	PROVIDE REINFORCEMENT WITHIN 16 INCHES OF EACH SIDE OF OPENING.
8	PROVIDE REINFORCEMENT AT TOP AND BOTTOM OF OPENINGS.
9	TYPICAL REINFORCEMENT INTERRUPTED BY OPENING.
10	PROVIDE REINFORCEMENT WITHIN 4 INCHES OF EACH SIDE OF OPENING IF TYPICAL REINFORCEMENT IS INTERRUPTED BY OPENING. OTHERWISE REINFORCEMENT IS NOT REQUIRED.
11	PROVIDE W1.7 (9 GAGE) JOINT REINFORCEMENT (LADDER TYPE) AT 16 INCHES ON CENTER OR #4 BAR AT 10 FEET ON CENTER.

1 MASONRY SHEAR WALL OPENING REINFORCEMENT LAYOUT

N.T.S.



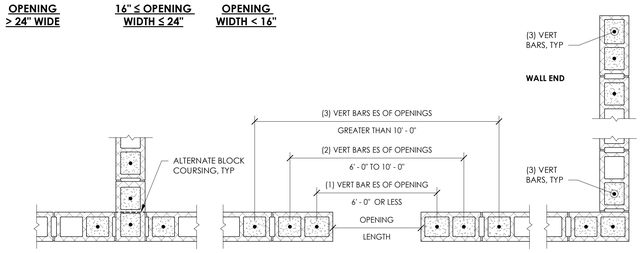
NOTES:
1. THIS DETAIL IS TO BE USED WHERE THERE IS NO BEAM OR JOIST WITHIN 6" OF THE FACE OF THE WALL. SEE TYPICAL PARTITION WALL BRACING DETAIL FOR OTHER CONDITIONS.
2. PROVIDE COMPRESSIBLE FILLER BETWEEN TOP OF WALL AND UNDERSIDE OF DECK (IN 1" VOID SPACE)



NOTE: PROVIDE 6" MIN OVERLAP BETWEEN SHEETS OF HORIZ JOINT REINF, TYP

2 CMU HORIZONTAL REINFORCING DETAIL

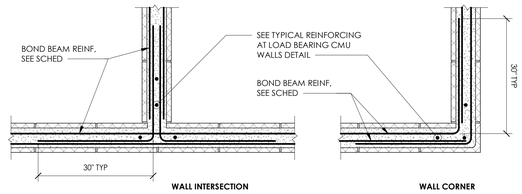
N.T.S.



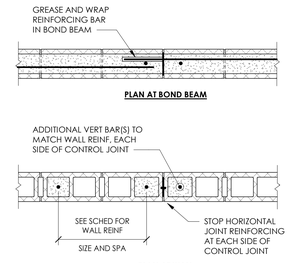
NOTES:
1. BALANCE OF VERTICAL REINFORCING NOT SHOWN FOR CLARITY.
2. ADDITIONAL VERTICAL BARS TO MATCH WALL REINFORCEMENT, SEE SCHEDULE. RUN REINFORCING FULL HEIGHT OF WALL AND DOWEL INTO FOUNDATION. ADDITIONAL BARS SHALL BE LOCATED WITHIN 8" OF CORNER OR WALL END.

4 REINFORCING AT STRUCTURAL CMU WALLS

N.T.S.

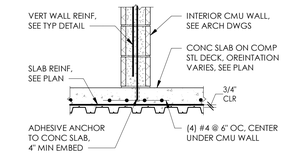


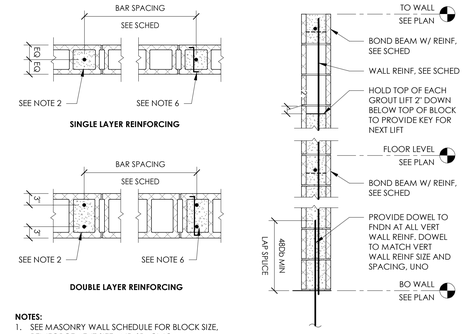
NOTES:
1. BALANCE OF VERTICAL WALL REINFORCING NOT SHOWN FOR CLARITY. SEE MASONRY WALL SCHEDULE FOR SIZE AND SPACING.
2. USE PREFABRICATED CORNER AND INTERSECTION BOND BEAM UNITS OR REMOVE FACESHELL TO ACCOMMODATE REINFORCEMENT BARS AND GROUT.
3. WALL INTERSECTION DETAIL IS SIM FOR INTERSECTION WITH WALL ON BOTH SIDES.



5 REINFORCING AT CONTROL JOINT

N.T.S.





NOTES:
1. SEE MASONRY WALL SCHEDULE FOR BLOCK SIZE, REINFORCEMENT SIZE AND SPACING.
2. GROUT REINFORCING SOLID IN BLOCK CORES.
3. PROVIDE ADDITIONAL HORIZONTAL JOINT REINFORCEMENT ON E COURSE ABOVE AND BELOW OPENINGS EXTENDING A MINIMUM OF 2' - 0" BEYOND FACE OF OPENING ON EACH SIDE.
4. PROVIDE BOND BEAMS AT SPACING NOTED IN MASONRY WALL SCHEDULE, AT STRUCTURALLY CONNECTED ROOF AND FLOOR LEVELS, AND WITHIN 16" OF THE TOP OF WALLS.
5. RUN BOND BEAMS WITH REINFORCEMENT THROUGH CONTROL JOINTS. SEE TYPICAL CONTROL JOINT DETAIL.
6. PROVIDE HECKMAN NO. 374 STEEL-WICH REBAR POSITIONERS, OR APPROVED EQUAL, AT 8" MAX ABOVE TOP OF GROUT LIFT.
7. COORDINATE ADDITIONAL GROUT AND REINFORCEMENT REQUIREMENTS WITH SPECIFICATIONS.

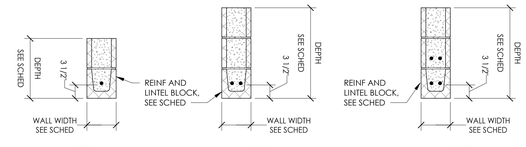
3 CMU VERTICAL REINFORCING

N.T.S.

STRUCTURAL MASONRY LINTEL SCHEDULE

MARK	MASONRY DIMENSIONS		REINFORCEMENT	LAYOUT TYPE	COMMENTS
	WALL WIDTH	DEPTH			
L1.0	8"	16"	(1) #5	TYPE A	
L1.1	10"	16"	(1) #5	TYPE A	
L1.2	1' - 0"	16"	(1) #5	TYPE A	
L2.0	8"	24"	(2) #5	TYPE B	
L2.2	1' - 0"	24"	(2) #5	TYPE B	
L3.0	8"	24"	(4) #5	TYPE C	
L3.2	1' - 0"	24"	(4) #5	TYPE C	
L4.0	8"	32"	(1) #5	TYPE A	
L4.1	8"	32"	(4) #5	TYPE C	
L5.0	1' - 0"	32"	(4) #6	TYPE C	

NOTES:
1. THIS SCHEDULE IS FOR OPENINGS IN STRUCTURAL MASONRY WALLS. SEE PLANS AND SECTIONS FOR MARKED LOCATIONS.
2. FOR WALLS NOT SHOWN ON STRUCTURAL DRAWINGS USE NON-STRUCTURAL LINTEL SCHEDULES.
3. LINTELS SHALL BE SHORED AND GROUTED. THE SHORING SHALL REMAIN IN PLACE FOR 14 DAYS, OR UNTIL THE GROUT HAS ATTAINED IT'S FULL COMPRESSIVE STRENGTH, WHICHEVER IS LONGER.
4. EXTEND GROUTED LINTEL A MINIMUM OF 2' - 0" BUT NO LESS THAN 40 BAR DIAMETERS BEYOND EACH SIDE OF OPENING. EXTEND REINFORCEMENT THROUGH CONTROL JOINTS OR AROUND CORNERS AS REQUIRED. SEE TYPICAL MASONRY OPENING DETAILS.
5. USE ONLY LINTEL BLOCKS FOR BOTTOM COURSE OF LINTEL BEAMS, UNLESS NOTED OTHERWISE.
6. CONTACT ENGINEER OF RECORD FOR OPENING SIZES LARGER THAN SHOWN IN SCHEDULE.



LOOSE LINTEL SCHEDULE

(NON-LOADBEARING MASONRY PARTITIONS OR BRICK VENEER ONLY)					
MAXIMUM MASONRY OPENING	MASONRY WALL THICKNESS				
	4 INCH WALLS	6 INCH WALLS	8 INCH WALLS	10 INCH WALLS	12 INCH WALLS
4' - 0"	(1) L4 x 4 x 1/4	(2) L3 x 2-1/2 x 1/4	(2) L4 x 3-1/2 x 1/4	L5x5x5/16 + L4x3-1/2x1/4	(3) L4 x 3-1/2 x 1/4
6' - 0"	(1) L4 x 4 x 1/4	(2) L3-1/2 x 2-1/2 x 1/4	(2) L5 x 3-1/2 x 1/4	L5x5x5/16 + L5x3-1/2x1/4	(3) L4 x 3-1/2 x 1/4
8' - 0"	(1) L6 x 4 x 3/8	(2) L3-1/2 x 2-1/2 x 1/4	(2) L6 x 3-1/2 x 5/16	L5x5x5/16 + L5x3-1/2x5/16	(3) L4 x 3-1/2 x 1/4
10' - 0"	(1) L7 x 4 x 3/8	-	(2) L6 x 3-1/2 x 3/8	-	-

NOTES:
1. INTERIOR LINTELS ARE NOT SHOWN ON STRUCTURAL PLANS.
2. ALL EXTERIOR LOOSE LINTELS TO BE HOT DIPPED GALVANIZED.
3. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS.
4. ALL HORIZONTAL LINTEL ELEMENTS SUPPORTING EXTERIOR WYTHES OF MASONRY SHALL BE HOT DIPPED GALVANIZED.
5. FOR OPENINGS OVER 8' - 0" CONSULT STRUCTURAL ENGINEER.
6. ALL ANGLES SCHEDULED ABOVE SHALL BE ORIENTATED WITH LONG LEGS VERTICAL, UNO.
7. TACK WELD BACK-TO-BACK VERTICAL LEGS OF MULTIPLE ANGLE LINTELS.
8. LOOSE LINTELS UP TO 4' - 0" TO HAVE A 4" MINIMUM BEARING, UP TO 8' - 0" TO HAVE 6" MINIMUM BEARING.
9. STEEL LINTELS SHALL NOT BE USED IN MASONRY FIREWALLS. ONLY CMU LINTELS ARE ACCEPTABLE. AT MASONRY OPENING NOT SHOWN ON STRUCTURAL DRAWINGS, CONSULT ARCHITECT.

10 LOOSE LINTEL SCHEUDLE

N.T.S.

6 TYPICAL CMU PARTITION BRACING AT UNTOPPED DECK

N.T.S.

7 DETAIL AT BOND BEAM INTERSECTIONS

N.T.S.

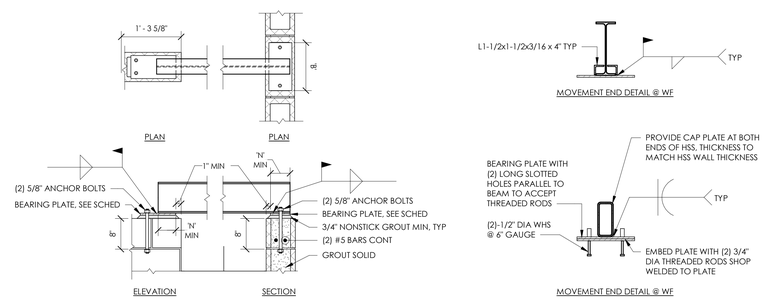
8 CMU ON COMPOSITE FLOOR DECK

N.T.S.

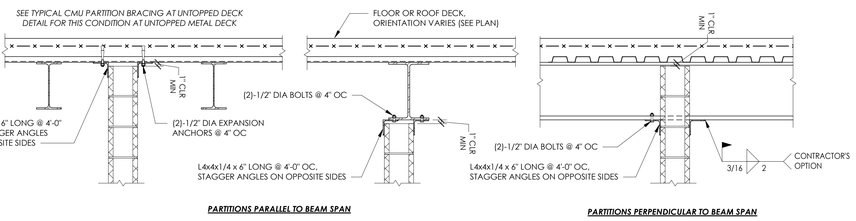
9 CMU LINTEL SCHEDULE AND DETAIL

N.T.S.

BEARING PLATE SCHEDULE			
BEAM/JOIST CLASS	WIDTH 'B'	LENGTH 'N'	THICKNESS 'tp'
W8	10"	6"	1/2"
W12	10"	6"	1/2"
30K	12"	6"	5/8"
80DLH	14"	8"	1"



NOTES:
1. PROVIDE 3 COURSES OF SOLID OR CONCRETE FILLED HOLLOW UNITS MIN 2'-0" EA SIDE OF PLATE CENTERLINE.
2. AT ALL BEAMS WELD ONE END TO THE BEARING PLATE AND USE APPLICABLE MOMENT JOINT FOR MOVEMENT AT OTHER END/
3. INFILL POCKET AFTER BEAM ERECTION WITH CMU OR GROUT.
4. PROVIDE ADDITIONAL BEARING PLATE AT HSS MEMBERS.



NOTES:
1. AT CONTRACTOR'S OPTION, CONNECTIONS MAY BE FIELD WELDED.
2. DETAILS ALSO APPLICABLE AT STEEL JOIST SUPPORTED SLABS.
3. PROVIDE COMPRESSIBLE FILLER BETWEEN TOP OF CMU PARTITION AND UNDERSIDE OF DECK (IN 1" VOID SPACE).
4. PROVIDE LATERAL BRACING AS SHOWN FOR ALL INTERIOR CMU PARTITION WALLS WHERE PARTITION LENGTH BETWEEN CROSS WALLS EXCEEDS 16'-0" FOR 6" THICK WALLS OR 22'-0" FOR 8" THICK WALLS.

11 TYPICAL CMU PARTITION BRACING AT SLAB ON METAL DECK

N.T.S.

12 TYPICAL BEARING PLATE DETAIL

N.T.S.

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK PATRICK JAMES WILLIAMS 100938 LICENSED PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
2	1/3/2024	BID ADDENDUM #2

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Issued for Bid:	4/15/2024

Sheet Title: TYPICAL MASONRY DETAILS

Sheet No.: CTE S503

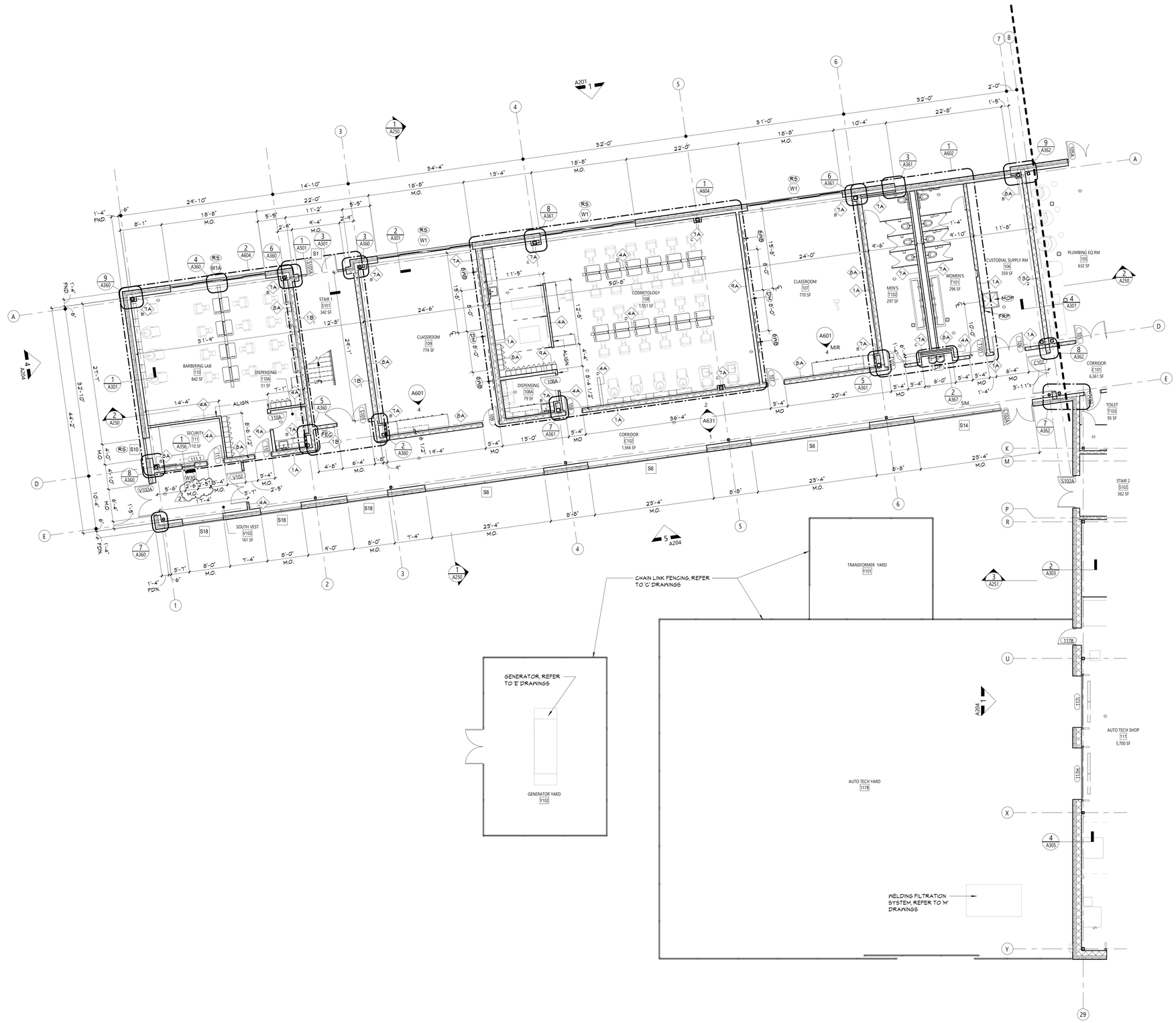
CONSTRUCTION DOCUMENTS

GENERAL NOTES

1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A600 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A7101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

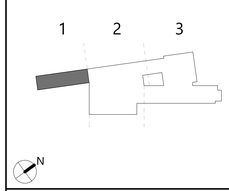
KEYNOTES

#	DESCRIPTION
BWB	8' WHITEBOARD
DF	DRINKING FOUNTAIN WITH BOTTLE FILLER, REFER TO PLUMBING DRAWINGS
DM	DISPLAY MONITOR (OWNER FURNISHED, CONTRACTOR INSTALLED)
FEC	FIRE EXTINGUISHER CABINET
FRP	4'X4' FULLY ADHERED FRP PANEL
MOP	MOP SINK, REFER TO PLUMBING DRAWINGS
RS	ROLLER SHADE



1 PARTIAL FIRST FLOOR PLAN - AREA 1
A111 1/8" = 1'-0"

KEY PLAN



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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT RICHARD L. PROCTOR 031985 STATE OF NEW YORK

REGISTRATION EXPIRATION DATE: 12/31/2026

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Sheet Title

PARTIAL FIRST FLOOR PLAN - AREA 1

Sheet No.

CTE
A111

CONSTRUCTION DOCUMENTS

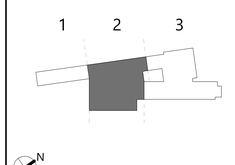
GENERAL NOTES

1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A600 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A7101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

KEYNOTES

#	DESCRIPTION
8WB	8' WHITEBOARD
A2	DISPLAY CASE WITH DISPLAY CASE GLASS DOOR SYSTEM
DM	DISPLAY MONITOR (OWNER FURNISHED, CONTRACTOR INSTALLED)
FEC	FIRE EXTINGUISHER CABINET
RS	ROLLER SHADE
RVL	1/2" DRYWALL REVEAL, REFER TO TYPICAL DETAILS

KEY PLAN



1 PARTIAL FIRST FLOOR PLAN - AREA 2

A112 1/8" = 1'-0"

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT
RICHARD L. PROSPERO
019984
STATE OF NEW YORK

REGISTRATION EXPIRATION DATE: 12/31/2026

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Sheet Title

PARTIAL FIRST FLOOR PLAN - AREA 2

Sheet No.

CTE A112

CONSTRUCTION DOCUMENTS

GENERAL NOTES

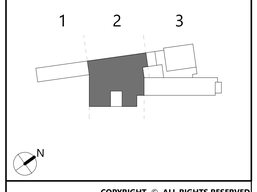
1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A600 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A700 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A710.1 FOR PARTITION TYPES AND ADDITIONAL NOTES.

KEYNOTES

#	DESCRIPTION
4WB	4' WHITEBOARD
6WB	6' WHITEBOARD
8WB	8' WHITEBOARD
DF	DRINKING FOUNTAIN WITH BOTTLE FILLER, REFER TO PLUMBING DRAWINGS
DM	DISPLAY MONITOR (OWNER FURNISHED, CONTRACTOR INSTALLED)
FEC	FIRE EXTINGUISHER CABINET
MFS	MATCHING FILLER STRIP
RS	ROLLER SHADE
RVL	1/2" DRYWALL REVEAL, REFER TO TYPICAL DETAILS

1 PARTIAL SECOND FLOOR PLAN - AREA 2
A122 1/8" = 1'-0"

KEY PLAN



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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT RICHARD L. PROSSER STATE OF NEW YORK 019955
REGISTRATION EXPIRATION DATE: 12/31/2026

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2	1/3/2024	BID Addendum #2

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CSArch Proj. #:	108-2303
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Sheet Title
PARTIAL SECOND FLOOR PLAN - AREA 2

Sheet No.
CTE A122

CONSTRUCTION DOCUMENTS

GENERAL NOTES

1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A600 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A7101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

KEYNOTES

#	DESCRIPTION

FEC	FIRE EXTINGUISHER CABINET
RS	ROLLER SHADE
RVL	1/2" DRYWALL REVEAL, REFER TO TYPICAL DETAILS

ROOF BELOW

OPEN TO BELOW

ELEC RM 300 120 SF

CORRIDOR 2,856 SF

ELEVATOR 84 SF

ELEV. CONTROL RM 89 SF

TOILET 81 SF

TOILET 84 SF

STORAGE 74 SF

STAIR 3 320 SF

FACULTY LOUNGE 433 SF

17'-4"

7'-4" M.O.

21'-4" M.O.

5'-4"

2'-6"

26'-5"

14'-10"

44'-8"

56'-4"

36'-6"

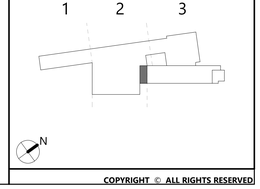
26'-6"

11'-4"

18'-10"

1 PARTIAL THIRD FLOOR PLAN - AREA 2
A132 1/8" = 1'-0"

KEY PLAN



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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT RAYMOND L. PEKARIK 019884 STATE OF NEW YORK

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#	DATE	DESCRIPTION
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Sheet Title

PARTIAL THIRD FLOOR PLAN - AREA 2

Sheet No.

CTE A132

CONSTRUCTION DOCUMENTS

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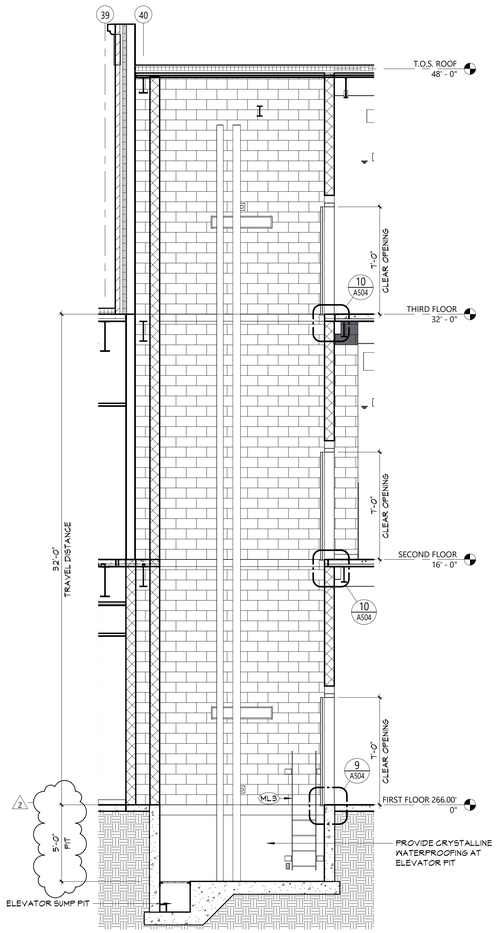
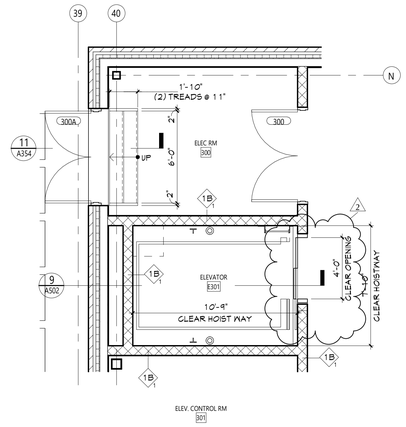
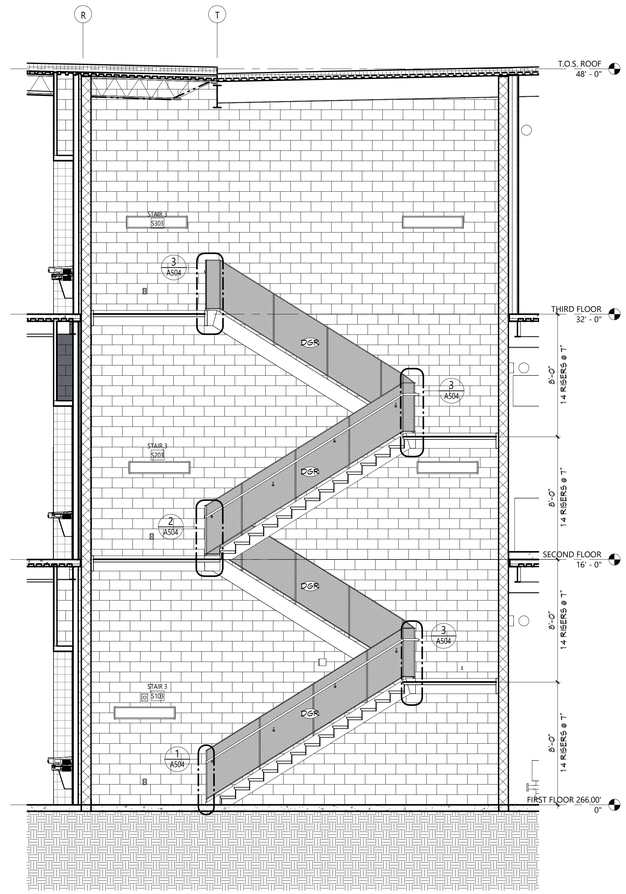


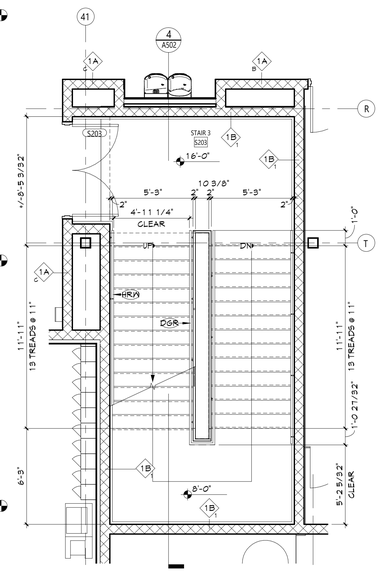
9 SECTION - ELEVATOR
A502 1/4" = 1'-0"



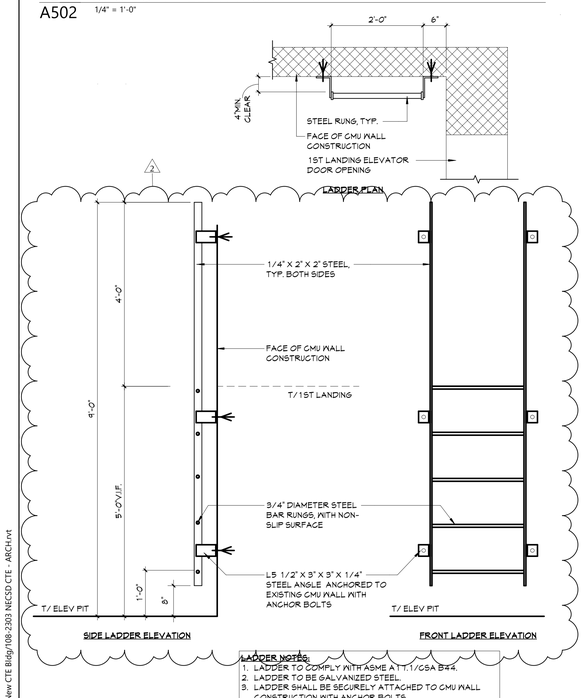
7 ENLARGED PLAN - LEVEL 3 - ELEVATOR
A502 1/4" = 1'-0"



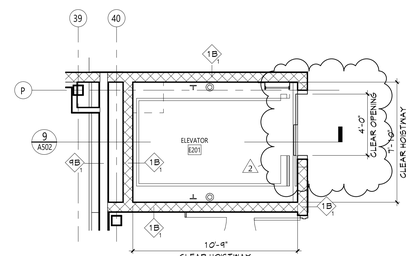
4 SECTION - STAIR 3
A502 1/4" = 1'-0"



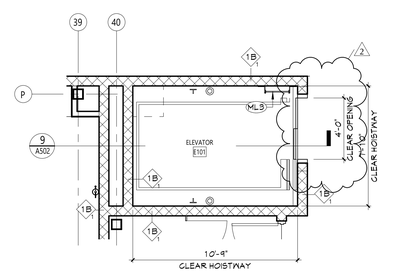
2 ENLARGED PLAN - LEVEL 2 - STAIR 3
A502 1/4" = 1'-0"



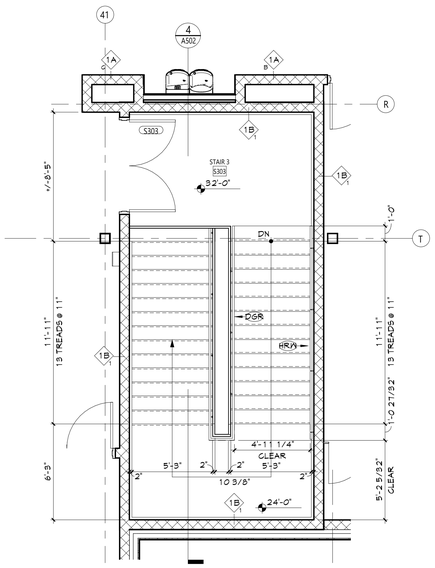
8 ELEVATOR PIT LADDER
A502 3/4" = 1'-0"



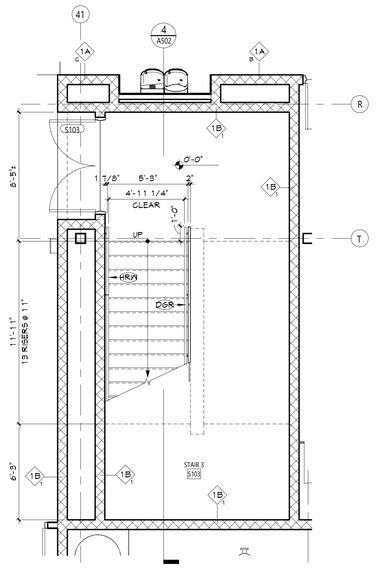
6 ENLARGED PLAN - LEVEL 2 - ELEVATOR
A502 1/4" = 1'-0"



5 ENLARGED PLAN - LEVEL 1 - ELEVATOR
A502 1/4" = 1'-0"



3 ENLARGED PLAN - LEVEL 3 - STAIR 3
A502 1/4" = 1'-0"

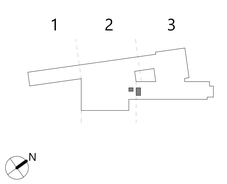


1 ENLARGED PLAN - LEVEL 1 - STAIR 3
A502 1/4" = 1'-0"

KEYNOTES

#	DESCRIPTION
DGR	DECORATIVE METAL GUARDRAIL WITH STAINLESS STEEL HANDRAIL
HRW	WALL-MOUNTED STAINLESS STEEL HANDRAIL
ML3	METAL ELEVATOR PIT LADDER

KEY PLAN



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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT EDWARD L. PROCHA 019855 STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

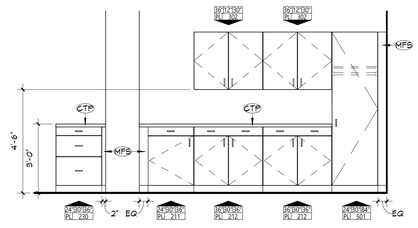
#	DATE	DESCRIPTION
2	5/1/2024	BID Addendum #2

Drawn By:	
Checked By:	
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

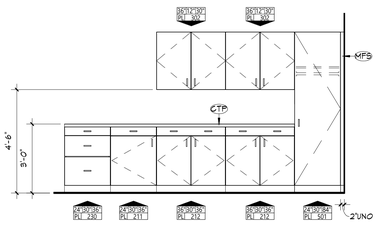
Sheet Title
STAIR AND ELEVATOR - PLANS, SECTIONS AND DETAILS

Sheet No.
CTE
A502

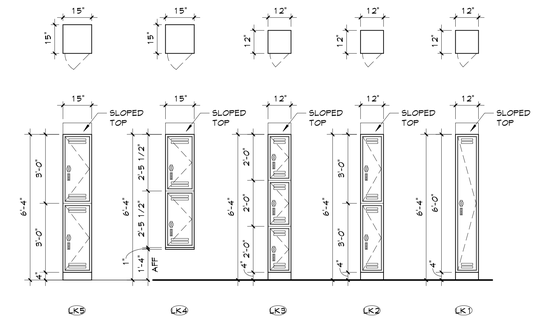
CONSTRUCTION DOCUMENTS



5 INTERIOR ELEVATION
TYPICAL CLASSROOM CASEWORK
A601 3/8" = 1'-0"

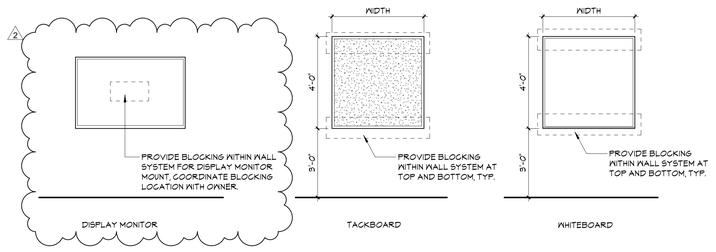


4 INTERIOR ELEVATION
TYPICAL CLASSROOM CASEWORK
A601 3/8" = 1'-0"

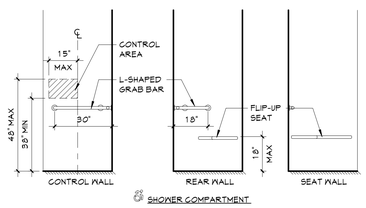


NOTE:
1. REFER TO A600 DRAWINGS FOR ADA LOCKER LOCATIONS
2. ADA LOCKERS SHALL HAVE ACCESSIBLE ELEMENTS WITHIN SIDE REACH GUIDELINES, 15" MINIMUM AND 48" MAXIMUM ABOVE FINISH FLOOR AND SHALL HAVE AN ADA WHEELCHAIR SIGN VISIBLE FROM THE OUTSIDE OF THE LOCKER.

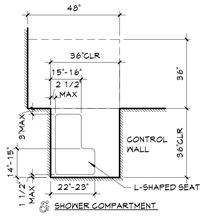
3 LOCKER TYPES
A601 3/8" = 1'-0"



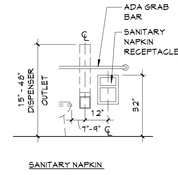
2 TYPICAL CLASSROOM EQUIPMENT
A601 3/8" = 1'-0"



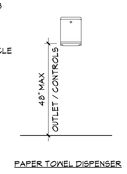
SHOWER COMPARTMENT



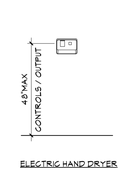
SHOWER COMPARTMENT



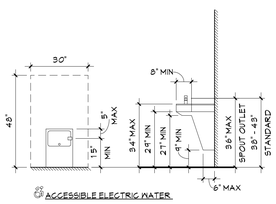
SANITARY NAPKIN



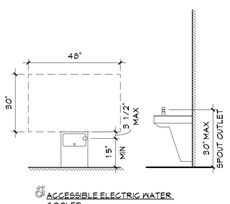
PAPER TOWEL DISPENSER



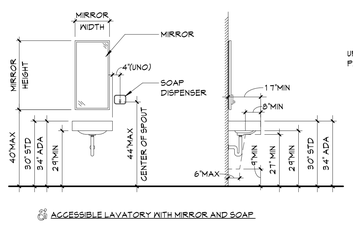
ELECTRIC HAND DRYER



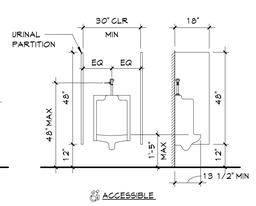
ACCESSIBLE ELECTRIC WATER



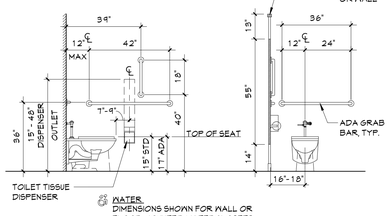
ACCESSIBLE ELECTRIC WATER COOLER



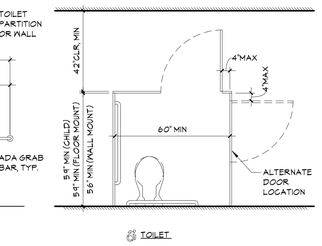
ACCESSIBLE LAVATORY WITH MIRROR AND SOAP



ACCESSIBLE



WATER DIMENSIONS SHOWN FOR WALL OR FLOOR MOUNTED WATERCLOSETS



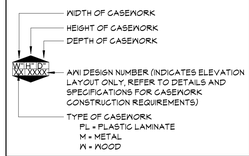
TOILET

1 TYPICAL PLUMBING FIXTURE ELEVATIONS
A601 3/8" = 1'-0"

GENERAL NOTES

1. ALL CASEWORK SHALL HAVE PLASTIC LAMINATE (PLAM) COUNTERTOPS AND 4" BACK SPLASHES, UNO.
2. INSTALL MATCHING FILLER PANELS IN LOCATIONS SHOWN. ADD MATCHING FILLER PANELS AS REQUIRED FOR FINAL FIT/FINISH.
3. PROVIDE BLOCKING IN ALL ADJACENT WALLS AS REQUIRED TO INSTALL ALL CASEWORK.
4. PROVIDE FINISHED END PANEL AT ALL EXPOSED FACES OF CASEWORK.
5. PROVIDE WALL BASE AS SCHEDULED ON ALL EXPOSED TOE KICK SPACES AND EXPOSED END PANELS.
6. ALL FURNITURE SHOWN AS HALFTONE IS NOT IN CONTRACT

CASEWORK NOTES



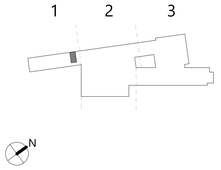
TOILET ROOM NOTES

1. THE HEIGHTS SHOWN ARE TYPICAL AND DO NOT NECESSARILY SHOW ALL EQUIPMENT THAT ARE TO BE LOCATED ON WALLS.
2. THESE GUIDELINES ESTABLISH LOCATION OF FIXTURES AND EQUIPMENT VERTICALLY AT THE WALL GENERALLY THROUGHOUT THE PROJECT.
3. THE DIMENSIONS CALLED OUT ARE TO THE TOP OR BOTTOM OF FIXTURES AND EQUIPMENT FACE PLATES/TRIM AS SHOWN, UNO.
4. THE DIMENSIONS CALLED OUT ARE TO THE CENTERLINE OF FIXTURES AND EQUIPMENT AS SHOWN, UNO.
5. ALL ACCESSORIES TO BE SURFACE MOUNTED, UNO.
6. INSTALL PRESSURE TREATED WOOD BLOCKING IN STUD PARTITIONS AT ALL LOCATIONS WHERE TOILET ACCESSORIES ARE MOUNTED TO THE WALL.

KEYNOTES

#	DESCRIPTION
CTP	PLAM COUNTERTOP
MFS	MATCHING FILLER STRIP

KEY PLAN



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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

REGISTERED ARCHITECT RICHARD L. PROCHNAU LICENSED STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

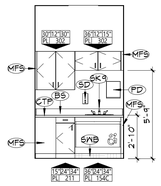
#	DATE	DESCRIPTION
2	5/1/2024	BID Addendum #2

Drawn By:
Checked By:
Proj. #: 44-16-00-01-0-053-001
CSArch Proj. #: 108-2303
Issued for Bid: 4/15/2024

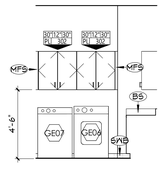
Sheet Title
TYPICAL EQUIPMENT PLANS, ELEVATIONS AND DETAILS

Sheet No.
CTE
A601

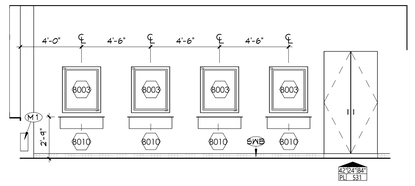
CONSTRUCTION DOCUMENTS



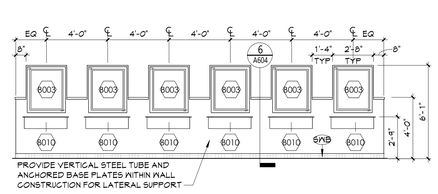
15 INTERIOR ELEVATION
DISPENSING - EAST
A604 1/4" = 1'-0"



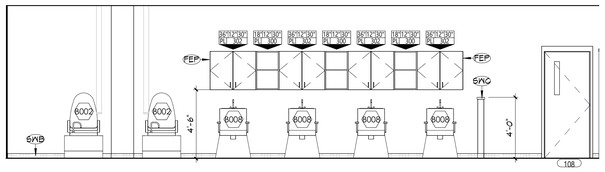
14 INTERIOR ELEVATION
DISPENSING - NORTH
A604 1/4" = 1'-0"



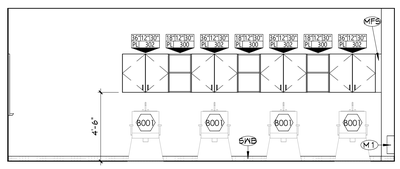
12 INTERIOR ELEVATION
BARBERING - NORTH
A604 1/4" = 1'-0"



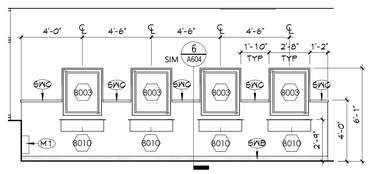
8 INTERIOR ELEVATION
COSMETOLOGY - WEST
A604 1/4" = 1'-0"



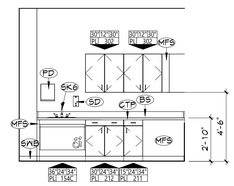
5 INTERIOR ELEVATION
COSMETOLOGY - EAST
A604 1/4" = 1'-0"



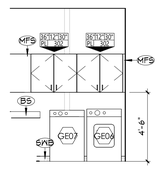
13 INTERIOR ELEVATION
BARBERING - SOUTH
A604 1/4" = 1'-0"



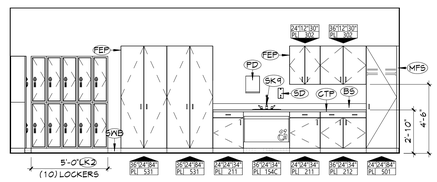
11 INTERIOR ELEVATION
BARBERING - NORTH
A604 1/4" = 1'-0"



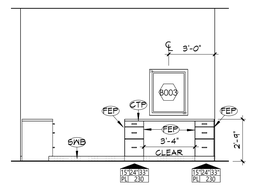
10 INTERIOR ELEVATION
DISPENSING - EAST
A604 1/4" = 1'-0"



9 INTERIOR ELEVATION
DISPENSING - SOUTH
A604 1/4" = 1'-0"



7 INTERIOR ELEVATION
COSMETOLOGY - SOUTH
A604 1/4" = 1'-0"



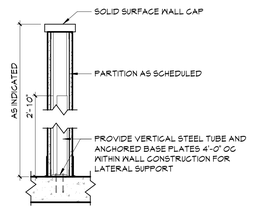
4 INTERIOR ELEVATION
COSMETOLOGY - SOUTH
A604 1/4" = 1'-0"

EQUIPMENT SCHEDULE - BARBERING

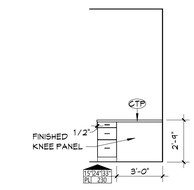
EQUIPMENT #	QUANTITY	DESCRIPTION	MANUFACTURER	MODEL	MOUNTING	POWER	HORSEPOWER	WATER	DUST COLLECTION	COMPRESSED AIR	FURNISHED	INSTALLED
B001	4	HAIR WASH STATION	AGS BEAUTY	DT-001	FLOOR	-	-	YES	-	-	CONTRACTOR	CONTRACTOR
B003	12	MIRROR	PIBBS	PIB-9440	WALL	110V	-	-	-	-	CONTRACTOR	CONTRACTOR
B009	12	SALON CHAIR	BUY-RITE SALON & SPA EQUIPMENT	CHRIS STYLING CHAIR - SY-1801	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
B010	12	STYLING STATION	WINADO	140658788186	WALL	-	-	-	-	-	CONTRACTOR	CONTRACTOR
GE06	1	DRYER	MAYTAG COMMERCIAL	MDE20MNBZW	FREE STANDING	240V	1/3 HP	-	-	-	CONTRACTOR	CONTRACTOR
GE07	1	WASHING MACHINE	MAYTAG COMMERCIAL	MAT20MNAWW	FREE STANDING	120V	1/2 HP	YES	-	-	CONTRACTOR	CONTRACTOR

EQUIPMENT SCHEDULE - COSMETOLOGY

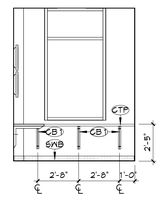
EQUIPMENT #	QUANTITY	DESCRIPTION	MANUFACTURER	MODEL	MOUNTING	POWER	HORSEPOWER	WATER	DUST COLLECTION	COMPRESSED AIR	FURNISHED	INSTALLED
B002	2	PEDICURE STATION	J & A	JA-CLEOG5	FLOOR	110V	-	YES	-	-	CONTRACTOR	CONTRACTOR
B003	25	MIRROR	PIBBS	PIB-9440	WALL	110V	-	-	-	-	CONTRACTOR	CONTRACTOR
B005	1	WAXING TABLE	OAKWORKS	OW-CLINICIANPRIM-ELHY-ST	FREE STANDING	120V	-	-	-	-	CONTRACTOR	CONTRACTOR
B006	1	FACIAL TABLE	OAKWORKS	OW-CLINICIANPRIM-ELHY-ST	FREE STANDING	120V	-	-	-	-	CONTRACTOR	CONTRACTOR
B007	4	MANICURE STATION	J & A	JA-KM-N104	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
B008	4	HAIR WASH STATION	BARBERPUB	6154-9070	FLOOR	-	-	YES	-	-	CONTRACTOR	CONTRACTOR
B009	25	SALON CHAIR	BUY-RITE SALON & SPA EQUIPMENT	CHRIS STYLING CHAIR - SY-1801	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
B010	24	STYLING STATION	WINADO	140658788186	WALL	-	-	-	-	-	CONTRACTOR	CONTRACTOR
GE06	1	DRYER	MAYTAG COMMERCIAL	MDE20MNBZW	FREE STANDING	240V	1/3 HP	-	-	-	CONTRACTOR	CONTRACTOR
GE07	1	WASHING MACHINE	MAYTAG COMMERCIAL	MAT20MNAWW	FREE STANDING	120V	1/2 HP	YES	-	-	CONTRACTOR	CONTRACTOR



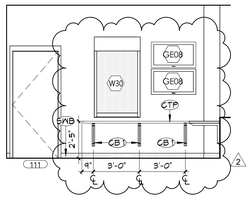
6 SECTION DETAIL AT
PARTIAL HEIGHT WALL
A604 1" = 1'-0"



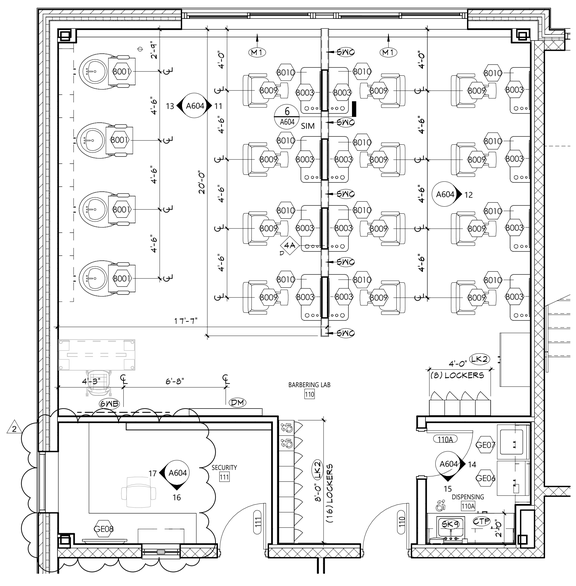
3 INTERIOR ELEVATION
COSMETOLOGY - EAST
A604 1/4" = 1'-0"



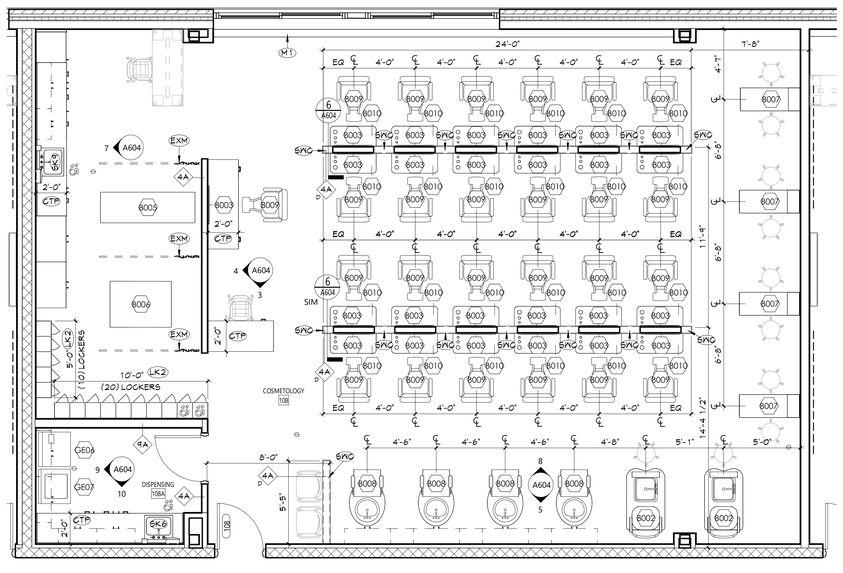
17 INTERIOR ELEVATION
SECURITY - SOUTH
A604 1/4" = 1'-0"



16 INTERIOR ELEVATION
SECURITY - EAST
A604 1/4" = 1'-0"



2 ENLARGED FLOOR PLAN - BARBERING
A604 1/4" = 1'-0"

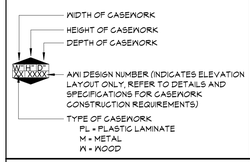


1 ENLARGED FLOOR PLAN - COSMETOLOGY
A604 1/4" = 1'-0"

GENERAL NOTES

1. ALL CASEWORK SHALL HAVE PLASTIC LAMINATE (PLAM) COUNTERTOPS AND 4" BACK SPLASHES, UNO.
2. INSTALL MATCHING FILLER PANELS IN LOCATIONS SHOWN. ADD MATCHING FILLER PANELS AS REQUIRED FOR FINAL FIT/FINISH.
3. PROVIDE BLOCKING IN ALL ADJACENT WALLS AS REQUIRED TO INSTALL ALL CASEWORK.
4. PROVIDE FINISHED END PANEL AT ALL EXPOSED FACES OF CASEWORK.
5. PROVIDE WALL BASE AS SCHEDULED ON ALL EXPOSED TOE KICK SPACES AND EXPOSED END PANELS.
6. ALL FURNITURE SHOWN AS HALFTONE IS NOT IN CONTRACT

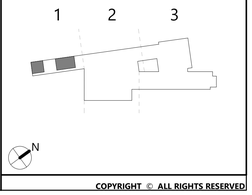
CASEWORK NOTES



KEYNOTES

#	DESCRIPTION
6WB	6' WHITEBOARD
BS	PLAM BACKSPLASH, 4" HIGH, UNO
CB1	COUNTER SUPPORT BRACKET
CTP	PLAM COUNTERTOP
DM	DISPLAY MONITOR (OWNER FURNISHED, CONTRACTOR INSTALLED)
EXM	EXAM CURTAIN
FEP	FINISHED END PANEL
LK2	TWO-TIER METAL LOCKER
M1	MECHANICAL EQUIPMENT. REFER TO MECHANICAL DRAWINGS.
MFS	MATCHING FILLER STRIP
PD	PAPER TOWEL DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED)
SD	SOAP DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED)
SK6	NURSING LAB SINK, REFER TO PLUMBING DRAWINGS
SK9	LAY-IN SINK WITH EYEWASH, REFER TO PLUMBING DRAWINGS
SNB	SCHEDULED WALL BASE
SNG	SOLID SURFACE WALL CAP

KEY PLAN



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Consultant

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

REGISTERED ARCHITECT
RAYMOND L. PROCHNA
019884
STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

#	DATE	DESCRIPTION
2	5/3/2024	BID Addendum #2

Drawn By:	ACG
Checked By:	
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

Sheet Title
ENLARGED PLAN - BARBERING AND COSMETOLOGY

Sheet No.
CTE
A604

CONSTRUCTION DOCUMENTS

DOOR SCHEDULE - FIRST FLOOR

DOOR NUMBER	DOOR											FRAME						LABEL (MIN)	GLAZING	HARDWARE	MAG HOLD-OPEN	ACCESS CONTROL	REMARKS	DOOR NUMBER
	QUANTITY	FROM		TO		WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	HEAD DETAIL	JAMB DETAIL	SILL DETAIL							
100		V101	WEST VEST	100	FRONT OFFICE	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S31	AL	FF	1/A921	1/A921	7/A901	-	G5	26.0	-	-		100
100A	1	100	FRONT OFFICE	100A	SECURITY	3' - 0"	7' - 0"	1 3/4"	G	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	11.0	-	-		100A
100A.1		100A	SECURITY	V101	WEST VEST	2' - 6"	4' - 0"	2"	OH3	-	-	-	-	-	11/A912	-	10/A912	20	-	42.0	-	-	3	100A.1
100B	1	100	FRONT OFFICE	100B	MEETING ROOM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	11.0	-	-		100B
100C	1	100	FRONT OFFICE	100C	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	11.0	-	-		100C
100D	1	100	FRONT OFFICE	100D	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	11.0	-	-		100D
100E	1	100	FRONT OFFICE	100E	VAULT	3' - 0"	7' - 0"	1 3/4"	F	HM	PT	2	HM	PT	5/A901	1/A901	7/A901	-	-	27.0	-	-		100E
100F	1	100M	PASSAGE	100F	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	6/A901	-	-	11.0	-	-		100F
100G	1	100M	PASSAGE	100G	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	6/A901	-	-	14.0	-	-		100G
100H	1	100M	PASSAGE	100H	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	11.0	-	-		100H
100J	1	100	FRONT OFFICE	100J	WORK BASED LEARNING	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	11.0	-	-		100J
100K	1	100	FRONT OFFICE	100K	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	24.0	-	-		100K
100L		C101	CORRIDOR	100	FRONT OFFICE	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S38	AL	FF	1/A921	1/A921	7/A901	-	G5	7.0	-	-		100L
100M	1	C101	CORRIDOR	100M	PASSAGE	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G5	4.0	-	-		100M
101	1	C101	CORRIDOR	101	HEALTH OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G5	6.0	-	-		101
101A	1	101	HEALTH OFFICE	101A	ISOLATION ROOM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	28.0	-	-		101A
101B	1	101	HEALTH OFFICE	101B	SECURE STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	19.0	-	-		101B
101C	1	101	HEALTH OFFICE	101C	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	6/A901	-	-	14.0	-	-		101C
101D	1	101	HEALTH OFFICE	101D	EXAM ROOM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	28.0	-	-		101D
102	1	C101	CORRIDOR	102	CLASSROOM	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G5	6.0	-	-		102
103	1	C101	CORRIDOR	103	GROOMING	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G5	6.0	-	-		103
103A	1	103	GROOMING	103A	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	8.0	-	-		103A
103B	1	103A	STORAGE	103B	CUST.	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	20.0	-	-		103B
103C	1	103A	STORAGE	103C	LOCKED STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	20.0	-	-		103C
103D		103	GROOMING	103D	DOG RUN	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S2	AL	FF	1/A922	1/A922	8/A351	-	G7	30.0	-	AC	10	103D
104	1	C101	CORRIDOR	104	VET TECH	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G5	6.0	-	-		104
104A	1	104	VET TECH	103A	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	9.0	-	-		104A
104B		104	VET TECH	103D	DOG RUN	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S2	AL	FF	1/A922	1/A922	8/A351	-	G7	30.0	-	AC	10	104B
105	PR	C101	CORRIDOR	105	PLUMBING EQ RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	-	-	21.0	-	-		105
105A	PR	105	PLUMBING EQ RM		EXTERIOR	3' - 6"	8' - 0"	1 3/4"	F	FRP	FF	4	AL	FF	13/A352	6/A352	8/A351	-	-	32.0	-	AC	10	105A
106	PR	C102	CORRIDOR	106	CUSTODIAL SUPPLY RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	-	-	21.0	-	-		106
107	1	C102	CORRIDOR	107	CLASSROOM	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G5	6.0	-	-		107
108	1	C102	CORRIDOR	108	COSMETOLOGY	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G5	5.0	-	-		108
108A	1	108	COSMETOLOGY	108A	DISPENSING	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	24.0	-	-		108A
109	1	C102	CORRIDOR	109	CLASSROOM	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G5	5.0	-	-		109
110	1	C102	CORRIDOR	110	BARBERING LAB	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G5	6.0	-	-		110
110A	1	110	BARBERING LAB	110A	DISPENSING	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	24.0	-	-		110A
111	1	V102	SOUTH VEST	111	SECURITY	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	-	5.0	-	-		111
111.1		111	SECURITY	V102	SOUTH VEST	2' - 6"	4' - 0"	2"	OH3	-	-	-	-	-	11/A912		10/A912	20	-	42.0	-	-	3	111.1
112	PR	C101	CORRIDOR	112	ELEC RM	3' - 0"	7' - 0"	1 3/4"	F	WD	PT	4	HM	PT	4/A901	2/A901	7/A901	60	-	40.0	-	-		112
115	1	C101	CORRIDOR	115	FOOD SERV. AREA	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	5.0	-	-		115
115A	1	C101	CORRIDOR	115A	FOOD SERV. STORAGE	3' - 4"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	18.0	-	-		115A
115B	1	C101	CORRIDOR	115	FOOD SERV. AREA	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	5.0	-	-		115B
115C		116	CAFETERIA	115	FOOD SERV. AREA	20' - 0"	9' - 6"	2"	OH4	-	-	-	-	-	2/A355	6/A255		-	-	42.0	-	-	4 / 6	115C
116	1	C101	CORRIDOR	116	CAFETERIA	3' - 0"	7' - 0"	1 3/4"	G	WD	FF	5	HM	PT	4/A901	2/A901	7/A901	-	G3	1.0	-	-		116
116A		C101	CORRIDOR	116	CAFETERIA	8' - 0"	9' - 8"	2"	OH3	-	-	-	-	-	4/A355	9/A355	5/A355	20	-	42.0	-	-	3	116A
116B		C101	CORRIDOR	116	CAFETERIA	8' - 0"	9' - 8"	2"	OH3	-	-	-	-	-	4/A355	9/A355	5/A355	20	-	42.0	-	-	3	116B
116C	1	C101	CORRIDOR	116	CAFETERIA	3' - 0"	7' - 0"	1 3/4"	G	WD	FF	5	HM	PT	4/A901	2/A901	7/A901	-	G3	1.0	-	-		116C
116D		C101	CORRIDOR	116	CAFETERIA	8' - 0"	9' - 8"	2"	OH3	-	-	-	-	-	4/A355	8/A355	5/A355	20	-	42.0	-	-	3	116D
116E	1	C101	CORRIDOR	116	CAFETERIA	3' - 0"	7' - 0"	1 3/4"	G	WD	FF	2	HM	PT	4/A901	2/A901	7/A901	-	G3	1.0	-	-		116E
116F	1	C101	CORRIDOR	116	CAFETERIA	3' - 0"	7' - 0"	1 3/4"	G	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	G3	1.0	-	-		116F
116G		C101	CORRIDOR	116	CAFETERIA	8' - 0"	9' - 8"	2"	OH3	-	-	-	-	-	4/A355	8/A355	5/A355	20	-	42.0	-	-	3	116G
116H		C101	CORRIDOR	116	CAFETERIA	10' - 0"	5' - 2"	2"	OH3	-	-	-	-	-	4/A355	7/A355	3/A355	20	-	42.0	-	-	3	116H
116I		C101	CORRIDOR	116	CAFETERIA	10' - 0"	5' - 2"	2"	OH3	-	-	-	-	-	4/A355	7/A355	3/A355	20	-	42.0	-	-	3	116I
116J		C101	CORRIDOR	116	CAFETERIA	10' - 0"	5' - 2"	2"	OH3	-	-	-	-	-	4/A355	7/A355	3/A355	20	-	42.0	-	-	3	116J
116K		C101	CORRIDOR	116	CAFETERIA	10' - 0"	5' - 2"	2"	OH3	-	-	-	-	-	4/A355	7/A355	3/A355	20	-	42.0	-	-	3	116K
116L		C101	CORRIDOR	116	CAFETERIA	10' - 0"	5' - 2"	2"	OH3	-	-	-	-	-	4/A355	7/A355	3/A355	20	-	42.0	-	-	3	116L
116M		C101	CORRIDOR	116	CAFETERIA	10' - 0"	5' - 2"	2"	OH3	-	-	-	-	-	4/A355	7/A355	3/A355	20	-	42.0	-	-	3	116M
117	1	C101	CORRIDOR	117	AUTO TECH SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		117
117A	1	117	AUTO TECH SHOP	117A	AUTO TECH OFFICE	3' - 0"	7' - 0"	1 3/4"	G	HM	PT	5	HM	PT	5/A901	1/A901	7/A901	45	G3	13.0	-	-	1	117A
117B	1	117	AUTO TECH SHOP		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	-	31.0	-	AC	10	117B
117C	1	117	AUTO TECH SHOP		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	-	31.0	-	AC	10	117C
117D		117	AUTO TECH SHOP		EXTERIOR	10' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	10/A353	11/A901	9/A353	-	G7	42.0	-	-	2 / 7	117D
117E		117	AUTO TECH SHOP		EXTERIOR	10' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	10/A353	11/A901	9/A353	-	G7	42.0	-	-	2 / 7	117E
117F		117	AUTO TECH SHOP		EXTERIOR	10' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	10/A353	11/A901	9/A353	-	G7	42.0	-	-	2 / 7	117F
117G		117	AUTO TECH SHOP		EXTERIOR	8' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	10/A353	11/A901	9/A353	-	G7	42.0	-	-	2 / 7	117G
117H		117	AUTO TECH SHOP		EXTERIOR	10' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	10/A353	11/A901	9/A353	-	G7	42.0	-	-	2 / 7	117H
117I		117	AUTO TECH SHOP		EXTERIOR	10' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	10/A353	11/A901	9/A353	-	G7	42.0	-	-	2 / 7	117I
118	1	C101	CORRIDOR	118	STORAGE	3' - 0"	7' - 0"	1 3/4"	G	WD	FF	5	HM	PT	5/A901	1/A901	7/A901	-	G3	15.0	-	-		118
119	1	119E	PASSAGE	119	WELDING SHOP	3' - 0"	7' - 0"	1 3/4"	F	HM	PT	2	HM	PT	5/A901	1/A901	7/A901	45	-	4.0	-	-		119
119A	1	119	WELDING SHOP	119A	WELDING OFFICE	3' - 0"	7' - 0"	1 3/4"	G	HM	PT	5	HM	PT	5/A901	1/A901	7/A901	45	G3	13.0	-	-	1	119A
119B	1	119E	PASSAGE	119B	DRESSING ROOM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	14.0	-	-		119B
119C	1	119E	PASSAGE	119C	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	6/A901	-	-	14.0	-	-		119C
119D	1	119E	PASSAGE	119D	DRESSING ROOM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	14.0	-	-		119D
119E	1	C101	CORRIDOR	119E	PASSAGE	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	G3	4.0	-	-		119E
119EA	1	119E	PASSAGE	117	AUTO TECH SHOP	3' - 0"	7' - 0"	1 3/4"	F	HM	PT	2	HM	PT	5/A901	1/A901	7/A901	45	-	6.0	-	-		119EA
119F	PR	119F	GAS & METAL STOCK STORAGE		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	4	AL	FF	5/A901	1/A901	8/A351	-	-	33.0	-	AC	10	119F
119G	1	119	WELDING SHOP		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	-	33.0	-	AC	10	119G
119H		119	WELDING SHOP		EXTERIOR	10' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	4/A354	11/A901	9/A353	-	G7	42.0	-	-	2 / 8	119H
119I	1	119	WELDING SHOP	117	AUTO TECH SHOP	3' - 0"	7' - 0"	1 3/4"	F	HM	PT	2	HM	PT	5/A901	1/A901	7/A901	45	-	41.0	-	-		119I
119J	1	119	WELDING SHOP	120	AUTOBODY SHOP	3' - 0"	7' - 0"	1 3/4"	F	HM	PT	2	HM	PT	5/A901	1/A901	7/A901	45	-	41.0	-	-		119J
120	1	C101	CORRIDOR	120	AUTOBODY SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		120
120A	1	120	AUTOBODY SHOP	120A	AUTOBODY OFFICE	3' - 0"	7' - 0"	1 3/4"	G	HM	PT	5	HM	PT	5/A901	1/A901	7/A901	45	G3	13.0	-	-	1	120A
120B	1	120	AUTOBODY SHOP	120B	ELEC RM	3' - 0"	7' - 0"	1 3/4"	F	HM	PT	2	HM	PT	5/A901	1/A901	7/A901	60	-	43.0	-	-		120B
120C	1	120	AUTOBODY SHOP		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	-	33.0	-	-		120C
120D		120	AUTOBODY SHOP		EXTERIOR	10' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	10/A353	11/A901	9/A353	-	G7	42.0	-	-	2 / 7	120D
120E		120	AUTOBODY SHOP		EXTERIOR	12' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	10/A353	11/A901	9/A353	-	G7	42.0	-	-	2 / 7	120E
121	1	C101	CORRIDOR	121	CUSTODIAL	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	-	16.0	-	-		121
122	PR	C101	CORRIDOR	122	LOADING	3' - 10"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	45	-	21.0	-	-		122
122A	1	122	LOADING		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	-	33.0	-	AC	10	122A
122B		122	LOADING		EXTERIOR	8' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	4/A354	11/A901	9/A353	-	-	42.0	-	-	8	122B
123	PR	122	LOADING	123	BOILER RM	3' - 0"	7' - 0"	1 3/4"	F	HM	PT	4	HM	PT	5/A901	1/A901	7/A901	60	-	21.0	-	-		123
123A	PR	123	BOILER RM		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	4	AL	FF	5/A901	1/A901	8/A351	-	-	34.0	-	AC	10	123A
124	1	C101	CORRIDOR	124	PLUMBING SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		124
124A	1	C103	CORRIDOR	124	PLUMBING SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		124A
124B		124	PLUMBING SHOP	125	HVAC SHOP	10' - 0"	11' - 0"	2"	OH2	-	-	-	-	-	8/A901	9/A901	10/A901	45	-	42.0	-	-	2 / 8	124B
124C	1	124	PLUMBING SHOP		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	G	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	G7	33.0	-	AC	10	124C
124D		124	PLUMBING SHOP		EXTERIOR	12' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	4/A354	11/A901	9/A353	-	G7	42.0	-	-	2 / 8	124D
125	1	C103	CORRIDOR	125	HVAC SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		125
125A	1	C103	CORRIDOR	125	HVAC SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		125A
125B		125	HVAC SHOP	128	ELECTRICAL SHOP	10' - 0"	11' - 0"	2"	OH2	-	-	-	-	-	8/A901	9/A901	10/A901	45	-	42.0	-	-	2 / 8	125B
125C	1	125	HVAC SHOP		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	G	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	G7	31.0	-	AC	10	125C
125D		125	HVAC SHOP		EXTERIOR	12' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	4/A354	11/A901	9/A353	-	G7	42.0	-	-	2 / 8	125D
126	1	C103	CORRIDOR	126	ELEC. RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	-	43.0	-	-		126
127	1	C103	CORRIDOR	127	IDF	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	-	17.0	-	-		127
128	1	C103	CORRIDOR	128	ELECTRICAL SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		128
128A	1	C103	CORRIDOR	128	ELECTRICAL SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		128A
128B	1	128	ELECTRICAL SHOP		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	G	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	G7	33.0	-	AC	10	128B
128C		128	ELECTRICAL SHOP		EXTERIOR	12' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	4/A354	11/A901	9/A353	-	G7	42.0	-	-	2 / 8	128C
129	1	C103	CORRIDOR	129	CONSTRUCTION SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		129
129A	1	129	CONSTRUCTION SHOP	129A	OFFICE	3' - 0"	7' - 0"	1 3/4"	G	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	-	12.0	-	-		129A
129B	PR	129	CONSTRUCTION SHOP	129B	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	-	-	22.0	-	-		129B
129C	1	129	CONSTRUCTION SHOP	129C	CONSTRUCTION STORAGE	3' - 0"	7' - 0"	1 3/4"	G	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	60	G3	29.0	-	-		129C
129CA		129	CONSTRUCTION SHOP	129C	CONSTRUCTION STORAGE	10' - 0"	11' - 0"	2"	OH2	-	-	-	-	-	8/A901	9/A901	10/A901	60	-	42.0	-	-	2 / 8	129CA
129CB		129C	CONSTRUCTION STORAGE		EXTERIOR	10' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	4/A354	11/A901	9/A353	-	G7	42.0	-	-	2 / 8	129CB
129CC	1	129C	CONSTRUCTION STORAGE		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	-	33.0	-	AC	10	129CC
129D	1	C103	CORRIDOR	129	CONSTRUCTION SHOP	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	45	G3	4.0	-	-		129D
129DA	1	129D	MAINTENANCE STORAGE		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	-	33.0	-	AC	10	129DA
129DB		129D	MAINTENANCE STORAGE		EXTERIOR	10' - 0"	11' - 0"	2"	OH2	-	-	-	-	-	4/A353	11/A901	9/A353	-	-	42.0	-	-	2 / 9	129DB
129F	1	129	CONSTRUCTION SHOP		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	G	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	G7	33.0	-	AC	10	129F
129G		129	CONSTRUCTION SHOP		EXTERIOR	12' - 0"	11' - 4"	3"	OH1	-	-	-	-	-	4/A354	11/A901	9/A353	-	G7	42.0	-	-	2 / 8	129G
130	PR	C104	CORRIDOR	130	GYMNASIUM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	5/A901	1/A901	6/A352	90	G3	10.0	-	-		130
130A	PR	130	GYMNASIUM	130A	GYM STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	-	-	23.0	-	-		130A

DOOR SCHEDULE - FIRST FLOOR

DOOR NUMBER	DOOR											FRAME						LABEL (MIN)	GLAZING	HARDWARE	MAG HOLD-OPEN	ACCESS CONTROL	REMARKS	DOOR NUMBER
	QUANTITY	FROM		TO		WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	HEAD DETAIL	JAMB DETAIL	SILL DETAIL							
130AA	PR	130A	GYM STORAGE		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	4	AL	FF	5/A901	1/A901	8/A351	-	-	33.0	-	-		130AA
130B	PR	C104	CORRIDOR	130	GYMNASIUM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	5/A901	1/A901	6/A352	90	G3	10.0	-	-		130B
130C	PR	130	GYMNASIUM		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	4	AL	FF	5/A901	1/A901	6/A352	-	-	35.0	-	AC	10	130C
130D	PR	130	GYMNASIUM		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	4	AL	FF	5/A901	1/A901	6/A352	-	-	35.0	-	AC	10	130D
130E	PR	130	GYMNASIUM		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	4	AL	FF	5/A901	1/A901	6/A352	-	-	35.0	-	AC	10	130E
130F	PR	130	GYMNASIUM		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	FF	4	AL	FF	5/A901	1/A901	6/A352	-	-	35.0	-	AC	10	130F
131	1	C103	CORRIDOR	131	GIRLS LOCKER RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	90	-	5.0	-	-		131
131A	1	130	GYMNASIUM	131	GIRLS LOCKER RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	-	-	5.0	-	-		131A
132	1	130	GYMNASIUM	132	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	-	11.0	-	-		132
133	1	130	GYMNASIUM	133	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	-	11.0	-	-		133
134	1	C103	CORRIDOR	134	BOYS LOCKER RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	90	-	5.0	-	-		134
134A	1	130	GYMNASIUM	134	BOYS LOCKER RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	-	-	5.0	-	-		134A
136	1	C104	CORRIDOR	136	HOT WATER CLOSET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	7/A901	-	-	17.0	-	-		136
C102	PR	C101	CORRIDOR	C102	CORRIDOR	3' - 8"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	90	G3	51.0	MHO	-		C102
C102A		C102	CORRIDOR		EXTERIOR	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S14	AL	FF	1/A922	1/A922	8/A351	-	G7	37.0	-	AC	10	C102A
C103		C101	CORRIDOR	C103	CORRIDOR	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S32	AL	FF	1/A921	1/A921	7/A901	-	G5	49.0	MHO	-		C103
C104		C104	CORRIDOR	C101	CORRIDOR	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S32	AL	FF	1/A921	1/A921	7/A901	-	G5	49.0	MHO	-		C104
CY101	1	C101	CORRIDOR	CY101	COURTYARD	3' - 0"	7' - 0"	1 3/4"	DG	FRP	FF	2	AL	FF	5/A901	1/A901	8/A351	-	G3	50.0	-	AC	10	CY101
CY101A	PR	C104	CORRIDOR	CY101	COURTYARD	3' - 0"	7' - 0"	1 3/4"	DG	FRP	FF	4	AL	FF	5/A901	1/A901	8/A351	-	G3	63.0	-	AC	10	CY101A
S101	PR	C102	CORRIDOR	S101	STAIR 1	3' - 0"	7' - 0"	1 3/4"	DG	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	60	G3	51.0	MHO	-		S101
S101A		S101	STAIR 1		EXTERIOR	3' - 0"	7' - 9 3/4"	1 3/4"	DG	AL	FF	S1	AL	FF	1/A922	1/A922	8/A351	-	G7	38.0	-	AC	10	S101A
S102	PR	C101	CORRIDOR	S102	STAIR 2	3' - 0"	7' - 0"	1 3/4"	DG	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	60	G3	51.0	MHO	-		S102
S102A	PR	S102	STAIR 2		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	DG	AL	AL	4	AL	FF	5/A901	1/A901	8/A351	-	G7	39.0	-	AC	10	S102A
S103	PR	S103	STAIR 3	C101	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	DG	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	60	G3	51.0	MHO	-		S103
S104	PR	C103	CORRIDOR	S104	STAIR 4	3' - 0"	7' - 0"	1 3/4"	DG	WD	FF	3	HM	PT	5/A901	1/A901	7/A901	60	G3	51.0	MHO	-		S104
S104A	PR	S104	STAIR 4		EXTERIOR	3' - 0"	7' - 8"	1 3/4"	DG	AL	AL	4	AL	FF	5/A901	1/A901	8/A351	-	G7	58.0	-	AC	11	S104A
T101	1	C102	CORRIDOR	T101	WOMEN'S	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	-	-	25.0	-	-		T101
T102	1	C102	CORRIDOR	T102	MEN'S	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	-	-	25.0	-	-		T102
T103	1	C101	CORRIDOR	T103	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	6/A901	20	-	52.0	-	-		T103
T104	1	C101	CORRIDOR	T104	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	60	-	52.0	-	-		T104
T105	1	C101	CORRIDOR	T105	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	60	-	52.0	-	-		T105
T106	1	C101	CORRIDOR	T106	MEN'S	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	45	-	25.0	-	-		T106
T107	1	C101	CORRIDOR	T107	WOMEN'S	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	45	-	25.0	-	-		T107
T108	1	C104	CORRIDOR	T108	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	-	-	52.0	-	-		T108
T109	1	C104	CORRIDOR	T109	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	5/A901	1/A901	6/A901	-	-	52.0	-	-		T109
V101		C101	CORRIDOR	V101	WEST VEST	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S30	AL	FF	1/A921	1/A921	7/A901	-	G5	53.0	-	AC	11	V101
V101A		C101	CORRIDOR	V101	WEST VEST	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S30	AL	FF	1/A921	1/A921	7/A901	-	G5	54.0	-	-		V101A
V101B		V101	WEST VEST		EXTERIOR	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S3	AL	FF	1/A922	1/A922	8/A351	-	G7	55.0	-	AC	10	V101B
V101C		V101	WEST VEST		EXTERIOR	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S3	AL	FF	1/A922	1/A922	8/A351	-	G7	58.0	-	AC	11	V101C
V102	PR	C102	CORRIDOR	V102	SOUTH VEST	3' - 0"	7' - 0"	1 3/4"	DG	WD	FF	3	HM	PT	4/A901	2/A901	7/A901	-	G5	59.0	-	-		V102
V102A	PR	V102	SOUTH VEST		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	DG	AL	AL	4	AL	FF	5/A901	1/A901	8/A351	-	G7	62.0	-	AC	11	V102A
V103		C101	CORRIDOR	V103	EAST VEST	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S36	AL	FF	1/A921	1/A921	7/A901	-	G5	54.0	-	-		V103
V103A		C101	CORRIDOR	V103	EAST VEST	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S36	AL	FF	1/A921	1/A921	7/A901	-	G5	53.0	-	-		V103A
V103B		V103	EAST VEST		EXTERIOR	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S5	AL	FF	1/A922	1/A922	8/A351	-	G7	58.0	-	AC	11	V103B
V103C		V103	EAST VEST		EXTERIOR	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S5	AL	FF	1/A922	1/A922	8/A351	-	G7	57.0	-	AC	10	V103C
V104		C103	CORRIDOR	V104	NORTH VEST	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S34	AL	FF	1/A921	1/A921	7/A901	-	G5	53.0	-	-		V104
V104A	PR	V104	NORTH VEST		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	DG	AL	AL	4	AL	FF	5/A901	1/A901	8/A351	-	G7	62.0	-	AC	11	V104A
V105		C104	CORRIDOR	V105	NW VEST	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S33	AL	FF	1/A921	1/A921	7/A901	-	G5	56.0	-	-		V105
V105A		V105	NW VEST		EXTERIOR	3' - 0"	8' - 0"	1 3/4"	DG	AL	FF	S4	AL	FF	1/A922	1/A922	8/A351	-	G7	58.0	-	AC	11	V105A

REMARKS:

1. DOOR WITH SIDELITE.
2. OVERHEAD DOOR.
3. SMOKE CURTAIN.
4. SECURITY GRILLE.
5. ACOUSTICAL DOOR WITH STC RATING: 61.
6. MOTOR OPERATED.
7. FULL VERTICAL TRACK.
8. STANDARD LIFT TRACK.
9. ~~COILING DOOR, MOTOR OPERATED.~~
10. DOOR CONTACT SENSOR, COORDINATE WITH 'T' DRAWINGS
11. DOOR CARD READER ACCESS, COORDINATE WITH T' DRAWINSG

GLAZING TYPES

G1	TINTED INSLUATED GLASS
G2	CLEAR INSULATED GLASS
G3	FIRE PROTECTED SAFETY GLASS
G4	FULLY TEMPERED GLASS, 1/4" CLEAR
G5	LAMINATED GLASS
G6	SPANDREL GLASS
G7	SHOOTER/ATTACK RESISTANT INSULATED GLASS

DOOR/FRAME MATERIALS

ALUM	ALUMINUM
ANOD	ANODIZED
EXST	EXISTING TO REMAIN
FF	FACTORY FINISH
FRP	FIBERGLASS REINFORCED PLASTIC
HM	HOLLOW METAL
PT	PAINTED
ST	STEEL
WD	WOOD

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Consultant

Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT · RICHARD L. PECKHAM · 019884 · STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

#	DATE	DESCRIPTION
2	5/3/2024	BID Addendum #2

Drawn By:	
Checked By:	
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Sheet Title
DOOR SCHEDULE - FIRST FLOOR

Sheet No.
CTE A902

CONSTRUCTION DOCUMENTS

DOOR SCHEDULE - THIRD FLOOR

DOOR NUMBER	DOOR QUANTITY	DOOR FROM		DOOR TO		DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	FRAME HEAD DETAIL	FRAME JAMB DETAIL	FRAME SILL DETAIL	LABEL (MIN)	GLAZING	HARDWARE	MAG HOLD-OPEN	ACCESS CONTROL	REMARKS	DOOR NUMBER
300	PR	C301	CORRIDOR	300	ELEC RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	S/A901	1/A901	7/A901	60	-	21.0	-			300
300A	PR	300	ELEC RM		EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	FRP	PT	4	AL	FF	S/A901	1/A901	11/A354	-	-	36.0	-	AC	10 2	300A
301	1	C301	CORRIDOR	301	ELEV. CONTROL RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	45	-	17.0	-	-		301
302	1	C301	CORRIDOR	302	FACULTY LOUNGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	5	HM	PT	S/A901	1/A901	7/A901	45	G3	3.0	-	-	1	302
302A	1	302	FACULTY LOUNGE	302A	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	6/A901	-	-	14.0	-	-		302A
303	PR	C301	CORRIDOR	303	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	3	HM	PT	S/A901	1/A901	7/A901	60	-	22.0	-	-		303
304	1	C301	CORRIDOR	304	CUSTODIAN	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	-	16.0	-	-		304
305	1	C301	CORRIDOR	305	VIDEO PRODUCTION LAB	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		305
305A	1	305	VIDEO PRODUCTION LAB	305A	CONTROL RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	48.0	-	-	5	305A
305B	1	305A	CONTROL RM	305B	GREEN RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	48.0	-	-	5	305B
305C	1	305	VIDEO PRODUCTION LAB	305C	CAMERA STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	24.0	-	-		305C
305D	1	C301	CORRIDOR	305	VIDEO PRODUCTION LAB	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		305D
306	1	C301	CORRIDOR	306	COMPUTER CLASSROOM	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		306
306A	1	C301	CORRIDOR	306	COMPUTER CLASSROOM	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		306A
307	1	C301	CORRIDOR	307	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	-	17.0	-	-		307
308	1	C301	CORRIDOR	308	COMPUTER CLASSROOM	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		308
308A	1	C301	CORRIDOR	308	COMPUTER CLASSROOM	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		308A
309	1	C301	CORRIDOR	309	ELEC. RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	45	-	43.0	-	-		309
310	1	C301	CORRIDOR	310	IDF	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	-	17.0	-	-		310
311	1	C301	CORRIDOR	311	COMPUTER CLASSROOM	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		311
311A	1	C301	CORRIDOR	311	COMPUTER CLASSROOM	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		311A
312	1	C301	CORRIDOR	312	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	-	17.0	-	-		312
313	1	313	STORAGE	C301	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	-	17.0	-	-		313
314	1	C301	CORRIDOR	314	PHOTO LAB	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		314
314A	1	314	PHOTO LAB	314A	LIGHT LOCK	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	24.0	-	-		314A
314B	1	314A	LIGHT LOCK	314B	DARK RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	47.0	-	-		314B
314C	1	314B	DARK RM	314C	DEVELOPER RM	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	1	HM	PT	4/A901	2/A901	7/A901	-	-	47.0	-	-		314C
314D	1	C301	CORRIDOR	314	PHOTO LAB	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	G3	4.0	-	-		314D
315	1	C301	CORRIDOR	315	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	7/A901	-	-	17.0	-	-		315
S303	PR	C301	CORRIDOR	S303	STAIR 3	3' - 0"	7' - 0"	1 3/4"	DG	WD	FF	3	HM	PT	S/A901	1/A901	7/A901	60	G3	51.0	MHO	-		S303
S304	PR	C301	CORRIDOR	S304	STAIR 4	3' - 0"	7' - 0"	1 3/4"	DG	WD	FF	3	HM	PT	S/A901	1/A901	7/A901	60	G3	51.0	MHO	-		S304
T301	1	C301	CORRIDOR	T301	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	6/A901	-	-	52.0	-	-		T301
T302	1	C301	CORRIDOR	T302	MEN'S	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	6/A901	-	-	25.0	-	-		T302
T303	1	C301	CORRIDOR	T303	WOMEN'S	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	2	HM	PT	S/A901	1/A901	6/A901	-	-	25.0	-	-		T303

REMARKS:

1. DOOR WITH SIDELITE.
2. OVERHEAD DOOR.
3. SMOKE CURTAIN.
4. SECURITY GRILLE.
5. ACOUSTICAL DOOR WITH STC RATING: 61.
6. MOTOR OPERATED.
7. FULL VERTICAL TRACK.
8. STANDARD LIFT TRACK.
9. ROLLING DOOR MOTOR OPERATED.
10. DOOR CONTACT SENSOR. COORDINATE WITH 'T' DRAWINGS. 2
11. DOOR CARD READER ACCESS. COORDINATE WITH 'T' DRAWINGS.

GLAZING TYPES

G1	TINTED INSLUATED GLASS
G2	CLEAR INSULATED GLASS
G3	FIRE PROTECTED SAFETY GLASS
G4	FULLY TEMPERED GLASS, 1/4" CLEAR
G5	LAMINATED GLASS
G6	SPANDREL GLASS
G7	SHOOTER/ATTACK RESISTANT INSULATED GLASS

DOOR/FRAME MATERIALS

ALUM	ALUMINUM
ANOD	ANODIZED
EXST	EXISTING TO REMAIN
FF	FACTORY FINISH
FRP	FIBERGLASS REINFORCED PLASTIC
HM	HOLLOW METAL
PT	PAINTED
ST	STEEL
WD	WOOD

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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT
EDWARD L. PROCHILO
019859
STATE OF NEW YORK

REGISTRATION EXPIRATION DATE: 12/31/2024

#	DATE	DESCRIPTION
2	5/1/2024	BID Addendum #2

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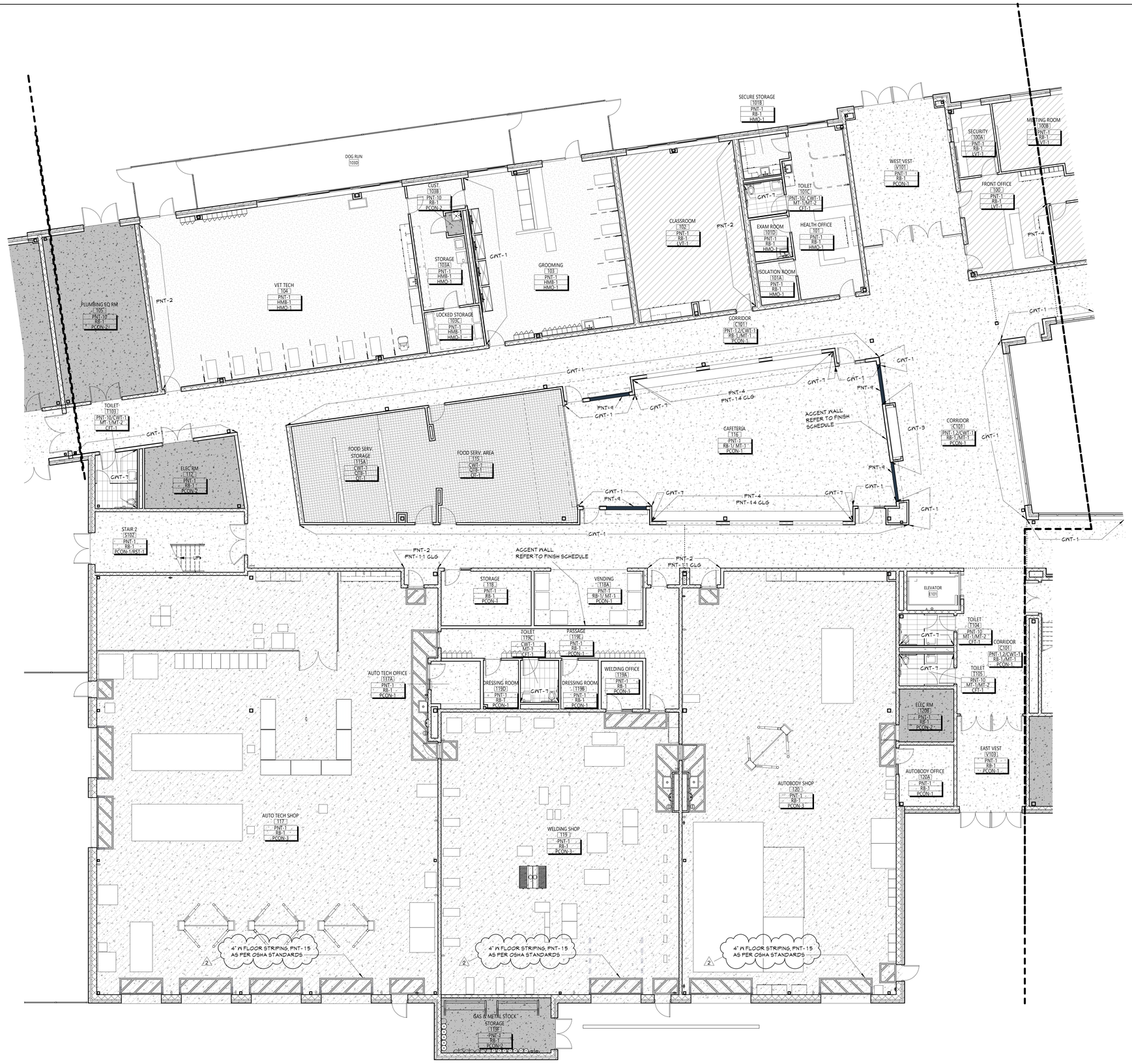
Sheet Title

DOOR SCHEDULE - THIRD FLOOR

Sheet No.

CTE A904

CONSTRUCTION DOCUMENTS



1 PARTIAL FIRST FLOOR PLAN - AREA 2
AF112 1/8" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A600 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A7101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

KEYNOTES

#	DESCRIPTION

DISCLAIMER NOTE

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ABBREVIATIONS

ACMU	ARCHITECTURAL CONCRETE MASONRY UNIT
ACT	ACOUSTICAL CEILING TILE
APC	ACOUSTICAL PANEL CEILING
BBT	BIO-BASED TILE
BRK	BRICK
CFT	CERAMIC FLOOR TILE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CPT	CARPET
CTB	CERAMIC TILE BASE
CWT	CERAMIC WALL TILE
EPF	EPOXY FLOOR
ETR	EXISTING TO REMAIN
EXP	EXPOSED
EXST	EXISTING
FAC/FF	FACTORY FINISH
GWB	GYPSUM WALL BOARD
HMB	HOMOGENOUS COVE BASE
HMO	HOMOGENOUS SHEET
LMC	LINEAR METAL CEILING
LVT	LUXURY VINYL TILE
MSS	MUSIC STORAGE SYSTEM
MT	METAL BASE
MWP	METAL WALL PANEL
PCON	POLISHED CONCRETE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PNT	PAINT
RAF	RESILIENT ATHLETIC FLOORING
RB	RUBBER BASE
RF	RESINOUS FLOORING
RST	RUBBER STAIR TREAD / LANDING
RT	RUBBER TILE FLOORING
SCON	SEALED CONCRETE
SS	SOLID SURFACE
SDT	STATIC DISSAPATIVE TILE
STF	SYNTHETIC TURF FLOORING
STL	STEEL
TERR	TERRAZZO
TP	TOILET PARTITIONS
TYP	TYPICAL
VCT	VINYL COMPOSITION TILE
VCTAS	VINYL COMPOSITION TILE ANTI-STATIC
VWC	VINYL WALLCOVERING
WAF	WOOD ATHLETIC FLOORING
WD	WOOD
WOM	WALK-OFF MAT

GENERAL FINISH NOTES

1. ALL EXPOSED SURFACES OF NEW PARTITIONS ARE TO BE PAINTED.
2. ALL ELECTRIC, MECHANICAL COMPONENTS AND TELEPHONE PANELS EXPOSED IN A ROOM TO MATCH WALL COLOR.
3. ALL NEW GWB CEILINGS, FASCIAS, AND SOFFITS TO BE PAINTED PNT-7, UNO.
4. ALL EXPOSED CEILING STRUCTURE, DECK, DUCTWORK, CONDUIT AND PIPING TO BE PAINTED PNT-8, UNO.
5. ALL STEEL COLUMNS IN AREAS OF WORK ARE TO BE PAINTED PNT-1.
6. ALL EXPOSED STEEL ASSOCIATED WITH STAIRS TO BE PAINTED PNT-8 , INCLUDING STRINGERS, CHANNELS, COLUMNS, PLATES, TUBES, GUARDRAILS, POSTS, UNDERSIDES OF FLOORS, LANDINGS, DECKS, AND STAIR PANS WITH THE EXCEPTION OF STAINLESS STEEL & FF, UNO.
7. NEW HM DOORS, DOOR FRAMES AND WINDOW FRAMES AND ETR CORRIDOR DOOR & WINDOW FRAMES AS SCHEDULED ON A900 SERIES DRAWINGS, PNT-8.
8. ALL EXPOSED GROUND FACE CMU LOCATIONS TO RECEIVE GRAFFITI COATING, TYPICAL FOR INTERIOR LOCATIONS.
9. ALL GYPSUM WALLS LOCATED IN CORRIDORS TO RECEIVE CNT-, UNO.

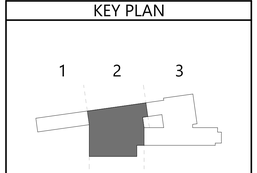
FINISH KEYS

Room Name
[101]
Wall Finish
Base Finish
Floor Finish
= Finish Tag

PNT-# ACCENT PAINT LOCATION

= PCON-1
= EPF-1
= RT-1
= LVT-1
= SDT-1
= CFT-1
= CFT-2
= HMO-1
= QT-1
= WD-1

KEY PLAN



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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

REGISTERED ARCHITECT RICHARD L. PROSACCO STATE OF NEW YORK 019883
REGISTRATION EXPIRATION DATE: 12/31/2026

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2	1/3/2024	BID Addendum #2

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Sheet Title
PARTIAL FIRST FLOOR FINISH PLAN - AREA 2

Sheet No.
CTE AF112

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - ARCH.rvt

GENERAL FINISH NOTES

1. ALL EXPOSED SURFACES OF NEW PARTITIONS ARE TO BE PAINTED.
2. ALL ELECTRIC, MECHANICAL COMPONENTS AND TELEPHONE PANELS EXPOSED IN A ROOM TO MATCH WALL COLOR.
3. ALL NEW GWB CEILINGS, FASCIAS, AND SOFFITS TO BE PAINTED PNT-7, UNO.
4. ALL EXPOSED CEILING STRUCTURE, DECK, DUCTWORK, CONDUIT AND PIPING TO BE PAINTED PNT-8, UNO.
5. ALL STEEL COLUMNS IN AREAS OF WORK ARE TO BE PAINTED PNT-1.
6. ALL EXPOSED STEEL ASSOCIATED WITH STAIRS TO BE PAINTED PNT-6 , INCLUDING STRINGERS, CHANNELS, COLUMNS, PLATES, TUBES, GUARDRAILS, POSTS, UNDERSIDES OF FLOORS, LANDINGS, DECKS, AND STAIR PANS WITH THE EXCEPTION OF STAINLESS STEEL & FF, UNO.
7. NEW HM DOORS, DOOR FRAMES AND WINDOW FRAMES AND ETR CORRIDOR DOOR & WINDOW FRAMES AS SCHEDULED ON A900 SERIES DRAWINGS, PNT-6.
8. ALL EXPOSED GROUND FACE CMU LOCATIONS TO RECEIVE GRAFFITI COATING, TYPICAL FOR INTERIOR LOCATIONS.
9. ALL GYPSUM WALLS LOCATED IN CORRIDORS TO RECEIVE CWT-1, UNO..

FINISH KEYS

Room Name
101
Wall Finish
Base Finish
Floor Finish
= Finish Tag

PNT-# = ACCENT PAINT LOCATION

= PCON-1
= EPF-1
= RT-1
= LVT-1
= SDT-1
= CPT-1
= CPT-2
= HMO-1
= QT-1
= WD-1

DISCLAIMER NOTE

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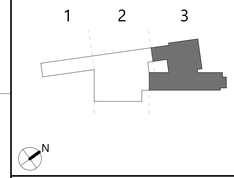
ABBREVIATIONS

ACMU	ARCHITECTURAL CONCRETE MASONRY UNIT
ACT	ACOUSTICAL CEILING TILE
APC	ACOUSTICAL PANEL CEILING
BBT	BIO-BASED TILE
BRK	BRICK
CFT	CERAMIC FLOOR TILE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CPT	CARPET
CTB	CERAMIC TILE BASE
CWT	CERAMIC WALL TILE
EPF	EPOXY FLOOR
ETR	EXISTING TO REMAIN
EXP	EXPOSED
EXST	EXISTING
FAC/FF	FACTORY FINISH
GWB	GYPSUM WALL BOARD
HMB	HOMOGENOUS COVE BASE
HMO	HOMOGENOUS SHEET
LMC	LINEAR METAL CEILING
LVT	LUXRY VINYL TILE
MSS	MUSIC STORAGE SYSTEM
MT	METAL BASE
MWP	METAL WALL PANEL
PCON	POLISHED CONCRETE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PNT	PAINT
RAF	RESILIENT ATHLETIC FLOORING
RB	RUBBER BASE
RF	RESINOUS FLOORING
RST	RUBBER STAIR TREAD / LANDING
RT	RUBBER TILE FLOORING
SCON	SEALED CONCRETE
SS	SOLID SURFACE
SDT	STATIC DISSAPATIVE TILE
STF	SYNTHETIC TURF FLOORING
STL	STEEL
TERR	TERRAZZO
TP	TOILET PARTITIONS
TYP	TYPICAL
VCT	VINYL COMPOSITION TILE
VCTAS	VINYL COMPOSITION TILE ANTI-STATIC
VNG	VINYL WALLGOVERING
WAF	WOOD ATHLETIC FLOORING
WD	WOOD
WOM	WALK-OFF MAT

KEY PLAN



1 PARTIAL FIRST FLOOR PLAN - AREA 3
AF113 1/8" = 1'-0"

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Consultant

Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT RICHARD L. PROCTOR 031984 STATE OF NEW YORK

REGISTRATION EXPIRATION DATE: 12/31/2024

#	DATE	DESCRIPTION
2	5/1/2024	BID Addendum #2

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Sheet Title

PARTIAL FIRST FLOOR FINISH PLAN - AREA 3

Sheet No.

CTE
AF113

CONSTRUCTION DOCUMENTS

PLUMBING EQUIPMENT CONNECTION SCHEDULE

TAG NO.	DESCRIPTION	LOCATION	BODY	STRAINER	MANUFACTURER AND REMARKS
FD-A	FLOOR DRAIN	FINISHED AREAS	CAST IRON	NICKEL BRONZE	JAY R SMITH FIG 2010C-A
FD-B	FLOOR DRAIN	UNFINISHED AREAS	CAST IRON	POLISHED BRONZE	JAY R SMITH FIG 2010C-A WITH 1/2 GRATE
FD-C	FLOOR DRAIN	UNFINISHED AREAS	CAST IRON	POLISHED BRONZE	JAY R SMITH FIG 2010C-A WITH WASTE FUNNEL
TD-A	TRENCH DRAIN	OUTSIDE RAMP	HDPE	-HPS	ZURN Z883 WITH HEEL PROOF STAINLESS STEEL SLOTTED GRATE

GREASE INTERCEPTOR SCHEDULE

NO.	LOCATION	GPM FLOW RATE	GREASE CAP.	CONNECTION		DESIGN MAKE
				INLET	OUTLET	
GT-1	FOOD SERVICE	50 GPM	108 GAL	3"	3"	BIG DIPPER W-500-IS POINT OF USE AUTOMATIC GREASE REMOVAL SYSTEM
GT-2	NW AREA 2 EXTERIOR	200 GPM	1154 GAL	4"	4"	PROCEPTOR GMC 2000(2)

OIL INTERCEPTOR SCHEDULE

NO.	LOCATION	GPM FLOW RATE	OIL CAP.	CONNECTION		DESIGN MAKE
				INLET	OUTLET	
OI-1	SE AREA 2 EXTERIOR	150 GPM	577 GAL	4"	4"	PROCEPTOR OMC 1000

PLUMBING FIXTURE CONNECTION SCHEDULE

SEE PLUMBING SPECIFICATIONS FOR COMPLETE FIXTURE INFORMATION

TAG NO.	DESCRIPTION	COLD WATER	HOT WATER	WASTE	SANITARY	VENT	REMARKS
WC-A	WATER CLOSET	1"	-	-	3"	2"	AMERICAN STANDARD 2257.101, WALL MOUNT, SLOAN SENSOR OPERATED FLUSHOMETER (FV-A); CHURCH 9500SCC OPEN FRONT, LESS COVER
WC-B	WATER CLOSET ADA	1"	-	-	3"	2"	AMERICAN STANDARD 2257.101, WALL MOUNT, SLOAN SENSOR OPERATED FLUSHOMETER (FV-A); CHURCH 9500SCC OPEN FRONT, LESS COVER
WC-B	WATER CLOSET ADA	1"	-	-	3"	2"	AMERICAN STANDARD 2257.101, WALL MOUNT, SLOAN SENSOR OPERATED FLUSHOMETER W/BEDPAN WASHER(FV-B); CHURCH 9500SCC OPEN FRONT, LESS COVER
LV-A	LAVATORY	1/2"	1/2"	1-1/2"	-	1-1/2"	SLOAN AER-DEC SINK, 1 STATION, F-A SENSOR FAUCET, HARDWIRED, WITH SOAP DISPENSER AND HAND DRYER
LV-B	LAVATORY	1/2"	1/2"	1-1/2"	-	1-1/2"	SLOAN AER-DEC SINK, 3 STATION, F-A SENSOR FAUCET, HARDWIRED, WITH SOAP DISPENSER AND HAND DRYER
LV-C	LAVATORY	1/2"	1/2"	1-1/2"	-	1-1/2"	SLOAN AER-DEC SINK, 4 STATION, F-A SENSOR FAUCET, HARDWIRED, WITH SOAP DISPENSER AND HAND DRYER
SK-A	SINK	1/2"	1/2"	1-1/2"	-	1-1/2"	ELKAY LR2219, SINGLE S/S DROP-IN, CHICAGO FAUCET (F-B), GOOSENECK SPOUT, MANUAL CLOSE WITH WRISTBLADE FAUCETS, 1.6 GPM
SK-B	SINK ADA	1/2"	1/2"	1-1/2"	-	1-1/2"	ELKAY LRAD221955, SINGLE S/S DROP-IN, ADA OFFSET TAILPIECE, CHICAGO FAUCET (F-B), GOOSENECK SPOUT, MANUAL WITH WRISTBLADE FAUCETS, 1.6 GPM
SK-C	SINK ADA WITH EYE WASH	1/2"	1/2"	1-1/2"	-	1-1/2"	ELKAY LRAD221955, SINGLE S/S DROP-IN, ADA OFFSET TAILPIECE, CHICAGO FAUCET (F-B), GOOSENECK SPOUT, MANUAL WITH WRISTBLADE FAUCETS, 1.6 GPM W/EEW-B
SK-D	SINK - UTILITY	1/2"	1/2"	1-1/2"	-	1-1/2"	ELKAY SS, TWO COMPARTMENT FLOOR SINK, 30" X 26" X 44" E2C16X20-0X, EXPOSED YOKE WALL-MOUNT UTILITY FAUCET 8251.076
SK-E	SINK - UTILITY	1/2"	1/2"	1-1/2"	-	1-1/2"	ELKAY SS, SINGLE COMPARTMENT FLOOR SINK, 27" X 27-1/2" X 14" SS81242, EXPOSED YOKE WALL-MOUNT UTILITY FAUCET 8251.076
SK-F	SINK ADA - EPOXY	1/2"	1/2"	1-1/2"	-	1-1/2"	ELKAY LRAD221955, SINGLE S/S DROP-IN, ADA OFFSET TAILPIECE, CHICAGO FAUCET (F-B), GOOSENECK SPOUT, MANUAL WITH WRISTBLADE FAUCETS, 1.6 GPM
SK-G	SINK ADA WITH EYE WASH - EPOXY	1/2"	1/2"	1-1/2"	-	1-1/2"	ELKAY LRAD221955, SINGLE S/S DROP-IN, ADA OFFSET TAILPIECE, CHICAGO FAUCET (F-B), GOOSENECK SPOUT, MANUAL WITH WRISTBLADE FAUCETS, 1.6 GPM W/EEW-B
EWC-A	WATER COOLER	1/2"	-	1-1/2"	-	1-1/2"	ELKAY EZH20 BOTTLE FILLING STATION & BI-LEVEL ADA COOLER, FILTERED, REFRIGERATED, STAINLESS -LZSTL8WSSK
EWC-B	WATER COOLER	1/2"	-	1-1/2"	-	1-1/2"	ELKAY SINGLE LEVEL ADA COOLER, FILTERED, REFRIGERATED, STAINLESS - LZS8S
BF-A	BOTTLE FILLER	1/2"	-	1-1/2"	-	1-1/2"	ELKAY EZH20 ADA BOTTLE FILLER, FILTERED, REFRIGERATED, STAINLESS - LZ8WSSSMC
MB-A	MOP BASIN	1/2"	1/2"	3"	-	2"	FIAT MSB, MOLDED STONE, 36" X 36" X 12", T&S BRASS B-0665-BSTP WALL MOUNTED FAUCET, BUCKET HOOK, HOSE END, VACUUM BREAKER
MB-B	MOP BASIN	1/2"	1/2"	3"	-	2"	FIAT MSB, MOLDED STONE, 24" X 24" X 10", T&S BRASS B-0665-BSTP WALL MOUNTED FAUCET, BUCKET HOOK, HOSE END, VACUUM BREAKER
EEW-A	EYE WASH	1/2"	1/2"	1-1/2"	-	1-1/2"	BRADLEY S19224 WALL MOUNT EYE WASH, S19-2000 EFX8 MIXING VALVE AND TEMPERATURE GAUGE
EEW-B	EYE WASH	1/2"	1/2"	1-1/2"	-	1-1/2"	BRADLEY S19274E SWING ACTIVATED EYE WASH, S19-2000 EFX8 MIXING VALVE AND TEMPERATURE GAUGE

PLUMBING GENERAL NOTES

#	Note
A	THESE NOTES ARE APPLICABLE TO THE FULL SET OF CONTRACT DRAWINGS
B	EXISTING CONDITIONS ARE TAKEN FROM FIELD OBSERVATIONS AND PRIOR CONSTRUCTION DOCUMENTS WHEN AVAILABLE. THE LOCATIONS SHOWN MUST BE CONSIDERED APPROXIMATE. OTHER SUCH WORK MAY EXIST, HOWEVER LOCATION AND SIZE ARE NOT PRESENTLY KNOWN.
C	WHEN EXISTING CONSTRUCTION IS DAMAGED BY WORK BY THIS CONTRACTOR, REPAIR AND/OR REPLACE WITH SIMILAR MATERIALS AS MUCH AS POSSIBLE, SUBJECT TO ARCHITECTS APPROVAL.
D	DISPOSE OF ALL DEMOLITION AND/OR OTHER WASTE MATERIALS CAUSE BY WORK OF THIS CONTRACTOR. LEGALLY DISPOSE ALL MATERIALS TO A LOCATION OFF SITE.
E	COORDINATE AND SCHEDULE WORK AND SHUTDOWNS WITH THE OWNER AND OTHER TRADES PRIOR TO DEMOLITION.
F	ALL EXISTING PIPING TO REMAIN SHALL BE RECONNECTED TO ACTIVE SERVICE PIPING.
G	ALL PIPING TO BE REMOVED SHALL BE REMOVED BACK TO ACTIVE SERVICE PIPING AND CAPPED. VALVE AND CAP ALL WATER PIPING. REMOVE ALL INACTIVE PIPING UNLESS OTHER WISE NOTED.
H	ALL PIPING TO BE REMOVED AND IN A WALL TO REMAIN MAY BE ABANDONED IN PLACE UNLESS NOTED.
I	PATCH HOLES IN EXISTING CONSTRUCTION LEFT BY THE REMOVAL OF PIPING OR EQUIPMENT WITH MATERIALS TO MATCH EXISTING CONSTRUCTION. MAINTAIN FIRE SMOKE RATING.
J	DEMOLITION SHALL INCLUDE, BUT NOT LIMITED TO: PIPING, VALVES, FIXTURES, EQUIPMENT, HANGERS, SUPPORTS AND INSULATION, EXCEPT ASBESTOS.
K	REMOVE EXISTING CONSTRUCTION IN THE WAY OF NEW WORK. PROTECT BUILDINGS AND FURNISHINGS FROM DAMAGE.
L	WHERE NEW WORK IS TO BE INSTALLED ABOVE AN EXISTING CEILING, PROVIDE FOR THE REMOVAL OF THE CEILING. UPON COMPLETION OF WORK, REPAIR ALL DAMAGED CEILING SURFACES, REPLACE ALL DAMAGED TILES.
M	SLEEVE AND SEAL ALL WALL AND FLOOR PENETRATIONS. PROVIDE FIRESTOPPING FOR ALL PENETRATIONS.
N	MAINTAIN SERVICE CLEARANCES OF ALL EQUIPMENT. ADVISE OTHER TRADES OF REQUIRED CLEARANCES.
O	PROVIDED FOR THE DRAINAGE AND REFILLING OF PIPING SYSTEMS, INCLUDING AIR REMOVAL, RESETTING OF FLUSH VALVES, FLUSHING SYSTEMS OF DIRT AND SCALE CAUSED BY SHUTDOWNS AND STARTUPS.
P	REFER TO EQUIPMENT/FIXTURE SCHEDULE FOR FINAL CONNECTION SIZES.
Q	PROVIDE CLEANOUTS AT THE BASE OF ALL STORM, SANITARY AND WASTE STACKS.
R	PITCH 4" AND LARGER SANITARY AND WASTE PIPING AT 1/8" PER FOOT UNLESS NOTED OTHERWISE. FOR SANITARY AND WASTE PIPING 3" AND SMALLER, PITCH AT 1/4" PER FOOT UNLESS NOTED OTHERWISE.
S	COORDINATE LOCATION AND ELEVATION OF STORM AND SANITARY LATERALS AND WATER SERVICE PIPING WITH THE SITE CONTRACTOR. NO ALLOWANCES WILL BE MADE FOR ADDITIONAL COST DUE TO THE CONTRACTORS FAILURE TO COORDINATE TERMINATION POINTS. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR THE FINAL CONNECTIONS TO THE SITE UTILITIES.
T	MINIMUM SIZE OF WASTE PIPING BELOW SLAB SHALL BE 3" EXCEPT PIPING SERVING FLOOR DRAINS SHALL BE 4". MINIMUM SIZE OF VENT PIPING BELOW SLAB SHALL BE 2" UNLESS NOTED OTHERWISE.
U	PITCH 4" AND LARGER STORM PIPING AT 1/4" PER FOOT UNLESS NOTED OTHERWISE.

PLUMBING SYMBOL LIST

SYMBOL	DESCRIPTION
	POINT OF CONNECTION
NTS	NOT TO SCALE
(E)	EXISTING
(ETR)	EXISTING TO REMAIN
AFF	ABOVE FINISHED FLOOR
BFF	BELOW FINISHED FLOOR
VTR	VENT THRU ROOF
GC	GENERAL CONTRACTOR
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
EC	ELECTRICAL CONTRACTOR
	NEW PIPING LOCATED ABOVE FLOOR/SLAB
	NEW PIPING LOCATED BELOW FLOOR/SLAB
	COLD WATER PIPING (CW)
	HOT WATER PIPING (HW)
	HOT WATER RECIRCULATING PIPING (HWR)
140	140° HOT WATER PIPING (HW)
140	140° HOT WATER RECIRCULATING PIPING (HWR)
W	WATER SERVICE - EXTERIOR
SAN	SANITARY SEWER PIPING
GW	GREASE WASTE PIPING (GW)
V	VENT PIPING (V)
ST	STORM WATER SEWER PIPING (ST)
ST(2)	SECONDARY STORM WATER SEWER PIPING (ST(2))
G	NATURAL GAS PIPING (G)
CA	COMPRESSED AIR PIPING (CA)
	ELBOW DOWN
	45°OFFSET
	ELBOW UP
	BOTTOM/TEE CONNECTION
	TOP TEE CONNECTION
	"P" TRAP
	PIPE CONTINUATION
	CAP OR PLUG
	DECK PLATE CLEANOUT (DPCO)
	WALL PLATE CLEANOUT (WPCO)
	CLEANOUT (CO)
	FLOOR DRAIN (FD) / FLOOR SINK (FS)
	ROOF DRAIN
	WALL HYDRANT (WH) / HOSE BIBB (HB)
	STRAINER
M	WATER METER
	CATCH BASIN
	SHUT OFF VALVE
	BALANCING VALVE
	CHECK VALVE
	SOLENOID VALVE
	PIPE GUIDE
	UNION
	BACKFLOW PREVENTER (BFP)
	SHOCK ABSORBER (SA)
	RECIRCULATION PUMP
	THERMOMETER
	PRESSURE GAUGE
X	DRAWING KEYNOTE

PUMP SCHEDULE

NO.	LOCATION	SERVICE	GPM	HEAD FT WATER	MOTOR				TYPE	DESIGN MAKE
					HP	VOLTAGE	PHASE	RPM		
PP-1	PLUMBING 105	DOM. HOT WATER	3.5	24.7	1/8	115	1	3250	IN LINE	TACO IL009-FS
PP-2	PLUMBING 105	DOM. HOT WATER	1	6.1	1/8	115	1	3250	IN LINE	TACO IL009-FS
PP-3	PLUMBING 105	DOM. HOT WATER	1	11.6	1/8	115	1	3250	IN LINE	TACO IL009-FS
PP-4	CLOSET 136	DOM. HOT WATER	0.25	5	1/8	115	1	3250	IN LINE	TACO IL009-FS
SP-1	E101 SHAFT	SUMP	50	15	1/2	115	-	-	SUMP	ELV280 WITH CONTROL PANEL AND ALARM

AIR COMPRESSOR SCHEDULE

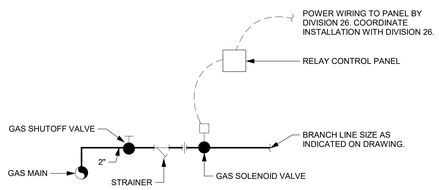
NO.	LOCATION	SERVICE	ACFM	MAX PRESSURE	MOTOR			TYPE	DESIGN MAKE
					HP	VOLTAGE	PHASE		
AC-1	PLUMBING 105	AUTO SHOP	51.0	175	15	230	3	RECIPRO	RAND 7100E15 WITH DRYER, FILTER AND SEPERATOR

EXPANSION TANK SCHEDULE

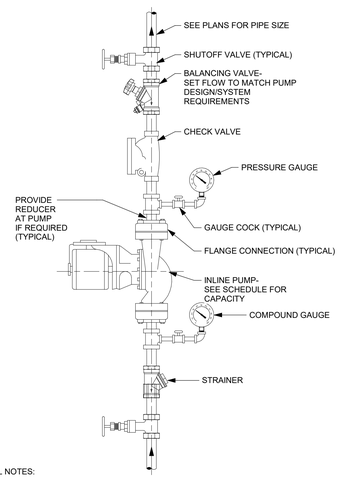
TAG NO.	LOCATION	SERVICE	MAXIMUM SYSTEM PRESSURE (PSI)	TANK VOLUME (GALS.)	ACCEPTANCE FACTOR	MANUFACTURER AND REMARKS
ET-1	PLUMBING EQ ROOM 105	DOMESTIC HOT WATER	150	23.0	0.49	AMTROL ST-42VC-DD ASME
ET-2	WATER HEATER CLOSET 136	DOMESTIC HOT WATER	150	2.0	0.45	AMTROL ST-5C-DD ASME

NATURAL GAS WATER HEATER SCHEDULE

TAG NO.	LOCATION	VENT SIZE (MIN)	STORAGE CAPACITY (GAL)	GPH RECOVERY @ 100°F RISE	NATURAL GAS CFH	REFERENCE MANUFACTURER
GWH-1 LOCKER RM	WATER CLOSET 136	4"	119	349	300	AOSMITH BTH-300A
GWH-2 CULLINARY	PLUMBING RM 105	4"	120	882	750	AOSMITH BTHS-750A
GWH-3A BUILDING	PLUMBING RM 105	4"	100	582	250	AOSMITH BTH-250A
GWH-3B BUILDING	PLUMBING RM 105	4"	100	582	250	AOSMITH BTH-250A
GWH-4 VET/COSMO	PLUMBING RM 105	4"	119	349	300	AOSMITH BTH-300A



4 CLASSROOM GAS PIPING SHUT-OFF DETAIL
P001 NOT TO SCALE



DETAIL NOTES:

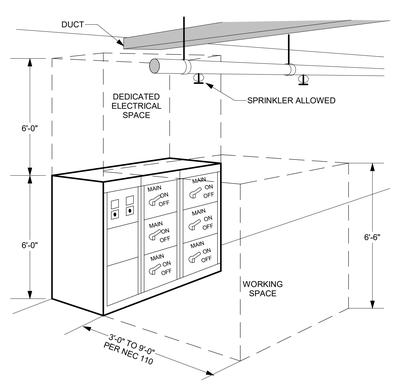
A. PRESSURE GAUGES - SELECT GAUGE RANGE TO PLACE MAXIMUM SYSTEM OPERATING PRESSURE IN MIDDLE THIRD OF RANGE.

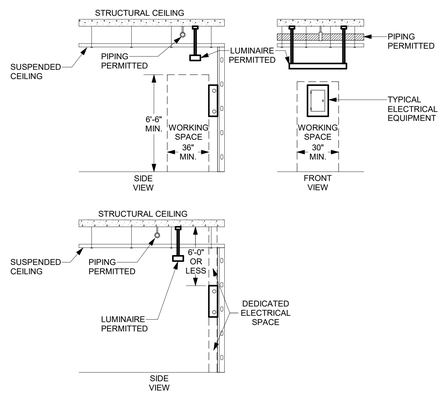
B. PROVIDE UNION ON PUMP INLET AND OUTLET IF PUMP IS NOT FLANGED.

C. INSTALL PUMP WITH SHAFT HORIZONTAL. PIPING MAY BE INSTALLED VERTICAL, AS SHOWN, OR HORIZONTAL DEPENDING ON SITE CONDITIONS.

D. INSTALL CHECK VALVE HORIZONTALLY OR VERTICALLY WITH FLOW UPWARD.

3 INLINE PUMP DETAIL
P001 NOT TO SCALE





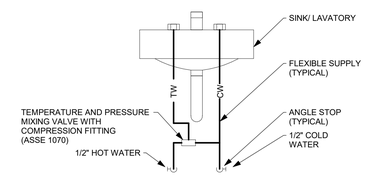
DETAIL NOTES:

A. ELECTRICAL EQUIPMENT INCLUDES PANELS, TRANSFORMERS, DISCONNECTS, STARTERS, MOTOR CONTROL CENTERS, SWITCHGEAR, ADJUSTABLE SPEED DRIVES, AND FUSED SWITCHES (THIS ALSO APPLIES TO ELECTRICAL GEAR MOUNTED DIRECTLY ON MECHANICAL EQUIPMENT).

B. DEDICATED ELECTRICAL SPACE IS DEFINED BY NEC 110.

C. NO PIPING OR DUCTWORK MAY BE INSTALLED IN DEDICATED ELECTRICAL SPACE OR WORKING SPACE.

2 PIPING OVER ELECTRICAL EQUIPMENT DETAIL
P001 NOT TO SCALE



DETAIL NOTE:

A. PROVIDE A MIXING VALVE FOR EACH HAND SINK AND LAVATORY.

B. MIXING VALVE SHALL BE ADJUSTED TO DELIVER TEMPERED WATER AT 105°F.

1 POINT OF USE MIXING VALVE DETAIL
P001 NOT TO SCALE

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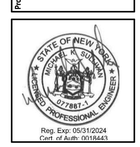
M/E PROJECT: 23139.00

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title



Reg. Exp. 05/31/2024
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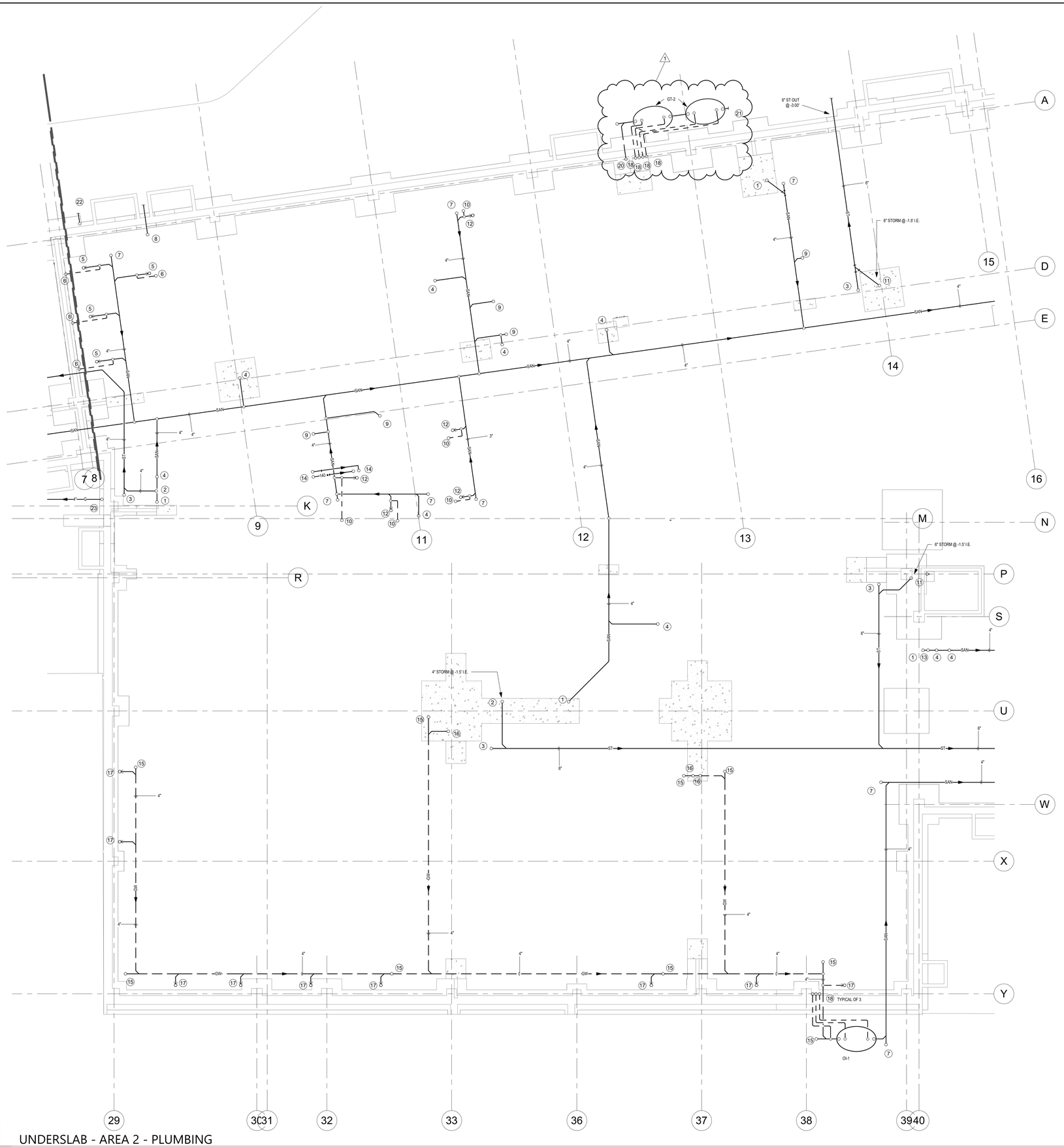
#	DATE	DESCRIPTION
1	1/3/2024	BID Addendum #2

Drawn By:	MT
Checked By:	MT
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Construction Documents:	4/15/2024

Sheet Title
PLUMBING NOTES, SYMBOLS AND SCHEDULES

Sheet No.
CTE P001

CONSTRUCTION DOCUMENTS

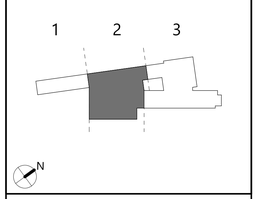


1 UNDERSLAB - AREA 2 - PLUMBING
P101 1/8" = 1'-0"

P101 DRAWING NOTES

1 4" SANITARY UP
2 4" PRIMARY STORM UP
3 STORM UP TO DECKPLATE CLEAN OUT
4 2" SANITARY UP
5 4" SANITARY WITH P-TRAP UP
6 2" VENT UP
7 SANITARY UP TO DECKPLATE CLEAN OUT
8 6" COMBINED DOMESTIC/ FIRE WATER SERVICE UP
9 3" SANITARY UP
10 1-1/2" VENT UP
11 6" STORM UP
12 3" SANITARY WITH P-TRAP UP
13 4" VENT UP
14 1/2" HOT AND COLD WATER UP
15 OIL WASTE UP TO CLEAN OUT
16 2" OIL WASTE UP
17 4" OIL WASTE WITH P-TRAP UP TO TRENCH DRAIN
18 3" VENT UP
20 4" GREASE WASTE UP
21 SANITARY FROM GREASE INTERCEPTOR TO SITE
22 MEDIUM PRESSURE NATURAL GAS SERVICE FROM UTILITY COMPANY
23 4" NATURAL GAS UP

KEY PLAN



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M/E PROJECT: 233139.00

Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Reg. Exp: 05/31/2024
Cert. of Auth.: 0V19.6&5

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Construction Documents:	4/15/2024

Sheet Title
PARTIAL UNDERSLAB PLAN - AREA 2 - PLUMBING

Sheet No.
CTE P101

CONSTRUCTION DOCUMENTS

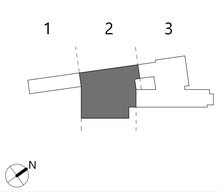
Autodesk Docs://NECSD - New CTE Bldg/233139_NECSD_CTE_PL_CENTRAL_R22.rvt

1 FIRST FLOOR - AREA 2 - PLUMBING PLAN
P112 1/8" = 1'-0"

P112 DRAWING NOTES

1 6" PRIMARY STORM UP
2 6" SECONDARY STORM UP
3 6" PRIMARY STORM DOWN
4 6" SECONDARY STORM DROP TO 1'-6" ABOVE GRADE AT EXTERIOR AND DISCHARGE OVER SPLASH BLOCK BY OTHERS. PROVIDE DOWNSPOUT AT EXTERIOR TERMINATION
5 3" VENT UP
6 4" SECONDARY STORM DROP TO 1'-6" ABOVE GRADE AT EXTERIOR AND DISCHARGE OVER SPLASH BLOCK BY OTHERS. PROVIDE DOWNSPOUT AT EXTERIOR TERMINATION
7 4" PRIMARY STORM UP
8 4" SECONDARY STORM UP
9 6" PRIMARY STORM UP AND DOWN
10 6" SECONDARY STORM UP, 6" DROP DOWN TO 1'-6" ABOVE GRADE AT BUILDING EXTERIOR AND TERMINATE WITH HINGED DOWNSPOUT COVER
11 4" PRIMARY STORM UP AND DOWN
12 4" SANITARY UP AND DOWN; 1" SANITARY DROP AND UP TO FLUSH VALVES
13 2" SANITARY UP, 2" SANITARY DOWN; 1/2" HOT AND COLD WATER DROP AND UP TO MIXING VALVE/ FAUCET SUPPLIES
14 1-1/2" SANITARY UP; 1/2" HOT AND COLD WATER UP TO MIXING VALVE/ FAUCET SUPPLIES
15 4" AND 4" VENT SANITARY UP AND DOWN; 1" SANITARY DROP AND UP TO FLUSH VALVES
16 2" SANITARY DOWN
17 1-1/2" SANITARY UP; 1/2" COLD WATER UP
18 1-1/2" SANITARY DROP, 2" DOWN, 1-1/2" VENT RISE; 1/2" HOT AND COLD WATER DROP TO MIXING VALVE/ FAUCET SUPPLIES
19 1-1/2" SANITARY DROP IN WALL, 1-1/2" VENT RISE
20 3" SANITARY DOWN, 2" VENT RISE
21 1-1/4" COLD WATER AND 1/2" HOT WATER DROP; ROUTE IN CHASE - 1" COLD WATER TO FLUSH VALVE, 1/2" HOT AND COLD WATER TO MIXING VALVE/ FAUCET SUPPLIES
22 3/4" COLD WATER DROP DOWN TO FROST FREE WALL HYDRANT
23 1" HOT AND 1-1/4" COLD WATER DROP. ROUTE IN CHASE TO MIXING VALVE/ FAUCET SUPPLIES, BOTTLE FILLER AND EYE WASH STATION. PROVIDE EMERGENCY MIXING VALVE AND THERMOMETER IN VISIBLE LOCATION AT EYE WASH STATION. ROUTE 1/2" TEPID WATER FROM MIXING VALVE TO EYE WASH
24 3/4" HOT AND 1" COLD WATER DROP. ROUTE IN CHASE TO MIXING VALVE/ FAUCET SUPPLIES, BOTTLE FILLER AND EYE WASH STATION. PROVIDE EMERGENCY MIXING VALVE AND THERMOMETER IN VISIBLE LOCATION AT EYE WASH STATION. ROUTE 1/2" TEPID WATER FROM MIXING VALVE TO EYE WASH
25 2" SANITARY DOWN, ROUTE IN CHASE TO FIXTURE TRAPS
26 3" SANITARY DOWN, 2" VENT RISE; 1" COLD WATER DROP
27 1-1/2" SANITARY DROP, 1-1/2" VENT RISE; 1/2" HOT AND COLD WATER DROP TO MIXING VALVE/ FAUCET SUPPLIES
38 3" VENT RISE
39 4" GREASE WASTE DOWN
40 3" GREASE WASTE WITH P-TRAP UP TO FLOOR SINK
41 1/2" HOT AND COLD WATER UP
42 3/4" HOT AND COLD WATER UP
43 2" VENT RISE
44 1/2" HOT AND COLD WATER DROP
45 1-1/2" SANITARY DROP, 2" SANITARY IN WALL, 1-1/2" VENT RISE
46 1-1/2" SANITARY DROP, 2" DOWN, 1-1/2" VENT RISE, P-TRAP IN WALL; 1/2" HOT AND COLD WATER DROP TO WASHING MACHINE SUPPLY BOX
47 2" SANITARY DOWN, 2" VENT RISE
48 1" HOT AND COLD WATER DROP, ROUTE IN WALL. PROVIDE 1/2" HOT AND COLD TO WASH TUB SUPPLIES.
49 1-1/2" SANITARY WITH P-TRAP TO EACH WASH TUB. PROVIDE HAIR TRAP SIMILAR TO STRIEM SIDEKICK PIONT OF USE SIDE ACCESS SOLIDS INTERCEPTOR IN DRAIN PIPING
50 2" VENT UP
51 3" SANITARY WITH P-TRAP UP
52 1-1/2" VENT UP
53 1/2" COLD WATER CONNECTION TO EACH COMBI UNIT SUPPLY. ROUTE DRAIN CONNECTION AND DISCHARGE WITH DOWN TURNED ELBOW 1" ABOVE FLOOD RIM OF FLOOR SINK
54 1/2" HOT AND COLD WATER RISE. 1-1/2" DRAIN FROM FIXTURE TO DISCHARGE 1" OVER FLOOR SINK
55 1/2" HOT AND COLD WATER DROP TO FAUCET SUPPLIES. ROUTE 1-1/2" WASTE TO FLOOR MOUNTED AUTOMATIC GREASE TRAP
56 3" SANITARY DOWN
57 1-1/2" SANITARY, 1/2" HOT AND COLD WATER UP
58 MEDIUM PRESSURE NATURAL GAS SERVICE FROM UTILITY COMPANY
59 2" NATURAL GAS RISE
60 4" NATURAL GAS UP TO ROOF
61 3/4" COMPRESSED AIR DROP DOWN TO REGULATOR STATION AND CONNECT TO TIRE CHANGING EQUIPMENT
62 3/4" COMPRESSED AIR DROP DOWN TO REGULATOR STATION AND CONNECT TO WHEEL BALANCING EQUIPMENT
64 3/4" COMPRESSED AIR DROP DOWN TO HOSE REEL - REELCRAFT S6500LP - 3/8" X 50' HEAVY DUTY HOSE REEL WITH BUMPER STOPS
65 1" COMPRESSED AIR UP
66 6" COMBINED DUCTED SUPPLY AIR TO HOT WATER HEATERS
67 1/2" COMPRESSED AIR DROP DOWN TO AIR HOSE REEL
68 1-1/2" PUMPED DISCHARGE RISE FROM SUMP PUMP
69 NATURAL GAS SHUTOFF VALVE FOR BUILDING
70 NATURAL GAS SHUTOFF VALVE FOR GENERATOR
71 1/2" COLD WATER DROP DOWN TO SUPPLY BOX IN WALL FOR REFRIGERATOR
72 6" DOMESTIC COLD WATER TO FIRE PROTECTION SYSTEM
73 COMPRESSED AIR UP
74 3" SOLENOID VALVE FOR NATURAL GAS SHUT DOWN. COORDINATE WITH FIRE SUPPRESSION CONTRACTOR FOR ACTIVATION WITH HOOD SUPPRESSION SYSTEM ACTIVATION
75 6" COMBINED DUCTED EXHAUST AIR TO HOT WATER HEATERS
76 4" NATURAL GAS DROP DOWN TO UNDERGROUND TO SUPPLY GENERATOR
77 1-1/2" COLD WATER TO DUST COLLECTOR. SIGN TO BE PROVIDED INDICATING THAT THIS VALVE SHALL REMAIN OPEN AT ALL TIMES.
78 6" COMBINED DOMESTIC AND FIRE WATER SERVICE
79 4" DOMESTIC WATER METER AND STRAINER
80 TWO DOMESTIC WATER REDUCED PRESSURE BACKFLOW PREVENTERS IN PARALLEL. SEE DETAIL 7 P301 FOR DETAILS

KEY PLAN



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ME ENGINEERING
Mechanical, Electrical, Plumbing & Fire Protection Engineering
Building Systems Commissioning
Energy Conservation Consulting
LEED Certification Consulting
Indoor Air Quality Testing
M/E PROJECT: 231359.00

Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW MEXICO
MICHAEL T. GUNN
21778
REGISTERED PROFESSIONAL ENGINEER
Reg. Exp: 05/31/2024
Cert. of Auth: 001R443

#	DATE	DESCRIPTION
1	5/3/2024	BID Addendum #2

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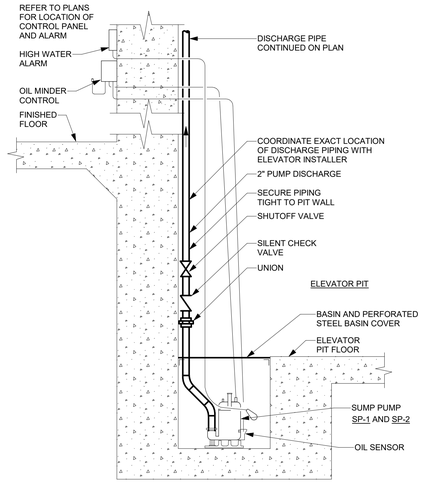
Sheet Title
PARTIAL FIRST FLOOR PLAN - AREA 2 - PLUMBING

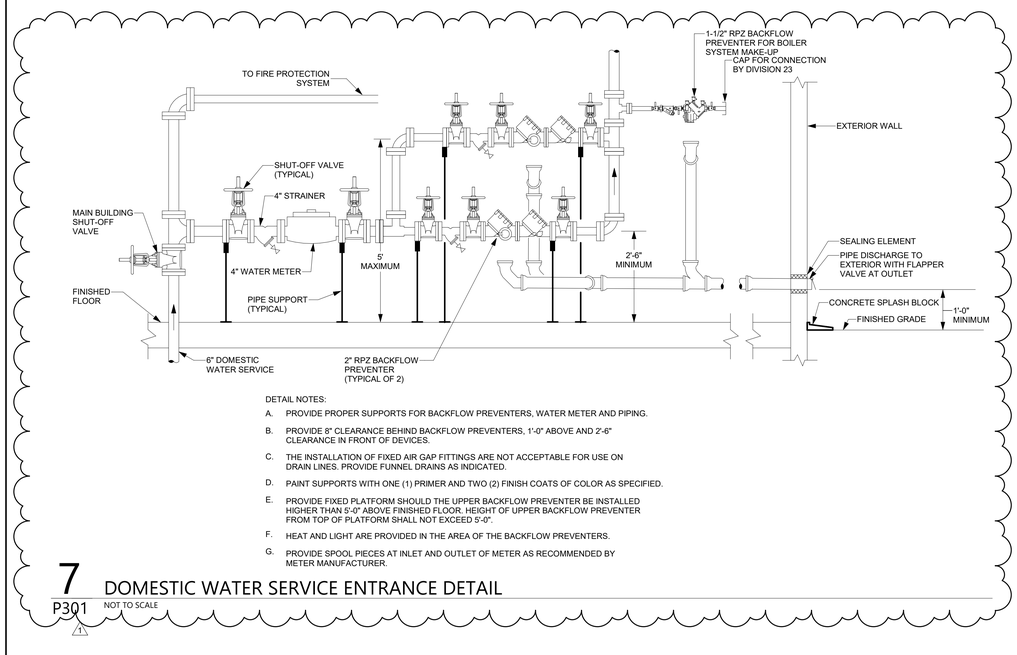
Sheet No.
CTE P112

CONSTRUCTION DOCUMENTS



10 ELEVATOR SUMP PUMP DETAIL - BASIN IN SHAFT

P301 NOT TO SCALE



DETAIL NOTES:

A. PROVIDE PROPER SUPPORTS FOR BACKFLOW PREVENTERS, WATER METER AND PIPING.

B. PROVIDE 8" CLEARANCE BEHIND BACKFLOW PREVENTERS, 1'-0" ABOVE AND 2'-6" CLEARANCE IN FRONT OF DEVICES.

C. THE INSTALLATION OF FIXED AIR GAP FITTINGS ARE NOT ACCEPTABLE FOR USE ON DRAIN LINES. PROVIDE FUNNEL DRAINS AS INDICATED.

D. PAINT SUPPORTS WITH ONE (1) PRIMER AND TWO (2) FINISH COATS OF COLOR AS SPECIFIED.

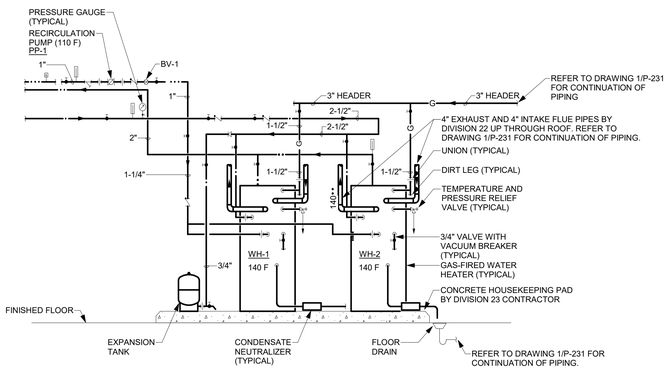
E. PROVIDE FIXED PLATFORM SHOULD THE UPPER BACKFLOW PREVENTER BE INSTALLED HIGHER THAN 5'-0" ABOVE FINISHED FLOOR. HEIGHT OF UPPER BACKFLOW PREVENTER FROM TOP OF PLATFORM SHALL NOT EXCEED 5'-0".

F. HEAT AND LIGHT ARE PROVIDED IN THE AREA OF THE BACKFLOW PREVENTERS.

G. PROVIDE SPOOL PIECES AT INLET AND OUTLET OF METER AS RECOMMENDED BY METER MANUFACTURER.

7 DOMESTIC WATER SERVICE ENTRANCE DETAIL

P301 NOT TO SCALE



DETAIL NOTES:

A. INSTALL PIPING TO ALLOW FOR FUTURE REMOVAL OF WATER HEATERS.

B. RELIEF VALVE DISCHARGE PIPE SIZE SHALL MATCH VALVE OUTLET SIZE - TERMINATE ABOVE FLOOR DRAIN WITH CODE REQUIRED AIR GAP.

C. REFER TO EXPANSION TANK DETAIL FOR EQUIPMENT INSTALLATION SCHEMATIC.

D. PROVIDE AQUASTAT AT FURTHEST POINT WITH DOMESTIC HOT WATER DISTRIBUTION SYSTEM, OR AS SHOWN ON FLOOR PLANS, AND PROVIDE NECESSARY WIRING TO INTERLOCK WITH HEATER CONTROLS.

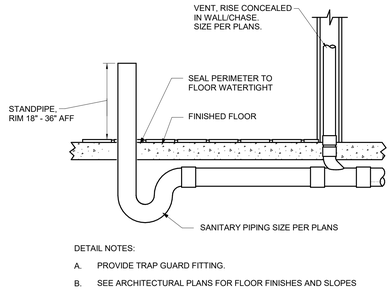
E. PIPING CONFIGURATION BASED ON CONDENSING WATER HEATER.

F. FLUE PIPING SHALL BE AL29-AC STAINLESS STEEL WITH SEALED JOINTS FOR CATEGORY 4 APPLIANCE.

G. PROVIDE WITH CONDENSATE NEUTRALIZER. CONNECT 3/4" CPVC PIPING TO WATER HEATERS AND NEUTRALIZER. TERMINATE CONDENSATE DRAIN ABOVE FLOOR DRAIN WITH CODE REQUIRED AIR GAP.

9 WATER HEATER SCHEMATIC

P301 NOT TO SCALE



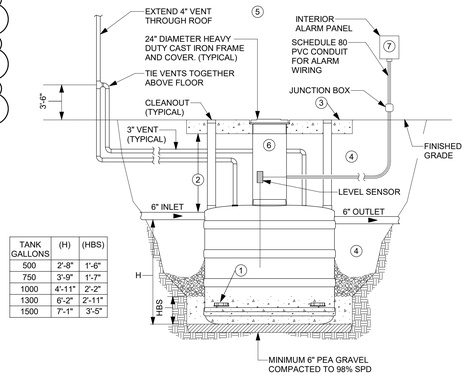
DETAIL NOTES:

A. PROVIDE TRAP GUARD FITTING.

B. SEE ARCHITECTURAL PLANS FOR FLOOR FINISHES AND SLOPES

6 ELEVATOR SUMP PUMP DISCHARGE STANDPIPE

P301 NTS



TANK GALLONS	(H)	(HBS)
500	2'-8"	1'-6"
750	3'-9"	1'-7"
1000	4'-11"	2'-2"
1300	6'-2"	2'-11"
1500	7'-1"	3'-5"

DETAIL NOTES:

(1) POUR 3000 PSI CONCRETE READY MIX ANTI-BUOYANCY SLAB 1'-0" ALL AROUND THE SEPARATOR CELLS. ENSURE THAT ANCHOR BRACKETS ON SIDE OF TANK ARE COVERED.

(2) 2'-7" MINIMUM DEPTH.

(3) PROVIDE REINFORCED CONCRETE RELIEVING SLAB PER MANUFACTURERS DETAIL.

(4) PROVIDE PEA GRAVEL COMPACTED TO 98% SPD.

(5) REFER TO MANUFACTURERS INSTALLATION DETAILS FOR FURTHER REQUIREMENTS.

(6) EXTENSION COLLAR WITH SIKAFLEX FIBERGLASS CAULKING.

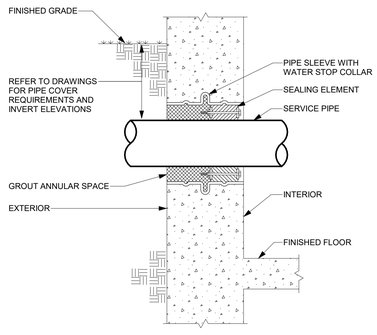
(7) POWER WIRING BY DIVISION 26. ALL OTHER WIRING BY DIVISION 22.

2 GREASE INTERCEPTOR DETAIL

P301 NOT TO SCALE

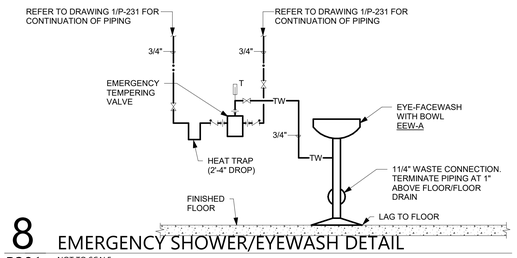
4 THERMAL EXPANSION TANK DETAIL

P301 NOT TO SCALE



3 PIPE THRU NEW EXTERIOR WALL DETAIL

P301 NOT TO SCALE



8 EMERGENCY SHOWER/EYEWASH DETAIL

P301 NOT TO SCALE

ROOF PIPE SUPPORTS

TYPE	NOMINAL PIPE SIZE INCHES	MAXIMUM O.D. INCHES	MAX. WT. PER STAND LBS.	CLEARANCE BELOW PIPE INCHES	NOTES
1	1 1/2"	1.9"	80	2.3 - 5.3"	1, 3
2	3"	3.75"	100	2.2 - 6.2"	2
3	3"	5"	100	2.75 - 7"	

NOTES:

1. WITHOUT ROLLER.
2. 1 OR 2 SPACER UNITS MAY BE STACKED FOR MORE CLEARANCE, EACH 2" HIGH.
3. UNITS MAY BE STACKED UP TO 3 HIGH FOR MORE CLEARANCE, ADD 1 1/2" E ACH.

TYPE 1 TYPE 2 TYPE 3

DETAIL NOTES:

A. PROVIDE PIPE SUPPORTS FOR PIPING ON ROOF. SEE TABLE ABOVE FOR TYPES.

B. GAS PIPING LOCATED ON ROOF SHALL BE SUPPORTED AT ALL TURNS AND EVERY 8'-0" FOR PIPING 1" AND LESS IN SIZE, AND EVERY 10'-0" FOR ALL OTHER SIZES. PITCH PIPING AS SPECIFIED.

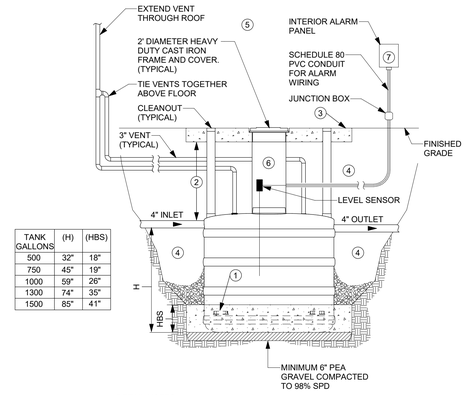
C. CENTER THE PIPE STAND BELOW THE PIPE AND PLACE THE PIPE GENTLY IN THE CRADLE. PROVIDE ROOFING MANUFACTURER'S RUBBER MEMBRANE PROTECTIVE PADS BELOW EACH PIPE SUPPORT.

D. FOR BUILT-UP AND STONE BALLASTED ROOFS - REMOVE ALL LOOSE AGGREGATE FROM A 1'-0" SQUARE AREA BELOW THE PIPE STAND BEFORE INSTALLING THE PROTECTIVE PAD.

E. ALL GAS PIPING LOCATED ON THE ROOF SHALL BE CLEANED, PRIMED AND PAINTED WITH ONE (1) PRIMER AND TWO (2) FINISH COATS OF COLOR SPECIFIED.

5 GAS PIPING ROOF SUPPORT DETAIL

P301 NOT TO SCALE



TANK GALLONS	(H)	(HBS)
500	32"	18"
750	45"	19"
1000	59"	26"
1300	74"	35"
1500	85"	41"

DETAIL NOTES:

(1) POUR 3000 PSI CONCRETE READY MIX ANTI-BUOYANCY SLAB 12" ALL AROUND THE SEPARATOR CELLS. ENSURE THAT ANCHOR BRACKS ON SIDE OF TANK ARE COVERED.

(2) 2'-7" MINIMUM DEPTH.

(3) PROVIDE REINFORCED CONCRETE RELIEVING SLAB PER MANUFACTURERS DETAIL.

(4) PROVIDE PEA GRAVEL COMPACTED TO 98% SPD.

(5) REFER TO MANUFACTURERS INSTALLATION DETAILS FOR FURTHER REQUIREMENTS.

(6) EXTENSION COLLAR WITH SIKAFLEX FIBERGLASS CAULKING.

(7) POWER WIRING BY ELECTRICAL CONTRACTOR ALL OTHER WIRING BY PLUMBING CONTRACTOR.

1 OIL SEPARATOR DETAIL (500-1500 GALLON FIBERGLASS)

P301 NOT TO SCALE

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Mechanical, Electrical, Plumbing & Fire Protection Engineers
Building Systems, Energy Conservation, Code Consulting, Commissioning
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M/E PROJECT: 23139.00

Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT NEW CTE BUILDING

STATE OF NEW YORK MICHAEL A. TOMAN 017881 LICENSED PROFESSIONAL ENGINEER

Reg. Exp: 05/31/2024
Cert. of Auth: 0818443

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Sheet Title

PLUMBING DETAILS

Sheet No.

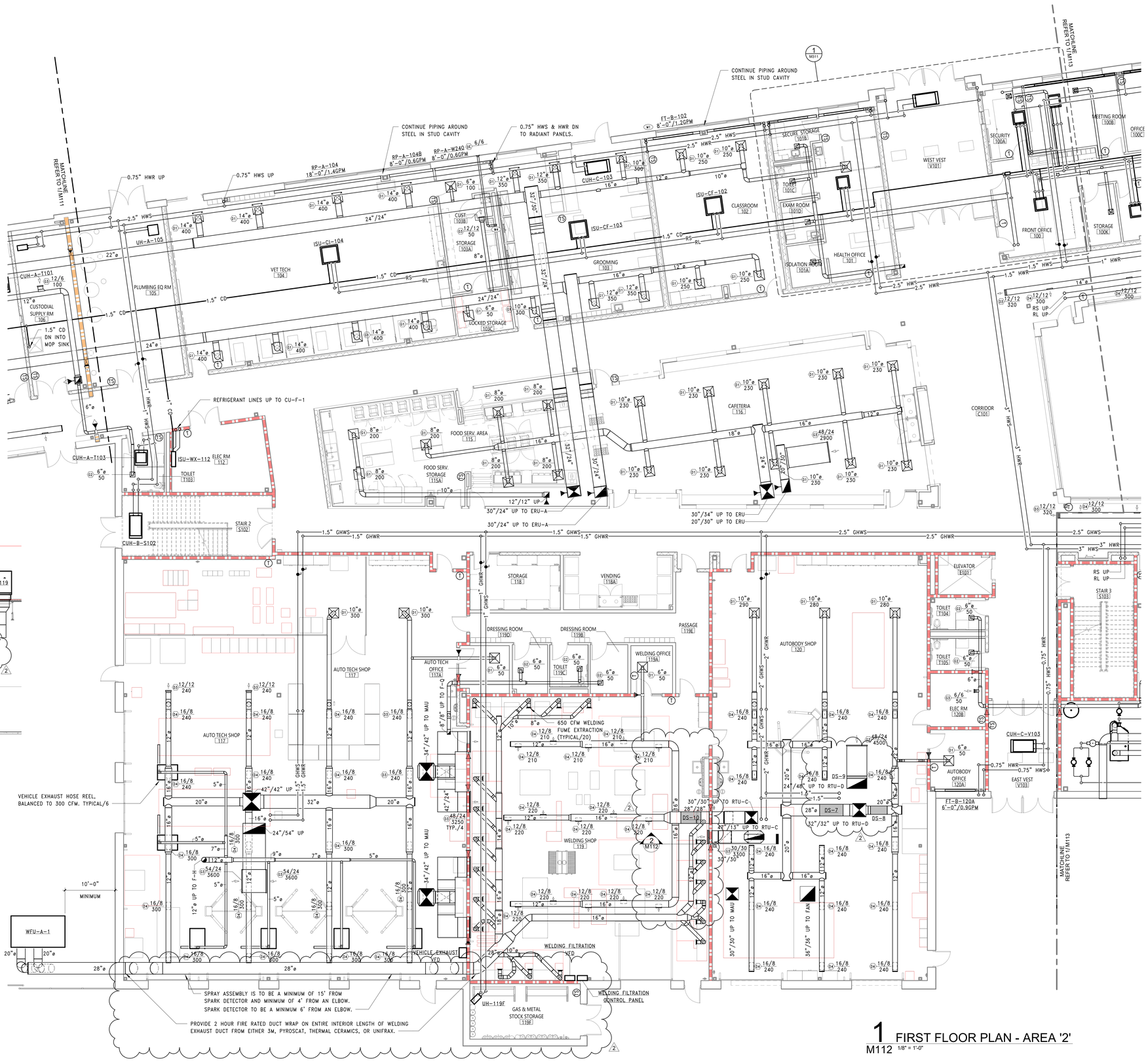
CTE P301

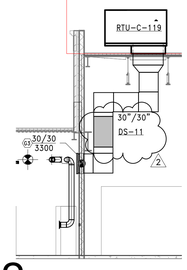
CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/23139_NECSD_CTE_PL_CENTRAL_R22.rvt

KEY NOTES

M1	1" TAP OFF MAIN AND 0.75" HWR UP AND DOWN TO FINNED TUBE. ROUTE PIPING UP IN STUD CAVITY TO AVOID STRUCTURAL BEAM.
M4	PROVIDE 4" SMOOTH DUCT DRYER EXHAUST SYSTEM WITH CODE REQUIRED CLEANOUT ON RISER. ELBOWS TO BE 4" DIAMETER 8" LONG RADIUS STYLE.

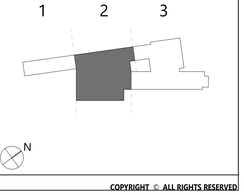




2 RTU-C-119
M112 1/8" = 1'-0"

1 FIRST FLOOR PLAN - AREA '2'
M112 1/8" = 1'-0"

KEY PLAN



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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK
ZACHARY ROBERT WISEMAN
LICENSED PROFESSIONAL ENGINEER
097797
Expires : 06/30/2025

#	DATE	DESCRIPTION
2	1/02/2024	BID ADDENDUM #2

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CSArch Proj. #: 108-2303
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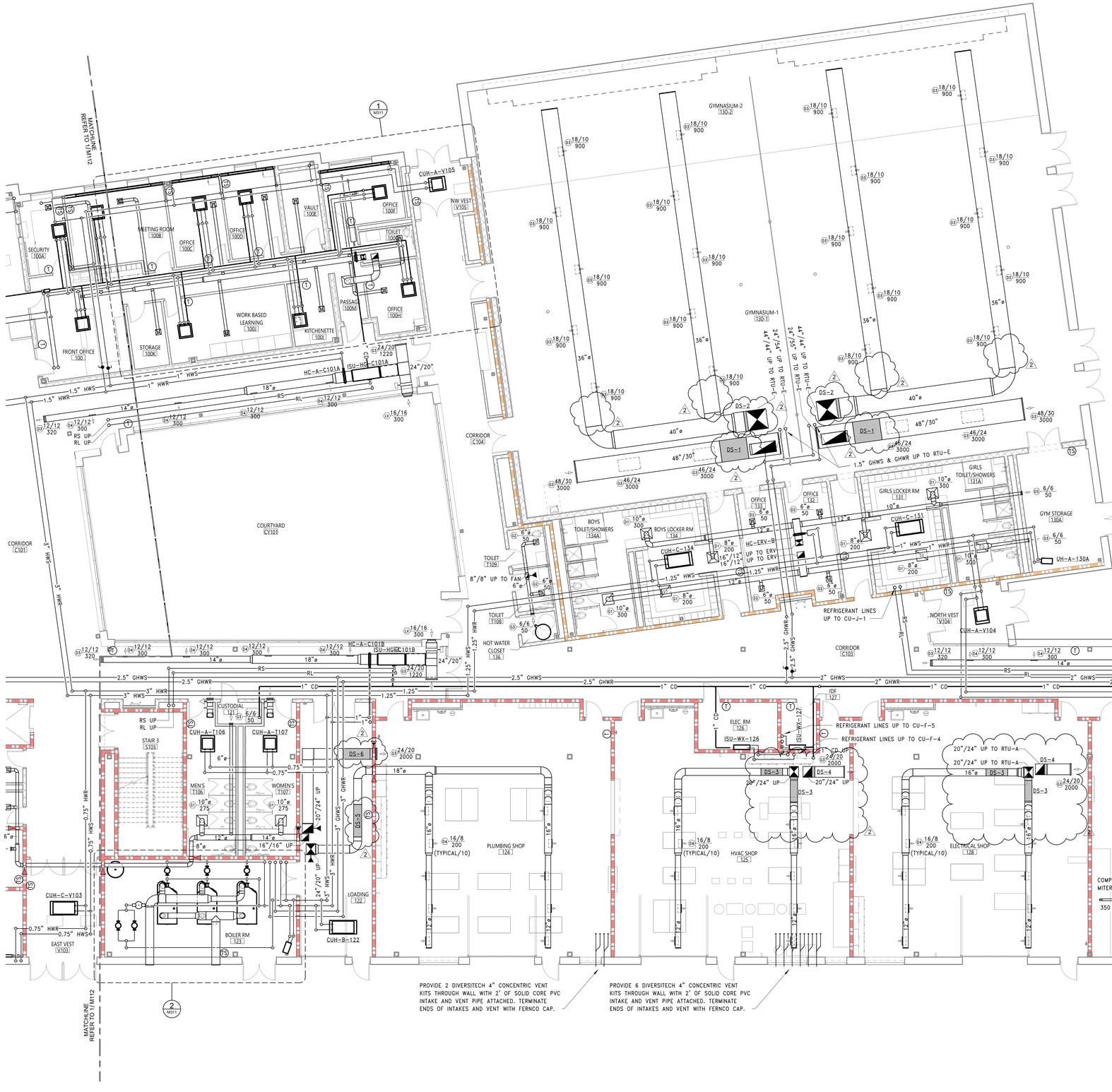
Sheet Title
FIRST FLOOR PLAN - AREA '2'

Sheet No.
CTE M112

CONSTRUCTION DOCUMENTS

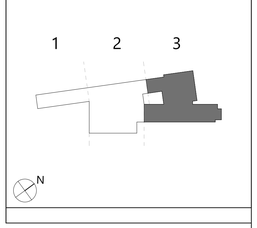
Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - MEP.rvt



1 FIRST FLOOR PLAN - AREA '3'
M113 1/8" = 1'-0"

KEY NOTES

KEY PLAN



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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

ZACHARY ROBERT SMITH 097797 LICENSED PROFESSIONAL ENGINEER
Expires : 06/30/2025

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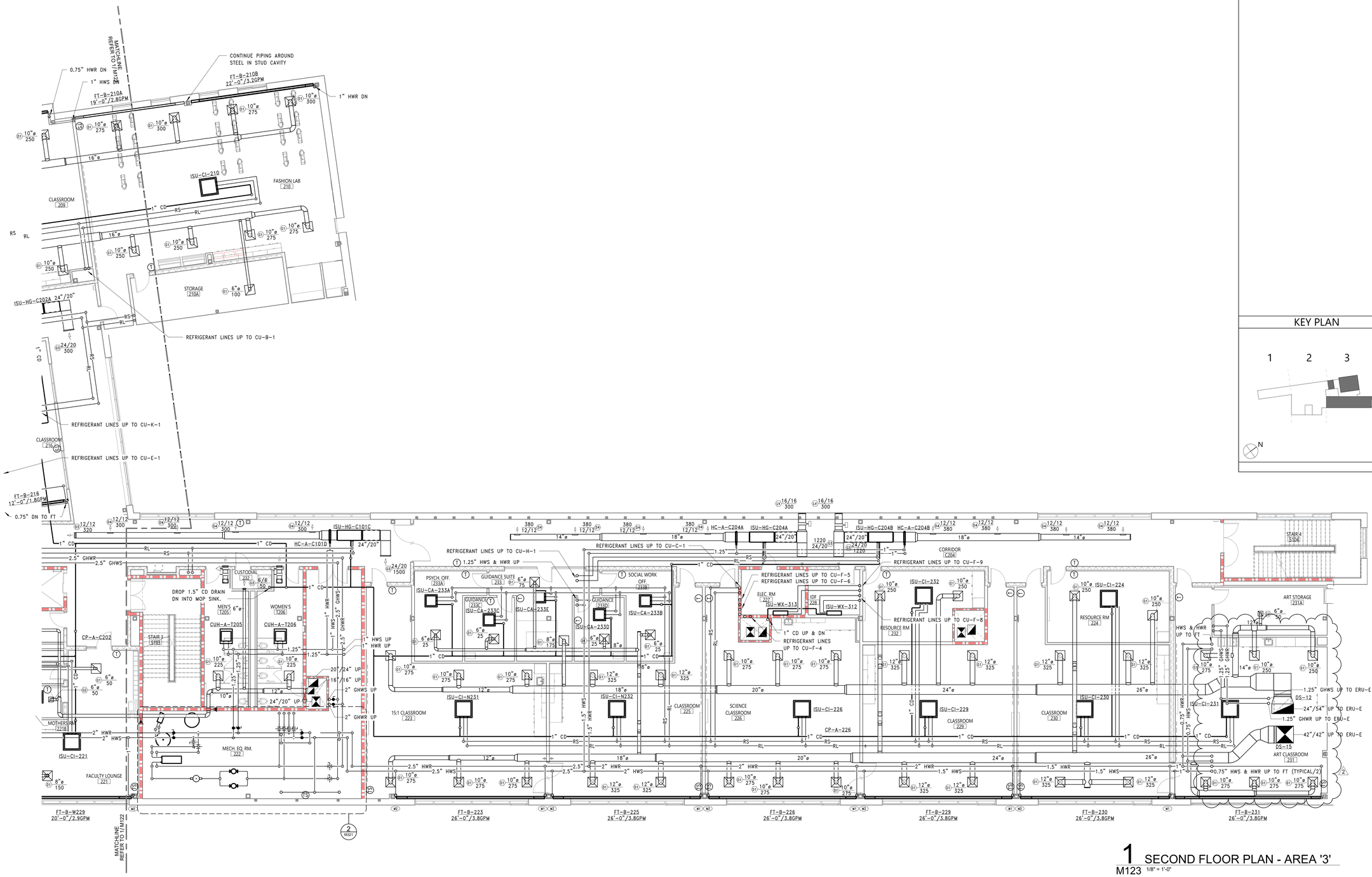
CSArch Proj. #: 108-2303
Construction Documents: 01/29/24

Sheet Title
FIRST FLOOR PLAN - AREA '3'

Sheet No.
CTE M113

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - MEP.rvt



KEY NOTES

M1	1" TAP OFF MAIN AND 0.75" HWR UP AND DOWN TO FINNED TUBE. ROUTE PIPING UP IN STUD CAVITY TO AVOID STRUCTURAL BEAM.
M2	1" TAP OFF MAIN AND 0.75" HWS UP AND DOWN TO FINNED TUBE. ROUTE PIPING UP IN STUD CAVITY TO AVOID STRUCTURAL BEAM.

KEY PLAN

1 SECOND FLOOR PLAN - AREA '3'
M123 1/8" = 1'-0"

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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

ZACHARY ROBERT NELSON 097797 LICENSED PROFESSIONAL ENGINEER
Expires : 06/30/2025

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Construction Documents:	01/29/24

Sheet Title

SECOND FLOOR PLAN - AREA '3'

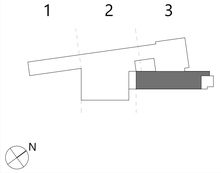
Sheet No.

CTE M123

CONSTRUCTION DOCUMENTS

KEY NOTES

KEY PLAN



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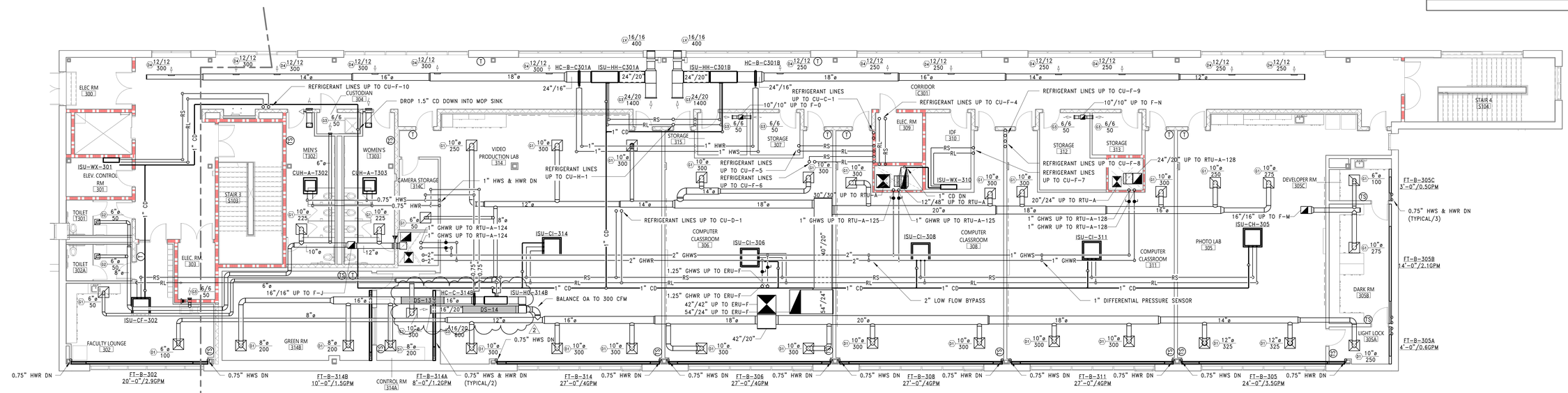
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title



1 THIRD FLOOR PLAN - AREA '3'
M133 1/8" = 1'-0"

STATE OF NEW YORK
ZACHARY ROBERT GALLOWAY
LICENSED PROFESSIONAL ENGINEER
097797
Expires : 06/30/2025

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Sheet Title

THIRD FLOOR PLAN - AREA '3'

Sheet No.

CTE M133

CONSTRUCTION DOCUMENTS

PUMP SCHEDULE

TAG	SERVICE	TYPE	GPM	PRESSURE (FT)	RPM	BHP	HP	MOTOR CONTROLLER	ELECTRICAL DATA						MANUFACTURER	MODEL	NOTES
									VOLTAGE	PHASE	FLA	MCA	MOCP	DISCONNECT SWITCH			
P-A-1	BOILER	INLINE	250	25	1760	–	3	INTEGRAL VFD	480	3	4.8	–	15	FACTORY PROVIDED	TACO	SKV4007D	
P-A-2	BOILER	INLINE	250	25	1760	–	3	INTEGRAL VFD	480	3	4.8	–	15	FACTORY PROVIDED	TACO	SKV4007D	
P-A-3	BOILER	INLINE	250	25	1760	–	3	INTEGRAL VFD	480	3	4.8	–	15	FACTORY PROVIDED	TACO	SKV4007D	
P-B-1	HEATING WATER	INLINE	500	95	1760	15.2	20	INTEGRAL VFD	480	3	27.0	–	60	FACTORY PROVIDED	TACO	SKS4011D	
P-B-2	HEATING WATER	INLINE	500	95	1760	15.2	20	INTEGRAL VFD	480	3	27.0	–	60	FACTORY PROVIDED	TACO	SKS4011D	
P-C-1	GLYCOL	INLINE	220	80	1760	5.74	7.5	INTEGRAL VFD	480	3	11.0	–	20	FACTORY PROVIDED	TACO	SKS3009D	
P-C-2	GLYCOL	INLINE	220	80	1760	5.74	7.5	INTEGRAL VFD	480	3	11.0	–	20	FACTORY PROVIDED	TACO	SKS3009D	

FIN TUBE SCHEDULE

BUILDING	TAG	ELEMENT						ENCLOSURE			MANUFACTURER	MODEL	NOTES
		PIPE DIAMETER (IN)	# OF ROWS	ELEMENT WIDTH (IN)	ELEMENT HEIGHT (IN)	EAT (F)	AVG. FLUID TEMP. (F)	BTU/FT	WIDTH (IN)	HEIGHT (IN)	DESCRIPTION			
CTE	FT-A	0.75	2	4.25	4.25	70	140	1470	6	20	TOP OUTLET, STAMPED LOUVERS	STERLING	JVB-RD20	
CTE	FT-B	0.75	2	4.25	4.25	70	150	1470	6	20	TOP OUTLET, STAMPED LOUVERS	STERLING	JVB-RD24	

GLYCOL MANAGEMENT SYSTEM SCHEDULE

TAG	VOLUME (GAL)	RELIEF VALVE (PSIG)	MOTOR HP	ELECTRICAL DATA						MANUFACTURER	MODEL	NOTES
				VOLTAGE	PHASE	FLA	MCA	MOCP	DISCONNECT SWITCH			
GMS-A-222	55	30	1/3	120	1	–	9.0	20	FACTORY PROVIDED	SKIDMORE	S-55-100-2-PEFS	

DUST COLLECTOR SCHEDULE

TAG	FILTER AREA (SQ FT)	CFM	ESP (In. Wg)	HP	VOLTAGE	PHASE	DISCONNECT SWITCH	WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
DC-A-1	720	5600	14	20	480	3	FIELD PROVIDED	6,000	STERNVENT	DKPL72020H	1

WELDING FILTRATION UNIT SCHEDULE

TAG	FILTER AREA (SQ FT)	CFM	ESP (In. Wg)	HP	VOLTAGE	PHASE	DISCONNECT SWITCH	WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
WFU-A-1	(12) X 323	13000	15	(2) X 20	480	3	FIELD PROVIDED	4850	LINCOLN ELECTRIC	PRISM 12	1

NOTES:
1. PROVIDE EXHAUST DUCT SILENCER ON UNIT.

AIR AND DIRT SEPARATOR SCHEDULE

TAG	SERVICE	FLOW	FPD (FT)	MANUFACTURER	MODEL	NOTES
AS-A-1	HEATING WATER	500	3.6	TACO	4906ADR-125	
AS-B-1	GLYCOL	220	3.7	TACO	4904ADR-125	

HYDRONIC RADIATOR PANEL SCHEDULE

TAG	PIPE DIAMETER (IN)	EAT (F)	AVG. FLUID TEMP. (F)	BTU/FT	WIDTH (IN)	HEIGHT (IN)	DESCRIPTION	MANUFACTURER	MODEL	NOTES
RP-A	0.75	70	135	1193	6	14	RADIANT PANEL	RUNTAL	R2F6	

DUCT SILENCER SCHEDULE

TAG	CFM	SIZE (ENTERING-LEAVING)	LENGTH	FACE VELOCITY (FPM)	APD (in. WC)	DYNAMIC INSERTION LOSS (dB)							MANUFACTURER	MODEL
						63	125	250	500	1000	2000	4000		
DS-1	9000	48"/30"-48"/30"	60"	900	0.12	10	12	18	18	12	9	6	VAW SYSTEMS	RSA
DS-2	9000	44"/44"-44"/44"	70" ELBOW	669	0.13	17	21	30	36	35	36	27	VAW SYSTEMS	REA
DS-3	1000	16"ø-16"ø	48"	716	0.08	3	8	17	25	38	50	53	VAW SYSTEMS	CSA
DS-4	2000	20"/24"-20"/24"	46" ELBOW	600	0.17	14	19	30	40	44	39	32	VAW SYSTEMS	REA
DS-5	2000	18"ø-18"ø	72"	1132	0.01	3	11	18	27	28	23	20	VAW SYSTEMS	CSA
DS-6	2000	24"/20"-24"/20"	60"	600	0.11	8	16	28	35	40	26	15	VAW SYSTEMS	RSA
DS-7	2880	28"ø-28"ø	56"	674	0.01	6	13	20	27	33	31	24	VAW SYSTEMS	CSA
DS-8	1530	20"ø-20"ø	40	683	0.05	6	13	20	30	40	44	38	VAW SYSTEMS	CSA
DS-9	4500	24"/48"-24"/48"	42" ELBOW	562	0.1	11	13	18	25	28	24	21	VAW SYSTEMS	REA
DS-10	3300	28"/28"-28"/28"	48"	606	0.1	6	10	20	34	42	37	23	VAW SYSTEMS	RSA
DS-11	3300	30"/30"-30"/30"	48"	528	0.09	10	13	23	30	29	22	15	VAW SYSTEMS	RSA
DS-12	5100	42"/42"-41"/42"	51" ELBOW	416	0.13	14	20	26	31	30	31	24	VAW SYSTEMS	REA
DS-13	600	16"ø-16"ø	96"	430	0.06	20	35	43	49	56	59	57	VAW SYSTEMS	CSA
DS-14	600	16"/20"-16"/20"	120"	270	0.04	19	25	45	53	54	44	34	VAW SYSTEMS	RSA
DS-15	5100	42"/42"-24"/42"	63" ELBOW	416	0.11	18	22	33	38	39	30	26	VAW SYSTEMS	REA

2

DIFFUSER & GRILLE SCHEDULE

TAG	SYSTEM TYPE	SHAPE	NOMINAL SIZE	MATERIAL	FINISH	MOUNTING	ACCESSORIES	MANUFACTURER	MODEL	NOTES
D1	SUPPLY DIFFUSER	SQUARE	24"x24"	STEEL	WHITE POWDER COAT	CEILING		TITUS	OMNI	
D2	SUPPLY DIFFUSER	SQUARE	12"X12"	STEEL	WHITE POWDER COAT	CEILING		TITUS	OMNI	
D3	SUPPLY GRILLE	RECTANGULAR	NECK SIZE + 2"	ALUMINUM	WHITE POWDER COAT	WALL AND RECTANGULAR DUCT		TITUS	300FL	
D4	SUPPLY GRILLE	RECTANGULAR	NECK SIZE + 2"	ALUMINUM	WHITE POWDER COAT	ROUND DUCT		TITUS	S300FL	
DE	DRYER EXHAUST	RECTANGULAR	6"x6"	STEEL	WHITE POWDER COAT	WALL	DAMPER	FAMCO	DWVG	
G1	RETURN GRILLE	SQUARE	24"x24"	STEEL	WHITE POWDER COAT	CEILING		TITUS	OMNI	
G2	RETURN GRILLE	SQUARE	12"X12"	STEEL	WHITE POWDER COAT	CEILING		TITUS	OMNI	
G3	RETURN GRILLE	RECTANGULAR	NECK SIZE + 2"	ALUMINUM	WHITE POWDER COAT	WALL AND RECTANGULAR DUCT		TITUS	3FL	
HE	HOOD EXHUAST CONNECTION	–	–	–	–	–	–	–	–	
HS	HOOD SUPPLY CONNECTION	–	–	–	–	–	–	–	–	

CONDENSATE PUMP SCHEDULE

TAG	SERVICE	GPH	PRESSURE (FT)	TANK VOLUME (GAL)	HP	MOTOR CONTROLLER	ELECTRICAL DATA						MANUFACTURER	MODEL	NOTES
							VOLTAGE	PHASE	FLA	MCA	MOCP	DISCONNECT SWITCH			
CP-A-108	CONDENSATE	48	10	0.5	1/30	FLOAT	120	1	1.5	–	20	FIELD	LITTLE GIANT	VCMA-20UL	
CP-A-202	CONDENSATE	48	10	0.5	1/30	FLOAT	120	1	1.5	–	20	FIELD	LITTLE GIANT	VCMA-20UL	
CP-A-207	CONDENSATE	48	10	0.5	1/30	FLOAT	120	1	1.5	–	20	FIELD	LITTLE GIANT	VCMA-20UL	
CP-A-100	CONDENSATE	48	10	0.5	1/30	FLOAT	120	1	1.5	–	20	FIELD	LITTLE GIANT	VCMA-20UL	
CP-A-216	CONDENSATE	48	10	0.5	1/30	FLOAT	120	1	1.5	–	20	FIELD	LITTLE GIANT	VCMA-20UL	
CP-A-C202	CONDENSATE	48	10	0.5	1/30	FLOAT	120	1	1.5	–	20	FIELD	LITTLE GIANT	VCMA-20UL	
CP-A-226	CONDENSATE	48	10	0.5	1/30	FLOAT	120	1	1.5	–	20	FIELD	LITTLE GIANT	VCMA-20UL	
CP-A-107	CONDENSATE	48	10	0.5	1/30	FLOAT	120	1	1.5	–	20	FIELD	LITTLE GIANT	VCMA-20UL	

FAN SCHEDULE

TAG	SERVICE	TYPE	FAN DATA						ELECTRICAL DATA						MANUFACTURER	MODEL	NOTES
			CFM	ESP (In. Wg)	RPM	BHP	HP	MOTOR CONTROLLER	VOLTAGE	PHASE	FLA	MCA	MOCP	DISCONNECT SWITCH			
F-A-206.1	KITCHEN HOOD	UP BLAST	5635	1.0	873	1.72	2	INTEGRAL ECM	480	3	7.2	9	15	FACTORY PROVIDED	GREENHECK	CUE-240-VG	
F-B-206.2	KITCHEN HOOD	UP BLAST	2100	1.0	1100	0.58	1	INTEGRAL ECM	480	3	3.2	4	15	FACTORY PROVIDED	GREENHECK	CUE-180HP-VG	
F-C-206.3	KITCHEN HOOD	UP BLAST	2100	1.0	1100	0.58	1	INTEGRAL ECM	480	3	3.2	4	15	FACTORY PROVIDED	GREENHECK	CUE-180HP-VG	
F-D-206.4	KITCHEN HOOD	UP BLAST	2400	1.0	1667	0.89	1	INTEGRAL ECM	480	3	1.8	2.2	15	FACTORY PROVIDED	GREENHECK	CUE-140-VG	
F-E-206.5	KITCHEN HOOD	UP BLAST	2400	1.0	1667	0.89	1	INTEGRAL ECM	480	3	1.8	2.2	15	FACTORY PROVIDED	GREENHECK	CUE-140-VG	
F-F-206.6	KITCHEN HOOD	UP BLAST	1890	1.0	1059	0.51	1	INTEGRAL ECM	480	3	3.2	4	15	FACTORY PROVIDED	GREENHECK	CUE-180HP-VG	
F-G-206.7	DISHWASHER HOOD	UP BLAST	600	0.5	1066	0.11	1	INTEGRAL ECM	480	3	3.2	4	15	FACTORY PROVIDED	GREENHECK	CUE-160XP-VG	
F-H-117	VEHICLE EXHAUST	UP BLAST	1800	4.5	3100	1.8	3	FACTORY VFD	480	3	4.8	–	15	FIELD PROVIDED	MONOXIVENT	BI-120	
F-I	AREA 1 BATHROOMS	DOWN BLAST	1400	0.75	1360	0.29	1/2	INTEGRAL ECM	115	1	6.6	8.2	15	FACTORY PROVIDED	GREENHECK	G-130-VG	
F-J	AREA 3 BATHROOMS	DOWN BLAST	2050	0.75	1704	0.56	3/4	INTEGRAL ECM	115	1	10	12.5	20	FACTORY PROVIDED	GREENHECK	G-130-VG	
F-K-115A	FOOD SERV. STORAGE 115A	DOWN BLAST	400	0.75	1646	0.12	1/6	INTEGRAL ECM	115	1	2.8	3.5	15	FACTORY PROVIDED	GREENHECK	G-095-VG	
F-L	HEALTH OFFICE	DOWN BLAST	200	0.75	1566	0.09	1/4	INTEGRAL ECM	115	1	3.8	4.8	15	FACTORY PROVIDED	GREENHECK	G-097-VG	
F-M	DARK ROOM	DOWN BLAST	375	0.75	1638	0.12	1/6	INTEGRAL ECM	115	1	2.8	3.5	15	FACTORY PROVIDED	GREENHECK	G-095-VG	
F-N	3RD FLOOR STORAGE ROOMS	DOWN BLAST	100	0.5	1122	0.03	1/4	INTEGRAL ECM	115	1	3.8	4.8	15	FACTORY PROVIDED	GREENHECK	G-097-VG	
F-O	3RD FLOOR STORAGE ROOMS	DOWN BLAST	100	0.5	1122	0.03	1/4	INTEGRAL ECM	115	1	3.8	4.8	15	FACTORY PROVIDED	GREENHECK	G-097-VG	
F-P	AREA 3 TOILET ROOMS	DOWN BLAST	150	0.5	1238	0.05	1/4	INTEGRAL ECM	115	1	3.8	4.8	15	FACTORY PROVIDED	GREENHECK	G-097-VG	
F-Q	SHOP DRESSING ROOMS	DOWN BLAST	150	0.5	1238	0.05	1/4	INTEGRAL ECM	115	1	3.8	4.8	15	FACTORY PROVIDED	GREENHECK	G-097-VG	
F-R-108	MANICURE STATIONS	INLINE	300	0.5	1358	0.1	1/10	INTEGRAL ECM	120	1	1.5	1.9	15	FACTORY PROVIDED	GREENHECK	CSP-A390-VG	

PLATE & FRAME HEAT EXCHANGER SCHEDULE

TAG	SERVICE	MBH	HEAT SOURCE						HEAT SYNC						NOMINAL DIMENSIONS (IN)	# PLATES	WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
			FLUID	EFT (F)	LFT (F)	FPD (FT)	GPM	FOULING FACTOR	FLUID	EFT (F)	LFT (F)	FPD (FT)	GPM	FOULING FACTOR						
PFHX-A-1	GLYCOL	4200	WATER	150	119	16.2	280	0.066	30% GLYCOL	105	145	14.3	220	0.066	26"/45".73"	69	2411	ALFA LAVAL	AQ6T-BFG	

HEATING HOT WATER EXPANSION TANK SCHEDULE

TAG	SERVICE	TYPE	ACCEPTANCE (GAL)	VOLUME (GAL)	DIAMETER / HEIGHT	SYSTEM FILL (PSIG)	RELIEF VALVE (PSIG)	MANUFACTURER	MODEL	NOTES
ET-A-1	HEATING WATER	FULL ACCEPTANCE BLADDER	106	106	24"/73"	30	75	AMTROL	ST-449C	
ET-B-1	GLYCOL	FULL ACCEPTANCE BLADDER	80	80	24"/59"	30	75	AMTROL	ST-448C	

BOILER SCHEDULE

TAG	INPUT MBH	OUTPUT MBH	FUEL	GPM	TURN DOWN RATIO	EFT (F)	LFT (F)	RELIEF VALVE (PSIG)	AFUE (%)	VENT DIAMETER (IN)	INTAKE DIAMETER (IN)	FPD (FT)	ELECTRICAL DATA						MANUFACTURER	MODEL	NOTES
													VOLTAGE	PHASE	FLA	MCA	MOCP	DISCONNECT SWITCH			
B-A-1	3999	3843	NAT	250	20:1	120	150	75	96.1	12	12		480	3	6	7.5	20	FIELD PROVIDED	LOCHINVAR	FCB4000	
B-A-3	3999	3843	NAT	250	20:1	120	150	75	96.1	12	12		480	3	6	7.5	20	FIELD PROVIDED	LOCHINVAR	FCB4000	
B-A-2	3999	3843	NAT	250	20:1	120	150	75	96.1	12	12		480	3	6	7.5	20	FIELD PROVIDED	LOCHINVAR	FCB4000	

MAKEUP AIR UNIT SCHEDULE

TAG	SERVICE	SUPPLY FAN DATA							FURNACE DATA					ELECTRICAL DATA							WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
		TYPE	CFM	OA CFM	ESP (In. Wg)	RPM	BHP	HP	FUEL	EAT (F)	LAT (F)	INPUT MBH	OUTPUT MBH	VOLTAGE	PHASE	FLA	MCA	MOCP	DISCONNECT SWITCH	MOTOR CONTROLLER				
MAU-A-119.2	WELDING	INDIRECT FIRED	6500	6500	0.75	1395	2.6	3	NAT	-10	82	800	634	480	3	–	7.2	15	FACTORY PROVIDED	–	2,000	GREENHECK	IGX-P120-H32-MF	
MAU-A-119.1	WELDING	INDIRECT FIRED	6500	6500	0.75	1395	2.6	3	NAT	-10	82	800	634	480	3	–	7.2	15	FACTORY PROVIDED	–	2,000	GREENHECK	IGX-P120-H32-MF	
MAU-C-129	DUST COLLECTION	INDIRECT FIRED	5600	5600	0.75	1255	1.93	3	NAT	-10	84	700	567	480	3	–	7.2	15	FACTORY PROVIDED	–	2,000	GREENHECK	IGX-P120-H32-MF	
MAU-D-206.1	CULINARY	DIRECT FIRED	5635	5635	0.75	1252	2.34	3	NAT	-10	83	615	566	480	3	–	6.2	15	FACTORY PROVIDED	–	1,000	GREENHECK	DGX-P122-H22-D1	
MAU-E-206.2	CULINARY	DIRECT FIRED	12600	12600	0.75	1744	8.26	10	NAT	-10	83	1376	1266	480	3	–	17.7	30	FACTORY PROVIDED	–	1500	GREENHECK	DGX-P125-H32-D3	

PACKAGED ENERGY RECOVERY VENTILATOR SCHEDULE

TAG	SERVICE	SUPPLY FAN					EXHAUST FAN DATA					MOTOR CONTROLLER	ENERGY RECOVERY SECTION DATA						ELECTRICAL DATA						WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
		CFM	ESP (In. Wg)	RPM	BHP	HP	CFM	ESP (In. Wg)	RPM	BHP	HP		WINTER			SUMMER			VOLTAGE	PHASE	FLA	MCA	MOCP	DISCONNECT SWITCH				
													OA TEMP DB (F)	RA TEMP DB (F)	LAT DB (F)	OA TEMP DB (F)	OA TEMP WB (F)	RA TEMP DB (F)	RA TEMP WB (F)	LAT DB (F)	LAT WB (F)							
ERV-A	OFFICES	525	0.5	–	–	1/2	525	0.5	–	–	1/2	INTEGRAL ECM	2	70	50	92	75	75	62.5	80	70	208	1	1.73	3.9	15	FACTORY PROVIDED	750	RENEWAIRE	HE10RTV	
ERV-B	LOCKER ROOMS	1100	0.5	–	–	1	1100	0.5	–	–	1	INTEGRAL ECM	2	70	50	92	75	75	62.5	80	70	208	1	3.4	7.7	15	FACTORY PROVIDED	750	RENEWAIRE	HE1.5XRTV	

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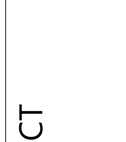

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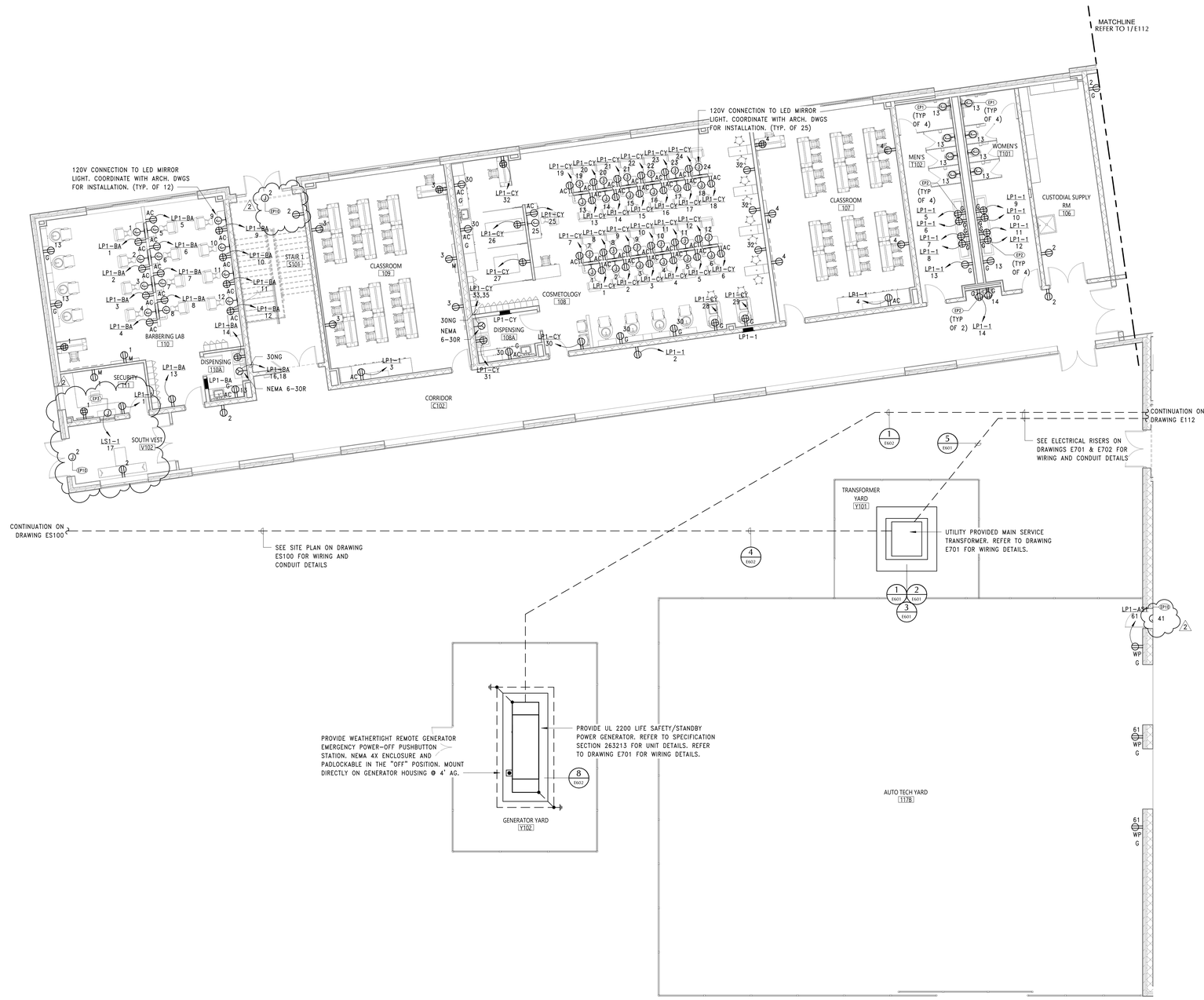
SCHEDULES

Sheet No.

CTE M902

CONSTRUCTION DOCUMENTS



1 FIRST FLOOR POWER PLAN - AREA '1'

E111 1/8" = 1'-0"

SHEET NOTES

A. FIELD COORDINATE ROUTING OF ALL FEEDERS AND BRANCH CIRCUITS WITH ALL TRADES. MAJORITY OF SPACES ARE OPEN CEILING, COORDINATE HARDPIPE ROUTING WITH COORDINATED MODEL PRIOR TO INSTALLATION.

B. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE PROPERLY FIRE-STOPPED.

C. COORDINATE ALL RECEPTACLE LOCATIONS WITH ARCHITECTURAL CASEWORK AND FURNITURE PLANS.

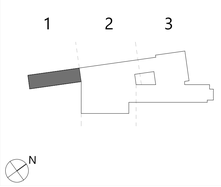
D. REFER TO E701 FOR POWER RISERS AND WIRING SCHEDULES.

E. REFER TO E900 SERIES DRAWINGS FOR EQUIPMENT AND PANELBOARD SCHEDULES.

KEY NOTES

EP1	FLUSHOMETER. COORDINATE WIRING REQUIREMENTS WITH PLUMBING DRAWINGS.
EP2	COORDINATE INSTALLATION OF RECEPTACLE BEHIND FIXTURE WITH PLUMBING DRAWINGS. RECEPTACLE INSTALLATION MUST BE COMPLETED ALLOWING FOR EASE OF ACCESSIBILITY.
EP3	FIRE SHUTTER. COORDINATE WITH ARCHITECTURAL DRAWING FOR CONTROL REQUIREMENTS. PROVIDE CONDUIT, CABLING, AND/OR BACKBOXES AS REQUIRED, AND CONNECT TO LOCAL SMOKE DETECTOR.
EP10	120V POWER FOR DOOR HARDWARE. COORDINATE WITH ARCHITECTURAL AND TECHNOLOGY DRAWINGS.

KEY PLAN



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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK · JAMES R. BARRETT · 073467 · LICENSED PROFESSIONAL ENGINEER
EXPIRES 5/31/2026

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Sheet Title

FIRST FLOOR POWER PLAN - AREA '1'

Sheet No.

CTE E111

CONSTRUCTION DOCUMENTS

SHEET NOTES

A. FIELD COORDINATE ROUTING OF ALL FEEDERS AND BRANCH CIRCUITS WITH ALL TRADES. MAJORITY OF SPACES ARE OPEN CEILING, COORDINATE HARDPIPE ROUTING WITH COORDINATED MODEL PRIOR TO INSTALLATION.

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EP4	OVERHEAD DOOR. COORDINATE WITH ARCHITECTURAL DRAWING FOR CONTROL REQUIREMENTS. PROVIDE CONDUIT, CABLING, AND/OR BACKBOXES AS REQUIRED.
EP5	EMERGENCY SHUTDOWN. PROVIDE WIRING TO LOCAL PANELBOARD MCB CONTACTOR(S) TO SHUTDOWN PANELBOARD(S) IN THE EVENT OF ACTIVATION. SEE DETAIL 6/E602 FOR MORE INFORMATION.
EP10	120V POWER FOR DOOR HARDWARE. COORDINATE WITH ARCHITECTURAL AND TECHNOLOGY DRAWINGS.

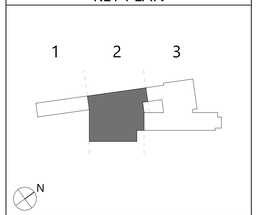
1 FIRST FLOOR POWER PLAN - AREA '2'

E112 1/8" = 1'-0"

2 ELECTRICAL ROOM PLAN

E112 1/4" = 1'-0"

KEY PLAN



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NEWBURGH ENLARGED CITY SCHOOL DISTRICT NEW CTE BUILDING

Project Title

STATE OF NEW YORK JAMES R. BARRETT 073467 LICENSED PROFESSIONAL ENGINEER
EXPIRES 5/31/2026

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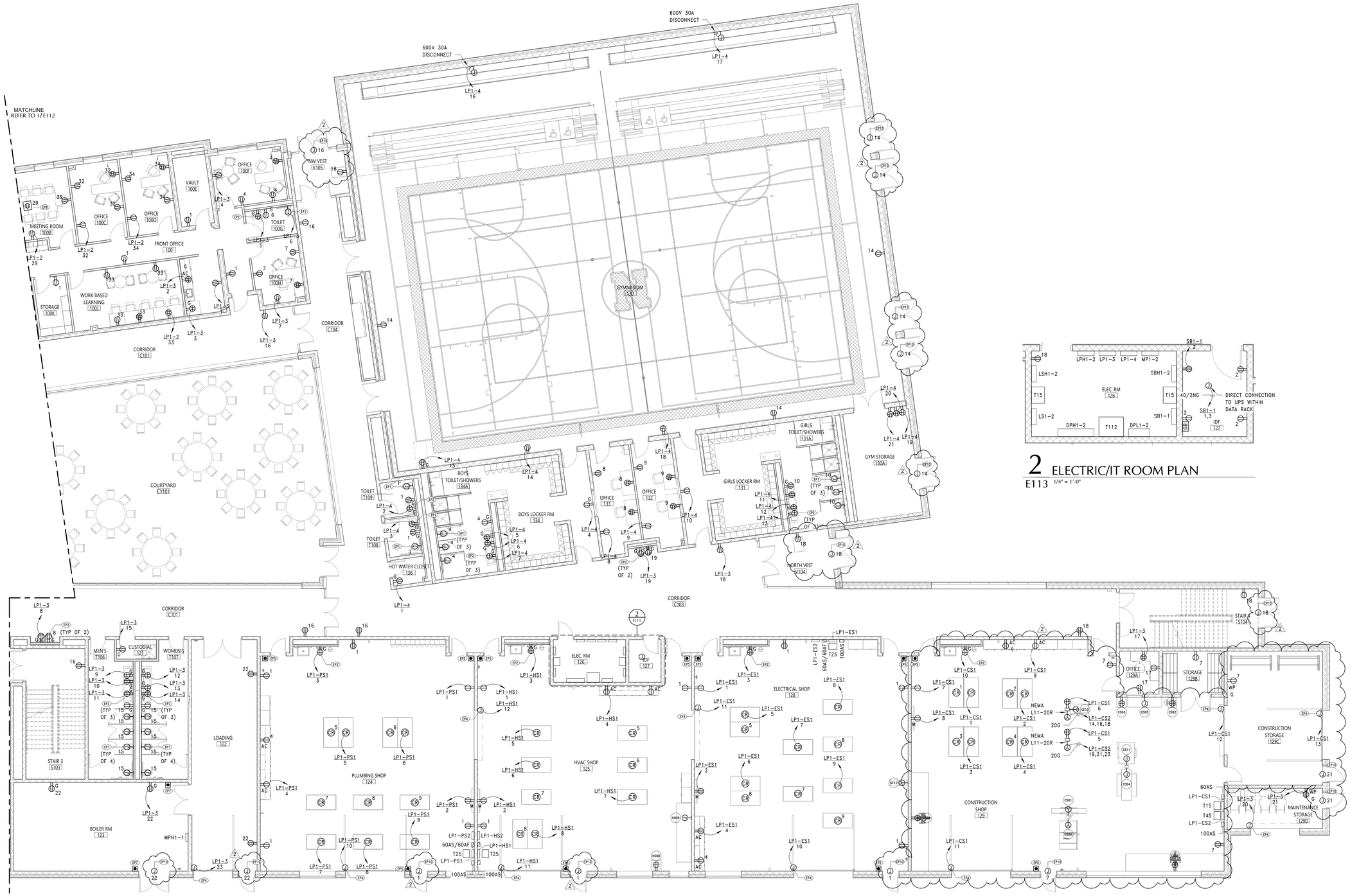
FIRST FLOOR POWER PLAN - AREA '2'

Sheet No.

CTE E112

CONSTRUCTION DOCUMENTS



1 FIRST FLOOR POWER PLAN - AREA '3'
E113 1/8" = 1'-0"

2 ELECTRIC/IT ROOM PLAN
E113 1/4" = 1'-0"

SHEET NOTES

A. FIELD COORDINATE ROUTING OF ALL FEEDERS AND BRANCH CIRCUITS WITH ALL TRADES. MAJORITY OF SPACES ARE OPEN CEILING, COORDINATE HARDPIPE ROUTING WITH COORDINATED MODEL PRIOR TO INSTALLATION.

B. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE PROPERLY FIRE-STOPPED.

C. COORDINATE ALL RECEPTACLE LOCATIONS WITH ARCHITECTURAL CASEWORK AND FURNITURE PLANS.

D. REFER TO E701 FOR POWER RISERS AND WIRING SCHEDULES.

E. REFER TO E900 SERIES DRAWINGS FOR EQUIPMENT AND PANELBOARD SCHEDULES.

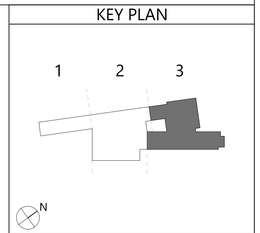
KEY NOTES

EP1	FLUSHOMETER. COORDINATE WIRING REQUIREMENTS WITH PLUMBING DRAWINGS.
EP2	COORDINATE INSTALLATION OF RECEPTACLE BEHIND FIXTURE WITH PLUMBING DRAWINGS. RECEPTACLE INSTALLATION MUST BE COMPLETED ALLOWING FOR EASE OF ACCESSIBILITY.
EP4	OVERHEAD DOOR. COORDINATE WITH ARCHITECTURAL DRAWING FOR CONTROL REQUIREMENTS. PROVIDE CONDUIT, CABLING, AND/OR BACKBOXES AS REQUIRED.
EP5	EMERGENCY SHUTDOWN. PROVIDE WIRING TO LOCAL PANELBOARD MCB CONTACTOR(S) TO SHUTDOWN PANELBOARD(S) IN THE EVENT OF ACTIVATION. SEE DETAIL 6|E602 FOR MORE INFORMATION.

KEY NOTES

EP7	EMERGENCY SHUTDOWN. PROVIDE WIRING TO LOCAL PANELBOARD SHUNT BREAKER CONTACTOR(S) TO SHUTDOWN BOILER(S) IN THE EVENT OF ACTIVATION. SEE DETAIL 6|E602 FOR MORE INFORMATION.
EP8	FLOOR BOX. PROVIDE 2-SECTION BOX FOR (1) DOUBLE-DUPLEX AND (2) DATA OUTLETS. INCLUDE PEDESTAL MOUNT FOR OUTLETS TO BE ABOVE FLOOR.
EP10	120V POWER FOR DOOR HARDWARE. COORDINATE WITH ARCHITECTURAL AND TECHNOLOGY DRAWINGS.

KEY PLAN



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073467
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Sheet Title
FIRST FLOOR POWER PLAN - AREA '3'

Sheet No.
CTE
E113

CONSTRUCTION DOCUMENTS

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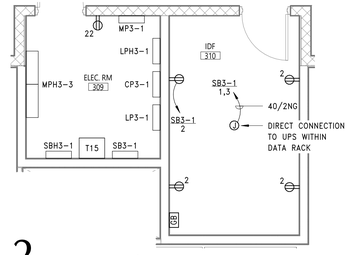
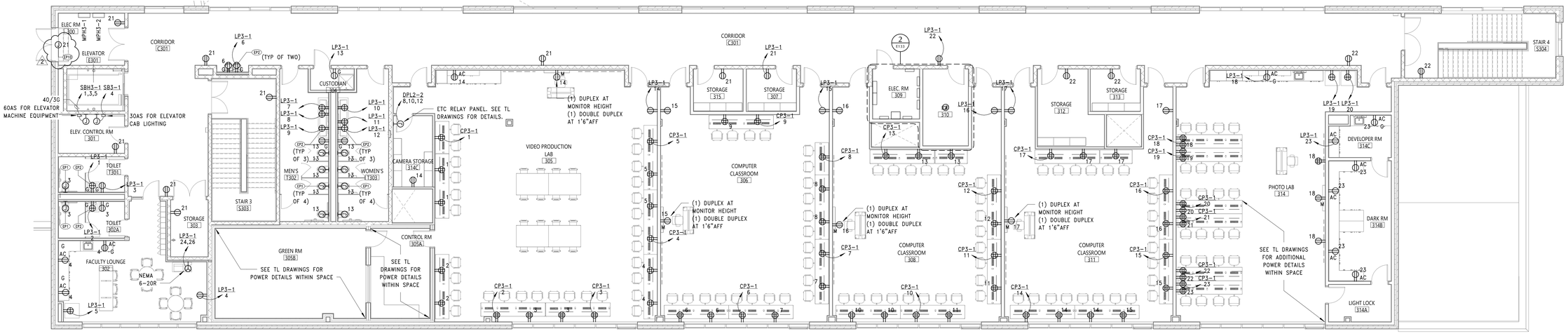


2 ELECTRIC/IT ROOM PLAN

E133 1/4" = 1'-0"



1 THIRD FLOOR POWER PLAN - AREA '3'

E133 1/8" = 1'-0"

SHEET NOTES

A. FIELD COORDINATE ROUTING OF ALL FEEDERS AND BRANCH CIRCUITS WITH ALL TRADES. MAJORITY OF SPACES ARE OPEN CEILING, COORDINATE HARDPIPE ROUTING WITH COORDINATED MODEL PRIOR TO INSTALLATION.

B. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE PROPERLY FIRE-STOPPED.

C. COORDINATE ALL RECEPTACLE LOCATIONS WITH ARCHITECTURAL CASEWORK AND FURNITURE PLANS.

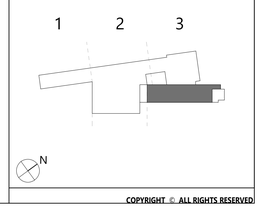
D. REFER TO E701 FOR POWER RISERS AND WIRING SCHEDULES.

E. REFER TO E900 SERIES DRAWINGS FOR EQUIPMENT AND PANELBOARD SCHEDULES.

KEY NOTES

EP1	FLUSHOMETER. COORDINATE WIRING REQUIREMENTS WITH PLUMBING DRAWINGS.
EP2	COORDINATE INSTALLATION OF RECEPTACLE BEHIND FIXTURE WITH PLUMBING DRAWINGS. RECEPTACLE INSTALLATION MUST BE COMPLETED ALLOWING FOR EASE OF ACCESSIBILITY.
EP10	120V POWER FOR DOOR HARDWARE. COORDINATE WITH ARCHITECTURAL AND TECHNOLOGY DRAWINGS.

KEY PLAN



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STATE OF NEW YORK
JAMES R. BURNETT
073467
LICENSED PROFESSIONAL ENGINEER
EXPIRES 5/31/2026

#	DATE	DESCRIPTION
2	5/02/2024	BID ADDENDUM #2

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Sheet Title

THIRD FLOOR POWER PLAN - AREA '3'

Sheet No.

CTE E133

CONSTRUCTION DOCUMENTS

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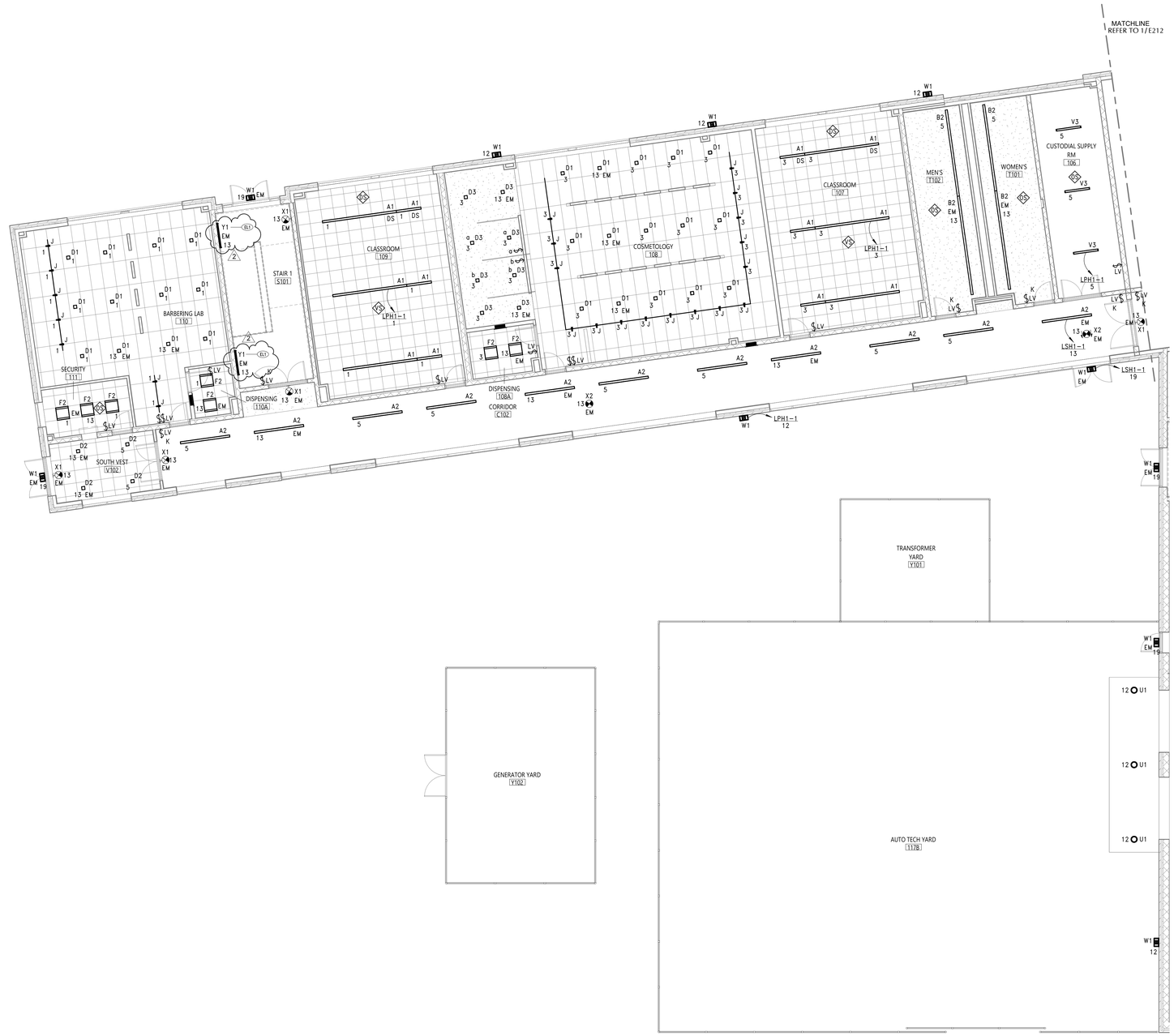


1 FIRST FLOOR LIGHTING PLAN - AREA '1'

E211 1/8" = 1'-0"

SHEET NOTES

A. SUSPENDED FIXTURES ARE MOUNTED AT 10'-0" AFF UNLESS OTHERWISE NOTED

B. STAIRWELL FIXTURES ARE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.

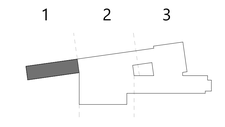
C. REFER TO E900 SERIES DRAWINGS FOR LIGHTING FIXTURE, LIGHTING CONTROL SEQUENCE OF OPERATION, AND PANELBOARD SCHEDULES.

KEY NOTES

2

EL1	PROVIDE FIXTURE WITH BRANCH CIRCUITY FROM BOTH A NORMAL AND LIFE SAFETY POWER SOURCE. EMERGENCY CIRCUIT INDICATED AS INDICATED. SOURCE NORMAL POWER FROM LOCAL LIGHTING CIRCUIT.

KEY PLAN



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Sheet Title

FIRST FLOOR LIGHTING PLAN - AREA '1'

Sheet No.

CTE E211

CONSTRUCTION DOCUMENTS

1 FIRST FLOOR LIGHTING PLAN - AREA '2'

E212 1/8" = 1'-0"

SHEET NOTES

A. SUSPENDED FIXTURES ARE MOUNTED AT 10'-0" AFF UNLESS OTHERWISE NOTED

B. STAIRWELL FIXTURES ARE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.

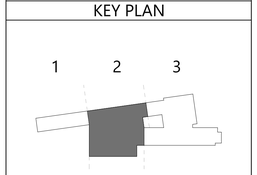
C. REFER TO E900 SERIES DRAWINGS FOR LIGHTING FIXTURE, LIGHTING CONTROL SEQUENCE OF OPERATION, AND PANELBOARD SCHEDULES.

KEY NOTES

2

EL1	PROVIDE FIXTURE WITH BRANCH CIRCUITY FROM BOTH A NORMAL AND LIFE SAFETY POWER SOURCE. EMERGENCY CIRCUIT INDICATED AS INDICATED. SOURCE NORMAL POWER FROM LOCAL LIGHTING CIRCUIT.

KEY PLAN



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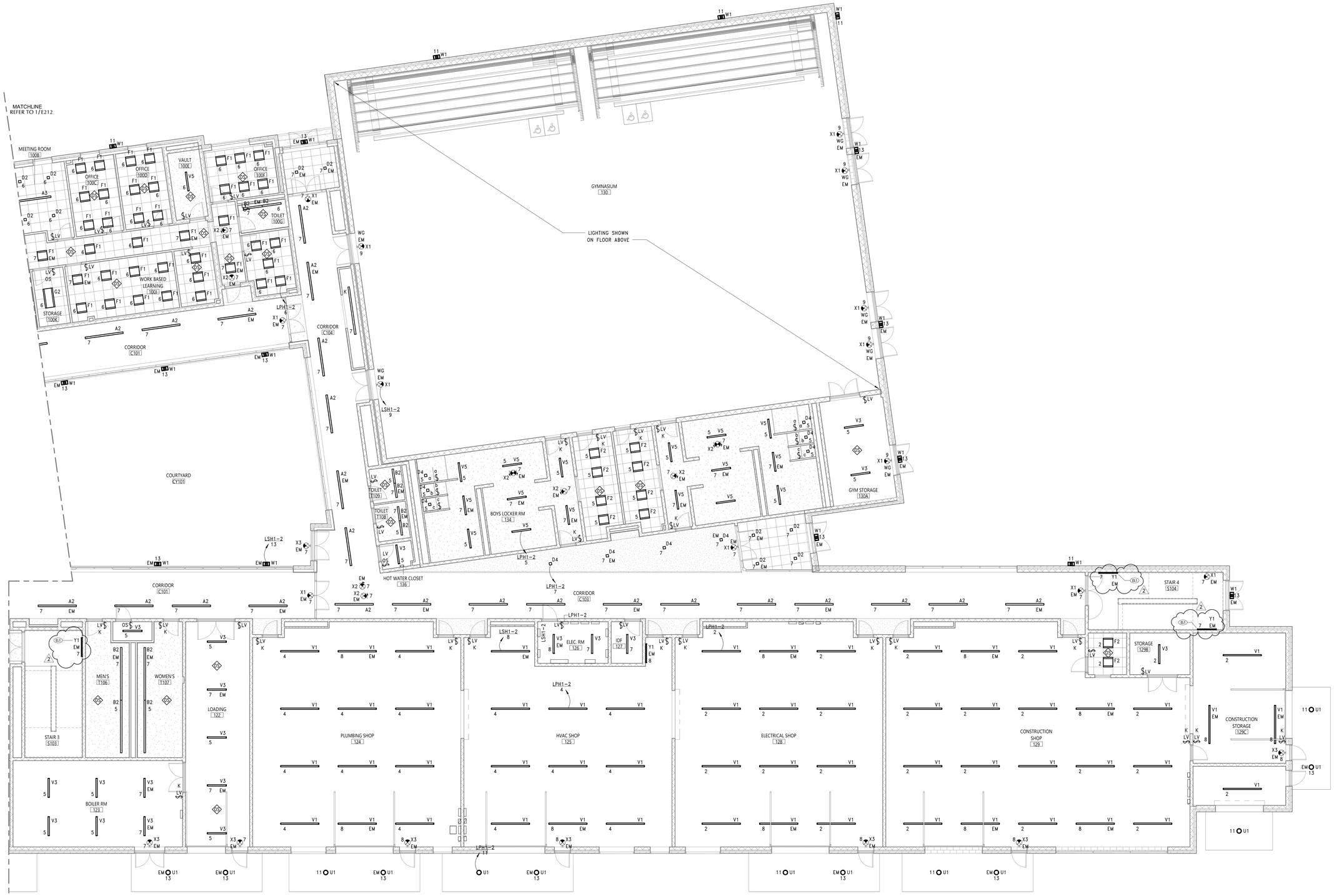
FIRST FLOOR LIGHTING PLAN -AREA '2'

Sheet No.

CTE E212

CONSTRUCTION DOCUMENTS



1 FIRST FLOOR LIGHTING PLAN - AREA '3'

E213 1/8" = 1'-0"

SHEET NOTES

A. SUSPENDED FIXTURES ARE MOUNTED AT 10'-0" AFF UNLESS OTHERWISE NOTED

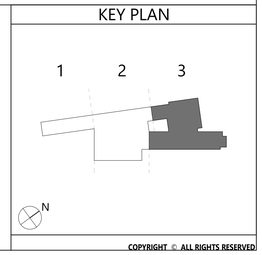
B. STAIRWELL FIXTURES ARE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.

C. REFER TO E900 SERIES DRAWINGS FOR LIGHTING FIXTURE, LIGHTING CONTROL SEQUENCE OF OPERATION, AND PANELBOARD SCHEDULES.

KEY NOTES

EL1 PROVIDE FIXTURE WITH BRANCH CIRCUITY FROM BOTH A NORMAL AND LIFE SAFETY POWER SOURCE. EMERGENCY CIRCUIT INDICATED AS INDICATED. SOURCE NORMAL POWER FROM LOCAL LIGHTING CIRCUIT.

KEY PLAN



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FIRST FLOOR LIGHTING PLAN - AREA '3'

Sheet No.

CTE
E213

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SHEET NOTES

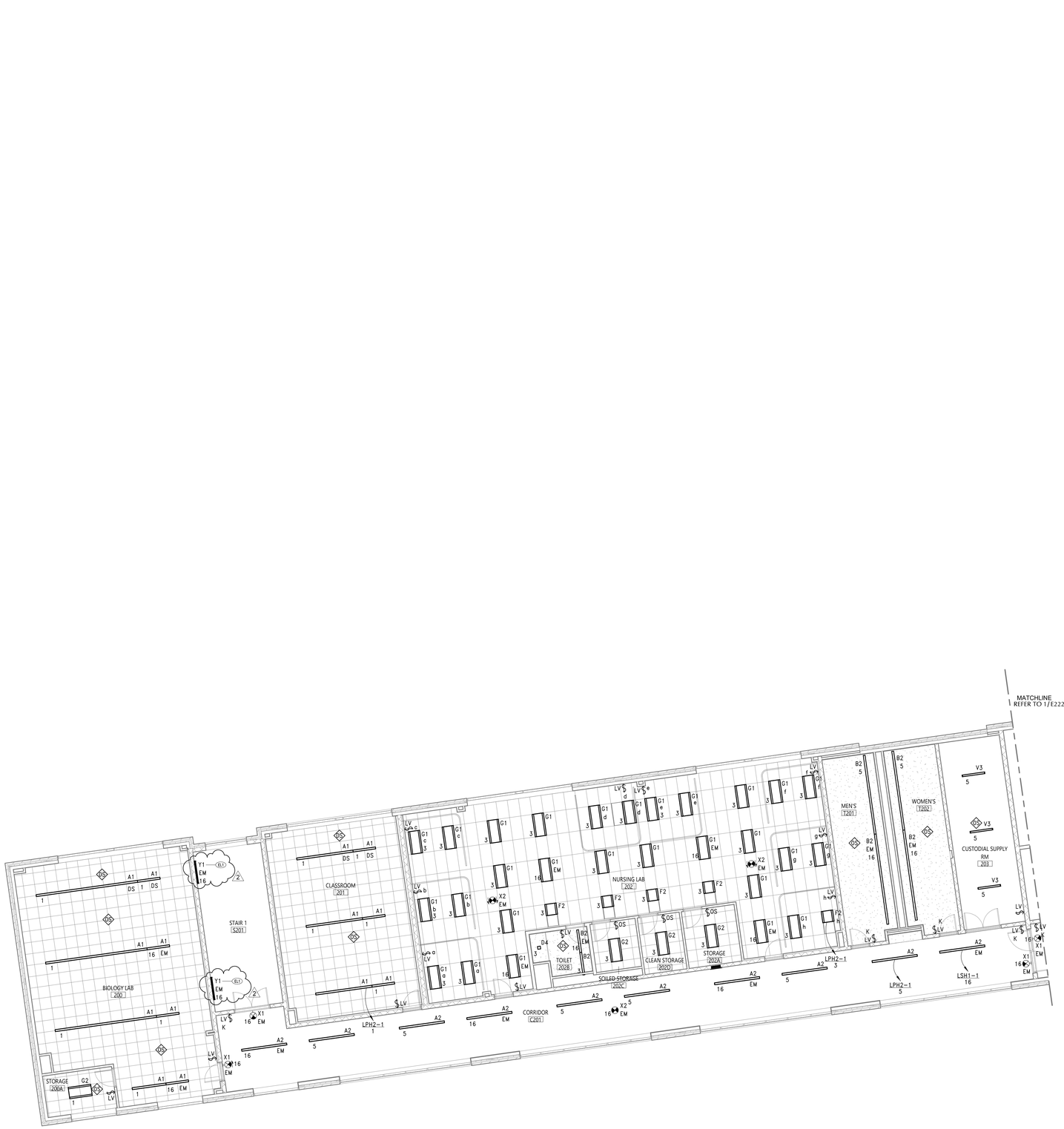
A. SUSPENDED FIXTURES ARE MOUNTED AT 10'-0" AFF UNLESS OTHERWISE NOTED

B. STAIRWELL FIXTURES ARE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.

C. REFER TO E900 SERIES DRAWINGS FOR LIGHTING FIXTURE, LIGHTING CONTROL SEQUENCE OF OPERATION, AND PANELBOARD SCHEDULES.

KEY NOTES

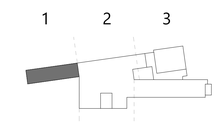
2	EL1	PROVIDE FIXTURE WITH BRANCH CIRCUITY FROM BOTH A NORMAL AND LIFE SAFETY POWER SOURCE. EMERGENCY CIRCUIT INDICATED AS INDICATED. SOURCE NORMAL POWER FROM LOCAL LIGHTING CIRCUIT.



1 SECOND FLOOR LIGHTING PLAN - AREA '1'

E221 1/8" = 1'-0"

KEY PLAN



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SECOND FLOOR LIGHTING PLAN - AREA '1'

Sheet No.
CTE E221

CONSTRUCTION DOCUMENTS

1 SECOND FLOOR LIGHTING PLAN - AREA '2'

E222 1/8" = 1'-0"

SHEET NOTES

A. SUSPENDED FIXTURES ARE MOUNTED AT 10'-0" AFF UNLESS OTHERWISE NOTED

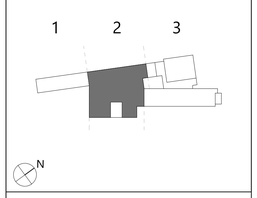
B. STAIRWELL FIXTURES ARE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.

C. REFER TO E900 SERIES DRAWINGS FOR LIGHTING FIXTURE, LIGHTING CONTROL SEQUENCE OF OPERATION, AND PANELBOARD SCHEDULES.

KEY NOTES

EL1	PROVIDE FIXTURE WITH BRANCH CIRCUITY FROM BOTH A NORMAL AND LIFE SAFETY POWER SOURCE. EMERGENCY CIRCUIT INDICATED AS INDICATED. SOURCE NORMAL POWER FROM LOCAL LIGHTING CIRCUIT.

KEY PLAN



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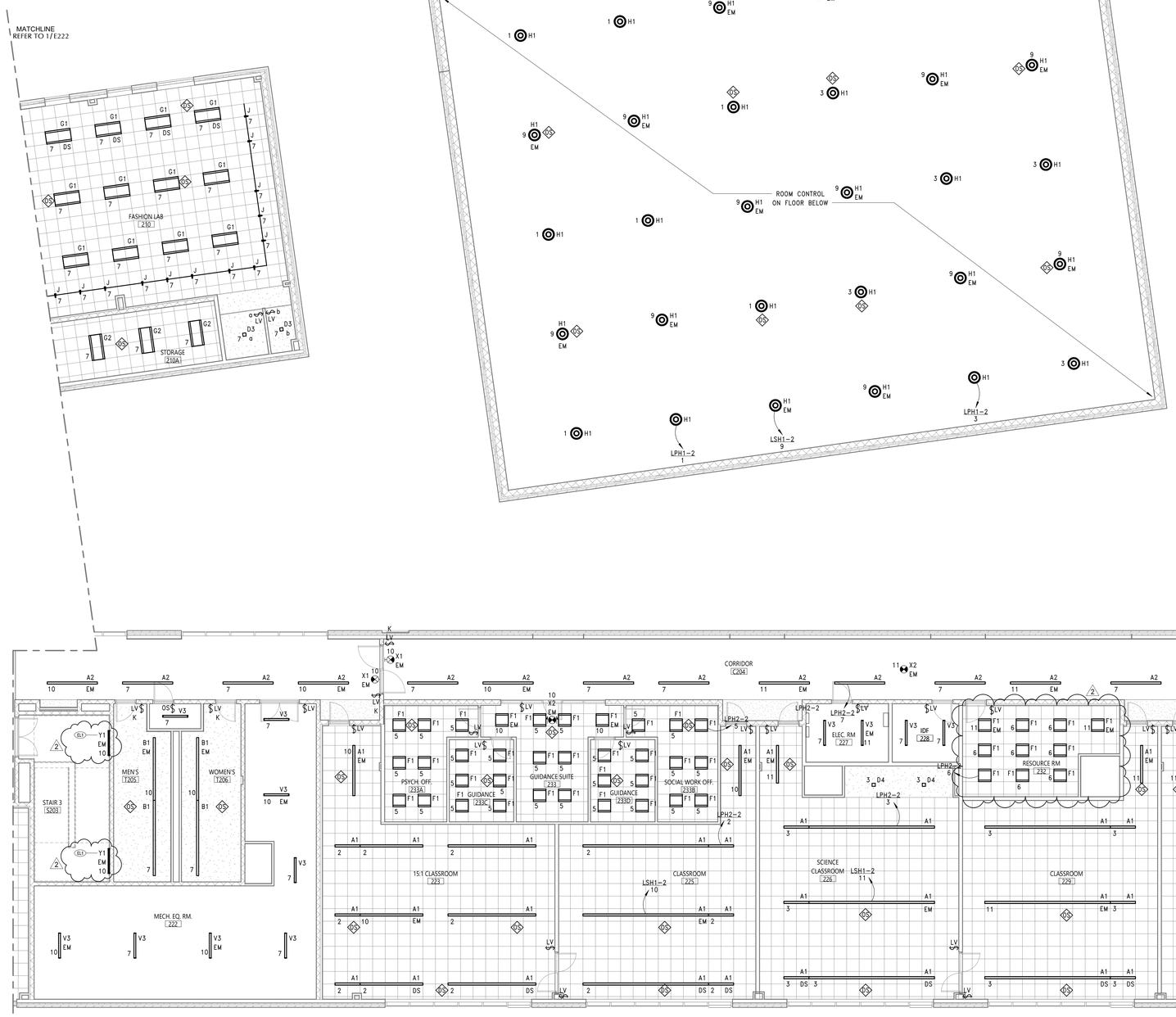
SECOND FLOOR LIGHTING PLAN - AREA '2'

Sheet No.
CTE E222

CONSTRUCTION DOCUMENTS



1 SECOND FLOOR LIGHTING PLAN - AREA '3'

E223 1/8" = 1'-0"

SHEET NOTES

A. SUSPENDED FIXTURES ARE MOUNTED AT 10'-0" AFF UNLESS OTHERWISE NOTED

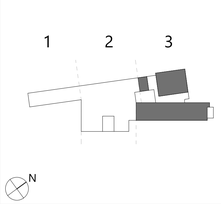
B. STAIRWELL FIXTURES ARE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.

C. REFER TO E900 SERIES DRAWINGS FOR LIGHTING FIXTURE, LIGHTING CONTROL SEQUENCE OF OPERATION, AND PANELBOARD SCHEDULES.

KEY NOTES

EL1 PROVIDE FIXTURE WITH BRANCH CIRCUITY FROM BOTH A NORMAL AND LIFE SAFETY POWER SOURCE. EMERGENCY CIRCUIT INDICATED AS INDICATED. SOURCE NORMAL POWER FROM LOCAL LIGHTING CIRCUIT.

KEY PLAN



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SECOND FLOOR LIGHTING PLAN - AREA '3'

Sheet No.
CTE E223

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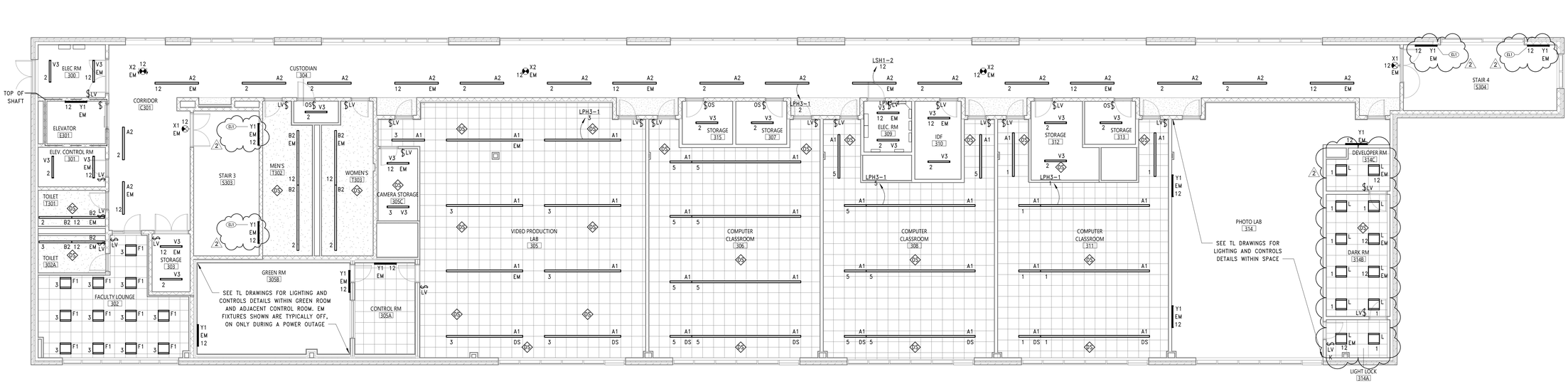


1 THIRD FLOOR LIGHTING PLAN - AREA '3'

E233 1/8" = 1'-0"

SHEET NOTES

A. SUSPENDED FIXTURES ARE MOUNTED AT 10'-0" AFF, UNLESS OTHERWISE NOTED

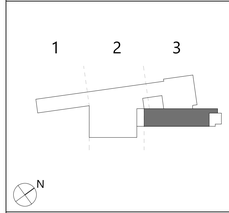
B. STAIRWELL FIXTURES ARE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.

C. REFER TO E900 SERIES DRAWINGS FOR LIGHTING FIXTURE, LIGHTING CONTROL SEQUENCE OF OPERATION, AND PANELBOARD SCHEDULES.

KEY NOTES

EL1 PROVIDE FIXTURE WITH BRANCH CIRCUITY FROM BOTH A NORMAL AND LIFE SAFETY POWER SOURCE. EMERGENCY CIRCUIT INDICATED AS INDICATED. SOURCE NORMAL POWER FROM LOCAL LIGHTING CIRCUIT.

KEY PLAN



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Sheet Title
THIRD FLOOR LIGHTING PLAN - AREA '3'

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E233

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WIRING SCHEDULE
COPPER CONDUCTORS (0-600V)

CIRCUIT LABEL	# OF PARALLEL CONDUIT RUNS	CONDUIT SIZE (INCHES) BASED ON CIRCUIT TYPE [1]			CONDUCTOR SIZE	
		2C	3C	4C	PHASE/ NEUTRAL [2]	EGC [3]
15	1	3/4	3/4	3/4	12	12
20	1	3/4	3/4	3/4	12	12
25	1	3/4	3/4	3/4	10	10
30	1	3/4	3/4	3/4	10	10
35	1	3/4	3/4	3/4	8	10
40	1	3/4	3/4	3/4	8	10
45	1	3/4	3/4	3/4	8	10
50	1	3/4	3/4	3/4	8	10
60	1	3/4	3/4	1	6	10
70	1	1	1	1-1/4	4	8
80	1	1	1	1-1/4	4	8
90	1	1	1-1/4	1-1/4	3	8
100	1	1	1-1/4	1-1/4	3	8
110	1	1-1/4	1-1/4	1-1/4	2	6
125	1	1-1/4	1-1/2	1-1/2	1	6
150	1	1-1/4	1-1/2	1-1/2	1/0	6
175	1	1-1/2	2	2	2/0	6
200	1	1-1/2	2	2	3/0	6
225	1	2	2	2-1/2	4/0	4
250	1	2	2-1/2	2-1/2	250	4
300	1	2-1/2	3	3	350	4
350	1	2-1/2	3	3-1/2	500	3
400	2	2	2	2	3/0	3
450	2	2	2	2-1/2	4/0	2
500	2	2	2-1/2	2-1/2	250	2
600	2	2-1/2	3	3	350	1
700	2	3	3	3-1/2	500	1/0
800	3	2-1/2	2-1/2	3	300	1/0
1000	3	2-1/2	3	3	400	2/0
1200	4	2-1/2	3	3	350	3/0
1600	5	3	3	3	400	4/0
2000	6	3	3	3	400	250
2500	7	3	3	3-1/2	500	350
3000	8	3	3	3-1/2	500	400
4000	11	3	3	3-1/2	500	500

WIRING SCHEDULE NOTES:

1. SUITABLE FOR NEC RACEWAY TYPES: RMC, EMT, FMC, LFMC, AND PVC SCHEDULE 40. VALUES SHOWN ARE BASED ON NEC CHAPTER 9 TABLES 4 (ABOVE RACEWAY TYPES) AND 5 (THHN/THWN/THWN-2 INSULATION), 40% MAXIMUM CONDUIT FILL, AND JAMMING RATIO > 3.2 (RIGID CONDUIT TYPES ONLY). ADJUST SIZE FOR OTHER RACEWAY TYPES REQUIRED FOR A GIVEN APPLICATION IN ACCORDANCE WITH THE PROJECT DRAWINGS AND SPECIFICATIONS.
2. BASED ON NEC TABLE 310.16 (75°C CONDUCTOR TEMPERATURE RATING), WITH AMPACITY OF PHASE/NEUTRAL CONDUCTORS EQUAL TO OR GREATER THAN OCPD RATING.
3. FROM NEC TABLE 250.122.

CONDUIT SELECTION TABLE

USE THE CIRCUIT DESIGNATION TO DETERMINE THE APPROPRIATE COLUMN FOR SELECTING CONDUIT SIZES:

CIRCUIT DESIGNATION	CIRCUIT PHASING/POLES	CONDUCTORS PER CONDUIT			COLUMN
		PHASE	NEUTRAL	EGC	
1NG	SINGLE PHASE/1-POLE	1	1	1	2C
2G	SINGLE PHASE/2-POLE	2	0	1	
2NG	SINGLE PHASE/2-POLE	2	1	1	3C
3G	THREE PHASE/3-POLE	3	0	1	
3NG	THREE PHASE/3-POLE	3	1	1	4C
3N	THREE PHASE/3-POLE (SE)	3	1	0	

CONDUIT SELECTION TABLE NOTES:

1. CIRCUIT LABELS/DESIGNATIONS ON PLANS AND DIAGRAMS INDICATE THE CIRCUIT AMPACITY AND PHASE/NEUTRAL/GROUND CONFIGURATION. FOR EXAMPLE, A DESIGNATION OF 800/3NG INDICATES AN 800A/3P CIRCUIT BREAKER SUPPLYING (3) [3"C, 4#300MCM + #1/0G].

DRY-TYPE TRANSFORMER SCHEDULE (THREE PHASE)

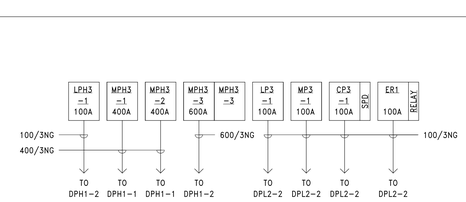
TRANSFORMER SIZE (KVA)	OCPD RATING (A)		GROUNDING ELECTRODE CONDUCTOR
	480V PRIMARY	208Y/120V SECONDARY	
15	25	60	8
30	50	110	8
45	70	175	4
75	125	300	2
112.5	175	400	2
150	250	600	2/0
225	350	800	2/0
300	500	1200	3/0
500	800	2000	3/0
TAG	FEEDER KEY – REFER TO WIRING SCHEDULE		
T	PRIMARY	SECONDARY	
	3G	3NG	

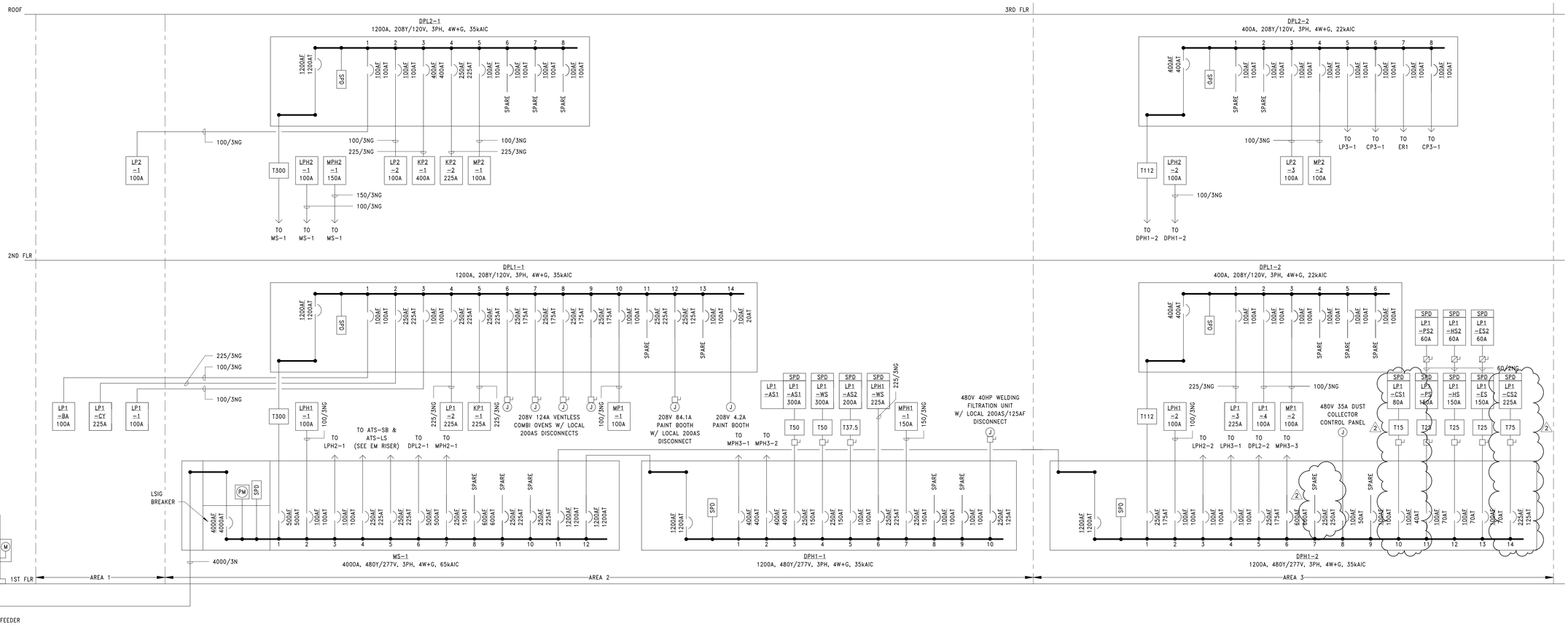
DRY-TYPE TRANSFORMER SCHEDULE (SINGLE PHASE)

TRANSFORMER SIZE (KVA)	OCPD RATING (A)		GROUNDING ELECTRODE CONDUCTOR
	480V PRIMARY	120/240V SECONDARY	
15	40	80	8
25	70	150	6
37.5	100	200	4
50	150	300	2
75	200	400	2
100	300	600	2/0
167	450	1000	3/0
250	700	1600	3/0
TAG	FEEDER KEY – REFER TO WIRING SCHEDULE		
T	PRIMARY	SECONDARY	
	2G	2NG	

TRANSFORMER SCHEDULE NOTES:

1. BOTH PRIMARY AND SECONDARY OCPD RATINGS BASED ON 125% OF TRANSFORMER RATED CURRENTS, COMPLYING WITH NEC TABLE 450.3(B). SELECT PRIMARY AND SECONDARY FEEDER WIRE SIZES FROM WIRING SCHEDULE TO MATCH RESPECTIVE OCPD SIZES.
2. FROM NEC TABLE 250.66, BASED ON WIRING SCHEDULE.
3. FOR EXAMPLE, FOR A DESIGNATION OF T150 PROVIDE: 150KVA TRANSFORMER, PRIMARY 250A/3P CIRCUIT BREAKER WITH 250/3G FEEDER, SECONDARY 600/3NG FEEDER WITH DOWNSTREAM 600A/3P CIRCUIT BREAKER, AND #2/0 GEC.
4. TRANSFORMER LABELS ON PLANS AND DIAGRAMS INDICATE THE TRANSFORMER SIZE AND CIRCUITING REQUIREMENTS. FOR EXAMPLE, A DESIGNATION OF T150 INDICATES: 150 KVA TRANSFORMER, PRIMARY 250A/3P CIRCUIT BREAKER WITH 250/3G FEEDER, SECONDARY 600/3NG FEEDER WITH DOWNSTREAM 600A/3P CIRCUIT BREAKER, AND #2/0 GEC.





1 ELECTRICAL RISER DIAGRAM
E701 NTS

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ELECTRICAL RISER DIAGRAM

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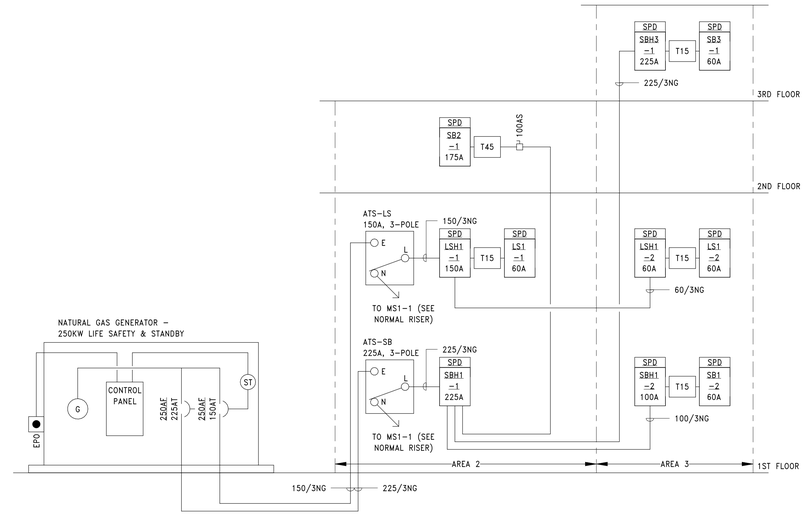
CTE E701

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - MEP.rvt



2 ELECTRICAL EMERGENCY/STANDBY RISER DIAGRAM

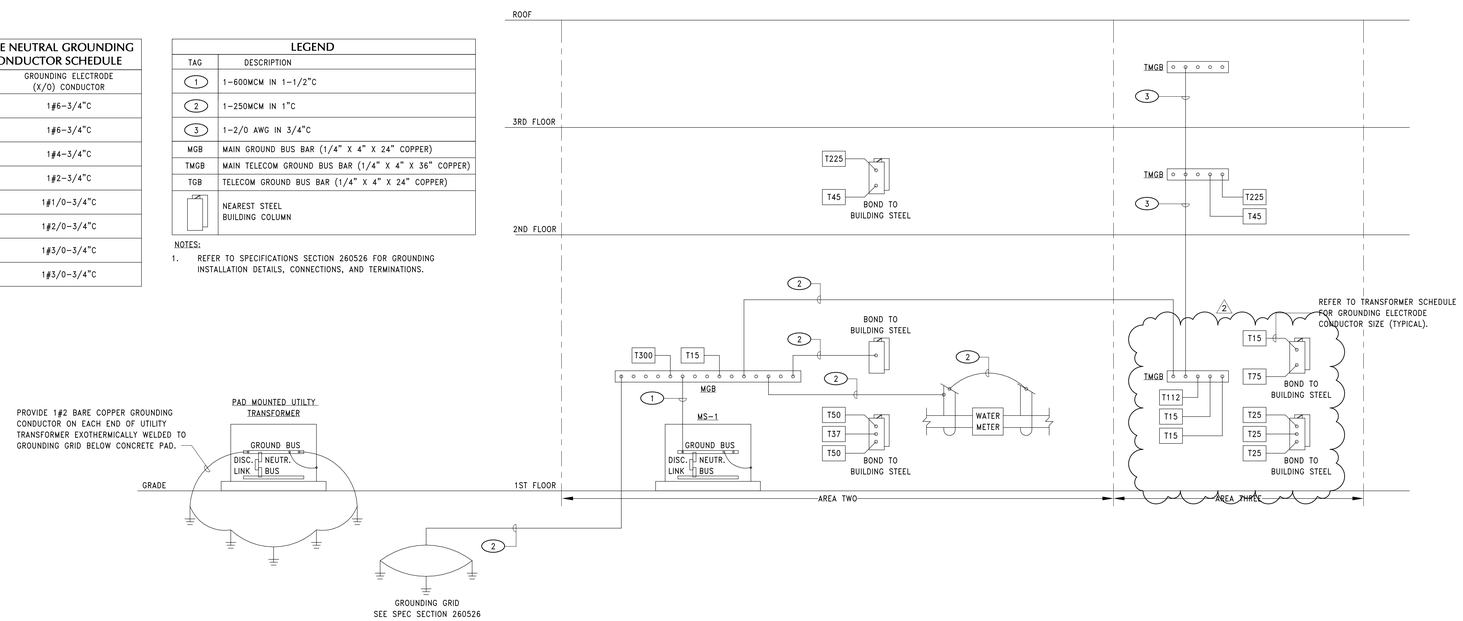
E702 NTS

DERIVED SOURCE NEUTRAL GROUNDING ELECTRODE CONDUCTOR SCHEDULE		
TRANSFORMER NAME	KVA	GROUNDING ELECTRODE (X/O) CONDUCTOR
T15	15	1#6-3/4"C
T30	30	1#6-3/4"C
T45	45	1#4-3/4"C
T75	75	1#2-3/4"C
T112	112.5	1#1/0-3/4"C
T150	150	1#2/0-3/4"C
T225	225	1#3/0-3/4"C
T300	300	1#3/0-3/4"C

LEGEND	
TAG	DESCRIPTION
1	1-600MCM IN 1-1/2"C
2	1-250MCM IN 1"C
3	1-2/0 AWG IN 3/4"C
MGB	MAIN GROUND BUS BAR (1/4" X 4" X 24" COPPER)
TMGB	MAIN TELECOM GROUND BUS BAR (1/4" X 4" X 36" COPPER)
TGB	TELECOM GROUND BUS BAR (1/4" X 4" X 24" COPPER)
	NEAREST STEEL BUILDING COLUMN

NOTES:

1. REFER TO SPECIFICATIONS SECTION 260526 FOR GROUNDING INSTALLATION DETAILS, CONNECTIONS, AND TERMINATIONS.



1 ELECTRICAL GROUNDING RISER DIAGRAM

E702 NTS

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Consultant

Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK JAMES R. BURNETT 073467 LICENSED PROFESSIONAL ENGINEER
EXPIRES 5/31/2026

#	DATE	DESCRIPTION
2	5/02/2024	BID ADDENDUM #2

Drawn By:	NAR
Checked By:	JRB
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Construction Documents:	01/29/24

Sheet Title

EMERGENCY & GROUNDING RISER DIAGRAM

Sheet No.

CTE
E702

CONSTRUCTION DOCUMENTS

SHOPS ELECTRICAL SCHEDULE

ITEM NO.	DESCRIPTION	VOLTAGE	PHASE	AMPS	NEMA	DIRECT	POWER SOURCE	CIRCUIT BREAKER	CONDUIT & WIRING
A010	WELDER	230V	1	39.5	L6-50R	–	LP1-AS1	2,4	50/2NG
A010	WELDER	230V	1	39.5	L6-50R	–	LP1-AS1	1,3	50/2NG
A010	WELDER	230V	1	39.5	L6-50R	–	LP1-AS1	5,7	50/2NG
A011	A/C MACHINE	120V	1	10.0	5-20R	–	LP1-AS1	44	20/1NG
A012	TABLE DRILL	120V	1	10.0	5-20R	–	LP1-AS1	42	20/1NG
A013	PARTS WASHER	120V	1	10.0	–	X	LP1-AS1	45	20/1NG
A013	PARTS WASHER	120V	1	10.0	–	X	LP1-AS1	46	20/1NG
A013	PARTS WASHER	120V	1	10.0	–	X	LP1-AS1	47	20/1NG
A014	TIRE CHANGER	230V	1	6.0	L6-20R	–	LP1-AS1	18,20	20/2NG
A014	TIRE CHANGER	230V	1	6.0	L6-20R	–	LP1-AS2	6,8	20/2NG
A014A	TIRE CHANGER	230V	1	23.0	L6-30R	–	LP1-AS1	17,19	30/2NG
A015	TIRE BALANCER	230V	1	10.0	L6-20R	–	LP1-AS1	21,23	20/2NG
A015	TIRE BALANCER	230V	1	10.0	L6-30R	–	LP1-AS2	9,11	20/2NG
A015	TIRE BALANCER	230V	1	10.0	L6-20R	–	LP1-AS1	22,24	20/2NG
A017	OIL FILTER CRUSHER	230V	1	10.0	–	X	LP1-AS1	25,27	20/2NG
A018	SCISSOR LIFT	230V	1	26.0	–	X	LP1-AS1	6,8	40/2NG
A018	SCISSOR LIFT	230V	1	26.0	–	X	LP1-AS1	9,11	40/2NG
A019	SCISSOR LIFT – HEAD UNIT	230V	1	3.0	–	X	LP1-AS1	29,31	20/2NG
A019	SCISSOR LIFT – HEAD UNIT	230V	1	3.0	–	X	LP1-AS1	26,28	20/2NG
A020	BENCH GRINDER	120V	1	12.0	5-20R	–	LP1-AS1	48	20/1NG
A020	BENCH GRINDER	120V	1	12.0	5-20R	–	LP1-AS2	17	20/1NG
A020	BENCH GRINDER	120V	1	12.0	5-20R	–	LP1-AS2	18	20/1NG
A020	BENCH GRINDER	120V	1	12.0	5-20R	–	LP1-AS1	49	20/1NG
A021	POST LIFT	230V	1	30.0	–	X	LP1-AS1	10,12	40/2NG
A021	POST LIFT	230V	1	30.0	–	X	LP1-AS1	13,15	40/2NG
A021	POST LIFT	230V	1	30.0	–	X	LP1-AS1	14,16	40/2NG
A021	POST LIFT	230V	1	30.0	–	X	LP1-AS2	1,3	40/2NG
A026	BRAKE LATHE	230V	1	7.5	–	X	LP1-AS1	30,32	20/2NG
A030	MIG WELDER	230V	1	22.5	L6-40R	–	LP1-WS	5,7	40/2NG
A030	MIG WELDER	230V	1	22.5	L6-40R	–	LP1-WS	9,11	40/2NG
A030	MIG WELDER	230V	1	22.5	L6-40R	–	LP1-WS	6,8	40/2NG
A030	MIG WELDER	230V	1	22.5	L6-40R	–	LP1-AS2	2,4	40/2NG
A030	MIG WELDER	230V	1	22.5	L6-40R	–	LP1-AS2	5,7	40/2NG
A030A	MIG WELDER	480V	1	25.0	L8-40R	–	LPH1-WS	2,4	40/2NG
A030A	MIG WELDER	480V	1	25.0	L8-40R	–	LPH1-WS	1,3	40/2NG
A030B	MIG WELDER	480V	1	27.0	L8-40R	–	LPH1-WS	10,12	40/2NG
A030B	MIG WELDER	480V	1	27.0	L8-40R	–	LPH1-WS	9,11	40/2NG
A030B	MIG WELDER	480V	1	27.0	L8-40R	–	LPH1-WS	6,8	40/2NG
A030B	MIG WELDER	480V	1	27.0	L8-40R	–	LPH1-WS	5,7	40/2NG
A034	DRILL PRESS	120V	1	14.0	5-20R	–	LP1-AS2	19	20/1NG
A034	DRILL PRESS	120V	1	14.0	5-20R	–	LP1-WS	13	20/1NG
A034	DRILL PRESS	120V	1	14.0	5-20R	–	LP1-WS	14	20/1NG
A038.1	PAINT BOOTH – MAU	208V	3	84.1	–	X	DPL1-1	20,22,24	125/3G
A038.2	PAINT BOOTH – FAN	208V	3	4.2	–	X	DPL1-1	38,40,42	20/3G
A039	TIG WELDER	480V	1	47.0	L8-70R	–	LPH1-WS	13,15	70/2NG
A039	TIG WELDER	480V	1	47.0	L8-70R	–	LPH1-WS	21,23	70/2NG
A039	TIG WELDER	480V	1	47.0	L8-70R	–	LPH1-WS	17,19	70/2NG
A039A	TIG WELDER	230V	1	30.0	L6-50R	–	LP1-WS	1,3	50/2NG
A040	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	15	20/1NG
A040	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	16	20/1NG
A040	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	16	20/1NG
A040	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	16	20/1NG
A040	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	15	20/1NG
A040	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	15	20/1NG
A040	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	15	20/1NG
A040	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	17	20/1NG
A040	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	17	20/1NG
A040A	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	16	20/1NG
A040A	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	15	20/1NG
A040A	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	17	20/1NG
A040A	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	18	20/1NG
A042	PLASMA CUTTER	480V	3	18.0	L19-30R	–	LPH1-WS	25,27,29	30/3G
A044	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	18	20/1NG
A044	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	18	20/1NG
A044	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	18	20/1NG
A044	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	18	20/1NG
A044	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	18	20/1NG
A044	WELDER HOOD (MISC.)	120V	1	1.0	5-20R	–	LP1-WS	18	20/1NG
A045	VERTICAL BAND SAW	240V	1	12.0	–	X	LP1-WS	2,4	20/2NG
A046	MANUAL COLD SAW	120V	1	10.0	5-20R	–	LP1-WS	19	20/1NG
A048	GRINDER W/ BELT SANDER	120V	1	11.0	5-20R	–	LP1-WS	21	20/1NG
A048	GRINDER W/ BELT SANDER	120V	1	11.0	5-20R	–	LP1-WS	20	20/1NG
A049	GRINDING TABLE	480V	3	5.4	–	X	LPH1-WS	49,51,53	20/3G
A049	GRINDING TABLE	480V	3	5.4	–	X	LPH1-WS	50,52,54	20/3G
A050	HORIZONTAL BANDSAW	120V	1	16.0	5-20R	–	LP1-WS	22	20/1NG
A051	HYDRAULIC IRONWORKER	230V	1	20.0	–	X	LP1-WS	10,12	30/2NG
A055	STICK-TIG WELDER	480V	3	19.0	–	X	LPH1-WS	44,46,48	35/3G
A055	STICK-TIG WELDER	480V	3	19.0	–	X	LPH1-WS	43,45,47	35/3G
A055	STICK-TIG WELDER	480V	3	19.0	–	X	LPH1-WS	38,40,42	35/3G
A055	STICK-TIG WELDER	480V	3	19.0	–	X	LPH1-WS	37,39,41	35/3G
A055	STICK-TIG WELDER	480V	3	19.0	–	X	LPH1-WS	32,34,36	35/3G
A055	STICK-TIG WELDER	480V	3	19.0	–	X	LPH1-WS	31,33,35	35/3G
A055	STICK-TIG WELDER	480V	3	19.0	–	X	LPH1-WS	26,28,30	35/3G
CS01	JOINTER	230V	3	15.2	L11-30R	–	LP1-CS2	7,9,11	30/3G
CS02	BELT DISK SANDER	120V	1	14.0	5-20R	–	LP1-CS2	20	20/1NG
CS03	OSCILLATING SPINDLE SANDER	120V	1	14.0	5-20R	–	LP1-CS2	26	20/1NG
CS04	WIDE BELT SANDER	230V	3	70.0	–	X	LP1-CS2	1,3,5	100/3G
CS05	OSCILLATING EDGE SANDER	230V	3	9.6	–	X	LP1-CS2	8,10,12	20/3G
CS06	CABINET SAW	230V	3	11.0	L11-20R	–	LP1-CS2	13,15,17	20/3G
CS08	COMPOUND MITER SAW	120V	1	15.0	5-20R	–	LP1-CS2	25	20/1NG
CS08	COMPOUND MITER SAW	120V	1	15.0	5-20R	–	LP1-CS2	31	20/1NG
CS11	PLANER	230V	3	30.0	–	X	LP1-CS2	2,4,6	40/3G
GE10	BANDSAW	230V	1	17.0	L6-30R	–	LP1-CS1	21,23	30/2NG
GE10	BANDSAW	230V	1	17.0	L6-30R	–	LP1-CS2	27,29	30/2NG
H006	SOLDERING FUME EXTRACTOR	120V	1	0.5	–	X	LP1-HS1	9	20/1NG
H008	DRILL PRESS	120V	1	18.0	5-20R	–	LP1-HS1	10	30/1NG

SHOPS SCHEDULE NOTES:
1. FOR EACH DIRECT CONNECTION UNIT, PROVIDE LOCAL DISCONNECT WITHIN SITE OF UNIT. COORDINATE LOCATION IN-FIELD WITH ARCHITECT.
2. FOR PAINT BOOTH UNITS, PROVIDE FIRE ALARM RELAY TO SHUTDOWN PAINT BOOTH IN THE EVENT OF AN ALARM.
3. A038.1 SHALL BE PROVIDED WITH ITS OWN UNIT MOUNTED DISCONNECT.

LIGHTING FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	WATTAGE	VOLTAGE	NOTES
A1	4" LED LINEAR LUMINAIRE, DOWN ONLY, PENDANT	PRUDENTIAL	BPRO4-LIN FLSH LED35 HO SAL-NU UNV DM01	10.5W/FT	MVOLT	
A2	4" LED LINEAR LUMINAIRE, DOWN ONLY, PENDANT	PRUDENTIAL	BPRO4-LIN FLSH LED35 MO SAL-NU UNV DM01	5.6W/FT	MVOLT	
A3	LED LINEAR LUMINAIRE, UP/DOWN, PENDANT	PRUDENTIAL	STOV LED35 SO-SO TWW D1-SYM SC UNV DM01	13.0W/FT	MVOLT	
B1	4" LED LINEAR LUMINAIRE, RECESSED GRID	PRUDENTIAL	BPRO4-REC FLSH LED35 SO SAL UNV X3 DM01	7.8W/FT	MVOLT	
B2	4" LED LINEAR LUMINAIRE, RECESSED GYP	PRUDENTIAL	BPRO4-REC FLSH LED35 SO SAL UNV X3 DM01	7.8W/FT	MVOLT	
C1	LINEAR LED, GRID BAR REPLACEMENT	JLC TECH	TBSL-WW-24-DW-W	8.0W/FT	MVOLT	2
C2	LINEAR LED, RECESSED GYP	JLC TECH	SOR-WW-2-24-C2BL-B	8.0W/FT	MVOLT	
D1	6" LED SQUARE DOWNLIGHT, RECESSED GRID	PORTFOLIO	LDSQ6C309035D010SQ1U	32.6W	MVOLT	
D2	6" LED SQUARE DOWNLIGHT, RECESSED GRID	PORTFOLIO	LDSQ6C159035D010SQ1U	16.6W	MVOLT	
D3	6" LED SQUARE DOWNLIGHT, RECESSED GYP	PORTFOLIO	LDSQ6C309035D010SQ1U	32.6W	MVOLT	
D4	6" LED SQUARE DOWNLIGHT, RECESSED GYP	PORTFOLIO	LDSQ6C159035D010SQ1U	16.6W	MVOLT	
F1	2'X2' LED TROFFER, RECESSED	LUMENWERX	SIDVR 22 CPO LED 80 3000 35 UNV D1	37.5W	MVOLT	
F2	2'X2' LED TROFFER, RECESSED	COLUMBIA	LCAT22 35MLG ED1U	25.8W	MVOLT	
G1	2'X4' LED TROFFER, RECESSED	COLUMBIA	LCAT24 35MLG ED1U	36.0W	MVOLT	
G2	2'X4' LED TROFFER, RECESSED	COLUMBIA	LCAT24 35MWG ED1U	26.4W	MVOLT	
H1	LED HIGHBAY, REFLECTOR W/ WIREGUARD, PENDANT	METALUX	UHB 18 UNV LB40 CD UHB-ALR12 UHB-WG12	147.0W	MVOLT	
J	LED SPOT LIGHTING, TRACK MOUNTED	HALO	L81208FL9035P	10.5W	MVOLT	
K	4" LED LINEAR LUMINAIRE, TROPHY CASE	NEO-RAY	S124DR S350D835 UDD F W	3.0W/FT	MVOLT	
L	2'x2' LED NARROW SPECTRUM TROFFER, RECESSED	KENNAL	CSEDO 22 23RD/45BD DIM1 DV 2F 2H SYM	23W/45W	MVOLT	
U1	OUTDOOR ROUND LED LIGHT, CEILING MOUNT	KENALL	MR13FFL PP 10L40K MVOLT	13.0W	MVOLT	
V1	8' LED STRIP LIGHT, DAMP LISTED, PENDANT	LITHONIA	CLX L96 10000LM HEF RDL MVOLT GZ1 35K 80CRI	60.6W	MVOLT	
V2	8' LED STRIP LIGHT, DAMP LISTED, PENDANT	LITHONIA	CLX L96 18000LM HEF RDL MVOLT GZ1 35K 80CRI	115.0W	MVOLT	
V3	4' LED STRIP LIGHT, DAMP LISTED, PENDANT	LITHONIA	CLX L48 4000LM HEF RDL MVOLT GZ1 35K 80CRI	23.8W	MVOLT	
V4	4' LED STRIP LIGHT, DAMP LISTED, SURFACE MOUNT	LITHONIA	CLX L48 5000LM HEF RDL MVOLT GZ1 35K 80CRI	30.3W	MVOLT	
V5	4' LED STRIP LIGHT, DAMP LISTED, SURFACE MOUNT	LITHONIA	CLX L48 4000LM HEF RDL MVOLT GZ1 35K 80CRI	23.8W	MVOLT	
W1	LED WALL SCONCE, WALL MOUNT	LITHONIA	WST LED P2 40K VF MVOLT	25.0W	MVOLT	
X1	LED EXIT SIGN, WALL MOUNT	LITHONIA	LQC R	0.7W	MVOLT	
X2	LED EXIT SIGN, CEILING MOUNT	LITHONIA	LQC R	0.7W	MVOLT	
X3	LED EXIT SIGN, WET LISTED, WALL MOUNT	LITHONIA	WLTE GY R	2.7W	MVOLT	
Y1	4' LED WRAPAROUND LIGHT, WALL MOUNT	PAL	AS350 HO K35 80 4 W LOH UNV DIM1 (DUAL DRIVER)	28.0W	MVOLT	1
Y2	4' LED WRAPAROUND LIGHT, WET LISTED, WALL MOUNT	LITHONIA	FML4W 48 5000LM 835 ZT MVOLT (DUAL DRIVER)	53.4W	MVOLT	1

LIGHTING FIXTURE SCHEDULE NOTES:
1. PROVIDE FIXTURE WITH BRANCH CIRCUITY FROM BOTH A NORMAL AND LIFE SAFETY POWER SOURCE. EMERGENCY CIRCUIT INDICATED ON DRAWINGS. SOURCE NORMAL POWER FROM LOCAL LIGHTING CIRCUIT.
2. COORDINATE INSTALLATION OF LIGHTING FIXTURE WITH ARCHITECTURAL GRID SYSTEM. PROVIDE INSTALLATION UNDER SUPERVISION OF GENERAL CONTRACTOR.
3. COORDINATE LENGTHS OF FIXTURES WITH CONTRACT DRAWINGS.

LIGHTING SEQUENCE OF OPERATION

SEQUENCE – TYPICAL CLASSROOM
1. VACANCY SENSOR(S) FOR AUTO-OFF OF ALL FIXTURES AFTER 30 MIN. TIME DELAY.
2. DAYLIGHT SENSOR(S) TO ACTUATE PRESET DIMMING LEVEL FOR GENERAL ILLUMINATION FIXTURES ONLY, BASED ON DAYLIGHT AVAILABLE IN SPACE, WITH DIM-TO-OFF FUNCTIONALITY.
3. (2) 3 BUTTON WALL STATION:
   BUTTON 1-1: ON/OFF CONTROL OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 1-2: DIM UP OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 1-3: DIM DOWN OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 2-1: ON/OFF CONTROL OF TEACHER'S LIGHT FIXTURE (4' SEGMENT).
   BUTTON 2-2: DIM UP CONTROL OF TEACHER'S LIGHT FIXTURE (4' SEGMENT).
   BUTTON 2-3: DIM DOWN CONTROL OF TEACHER'S LIGHT FIXTURE (4' SEGMENT).

SEQUENCE – TYPICAL CLASSROOM (WINDOWLESS)
1. VACANCY SENSOR(S) FOR AUTO-OFF OF ALL NON-EMERGENCY FIXTURES AFTER 30 MIN. TIME DELAY.
2. (2) 3 BUTTON WALL STATION:
   BUTTON 1-1: ON/OFF CONTROL OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 1-2: DIM UP OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 1-3: DIM DOWN OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 2-1: ON/OFF CONTROL OF TEACHER'S LIGHT FIXTURE (4' SEGMENT).
   BUTTON 2-2: DIM UP CONTROL OF TEACHER'S LIGHT FIXTURE (4' SEGMENT).
   BUTTON 2-3: DIM DOWN CONTROL OF TEACHER'S LIGHT FIXTURE (4' SEGMENT).

SEQUENCE – TYPICAL OFFICE
1. OCCUPANCY SENSOR(S) FOR AUTO-ON/OFF OF ALL FIXTURES AFTER 30 MIN. TIME DELAY.
2. (2) 3 BUTTON WALL STATION:
   BUTTON 1: ON/OFF CONTROL OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 2: DIM UP OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 3: DIM DOWN OF GENERAL ILLUMINATION FIXTURES.

SEQUENCE – TYPICAL CORRIDOR/KITCHEN/SHOPS/LOCKER ROOMS/CULINARY
1. (2) DIGITAL KEY SWITCHES, ONE LABELED 'EMERGENCY':
   SWITCH 1: ON/OFF CONTROL OF GENERAL ILLUMINATION FIXTURES.
   SWITCH 2: ON/OFF CONTROL OF EMERGENCY ILLUMINATION FIXTURES.

SEQUENCE – TYPICAL BATHROOMS
1. OCCUPANCY SENSOR(S) FOR AUTO-ON/OFF OF ALL NON-EMERGENCY FIXTURES AFTER 30 MIN. TIME DELAY,
2. (2) DIGITAL KEY SWITCHES, ONE LABELED 'EMERGENCY':
   SWITCH 1: ON/OFF CONTROL OF GENERAL ILLUMINATION FIXTURES.
   SWITCH 2: ON/OFF CONTROL OF EMERGENCY ILLUMINATION FIXTURES.

SEQUENCE – TYPICAL STORAGE
1. OCCUPANCY SENSOR(S) FOR AUTO-ON/OFF OF ALL NON-EMERGENCY FIXTURES AFTER 30 MIN. TIME DELAY.
2. (1) 2 BUTTON WALL STATION:
   BUTTON 1: ON CONTROL OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 2: OFF CONTROL OF GENERAL ILLUMINATION FIXTURES.

SEQUENCE – TYPICAL ELECTRICAL/MECHANICAL SPACE
1. (1) 2 BUTTON WALL STATION:
   BUTTON 1: ON/OFF CONTROL OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 2: ON/OFF CONTROL OF EMERGENCY ILLUMINATION FIXTURES.

SEQUENCE – BARBERING, COSMETOLOGY, FASHION LAB
1. VACANCY SENSOR(S) FOR AUTO-OFF OF ALL FIXTURES AFTER 30 MIN. TIME DELAY.
2. DAYLIGHT SENSOR(S) TO ACTUATE PRESET DIMMING LEVEL FOR GENERAL ILLUMINATION FIXTURES ONLY, BASED ON DAYLIGHT AVAILABLE IN SPACE, WITH DIM-TO-OFF FUNCTIONALITY.
3. 3 BUTTON WALL STATION:
   BUTTON 1: ON/OFF CONTROL OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 2: DIM UP OF GENERAL ILLUMINATION FIXTURES.
   BUTTON 3: DIM DOWN OF GENERAL ILLUMINATION FIXTURES.
4. PROVIDE ADDITIONAL 2 BUTTON STATION(S) FOR ON/OFF CONTROL OF TRACK LIGHTING. COORDINATE WITH OWNER FOR COUNT AND ZONING.

SEQUENCE – CAFETERIA
1. OCCUPANCY SENSOR(S) FOR AUTO-ON/OFF OF ALL NON-EMERGENCY FIXTURES AFTER 30 MIN. TIME DELAY.
2. GRAPHIC WALL PANEL CONTROLLER:
   PROVIDE FOUR ZONES OF LIGHTING CONTROL FOR GENERAL & EMERGENCY FIXTURES.
3. (2) DIGITAL KEY SWITCHES, ONE LABELED 'EMERGENCY':
   SWITCH 1: ON/OFF CONTROL OF GENERAL ILLUMINATION FIXTURES.
   SWITCH 2: ON/OFF CONTROL OF EMERGENCY ILLUMINATION FIXTURES.

GENERAL NOTES:
- ALL EMERGENCY WALL SWITCHES MUST BE PROPERLY IDENTIFIED AS 'EMERGENCY LIGHTING CONTROL' ON THE SWITCHES WALLPLATES.
- ALL EMERGENCY POWER PACKS/ROOM CONTROL MUST BE UL924 LISTED.

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Consultant

Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK
JAMES R. BARRETT
073467
LICENSED PROFESSIONAL ENGINEER
EXPIRES 5/31/2026

#	DATE	DESCRIPTION
2	1/02/2024	BID ADDENDUM #2

Drawn By:	NAB
Checked By:	JRB
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Construction Documents:	01/29/24

Sheet Title
SCHEDULES

Sheet No.
CTE
E902

CONSTRUCTION DOCUMENTS

Branch Panel: LP1-AS1

Volts: 120/240 Single **Phases:** 1 **Wires:** 3 **A.I.C. Rating:** 14,000

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
41	RECEPT. - AUTO TECH SHOP 117	20	1	720 VA	720 VA			1	20	CORD REEL - AUTO TECH SHOP 117	42
43	CORD REEL - AUTO TECH SHOP 117	20	1			720 VA	1200 VA	1	20	A011 - A/C MACHINE	44
45	A013 - PARTS WASHER	20	1	1200 VA	1200 VA			1	20	A013 - PARTS WASHER	46
47	A013 - PARTS WASHER	20	1			1200 VA	1440 VA	1	20	A020 - BENCH GRINDER	48
49	A020 - BENCH GRINDER	20	1	1440 VA	720 VA			1	20	CORD REELS - AUTO TECH SHOP 117	50
51	CORD REELS - AUTO TECH SHOP 117	20	1			720 VA	720 VA	1	20	CORD REELS - AUTO TECH SHOP 117	52
53	RECEPT. - AUTO TECH SHOP 117	20	1	1800 VA	260 VA			1	20	RECEPT. - WATER COOLER	54
55	OVERHEAD DOOR	20	1			864 VA	864 VA	1	20	OVERHEAD DOOR	56
57	OVERHEAD DOOR	20	1	864 VA	864 VA			1	20	OVERHEAD DOOR	58
59	OVERHEAD DOOR	20	1			864 VA	864 VA	1	20	OVERHEAD DOOR	60
61	RECEPT. - EXTERIOR	20	1	540 VA	0 VA			1	20	SPARE	62
63	SPARE	20	1			0 VA	0 VA	1	20	SPARE	64
65	SPARE	20	1	0 VA	0 VA			1	20	SPARE	66
67	SPARE	20	1			0 VA	0 VA	1	20	SPARE	68
69	SPACE	--	1	--	--			1	--	SPACE	70
71	SPACE	--	1			--	--	1	--	SPACE	72
73	SPACE	--	1	--	--			1	--	SPACE	74
75	SPACE	--	1			--	--	1	--	SPACE	76
77	SPACE	--	1	--	--			1	--	SPACE	78
79	SPACE	--	1			--	--	1	--	SPACE	80
			Total Load:	10328 VA		9456 VA					
			Total Amps:	86.1		78.8					

Notes:

Branch Panel: LP1-AS1

Location: AUTO TECH SHOP 117 **Supply From:** T50 - LP1-AS1 **Mounting:** SURFACE **Volts:** 120/240 Single **Phases:** 1 **Wires:** 3 **A.I.C. Rating:** 14,000 **Mains Type:** 300 A MCB **Mains Rating:** 300

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	A010 - WELDER	50	2	4740 VA	4740 VA			2	50	A010 - WELDER	2
3	--	--	--			4740 VA	4740 VA	--	--	--	4
5	A010 - WELDER	50	2	4740 VA	3120 VA			2	40	A018 - SCISSOR LIFT	6
7	--	--	--			4740 VA	3120 VA	--	--	--	8
9	A018 - SCISSOR LIFT	40	2	3120 VA	3600 VA			2	40	A021 - POST LIFT	10
11	--	--	--			3120 VA	3600 VA	--	--	--	12
13	A021 - POST LIFT	40	2	3600 VA	3600 VA			2	40	A021 - POST LIFT	14
15	--	--	--			3600 VA	3600 VA	--	--	--	16
17	A014A - TIRE CHANGER	30	2	2760 VA	720 VA			2	20	A014 - TIRE CHANGER	18
19	--	--	--			2760 VA	720 VA	--	--	--	20
21	A015 - WHEEL BALANCER	20	2	1200 VA	1200 VA			2	20	A015 - WHEEL BALANCER	22
23	--	--	--			1200 VA	1200 VA	--	--	--	24
25	A017 - OIL FILTER CRUSHER	20	2	1200 VA	360 VA			2	20	A019 - SCISSOR LIFT (HEAD-END)	26
27	--	--	--			1200 VA	360 VA	--	--	--	28
29	A019 - SCISSOR LIFT (HEAD-END)	20	2	360 VA	900 VA			2	20	A026 - BRAKE LATHE	30
31	--	--	--			360 VA	900 VA	--	--	--	32
33	SPARE	20	2	0 VA	0 VA			2	20	SPARE	34
35	--	--	--			0 VA	0 VA	--	--	--	36
37	SPARE	20	2	0 VA	0 VA			2	20	SPARE	38
39	--	--	--			0 VA	0 VA	--	--	--	40
			Total Load:	50288 VA		49416 VA					
			Total Amps:	419.1		411.8					

Notes:

Branch Panel: LP1-2

Location: CORRIDOR C101 **Supply From:** DPL1-1 **Mounting:** SURFACE **Volts:** 120/208 Wye **Phases:** 3 **Wires:** 4 **A.I.C. Rating:** 10,000 **Mains Type:** 225A MCB **Mains Rating:** 225

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	HAND DRYER (SINK) - TOILET T103	20	1	1500 VA	770 VA					1	20	RECEPT. & FLUSH. - TLT & PLUMB.	2
3	RECEPT. - GROOMING TABLE	20	1			1080 VA	1620 VA			1	20	RECEPT. - GROOMING TABLE	4
5	RECEPT. - GROOMING TABLE	20	1					1080 VA	360 VA	1	20	RECEPT. - ULTRASOUND MACHINE	6
7	RECEPT. - VET TECH 104	20	1	1080 VA	800 VA					1	20	RECEPT. - WASHER	8
9	RECEPT. - GROOMING & STORAGE	20	1			900 VA	720 VA			1	20	RECEPT. - LOCKED STORAGE 103C	10
11	RECEPT. - GROOMING TABLE	20	1					1620 VA	1080 VA	1	20	RECEPT. - GROOMING TABLE	12
13	RECEPT. - GROOMING TABLE	20	1	1080 VA	1260 VA					1	20	RECEPT. - CLASSROOM 102	14
15	RECEPT. - HEALTH, TOILET, STOR	20	1			1310 VA	1500 VA			1	20	HAND DRYER (SINK) - TOILET T101C	16
17	RECEPT. - HEALTH OFFICE 101	20	1					1440 VA	180 VA	1	20	RECEPT. - REFRIGERATOR	18
19	RECEPT. - CAFETERIA 116	20	1	1440 VA	1260 VA					1	20	RECEPT. - CAFETERIA 116	20
21	RECEPT. & FLUSH - PASS, LOCK, & TLT	20	1			950 VA	1080 VA			1	20	RECEPT. - CORRIDOR & VEST.	22
23	RECEPT. - CORRIDOR C101	20	1					720 VA	1440 VA	1	20	RECEPT. - OFFICES	24
25	HAND DRYER (SINK) - TOILET 119C	20	1	1500 VA	1500 VA					1	20	HAND DRYER (SINK) - TOILET T104	26
27	RECEPT. & FLUSH - CORR, VEST, TLT	20	1			1180 VA	1500 VA			1	20	HAND DRYER (SINK) - TOILET T105	28
29	RECEPT. - SECURITY & MEETING ROOM	20	1					720 VA	720 VA	1	20	RECEPT. - AUTOBODY OFFICE 120A	30
31	RECEPT. - FRONT OFFICE	20	1	1080 VA	900 VA					1	20	RECEPT. - OFFICE 100C	32
33	RECEPT. - WB LEARNING 100J	20	1			1440 VA	900 VA			1	20	RECEPT. - OFFICE 100D	34
35	SPARE	20	1					0 VA	0 VA	1	20	SPARE	36
37	SPARE	20	1	0 VA	0 VA					1	20	SPARE	38
39	SPARE	20	1			0 VA	0 VA			1	20	SPARE	40
41	SPARE	20	1					0 VA	0 VA	1	20	SPARE	42
43	SPACE	--	1	--	0 VA					2	20	SPARE	44
45	SPACE	--	1			--	0 VA			--	--	--	46
47	SPACE	--	1					--	1500 VA	2	20	RECEPT. - COPIER	48
49	SPACE	--	1	--	1500 VA					--	--	--	50
51	SPACE	--	1			--	2000 VA			2	30	RECEPT. - DRYER	52
53	SPACE	--	1					--	2000 VA	--	--	--	54
			Total Load:	15670 VA		16180 VA		12860 VA					
			Total Amps:	134.2		138.4		107.2					

Notes:

Branch Panel: MP1-1

Location: ELEC RM 112 **Supply From:** DPL1-1 **Mounting:** SURFACE **Volts:** 120/208 Wye **Phases:** 3 **Wires:** 4 **A.I.C. Rating:** 10,000 **Mains Type:** 100 A MCB **Mains Rating:** 100

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	ISUs - AREA ONE	20	2	324.5 VA	914.6 VA					1	20	CUH-As & UH-A	2
3	--	--	--			324.5 VA	1332 VA			1	20	CUH-A & CUH-B	4
5	ISUs - AREA TWO	20	2					299.5 VA	1332 VA	1	20	CUH-A & CUH-B	6
7	--	--	--	299.5 VA	951.6 VA					1	20	CUH-C & UH-A	8
9	SPARE	20	2			0 VA	768 VA			1	20	GWH-2 & PP-2	10
11	--	--	--					0 VA	768 VA	1	20	GWH-3A & PP-3A	12
13	ISU-HG-C102A	15	2	540.8 VA	768 VA					1	20	GWH-3B & PP-3B	14
15	--	--	--			540.8 VA	600 VA			1	20	GWH-4	16
17	ISU-HG-C102B	15	2					540.8 VA	61.6 VA	1	20	AC-DRYER	18
19	--	--	--	540.8 VA	180 VA					1	20	F-R-108	20
21	SPARE	15	2			0 VA	360 VA			1	20	CP-A-108	22
23	--	--	--					0 VA	180 VA	1	20	RECEPT. - MAINTENANCE	24
25	SPARE	20	2	0 VA	0 VA					1	20	SPARE	26
27	--	--	--			0 VA	0 VA			1	20	SPARE	28
29	SPARE	20	2					0 VA	0 VA	1	20	SPARE	30
31	--	--	--	0 VA	0 VA					1	20	SPARE	32
33	SPARE	20	2			0 VA	0 VA			1	20	SPARE	34
35	--	--	--					0 VA	0 VA	1	20	SPARE	36
37	AC-1	35	3	2101.6 VA	--					1	--	SPACE	38
39	--	--	--			2101.6 VA	--			1	--	SPACE	40
41	--	--	--					2101.6 VA	--	1	--	SPACE	42
			Total Load:	6621 VA		6077 VA		5303 VA					
			Total Amps:	56.1		51.2		44.2					

Notes:

Branch Panel: KP1-1

Location: FOOD SERV. STORAGE 115A **Supply From:** DPL1-1 **Mounting:** SURFACE **Volts:** 120/208 Wye **Phases:** 3 **Wires:** 4 **A.I.C. Rating:** 10,000 **Mains Type:** 225A MCB **Mains Rating:** 225

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	K123 - WORK TABLE	30	1	2700 VA	912 VA					1	20	K100 - MILK COOLER	2
3	K123 - WORK TABLE	30	1			2700 VA	912 VA			1	20	K100 - MILK COOLER	4
5	K123 - WORK TABLE	30	1					2700 VA	500 VA	1	20	K103 - UTILITY COUNTER	6
7	K103 - UTILITY COUNTER	20	1	500 VA	936 VA					1	20	K104 - COLD FOOD STATION	8
9	K104 - COLD FOOD STATION	20	1			936 VA	500 VA			1	20	K106 - UTILITY COUNTER	10
11	K106 - UTILITY COUNTER	20	1					500 VA	500 VA	1	20	K109 - CASHIER STATION	12
13	K109 - CASHIER STATION	20	1	500 VA	180 VA					1	20	K112 - ROLL-THRU REFRIGERATOR	14
15	K117 - ROLL-IN REFRIGERATOR	20	1			1128 VA	1128 VA			1	20	K117 - ROLL-IN REFRIGERATOR	16
17	K120.1 - CONDENSATE HOOD	20	1					384 VA	1128 VA	1	20	K124 - REACH-IN FREEZER	18
19	RECEPT. - FOOD SERV.	20	1	900 VA	1260 VA					1	20	RECEPT. - VENDING 118A	20
21	RECEPT. - VENDING 118A	20	1			1260 VA	1260 VA			1	20	RECEPT. - VENDING 118A	22
23	RECEPT. - VENDING 118A	20	1					1260 VA	1260 VA	1	20	RECEPT. - VENDING 118A	24
25	RECEPT. - VENDING 118A	20	1	1260 VA	0 VA					1	20	SPARE	26
27	SPARE	20	1			0 VA	0 VA			1	20	SPARE	28
29	SPARE	20	1					0 VA	0 VA	1	20	SPARE	30
31	K101 - HOT FOOD STATION	20	2	1029.6 VA	1029.6 VA					2	20	K101 - HOT FOOD STATION	32
33	--	--	--			1029.6 VA	1029.6 VA			--	--	--	34
35	K113 - ROLL-THRU HEATED CABINET	20	2					748.8 VA	748.8 VA	2	20	K115 - ROLL-IN HEATED CABINET	36
37	--	--	--	748.8 VA	748.8 VA					--	--	--	38
39	K116 - ROLL-IN HEATED CABINET	20	2			1445.6 VA	0 VA			2	20	SPARE	40
41	--	--	--					1445.6 VA	0 VA	--	--	--	42
			Total Load:	12705 VA		13329 VA		11175 VA					
			Total Amps:	107.8		113		93.1					

Notes:

Branch Panel: LPH1-1

Location: ELEC RM 112 **Supply From:** MS-1 **Mounting:** SURFACE **Volts:** 480/277 Wye **Phases:** 3 **Wires:** 4 **A.I.C. Rating:** 14,000 **Mains Type:** 100 A MCB **Mains Rating:** 100

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	LIGHTING - BARBERING & CLASS.	20	1	1154.2 VA	1014 VA					1	20	LIGHTING - VET & GROOMING	2
3	LIGHTING - COSMO. & CLASS.	20	1			1457.1 VA	1119.4 VA			1	20	LIGHTING - CLASS. & HEALTH OFFICE	4
5	LIGHTING - CORR., STOR. & TOILETS	20	1					536.8 VA	341.8 VA	1	20	LIGHTING - FOOD SERV. & CAFE.	6
7	LIGHTING - AUTO TECH SHOP 117	20	1	2594.2 VA	690.4 VA					1	20	LIGHTING - WELDING SHOP 119	8
9	LIGHTING - AUTOBODY SHOP 120	20	1			1776 VA	1389.9 VA			1	20	LIGHTING - CORR., STOR., TOILETS	10
11	SITE LIGHTING - POLES	20	1					857 VA	293 VA	1	20	SITE LIGHTING - BUILDING MOUNTED	12
13	SPARE	20	1	0 VA	0 VA					1	20	SPARE	14
15	SPARE	20	1			0 VA	0 VA			1	20	SPARE	16
17	SPARE	20	1					0 VA	0 VA	1	20	SPARE	18
19	SPACE	--	1	--	--					1	--	SPACE	20
21	SPACE	--	1			--	--			1	--	SPACE	22
23	SPACE	--	1					--	--	1	--	SPACE	24
25	SPACE	--	1	--	--					1	--	SPACE	26
27	SPACE	--	1			--	--			1	--	SPACE	28
29	SPACE	--	1					--	--	1	--	SPACE	30
			Total Load:	5453 VA		5742 VA		2029 VA					
			Total Amps:	21.6		22.6		7.3					

Notes:

Branch Panel: LP1-1

Location: CORRIDOR C102 **Supply From:** DPL1-1 **Mounting:** SURFACE **Volts:** 120/208 Wye **Phases:** 3 **Wires:** 4 **A.I.C. Rating:** 10,000 **Mains Type:** 100 A MCB **Mains Rating:** 100

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	RECEPT. - BARBERING & SECURITY	20	1	1260 VA	1080 VA					1	20	RECEPT. - CORR, STAIR, VEST, CUST	2
3	RECEPT. - CLASSROOM 109	20	1			1260 VA	1260 VA			1	20	RECEPT. - CLASSROOM 107	4
5	HAND DRYER (SINK) - MEN'S T102	20	1					1500 VA	1500 VA	1	20	HAND DRYER (SINK) - MEN'S T102	6
7	HAND DRYER (SINK) - MEN'S T102	20	1	1500 VA	1500 VA					1	20	HAND DRYER (SINK) - MEN'S T102	8
9	HAND DRYER (SINK) - WOMEN'S T101	20	1			1500 VA	1500 VA			1	20	HAND DRYER (SINK) - WOMEN'S T101	10
11	HAND DRYER (SINK) - WOMEN'S T101	20	1					1500 VA	1500 VA	1	20	HAND DRYER (SINK) - WOMEN'S T101	12
13	RECEPT. & FLUSH. - TOILET	20	1	760 VA	520 VA					1	20	RECEPT. - WATER COOLER	14
15	SPARE	20	1			0 VA	0 VA			1	20	SPARE	16
17	SPARE	20	1					0 VA	0 VA	1	20	SPARE	18
19	SPARE	20	1	0 VA	0 VA					1	20	SPARE	20
21	SPARE	20	1			0 VA	0 VA			1	20	SPARE	22
23	SPARE	20	1					0 VA	0 VA	1	20	SPARE	24
25	SPACE	--	1	--	--					1	--	SPACE	26
27	SPACE	--	1			--	--			1	--	SPACE	28
29	SPACE	--	1					--	--	1	--	SPACE	30
31	SPACE	--	1	--	--					1	--	SPACE	32
33	SPACE	--	1			--	--			1	--	SPACE	34
35	SPACE	--	1					--	--	1	--	SPACE	36
37	SPACE	--	1	--	--					1	--	SPACE	38
39	SPACE	--	1			--	--			1	--	SPACE	40
41	SPACE	--	1					--	--	1	--	SPACE	42
			Total Load:	6620 VA		5520 VA		6000 VA					
			Total Amps:	55.8		46		50.6					

Notes:

Branch Panel: LP1-CY

Location: DISPENSING 108A **Supply From:** DPL1-1 **Mounting:** SURFACE **Volts:** 120/208 Wye **Phases:** 3 **Wires:** 4 **A.I.C. Rating:** 10,000 **Mains Type:** 225A MCB **Mains Rating:** 225

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	RECEPT. - STYLING STATION	20	1	1800 VA	1800 VA					1	20	RECEPT. - STYLING STATION	2
3	RECEPT. - STYLING STATION	20	1			1800 VA	1800 VA			1	20	RECEPT. - STYLING STATION	4
5	RECEPT. - STYLING STATION	20	1					1800 VA	1800 VA	1	20	RECEPT. - STYLING STATION	6
7	RECEPT. - STYLING STATION	20	1	1800 VA	1800 VA					1	20	RECEPT. - STYLING STATION	8
9	RECEPT. - STYLING STATION	20	1			1800 VA	1800 VA			1	20	RECEPT. - STYLING STATION	10
11	RECEPT. - STYLING STATION	20	1					1800 VA	1800 VA	1	20	RECEPT. - STYLING STATION	12
13	RECEPT. - STYLING STATION	20	1	1800 VA	1800 VA					1	20	RECEPT. - STYLING STATION	14
15	RECEPT. - STYLING STATION	20	1			1800 VA	1800 VA			1	20	RECEPT. - STYLING STATION	16
17	RECEPT. - STYLING STATION	20	1					1800 VA	1800 VA	1	20	RECEPT. - STYLING STATION	18
19	RECEPT. - STYLING STATION	20	1	1800 VA	1800 VA					1	20	RECEPT. - STYLING STATION	20
21	RECEPT. - STYLING STATION	20	1			1800 VA	1800 VA			1	20	RECEPT. - STYLING STATION	22
23	RECEPT. - STYLING STATION	20	1					1800 VA	1800 VA	1	20	RECEPT. - STYLING STATION	24
25	RECEPT. - STYLING STATION	20	1	1800 VA	500 VA					1	20	RECEPT. - WAXING TABLE	26
27	RECEPT. - FACIAL STATION	20	1			1400 VA	1200 VA			1	20	RECEPT. - PEDICURE STATION	28
29	RECEPT. - PEDICURE STATION	20	1					1200 VA	1080 VA	1	20	RECEPT. - GENERAL	30
31	RECEPT. - WASHER	20	1	800 VA	900 VA					1	20	RECEPT. - GENERAL	32
33	RECEPT. - DRYER	30	2			2000 VA	0 VA			1	20	SPARE	34
35	--	--	--					2000 VA	0 VA	1	20	SPARE	36
37	SPARE	20	1	0 VA	0 VA					1	20	SPARE	38
39	SPARE	20	1			0 VA	0 VA			1	20	SPARE	40
41	SPARE	20	1					0 VA	0 VA	1	20	SPARE	42
			Total Load:	18400 VA		19000 VA		18680 VA					
			Total Amps:	153.3		158.7		156					

Notes:

Branch Panel: LP1-BA

Location: DISPENSING 110A **Supply From:** DPL1-1 **Mounting:** SURFACE **Volts:** 120/208 Wye **Phases:** 3 **Wires:** 4 **A.I.C. Rating:** 10,000 **Mains Type:** 100 A MCB **Mains Rating:** 100

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	STYLING STATION - RECEPT. & LIGHT	20	1	1800 VA	1800 VA					1	20	STYLING STATION - RECEPT. & LIGHT	2
3	STYLING STATION - RECEPT. & LIGHT	20	1			1800 VA	1800 VA			1	20	STYLING STATION - RECEPT. & LIGHT	4
5	STYLING STATION - RECEPT. & LIGHT	20	1					1800 VA	1800 VA	1	20	STYLING STATION - RECEPT. & LIGHT	6
7	STYLING STATION - RECEPT. & LIGHT	20	1	1800 VA	1800 VA					1	20	STYLING STATION - RECEPT. & LIGHT	8
9	STYLING STATION - RECEPT. & LIGHT	20	1			1800 VA	1800 VA			1	20	STYLING STATION - RECEPT. & LIGHT	10
11	STYLING STATION - RECEPT. & LIGHT	20	1					1800 VA	1800 VA	1	20	STYLING STATION - RECEPT. & LIGHT	12
13	RECEPT. - GENERAL	20	1	900 VA	800 VA					1	20	RECEPT. - WASHING MACHINE	14
15	SPARE	20	1			0 VA	2000 VA			2	30	RECEPT. - DRYER	16
17	SPARE	20	1					0 VA	2000 VA	--	--	--	18
19	SPARE	20	1	0 VA	0 VA					1	20	SPARE	20
21	SPARE	20	1			0 VA	0 VA			1	20	SPARE	22
23	SPARE	20	1					0 VA	--	1	--	SPACE	24
25	SPACE	--	1	--	--					1	--	SPACE	26
27	SPACE	--	1			--	--			1	--	SPACE	28
29	SPACE	--	1					--	--	1	--	SPACE	30
			Total Load:	8900 VA		9200 VA		9200 VA					
			Total Amps:	74.2		77.1		77.1					

Notes:

LP1-AS1 (S2)	LP1-AS1 (S1)	LP1-2
MP1-1	KP1-1	LPH1-1
LP1-1	LP1-CY	LP1-BA

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK
JAMES R. BARRETT
073467
LICENSED PROFESSIONAL ENGINEER
EXPIRES 5/31/2026

#	DATE	DESCRIPTION
2	1/02/2024	BID ADDENDUM #2

Drawn By: NAR
Checked By: JRB
Proj. #: 44-16-00-01-0-053-001
CSArch Proj. #: 108-2303
Construction Documents: 01/29/24

Sheet Title

PANELBOARD SCHEDULES - 1ST FLOOR

Sheet No.

CTE E903

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - MEP.rvt

Branch Panel: MP1-2

Location: ELEC. RM 126 | **Supply From:** DPL1-2 | **Mounting:** SURFACE
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 10,000 | **Mains Type:** 100 A MCB | **Mains Rating:** 100

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	ISUs - AREA THREE	20	2	216.3 VA	1776 VA					1	20	CUH-B & CUH-C	2
3	--	--	--			216.3 VA	1332 VA			1	20	CUH-A & CUH-C	4
5	SPARE	20	2					0 VA	1776 VA	1	20	CUH-Cs	6
7	--	--	--	0 VA	1522.8 VA					1	20	CUH-A, CUH-B, UHs	8
9	SPARE	20	2			0 VA	951.6 VA			1	20	CUH-As & UH-A	10
11	--	--	--					0 VA	768 VA	1	20	GWH-1 & PP-1	12
13	ISU-HG-C101A	15	2	540.8 VA	180 VA					1	20	RECEPT. - MAINTENANCE	14
15	--	--	--			540.8 VA	180 VA			1	20	CP-A-100	16
17	ISU-HG-C101B	15	2					540.8 VA	0 VA	1	20	SPARE	18
19	--	--	--	540.8 VA	0 VA					1	20	SPARE	20
21	ISU-HG-C103	15	2			540.8 VA	0 VA			1	20	SPARE	22
23	--	--	--					540.8 VA	0 VA	1	20	SPARE	24
25	SPACE	--	1	--	--					1	--	SPACE	26
27	SPACE	--	1			--	--			1	--	SPACE	28
29	SPACE	--	1					--	--	1	--	SPACE	30
			Total Load:	4777 VA		3762 VA		3626 VA					
			Total Amps:	40		31.5		30.2					

Notes:

Branch Panel: LP1-CS2

Location: CONSTRUCTION SHOP 129 | **Supply From:** T45 - LP1-CS2 | **Mounting:** SURFACE
Volts: 120/240 Delta | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 14,000 | **Mains Type:** 225 A MCB | **Mains Rating:** 250

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	CS04 - WIDE BELT SANDER	100	3	9699.5 VA	4156.9 VA					3	40	CS11 - PLANER	2
3	--	--	--			9699.5 VA	4156.9 VA			--	--	--	4
5	--	--	--					9699.5 VA	4156.9 VA	--	--	--	6
7	CS01 - JOINTER	30	3	2106.2 VA	1247.1 VA					3	20	CS05 - OSCILLATING EDGE SANDER	8
9	--	--	--			2106.2 VA	1247.1 VA			--	--	--	10
11	--	--	--					2106.2 VA	1247.1 VA	--	--	--	12
13	CS06 - CABINET SAW	20	3	1524.2 VA	1385.6 VA					3	20	RECEPT. - DEDICATED POWER POLE	14
15	--	--	--			1524.2 VA	1385.6 VA			--	--	--	16
17	--	--	--					1524.2 VA	1385.6 VA	--	--	--	18
19	RECEPT. - DEDICATED POWER POLE	20	3	1385.6 VA	1680 VA					1	20	CS02 - BELT DISK SANDER	20
21	--	--	--			1385.6 VA	0 VA			2	20	SPARE	22
23	--	--	--					1385.6 VA	0 VA	--	--	--	24
25	CS08 - COMPOUND MITER SAW	20	1	1675 VA	1680 VA					1	20	CS03 - OSCILLATING SPINDLE SANDER	26
27	GE10 - BANDSAW	30	2			2040 VA	0 VA			2	20	SPARE	28
29	--	--	--					2040 VA	0 VA	--	--	--	30
31	CS08 - COMPOUND MITER SAW	20	1	1675 VA	0 VA					1	20	SPARE	32
33	SPARE	20	2			0 VA	0 VA			2	20	SPARE	34
35	--	--	--					0 VA	0 VA	--	--	--	36
37	SPARE	20	1	0 VA	0 VA					1	20	SPARE	38
39	SPARE	20	2			0 VA	0 VA			2	20	SPARE	40
41	--	--	--					0 VA	0 VA	--	--	--	42
			Total Load:	28215 VA		23545 VA		23545 VA					
			Total Amps:	235.1		196.2		196.2					

Notes:
PROVIDE CURRENT SENSING RELAY TO CONTROL ON/OFF OF DUST COLLECTOR, COORDINATE WITH MECHANICAL DRAWINGS FOR DETAILS

Branch Panel: LP1-CS1

Location: CONSTRUCTION SHOP 129 | **Supply From:** T15 - LP1-CS1 | **Mounting:** SURFACE
Volts: 120/240 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 14,000 | **Mains Type:** 80 A MCB | **Mains Rating:** 100

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	CORD REEL - CON. SHOP 129	20	1	720 VA	720 VA			1	20	CORD REEL - CON. SHOP 129	2
3	CORD REEL - CON. SHOP 129	20	1			720 VA	720 VA	1	20	CORD REEL - CON. SHOP 129	4
5	RECEPT. - DEDICATED POWER POLE	20	1	1200 VA	1200 VA			1	20	RECEPT. - DEDICATED POWER POLE	6
7	RECEPT. - CONSTRUCTION SHOP 129	20	1			900 VA	180 VA	1	20	RECEPT. - MONITOR	8
9	RECEPT. - CONSTRUCTION SHOP 129	20	1	360 VA	180 VA			1	20	RECEPT. - WATER COOLER	10
11	OVERHEAD DOOR	20	1			864 VA	864 VA	1	20	OVERHEAD DOOR	12
13	OVERHEAD DOOR	20	1	864 VA	0 VA			1	20	SPARE	14
15	SPARE	20	1			0 VA	0 VA	1	20	SPARE	16
17	SPARE	20	1	0 VA	0 VA			1	20	SPARE	18
19	SPARE	20	1			0 VA	0 VA	1	20	SPARE	20
21	SPACE	--	1	--	--			1	--	SPACE	22
23	SPACE	--	1			--	--	1	--	SPACE	24
25	SPACE	--	1	--	--			1	--	SPACE	26
27	SPACE	--	1			--	--	1	--	SPACE	28
29	SPACE	--	1	--	--			1	--	SPACE	30
31	SPACE	--	1			--	--	1	--	SPACE	32
33	SPACE	--	1	--	--			1	--	SPACE	34
35	SPACE	--	1			--	--	1	--	SPACE	36
37	SPACE	--	1	--	--			1	--	SPACE	38
39	SPACE	--	1			--	--	1	--	SPACE	40
			Total Load:	5244 VA		4248 VA					
			Total Amps:	43.7		35.4					

Notes:

Branch Panel: LP1-ES2

Location: ELECTRICAL SHOP 128 | **Supply From:** LP1-ES1 | **Mounting:** SURFACE
Volts: 120/240 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 14,000 | **Mains Type:** 60 A MCB | **Mains Rating:** 100

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	SPARE	20	2	0 VA	0 VA			2	20	SPARE	2
3	--	--	--			0 VA	0 VA	--	--	--	4
5	SPARE	20	2	0 VA	0 VA			2	20	SPARE	6
7	--	--	--			0 VA	0 VA	--	--	--	8
9	SPARE	20	2	0 VA	0 VA			2	20	SPARE	10
11	--	--	--			0 VA	0 VA	--	--	--	12
13	SPARE	20	1	0 VA	0 VA			1	20	SPARE	14
15	SPARE	20	1			0 VA	0 VA	1	20	SPARE	16
17	SPARE	20	1	0 VA	0 VA			1	20	SPARE	18
19	SPARE	20	1			0 VA	0 VA	1	20	SPARE	20
21	SPARE	20	1	0 VA	0 VA			1	20	SPARE	22
23	SPARE	20	1			0 VA	0 VA	1	20	SPARE	24
			Total Load:	0 VA		0 VA					
			Total Amps:	0		0					

Notes:

Branch Panel: LP1-ES1

Location: ELECTRICAL SHOP 128 | **Supply From:** T25 - LP1-ES1 | **Mounting:** SURFACE
Volts: 120/240 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 14,000 | **Mains Type:** 150 A MCB | **Mains Rating:** 150

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	RECEPT. - ELECTRICAL SHOP 128	20	1	720 VA	180 VA			1	20	RECEPT. - MONITOR	2
3	CORD REEL - ELECTRICAL SHOP 128	20	1			260 VA	360 VA	1	20	CORD REEL - ELECTRICAL SHOP 128	4
5	CORD REEL - ELECTRICAL SHOP 128	20	1	720 VA	720 VA			1	20	CORD REEL - ELECTRICAL SHOP 128	6
7	CORD REEL - ELECTRICAL SHOP 128	20	1			720 VA	720 VA	1	20	CORD REEL - ELECTRICAL SHOP 128	8
9	CORD REEL - ELECTRICAL SHOP 128	20	1	720 VA	864 VA			1	20	OVERHEAD DOOR	10
11	OVERHEAD DOOR	20	1			864 VA	0 VA	1	20	SPARE	12
13	SPARE	20	1	0 VA	0 VA			1	20	SPARE	14
15	SPARE	20	1			0 VA	0 VA	1	20	SPARE	16
17	SPACE	--	1	--	--			1	--	SPACE	18
19	SPACE	--	1			--	--	1	--	SPACE	20
21	GE10 - BANDSAW	25	2	2040 VA	0 VA			2	60	LP1-ES2	22
23	--	--	--			2040 VA	0 VA	--	--	--	24
			Total Load:	5964 VA		4964 VA					
			Total Amps:	49.7		41.4					

Notes:

Branch Panel: LP1-4

Location: ELEC. RM 126 | **Supply From:** DPL1-2 | **Mounting:** SURFACE
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 10,000 | **Mains Type:** 225 A MCB | **Mains Rating:** 225

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	RECEPT. & FLUSH. - TOILET	20	1	640 VA	1500 VA					1	20	HAND DRYER (SINK) - T109	2
3	HAND DRYER (SINK) - T108	20	1			1500 VA	510 VA			1	20	RECEPT. & FLUSH. - BOY'S LOCK. RM	4
5	HAND DRYER (SINK) - BOY'S LOCK. RM.	20	1					1500 VA	1500 VA	1	20	HAND DRYER (SINK) - BOY'S LOCK. RM.	6
7	HAND DRYER (SINK) - BOY'S LOCK. RM.	20	1	1500 VA	1080 VA					1	20	RECEPT. - OFFICE 133	8
9	RECEPT. - OFFICE 132	20	1			1080 VA	510 VA			1	20	RECEPT. & FLUSH. - GIRL'S LOCK. RM	10
11	HAND DRYER (SINK) - GIRL'S LOCK. RM.	20	1					360 VA	360 VA	1	20	HAND DRYER (SINK) - GIRL'S LOCK. RM.	12
13	HAND DRYER (SINK) - GIRL'S LOCK. RM.	20	1	360 VA	720 VA					1	20	RECEPT. - GYMNASIUM 130	14
15	RECEPT. - WATER COOLER	20	1			260 VA	744 VA			1	20	BLEACHERS	16
17	BLEACHERS	20	1					744 VA	360 VA	1	20	RECEPT. - A/V GYMNASIUM	18
19	RECEPT. - A/V GYMNASIUM	20	1	360 VA	360 VA					1	20	RECEPT. - A/V GYMNASIUM	20
21	RECEPT. - A/V GYMNASIUM	20	1			360 VA	1380 VA			1	20	GYMNASIUM BACKBOARD	22
23	GYMNASIUM BACKBOARD	20	1					1380 VA	1380 VA	1	20	GYMNASIUM BACKBOARD	24
25	GYMNASIUM BACKBOARD	20	1	1380 VA	1380 VA					1	20	GYMNASIUM BACKBOARD	26
27	GYMNASIUM BACKBOARD	20	1			1380 VA	180 VA			1	20	SCOREBOARD	28
29	SCOREBOARD	20	1					180 VA	180 VA	1	20	HUDDLE CAMERA	30
31	SPARE	20	1	0 VA	0 VA					1	20	SPARE	32
33	SPARE	20	1			0 VA	0 VA			1	20	SPARE	34
35	SPARE	20	1					0 VA	0 VA	1	20	SPARE	36
37	SPACE	--	1	--	--					1	--	SPACE	38
39	SPACE	--	1			--	--			1	--	SPACE	40
41	SPACE	--	1					--	--	1	--	SPACE	42
			Total Load:	9280 VA		7904 VA		7944 VA					
			Total Amps:	77.4		65.9		66.3					

Notes:

Branch Panel: LP1-3

Location: ELEC. RM 126 | **Supply From:** DPL1-2 | **Mounting:** SURFACE
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 10,000 | **Mains Type:** 100 A MCB | **Mains Rating:** 100

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	RECEPT. - OFFICE, STOR, VAULT	20	1	1080 VA	1000 VA					1	20	RECEPT. - MICROWAVE	2
3	RECEPT. - REFRIGERATOR	20	1			500 VA	900 VA			1	20	RECEPT. - OFFICE 100F	4
5	HAND DRYER (SINK) - TOILET 100G	20	1					1500 VA	230 VA	1	20	RECEPT. & FLUSH. - TOILET	6
7	RECEPT. - OFFICE 100H	20	1	900 VA	520 VA					1	20	RECEPT. - WATER COOLER	8
9	HAND DRYER (SINK) - MEN'S T106	20	1			1500 VA	1500 VA			1	20	HAND DRYER (SINK) - MEN'S T106	10
11	HAND DRYER (SINK) - MEN'S T106	20	1					1500 VA	1500 VA	1	20	HAND DRYER (SINK) - WOMEN'S T107	12
13	HAND DRYER (SINK) - WOMEN'S T107	20	1	1500 VA	1500 VA					1	20	HAND DRYER (SINK) - WOMEN'S T107	14
15	RECEPT. & FLUSH. - TOILET & CUST.	20	1			940 VA	1080 VA			1	20	RECEPT. - CORR, STAIR, VEST	16
17	RECEPT. - OFFICE 129A	20	1					720 VA	900 VA	1	20	RECEPT. - CORR, STAIR, VEST, STOR	18
19	RECEPT. - WATER COOLER	20	1	520 VA	864 VA					1	20	OVERHEAD DOOR	20
21	RECEPT. - MAINTENANCE STOR. 119G	20	1			180 VA	720 VA			1	20	RECEPT. - BOILER ROOM & LOADING	22
23	OVERHEAD DOOR	20	1					864 VA	0 VA	1	20	SPARE	24
25	SPARE	20	1	0 VA	0 VA					1	20	SPARE	26
27	SPARE	20	1			0 VA	0 VA			1	20	SPARE	28
29	SPARE	20	1					0 VA	0 VA	1	20	SPARE	30
31	SPARE	20	1	0 VA	0 VA					1	20	SPARE	32
33	SPARE	20	1			0 VA	0 VA			1	20	SPARE	34
35	SPARE	20	1					0 VA	0 VA	1	20	SPARE	36
37	SPACE	--	1	--	--					1	--	SPACE	38
39	SPACE	--	1			--	--			1	--	SPACE	40
41	SPACE	--	1					--	--	1	--	SPACE	42
			Total Load:	7884 VA		7320 VA		7214 VA					
			Total Amps:	65.8		61.1		60.1					

Notes:

		MP1-2
LP-CS2	LP-CS1	LP1-ES2
LP1-ES1	LP1-4	LP1-3

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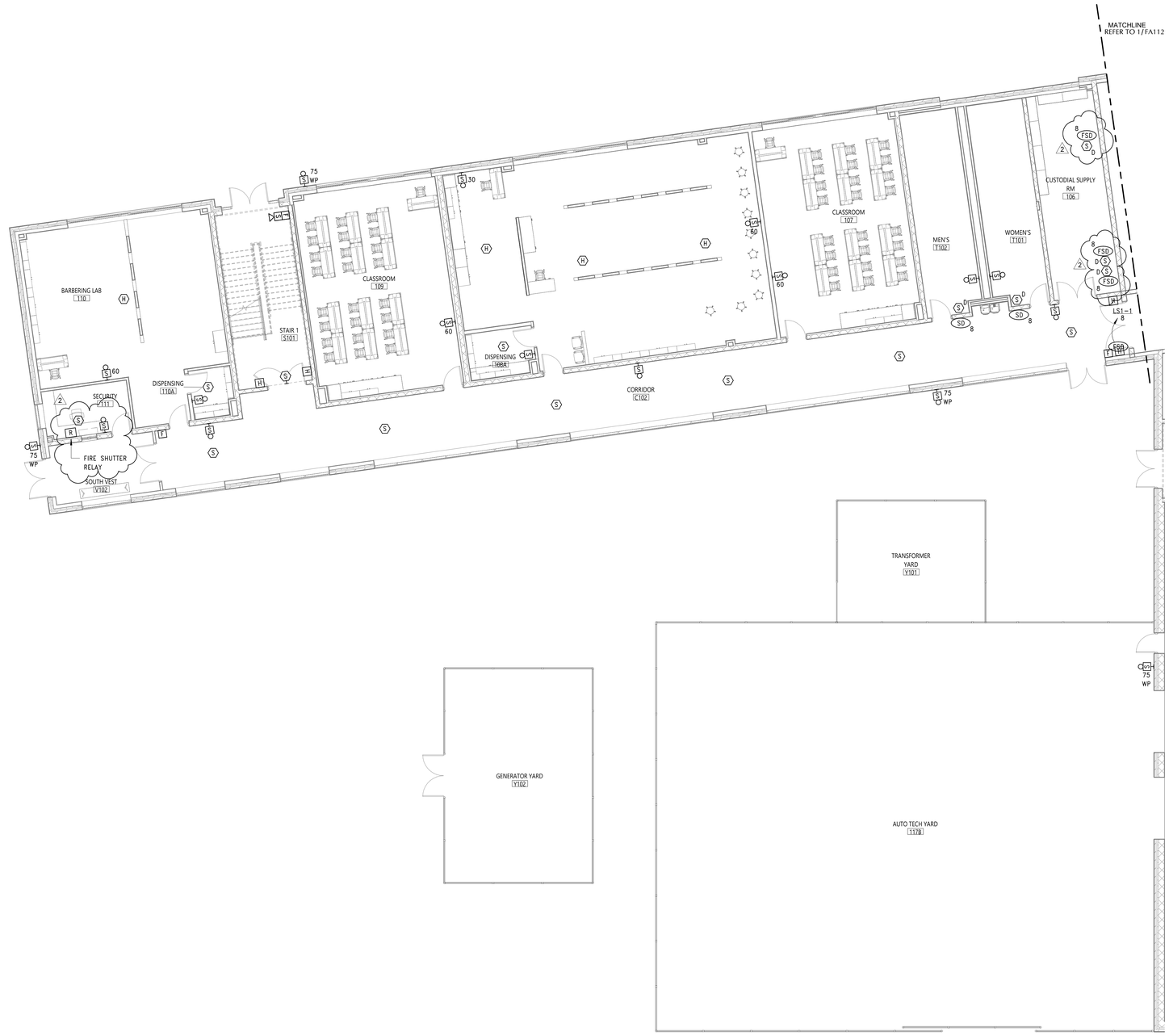
Drawn By: NAR
Checked By: JRB
Proj. #: 44-16-00-01-0-053-001
CSArch Proj. #: 108-2303
Construction Documents: 01/29/24

Sheet Title
PANELBOARD SCHEDULES - 1ST FLOOR

Sheet No.
CTE E905

CONSTRUCTION DOCUMENTS



1 FIRST FLOOR FIRE ALARM PLAN - AREA '1'

FA111 1/8" = 1'-0"

SHEET NOTES

A. FIELD COORDINATE ROUTING OF ALL FEEDERS AND BRANCH CIRCUITS.

B. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE PROPERLY FIRE-STOPPED.

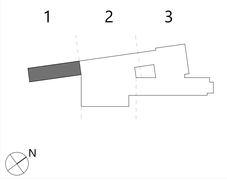
C. REFER TO E900 SERIES DRAWING FOR ADDITIONAL DETAILS ON REQUIRED FIRE ALARM SHUTDOWN FOR MECHANICAL UNITS.

D. REFER TO M100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON FIRE/SMOKE AND SMOKE DAMPERS.

E. REFER TO FP100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON BUILDING SPRINKLER SYSTEM.

F. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS TO PROVIDE NEW COMPLETE FIRE ALARM SYSTEM.

KEY PLAN



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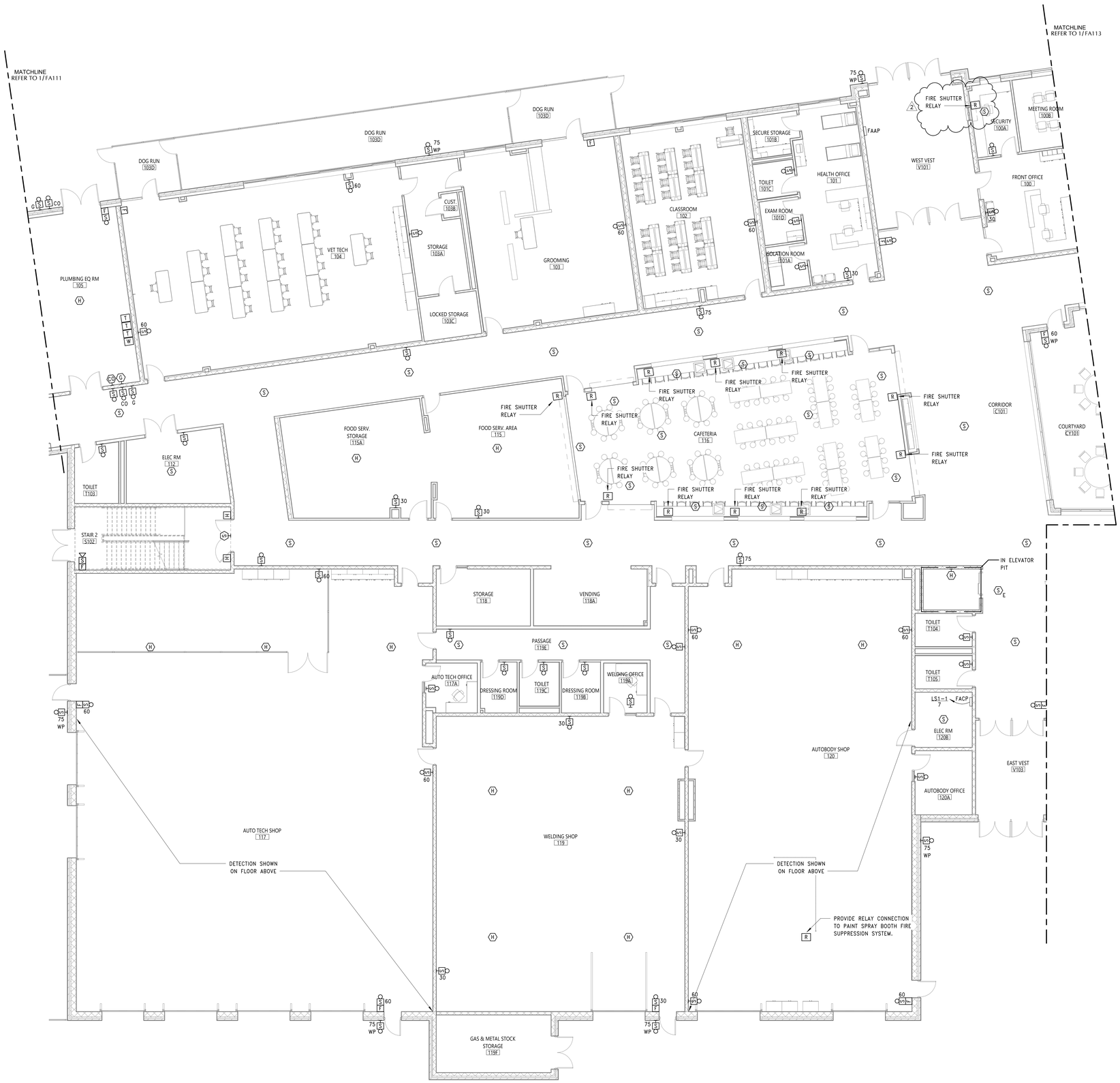
FIRST FLOOR FIRE ALARM PLAN - AREA '1'

Sheet No.

CTE FA111

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - MEP.rvt



1 FIRST FLOOR FIRE ALARM PLAN - AREA '2'
FA112 1/8" = 1'-0"

SHEET NOTES

A. FIELD COORDINATE ROUTING OF ALL FEEDERS AND BRANCH CIRCUITS.

B. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE PROPERLY FIRE-STOPPED.

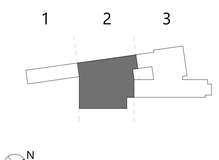
C. REFER TO E900 SERIES DRAWING FOR ADDITIONAL DETAILS ON REQUIRED FIRE ALARM SHUTDOWN FOR MECHANICAL UNITS.

D. REFER TO M100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON FIRE/SMOKE AND SMOKE DAMPERS.

E. REFER TO FP100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON BUILDING SPRINKLER SYSTEM.

F. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS TO PROVIDE NEW COMPLETE FIRE ALARM SYSTEM.

KEY PLAN



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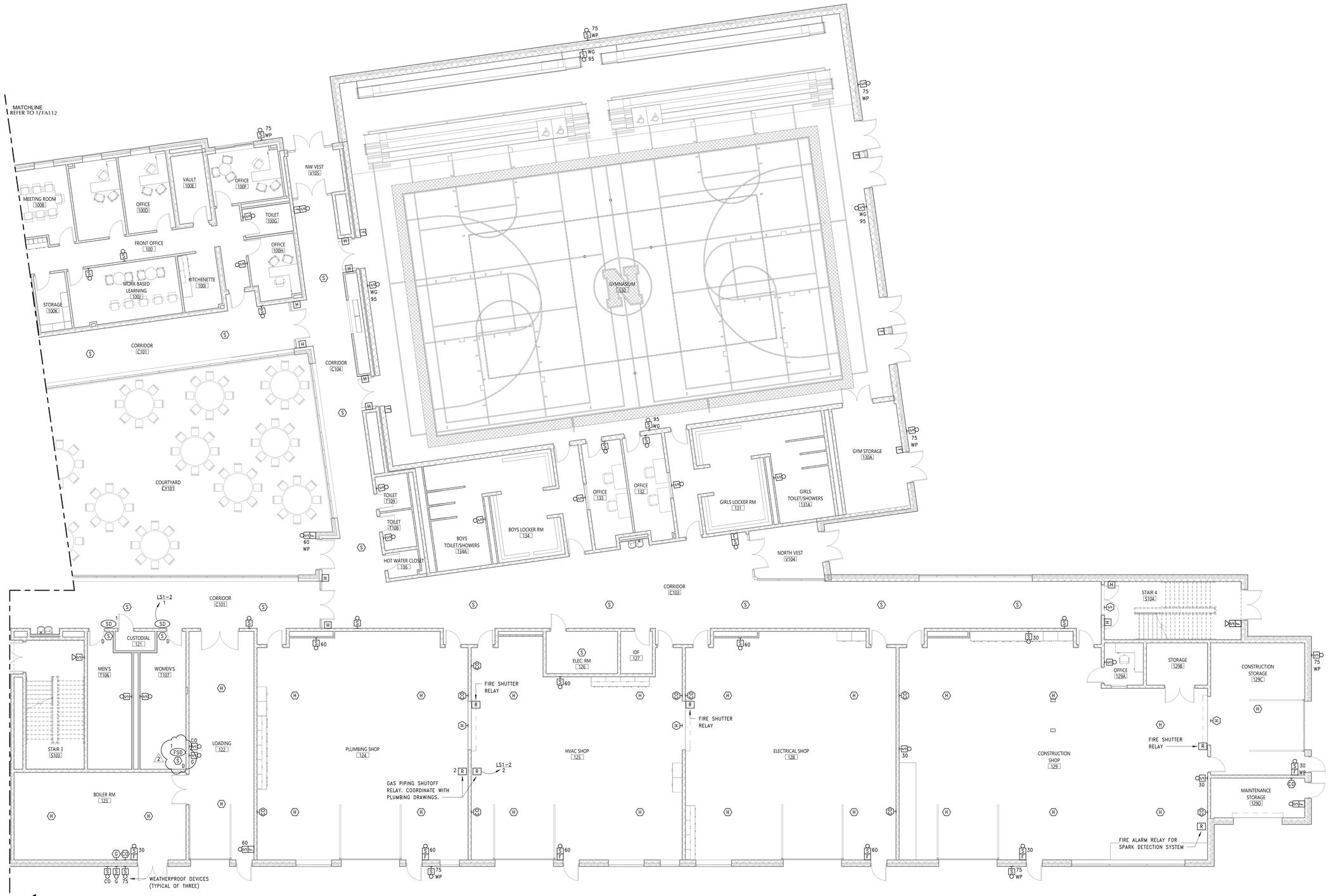
Sheet Title
FIRST FLOOR FIRE ALARM PLAN - AREA '2'

Sheet No.
CTE FA112

CONSTRUCTION DOCUMENTS



1 FIRE ALARM PLAN - AREA '3'

FA113 1/8" = 1'-0"

SHEET NOTES

A. FIELD COORDINATE ROUTING OF ALL FEEDERS AND BRANCH CIRCUITS.

B. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE PROPERLY FIRE-STOPPED.

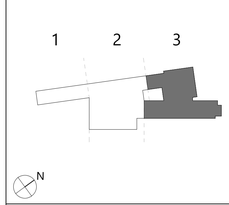
C. REFER TO E900 SERIES DRAWING FOR ADDITIONAL DETAILS ON REQUIRED FIRE ALARM SHUTDOWN FOR MECHANICAL UNITS.

D. REFER TO M100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON FIRE/SMOKE AND SMOKE DAMPERS.

E. REFER TO FP100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON BUILDING SPRINKLER SYSTEM.

F. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS TO PROVIDE NEW COMPLETE FIRE ALARM SYSTEM.

KEY PLAN



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Construction Documents:	01/29/24

Sheet Title
FIRST FLOOR FIRE ALARM PLAN - AREA '3'

Sheet No.
CTE FA113

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - MEP.rvt

SHEET NOTES

A. FIELD COORDINATE ROUTING OF ALL FEEDERS AND BRANCH CIRCUITS.

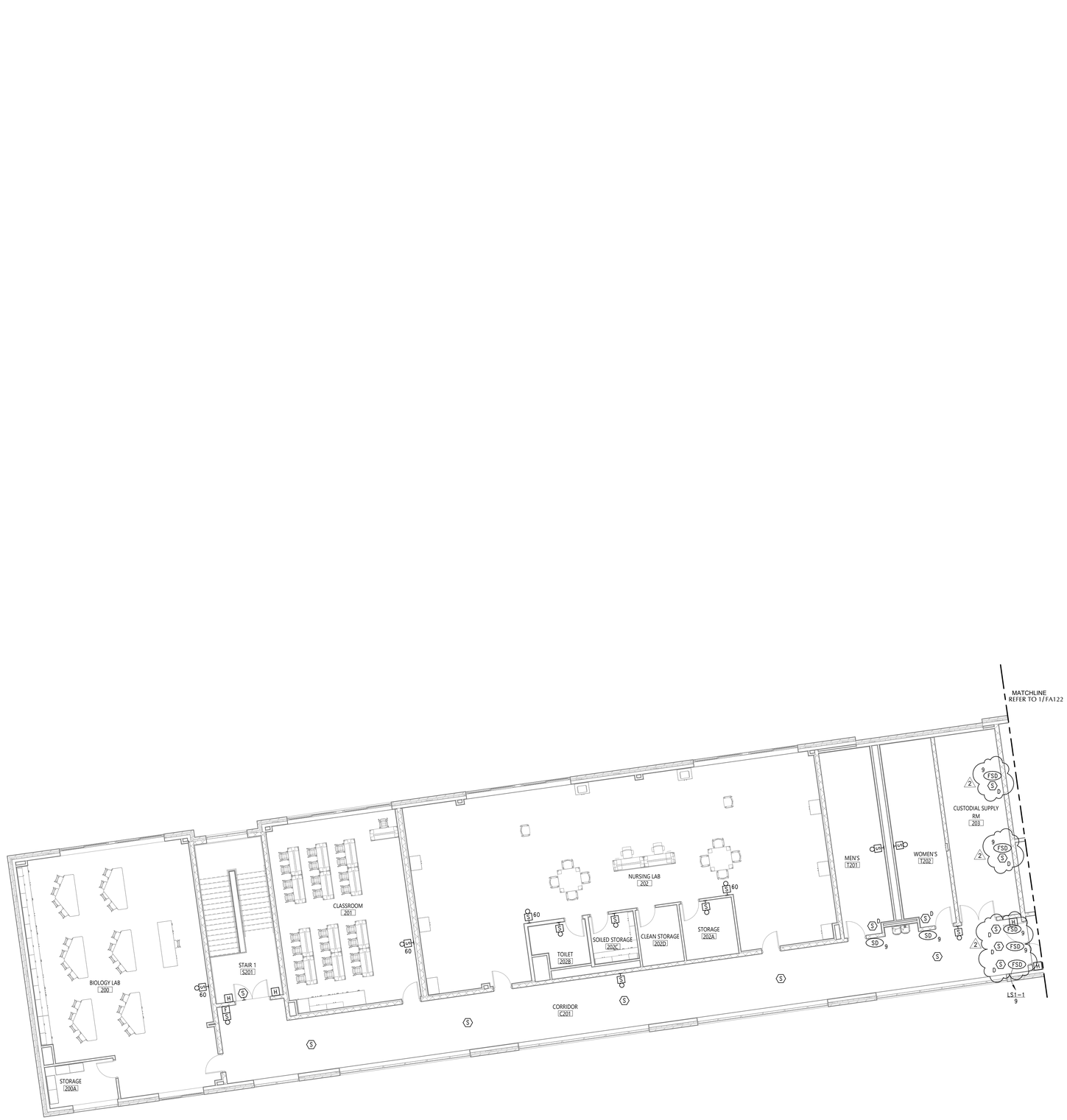
B. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE PROPERLY FIRE-STOPPED.

C. REFER TO E900 SERIES DRAWING FOR ADDITIONAL DETAILS ON REQUIRED FIRE ALARM SHUTDOWN FOR MECHANICAL UNITS.

D. REFER TO M100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON FIRE/SMOKE AND SMOKE DAMPERS.

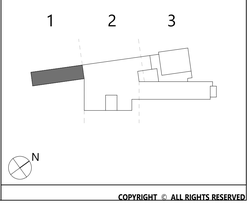
E. REFER TO FP100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON BUILDING SPRINKLER SYSTEM.

F. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS TO PROVIDE NEW COMPLETE FIRE ALARM SYSTEM.



1 SECOND FLOOR FIRE ALARM PLAN - AREA '1'
FA121 1/8" = 1'-0"

KEY PLAN



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Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK
JAMES R. BENNETT
073467
LICENSED PROFESSIONAL ENGINEER
EXPIRES 5/31/2026

#	DATE	DESCRIPTION
2	5/02/2024	BID ADDENDUM #2

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Checked By:	JRB
Proj. #:	44-16-00-01-0-053-001
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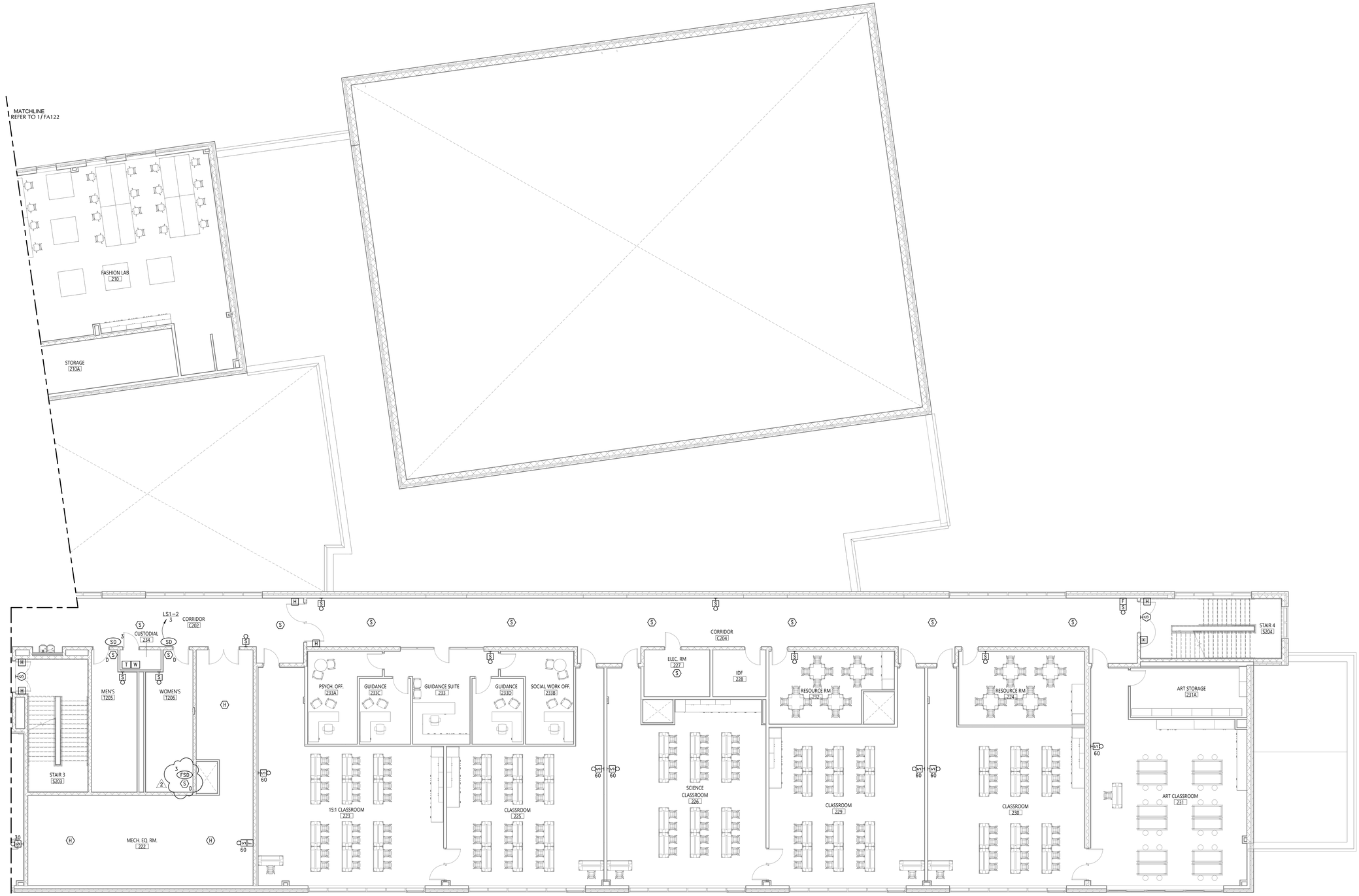
Sheet Title
SECOND FLOOR FIRE ALARM PLAN - AREA '1'

Sheet No.
CTE FA121

CONSTRUCTION DOCUMENTS



1 SECOND FLOOR FIRE ALARM PLAN - AREA '3'

FA123 1/8" = 1'-0"

SHEET NOTES

A. FIELD COORDINATE ROUTING OF ALL FEEDERS AND BRANCH CIRCUITS.

B. ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE PROPERLY FIRE-STOPPED.

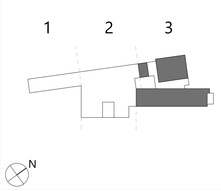
C. REFER TO E900 SERIES DRAWING FOR ADDITIONAL DETAILS ON REQUIRED FIRE ALARM SHUTDOWN FOR MECHANICAL UNITS.

D. REFER TO M100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON FIRE/SMOKE AND SMOKE DAMPERS.

E. REFER TO FP100 SERIES DRAWINGS FOR ADDITIONAL DETAILS ON BUILDING SPRINKLER SYSTEM.

F. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS TO PROVIDE NEW COMPLETE FIRE ALARM SYSTEM.

KEY PLAN



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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK
JAMES R. BARNETT
073467
LICENSED PROFESSIONAL ENGINEER
EXPIRES 5/31/2026

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Sheet Title
SECOND FLOOR FIRE ALARM PLAN - AREA '3'

Sheet No.
CTE FA123

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - MEP.rvt

GENERAL DEFINITIONS:

A. INDICATE: THE TERM "INDICATE" REFERS TO GRAPHIC REPRESENTATIONS, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

B. DESCRIBED: TERMS SUCH AS "DIRECTED", "REQUESTED", "AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

C. APPROVE: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

D. FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

E. INSTALL: THE TERM "INSTALL IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

F. PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL COMPLETE AND READY FOR THE INTENDED USE."

G. INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

H. ELECTRONIC SYSTEMS: THE TERM "ELECTRONIC SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS." THESE SYSTEMS INCLUDE BUT NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC.

GENERAL NOTES (APPLY TO ALL DRAWINGS):

A. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED N.E.C./NFPA 70 CODE.

B. THE CONTRACTOR SHALL PERFORM HIS WORK BY COORDINATING WITH THE FACILITY REPRESENTATIVE REGARDING SUCH THINGS AS NOISE, WORK AREA LIMITATIONS, ALLOWABLE WORKING HOURS, UTILITY INTERRUPTIONS, ETC.

C. THE CONTRACTOR SHALL INSTALL TEMPORARY FACILITIES/PRECAUTIONS TO GUARD AGAINST WORK THAT IS AN INFECTION CONTROL HAZARD OR NUISANCE (SUCH AS NOISE, DUST, OPERATIONS INTERRUPTION, ETC.). THE CONTRACTOR SHALL COMPLY WITH FACILITY REPRESENTATIVES FOR THE COORDINATION, LOCATION, AND QUALITY OF THESE TEMPORARY PROVISIONS.

D. ALL WORK AREAS SHALL BE KEPT CLEAN AND ORDERLY AT ALL TIMES. OPEN-ENDED ITEMS SUCH AS CONDUITS SHALL ALWAYS BE COVERED AND PROTECTED TO PROHIBIT ACCUMULATION OF CONSTRUCTION DUST/DEBRIS.

E. ALL COMMUNICATION AND DATA CABLE ARE TO BE INSTALLED IN CONDUIT WHERE INSTALLED EXPOSED AT AREAS W/O CEILINGS OR ABOVE IN CONCEALED CEILINGS. CABLES CAN BE INSTALLED EXPOSED ABOVE ACCESSIBLE CEILINGS. ALL EXPOSED CABLES ARE TO BE ANCHORED TO WALL OR ROOF STRUCTURE IN BRIDLE RINGS AT MINIMUM 3'-0" O.C. OR IN CABLE TRAY.

F. PROVIDE CONDUIT BODY FOR ALL DATA AND SIGNAL CABLES TO BE INSTALLED EXPOSED AT AREAS W/O CEILINGS OR ABOVE INACCESSIBLE CEILINGS. CABLES CAN BE INSTALLED EXPOSED ABOVE ACCESSIBLE CEILINGS AND THEREFORE DO NOT REQUIRE CONDUIT.

G. CONDUIT RUNS ARE SCHEMATIC ONLY. ALL CONDUIT RUNS SHOULD TAKE THE SHORTEST MOST DIRECT ROUTE POSSIBLE. CONDUIT RUNS MAY HAVE A MAXIMUM OF (3) 90° BENDS. IF ADDITIONAL BENDS ARE REQUIRED, PROVIDE PULLBOX.

H. CABLE TRAY SHALL BE PAINTED AS DIRECTED BY THE ARCHITECT. CABLE TRAY SHALL BE PAINTED BEFORE ANY CABLES ARE INSTALLED AS PAINT COULD DAMAGE UTP CABLE JACKETING.

I. WHERE CABLE TRAY IS SHOWN PENETRATING A FIRE WALL, TERMINATE CABLE TRAY ON EITHER SIDE OF THE WALL AND PROVIDE FOUR (4)" EMT CONDUIT SLEEVES IN FIRE WALL. SEAL CONDUIT PENETRATIONS AS DIRECTED BY THE SPECIFICATIONS.

J. ALL CABLE TRAY SHALL BE MOUNTED 9'-0" AFF WHERE ALLOWED BY FIELD CONDITIONS. IF FIELD CONDITIONS DO NOT ALLOW FOR 9'-0" MOUNTING HEIGHT, CONTRACTOR SHALL PROVIDE ALTERNATE ROUTING TO BE APPROVED BY EOR.

K. ALL CABLE NOT INSTALLED IN CABLE TRAY SHALL BE SUPPORTED VIA J-HOOKS OR ROUTED THROUGH CONDUIT.

L. CONTRACTOR SHALL PROVIDE BACKBOX AND CONDUIT ROUTED TO NEAREST CABLE TRAY FOR ALL WALL MOUNTED DEVICES. CONDUIT SHALL BE SIZED TO ACCOMMODATE QUANTITY OF DEVICES BEING FED TO EACH DEVICE. CONDUIT SHALL BE 3/4" MINIMUM.

M. COORDINATE WORK WITH ALL OTHER TRADES.

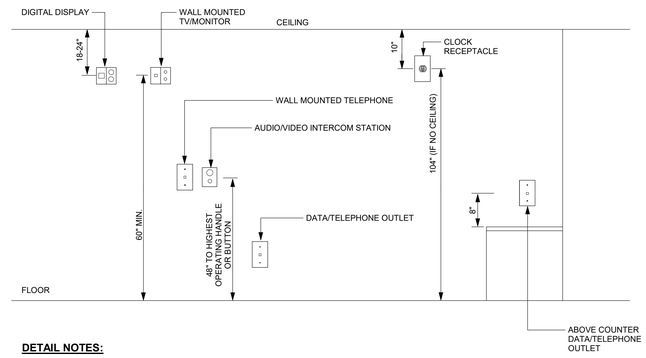
N. CONTRACTOR TO INSTALL ALL DEVICES INCLUDING, BUT NOT LIMITED TO CAMERAS, WALL PHONES, WAPS, VAPE DETECTORS, SPEAKERS, CLOCKS, DATA RECEPTACLES, AND NETWORK ELECTRONICS (PROVIDED BY OTHERS).
   a. WHEN INSTALLING NETWORK ELECTRONICS:
      - ALL PATCH CORDS ARE TO BE UNIQUELY LABELED AT EACH END AT APPROXIMATELY 2 INCHES FROM THE TERMINATION POINT.
      - CONTRACTOR IS REQUIRED TO INCLUDE WITH HIS PROPOSAL SUFFICIENT TIME AND MATERIALS TO INSTALL CUSTOMER PROVIDED NETWORK SWITCHES.
      - CONTRACTOR SHALL RECEIVE DEVICES FROM THE CLIENT AND INSTALL. MOUNTING POSITIONS SHALL BE REVIEWED WITH CUSTOMER IT PERSONNEL PRIOR TO INSTALL.
      - CONTRACTOR SHALL ASSUME SIX (6) NETWORK SWITCHES PER TELECOMMUNICATIONS CLOSET.
      - CONTRACTOR IS REQUIRED TO INCLUDE WITH HIS PROPOSAL SUFFICIENT TIME AND MATERIALS TO INSTALL CUSTOMER PROVIDED NETWORK EQUIPMENT.
   b. WHEN INSTALLING WAPs:
      - CONTRACTOR IS REQUIRED TO INCLUDE WITH HIS PROPOSAL TIME AND MATERIALS TO INSTALLED CUSTOMER PROVIDED WAPS FOR DATA.
      - THIS INCLUDES BOTH INTERIOR AND EXTERIOR WAPS.
      - CUSTOMER SHALL PROGRAM AND TEST ALL ACCESS POINTS.
      - CONTRACTOR SHALL RECEIVE AND INSTALL DEVICES IN POSITIONS SHOWN ON DRAWINGS. ALL MOUNTING HARDWARE SHALL BE PROVIDED BY CONTRACTOR.
      - CONTRACTOR SHALL COORDINATE ALL POSITIONS AND MOUNTING HEIGHTS WITH ARCHITECT AND CUSTOMER IT PERSONNEL.

LEGEND

SYMBOL	DESCRIPTION
▼	DATA OUTLET
▣	PROVIDE (30) FEET OF CAT6A CABLE ABOVE ACCESSIBLE CEILING FOR FUTURE USE
WAP	WIRELESS ACCESS POINT. PROVIDE ADDITIONAL 15' OF CABLE SPOOLED ABOVE CEILING FOR ADJUSTMENT OF WAP LOCATION.
DR	DATA RACK
▭	CABLE TRAY; 12"W x 6"D SOLID BOTTOM
IC	INTERCOM
FB	FLOOR BOX
AC A	ACCESS CONTROL, REFER TO DETAILS SUBSCRIPT INDICATES TYPE
VAPE	VAPE DETECTOR
S	CEILING AND WALL MOUNTED SPEAKER(S)
C	WALL MOUNTED CLOCK
C S	COMBINATION WALL SPEAKER/CLOCK UNIT
PA	PUBLIC ADDRESS SYSTEM HEAD END DEVICE
	SECURITY CAMERA, SUBSCRIPT INDICATES TYPE: B - BI-DIRECTIONAL F - FISHEYE O - ONE-EIGHTY DEGREE S - SINGLE POINT T - THREE-WAY V - TWO-SEVENTY DEGREE WP - WEATHER PROOF

ABBREVIATIONS

ABBREV.	DESCRIPTION
AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AV	AUDIOVISUAL
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CT	CABLE TRAY
CU	COPPER
DN	DOWN
EA	EACH
EMT	ELECTRICAL METALLIC TUBING
FBO	FURNISHED BY OTHERS
GC	GENERAL CONTRACTOR
G/GND	GROUND
NA	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	MOUNTED OVER COUNTER
SPD	SURGE PROTECTIVE DEVICE
SPEC	SPECIFICATION
TV	TELEVISION
TYP	TYPICAL
UC	MOUNTED UNDER COUNTER HEIGHT
UL	UNDERWRITER'S LABORATORY
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLT
W	WIRE OR WATT
WP	WEATHER PROOF



DETAIL NOTES:

A. MOUNTING LOCATIONS OF DATA DEVICES.
B. DEVICE HEIGHTS ARE TO BE AS INDICATED UNLESS OTHERWISE NOTED.

1 T001 DEVICE MOUNTING LOCATION DETAIL
NTS

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Mechanical/Electrical/Plumbing Consultants
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Connecticut · Massachusetts · Florida
M/E PROJECT: 23319.00

Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK · MICHAEL K. BUCKLEY · 027887-1 · LICENSED PROFESSIONAL ENGINEER
Reg. Exp: 05/31/2024
Cert. of Auth: 0018443

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Issued for Bid:	4/15/2024

Sheet Title
LEGEND, NOTES & ABBREVIATIONS

Sheet No.
CTE T001

CONSTRUCTION DOCUMENTS

GENERAL NOTES:

A. ALL LOW VOLTAGE CONNECTIONS AND CABLES SHOWN ON THIS PLAN SHALL BE CONNECTED TO THE MDF ON THE SECOND FLOOR.

B. ALL CAMERAS SHALL BE PENDANT MOUNTED UNLESS THEY CAN BE INSTALLED IN A DROP CEILING OR WALL MOUNTED AS CONDITIONS ALLOW. COORDINATE WITH CAMERA SPECIFICATIONS. IF PENDANT MOUNTED, COORDINATE MOUNTING HEIGHT WITH OTHER CEILING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO, LIGHTING, HVAC DUCTWORK, PIPING, ETC. SO THAT THERE ARE NO OBSTRUCTIONS TO CAMERA VIEW.

C. ALL EXTERIOR CAMERAS MOUNTED AT 10' UNLESS OTHERWISE NOTED.

D. UNLESS PREVENTED BY FIELD CONDITIONS, CABLE TRAY SHALL BE WALL MOUNTED. IF WALL MOUNTING IS NOT POSSIBLE, CABLE TRAY SHALL BE PENDANT MOUNTED.

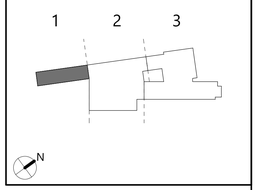
DRAWING NOTES:

1. PROVIDE THREE (3) FOUR INCH CONDUITS BETWEEN SECOND FLOOR DATA CLOSET AND FIRST FLOOR CUSTODIAL ROOM TO ROUTE DATA CABLES BETWEEN FLOORS.

1 FIRST FLOOR - AREA 1 - DATA PLAN
T111 1/8" = 1'-0"

0' 4' 8' 16'

KEY PLAN



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Consultant
ME ENGINEERING
Mechanical Electrical Plumbing Fire Protection Technology Sustainable Design Energy Modeling Commissioning
M/E PROJECT: 233139.00

Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK
WILLIAM A. GUNNAM
087881
LICENSED PROFESSIONAL ENGINEER
Reg. Exp: 05/31/2024
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Sheet Title
PARTIAL FIRST FLOOR PLAN - AREA 1 - DATA

Sheet No.
CTE T111

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/233139_NECSD_CTE_ELEC_CENTRAL_R22.rvt

GENERAL NOTES:

A. REFER TO DETAIL LINE ON DRAWING DENOTING WHICH DATA CLOSET DEVICES SHALL BE CONNECTED TOO.

B. ALL CAMERAS SHALL BE PENDANT MOUNTED UNLESS THEY CAN BE INSTALLED IN A DROP CEILING OR WALL MOUNTED AS CONDITIONS ALLOW. COORDINATE WITH CAMERA SPECIFICATIONS. IF PENDANT MOUNTED, COORDINATE MOUNTING HEIGHT WITH OTHER CEILING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO, LIGHTING, HVAC DUCTWORK, PIPING, ETC. SO THAT THERE ARE NO OBSTRUCTIONS TO CAMERA VIEW.

C. ALL EXTERIOR CAMERAS MOUNTED AT 10' UNLESS OTHERWISE NOTED.

D. UNLESS PREVENTED BY FIELD CONDITIONS, CABLE TRAY SHALL BE WALL MOUNTED. IF WALL MOUNTING IS NOT POSSIBLE, CABLE TRAY SHALL BE PENDANT MOUNTED.

DRAWING NOTES:

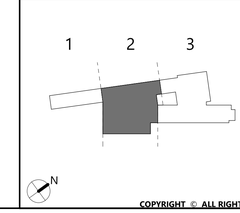
1. PROVIDE NEW IP BASED BUILDING WIDE PUBLIC ADDRESS (PA) SYSTEM. REFER TO SPECIFICATIONS FOR MORE INFORMATION. PA SYSTEM TO INTERFACE WITH DISTRICT LOCKDOWN PROCEDURES. COORDINATE LOCKDOWN REQUIRMENTS WITH OWNER BUILDING WIDE CLOCK SYSTEM TO BE INTERFACED WITH PA SYSTEM. PROVIDE MASTER CLOCK STATION WITH WIRELESS CLOCKS AS INDICATED IN SPECIFICATIONS.

2. ROUTE CONDUIT UNDER SLAB FROM NEAREST WALL AND PUNCH UP TO SERVING LINE FOR DATA CONNECTION TO POS STATION. PROVIDE A PEDESTAL MOUNTED BOX ON TOP OF STUBBED UP CONDUIT. COORDINATE EXACT LOCATION OF EQUIPMENT AND SERVING LINE WITH ARCHITECTURAL PLANS.

1 FIRST FLOOR - AREA 2 - DATA PLAN
T112 1/8" = 1'-0"

0' 4' 8' 16'

KEY PLAN



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Energy Conservation Consulting
M/E PROJECT: 233139.00

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK
MICHAEL K. SIMONSON
078BT
LICENSED PROFESSIONAL ENGINEER
Reg. Exp: 05/31/2024
Cert. of Auth.: 0919/6&5

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Sheet Title
PARTIAL FIRST FLOOR PLAN - AREA 2 - DATA

Sheet No.
CTE T112

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/233139_NECSD_CTE ELEC_CENTRAL_R22.rvt

GENERAL NOTES:

A. ALL LOW VOLTAGE CONNECTIONS AND CABLES SHOWN ON THIS PLAN SHALL BE CONNECTED TO THE IDF ON THE FIRST FLOOR.

B. ALL INTERIOR CAMERAS SHALL BE PENDANT MOUNTED UNLESS THEY CAN BE INSTALLED IN A DROP CEILING OR WALL MOUNTED AS CONDITIONS ALLOW. COORDINATE WITH CAMERA SPECIFICATIONS. IF PENDANT MOUNTED, COORDINATE MOUNTING HEIGHT WITH OTHER CEILING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO, LIGHTING, HVAC DUCTWORK, PIPING, ETC. SO THAT THERE ARE NO OBSTRUCTIONS TO CAMERA VIEW.

C. ALL EXTERIOR CAMERAS MOUNTED AT 10' UNLESS OTHERWISE NOTED.

D. UNLESS PREVENTED BY FIELD CONDITIONS, CABLE TRAY SHALL BE WALL MOUNTED. IF WALL MOUNTING IS NOT POSSIBLE, CABLE TRAY SHALL BE PENDANT MOUNTED.

E. ALL DEVICES IN GYMNASIUM SHALL BE PROTECTED BY A WIREGUARD.

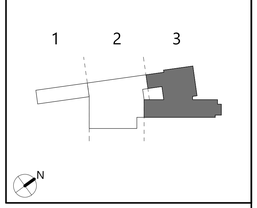
DRAWING NOTES:

1. ROOM SHALL BE WRAPPED IN 3/4" PLYDWOOD AND PAINTED WITH A FIRE RESISTANT PAINT. PAINT SHALL BE LIGHT IN COLOR. PLYWOOD SHALL STOP 6" ABOVE THE FLOOR.
2. PROVIDE DATA CONNECTION TO SCOREBOARD. CENTER OF SCOREBOARD TO BE LOCATED AT 17' AFF. COORDINATE EXACT MOUNTING HEIGHT WITH OWNER'S REP PRIOR TO ROUGH-IN.
3. COODINATE INSTALL OF FLOOR BOX WITH ELECTRICAL CONTRACTOR AND ELECTRICAL DRAWINGS. A SINGLE BOX WITH DIVIDERS FOR POWER AND DATA SHALL BE PROVIDED IN LIEU OF (2) SEPARATE BOXES. PROVIDE (1) 3/4" CONDUIT FOR LOW VOLTAGE CABLING.

1 FIRST FLOOR - AREA 3 - DATA PLAN
T113 1/8" = 1'-0"

0' 4' 8' 16'

KEY PLAN



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M/E PROJECT: 233139.00

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK
MICHAEL K. SIMMEN
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LICENSED PROFESSIONAL ENGINEER
Reg. Exp: 05/31/2024
Cert of Auth: 0018A&S

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Sheet Title
PARTIAL FIRST FLOOR PLAN - AREA 3 - DATA

Sheet No.
CTE T113

CONSTRUCTION DOCUMENTS

GENERAL NOTES:

A. REFER TO DETAIL LINE ON DRAWING DENOTING WHICH DATA CLOSET DEVICES SHALL BE CONNECTED TOO.

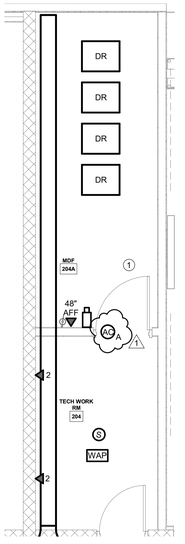
B. UNLESS PREVENTED BY FIELD CONDITIONS, CABLE TRAY SHALL BE WALL MOUNTED. IF WALL MOUNTING IS NOT POSSIBLE, CABLE TRAY SHALL BE PENDANT MOUNTED.

DRAWING NOTES:

1. ROOM SHALL BE WRAPPED IN 3/4" PLYDWOOD AND PAINTED WITH A FIRE RESISTANT PAINT. PAINT SHALL BE LIGHT IN COLOR. PLYWOOD SHALL STOP 6" ABOVE THE FLOOR.

1 SECOND FLOOR - AREA 2 - DATA PLAN
T122 1/8" = 1'-0"

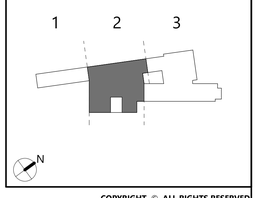
0' 4' 8' 16'



ENLARGED MDF ROOM

0' 2' 4' 8'

KEY PLAN



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Reg. Exp: 05/31/2024
Cert. of Auth: 0018443

#	DATE	DESCRIPTION
1	1/3/2024	BID Addendum #2

Drawn By:	SPW
Checked By:	EJM
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

Sheet Title
PARTIAL SECOND FLOOR PLAN - AREA 2 - DATA

Sheet No.
CTE T122

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/233139_NECSD_CTE_ELEC_CENTRAL_R22.rvt

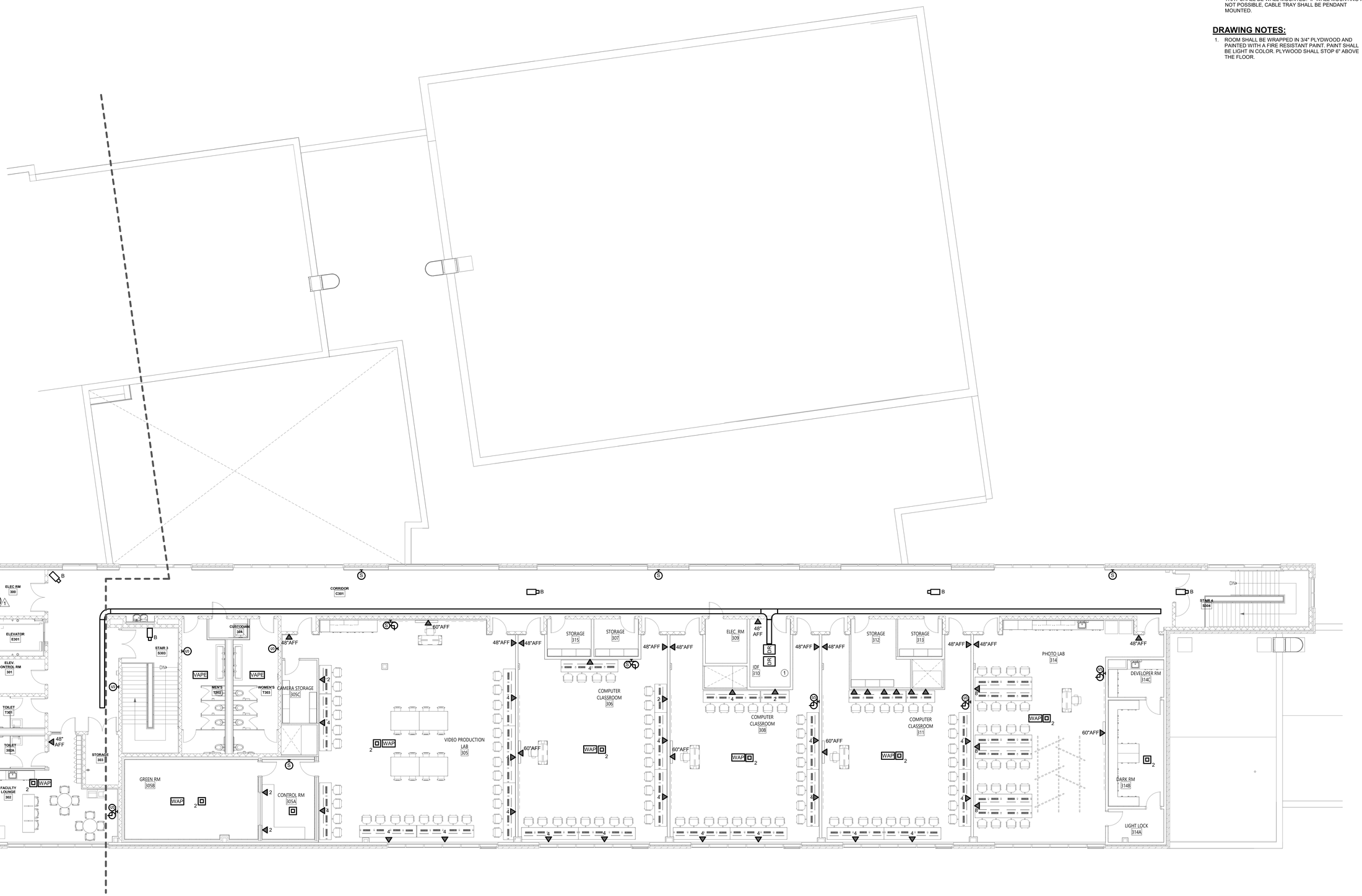
GENERAL NOTES:

A. ALL LOW VOLTAGE CONNECTIONS AND CABLES SHOWN ON THIS PLAN SHALL BE CONNECTED TO THE IDF ON THE THIRD FLOOR.

B. UNLESS PREVENTED BY FIELD CONDITIONS, CABLE TRAY SHALL BE WALL MOUNTED. IF WALL MOUNTING IS NOT POSSIBLE, CABLE TRAY SHALL BE PENDANT MOUNTED.

DRAWING NOTES:

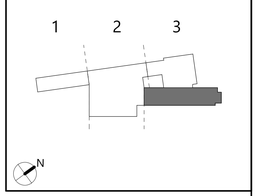
1. ROOM SHALL BE WRAPPED IN 3/4" PLYDWOOD AND PAINTED WITH A FIRE RESISTANT PAINT. PAINT SHALL BE LIGHT IN COLOR. PLYWOOD SHALL STOP 6" ABOVE THE FLOOR.



1 THIRD FLOOR - AREA 3 - DATA PLAN
T133 1/8" = 1'-0"

0' 4' 8' 16'

KEY PLAN



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Consultant
ENGINEERING
Mechanical/Electrical/Plumbing Consultants
New York · New Jersey · Pennsylvania
Connecticut · Massachusetts · Florida
M/E PROJECT: 233139.00

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK
MICHAEL M. BINDA
017887-1
LICENSED PROFESSIONAL ENGINEER
Reg. Exp: 05/31/2024
Cert of Auth: 0018443

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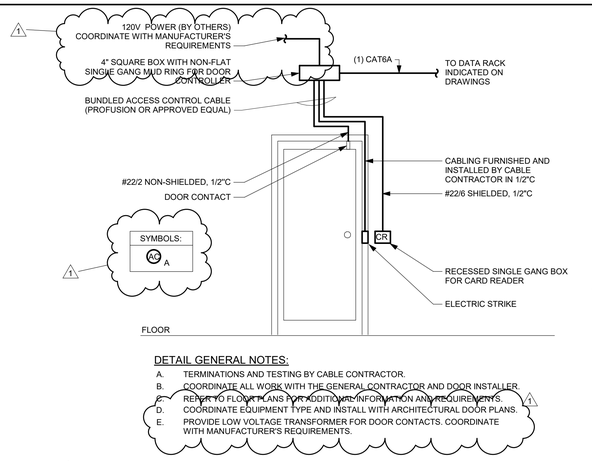
Sheet Title
PARTIAL THIRD FLOOR PLAN - AREA 3 - DATA

Sheet No.
CTE T133

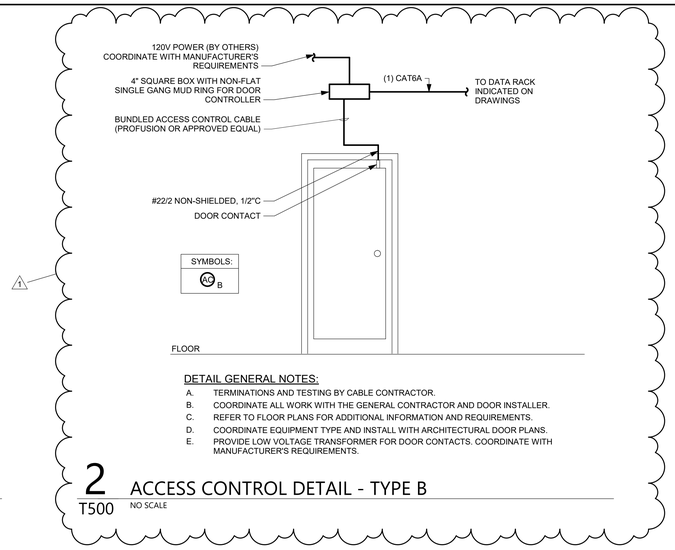
CONSTRUCTION DOCUMENTS



DETAIL GENERAL NOTES:

A. TERMINATIONS AND TESTING BY CABLE CONTRACTOR.
B. COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR AND DOOR INSTALLER.
C. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
D. COORDINATE EQUIPMENT TYPE AND INSTALL WITH ARCHITECTURAL DOOR PLANS.
E. PROVIDE LOW VOLTAGE TRANSFORMER FOR DOOR CONTACTS. COORDINATE WITH MANUFACTURER'S REQUIREMENTS.

1 ACCESS CONTROL DETAIL - TYPE A
T500 NO SCALE



DETAIL GENERAL NOTES:

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B. COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR AND DOOR INSTALLER.
C. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
D. COORDINATE EQUIPMENT TYPE AND INSTALL WITH ARCHITECTURAL DOOR PLANS.
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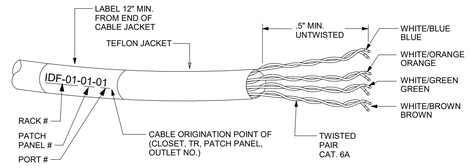
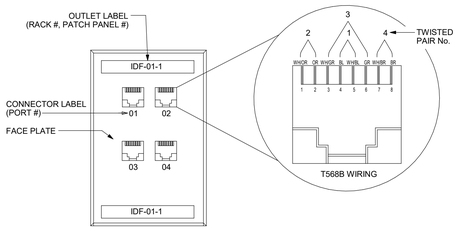
2 ACCESS CONTROL DETAIL - TYPE B
T500 NO SCALE



DETAIL GENERAL NOTES:

A. PROVIDE HORIZONTAL CABLE LABELING 12" FROM EACH END OF THE CABLE JACKET WITH AN IDENTIFIER AND BE VISIBLE ON THE EXPOSED PART OF THE CABLE JACKET. THIS SHALL INCLUDE EACH CABLE IN THE TELECOMMUNICATION CLOSET OR RACK. AS A MINIMUM, THE FOLLOWING MUST BE REFLECTED IN THE LABEL - "RACK #" IDENTIFYING THE RACK DESIGNATION, "PATCH PANEL #" IDENTIFYING THE PATCH PANEL DESIGNATION AND "PORT #" IDENTIFYING THE PORT ON THE PATCH PANEL.
B. MAINTAIN THE WIRE PAIR TWISTS AS CLOSE AS POSSIBLE TO THE POINT OF TERMINATION, NO MORE THAN 0.5" OF WIRE SHALL BE UNTWISTED.

3 TYPICAL TELE/DATA CABLE DETAIL
T500 NO SCALE

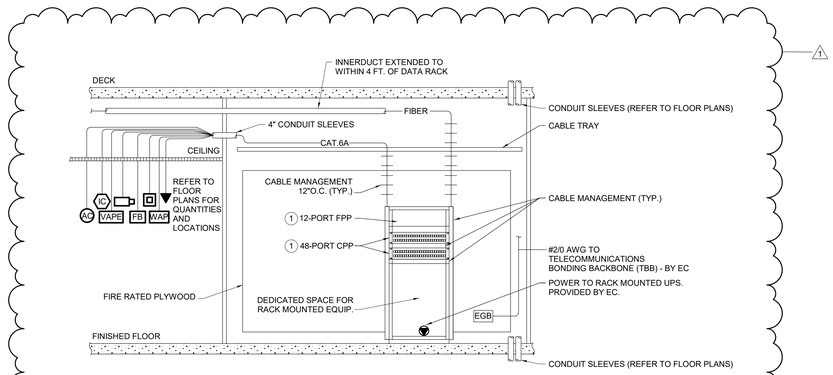


DETAIL GENERAL NOTES:

A. PROVIDE TELECOMMUNICATION LABELING AS PER TIA/EIA-606-A. ALL OUTLETS AND PATCH PANEL POSITIONS MUST BE LABELED AS TO THEIR FUNCTION AND IDENTIFIER CODE. ALL DEVICES, OUTLET LOCATIONS AND DESIGNATIONS MUST APPEAR ON SHOP DRAWINGS AND FINAL AS-BUILT DRAWINGS. AS A MINIMUM THE FOLLOWING MUST BE REFLECTED FOR THE CONNECTORS AND PANEL LABEL - "RACK #" IDENTIFYING THE RACK DESIGNATION, "PATCH PANEL #" IDENTIFYING THE PATCH PANEL DESIGNATION AND "PORT #" IDENTIFYING THE PORT ON THE PATCH PANEL.

B. LABEL EACH CONNECTOR LOCATION AS SPECIFIED IN A SEQUENCE AND PROCEEDING CLOCKWISE AROUND THE ROOM. ALSO IDENTIFY AND LABEL THE CONNECTOR FUNCTION OR DESIGNATION FOR "VOICE" OR "DATA". COLOR CODING CONNECTORS AND CABLING SHALL BE USED TO IDENTIFY VOICE OR DATA, COORDINATE WITH IT PERSONNEL.

4 TYPICAL TELE/DATA COVERPLATE DETAIL
T500 NO SCALE



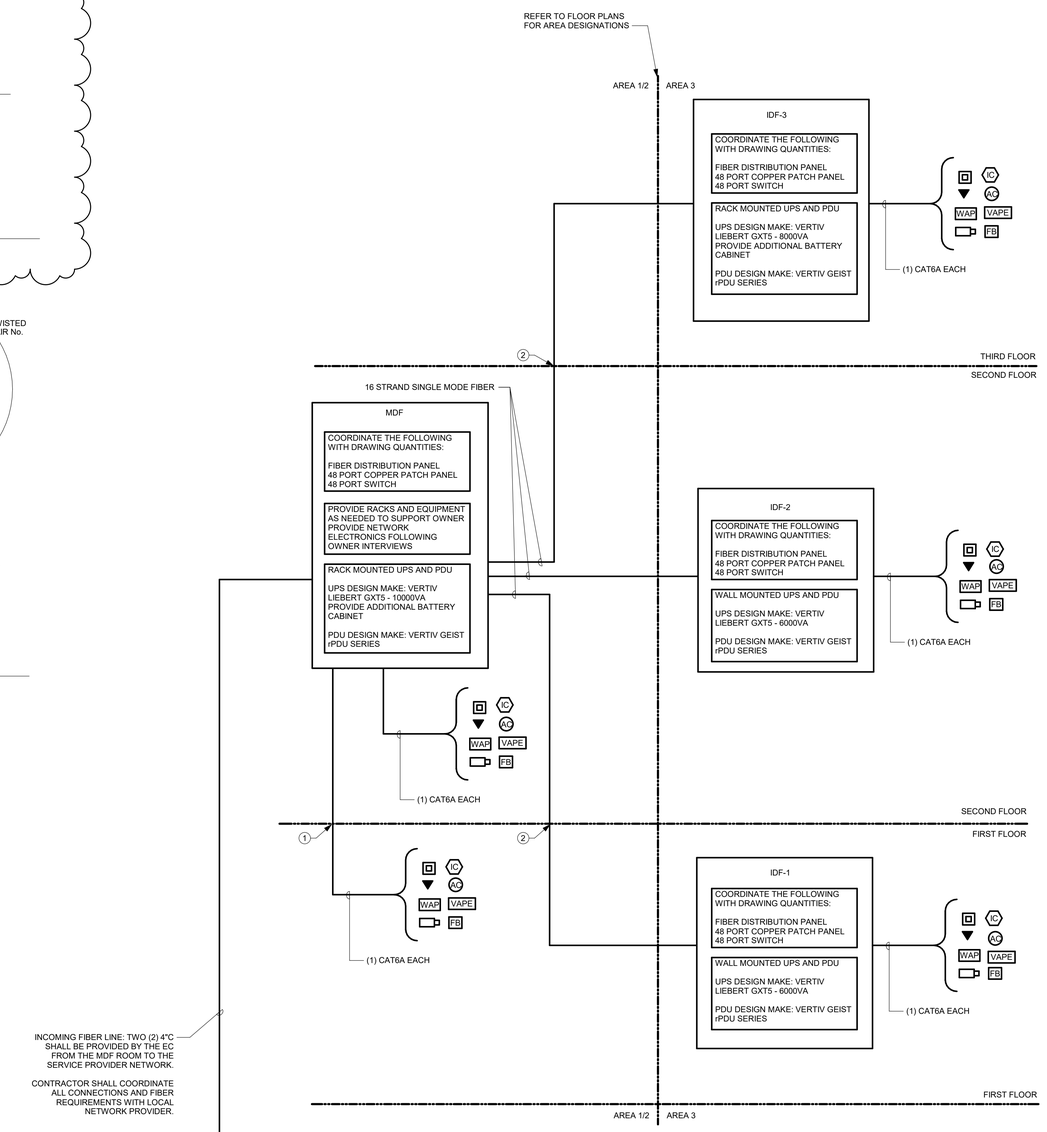
DETAIL GENERAL NOTES:

A. PROVIDE DEDICATED 4" CONDUIT SLEEVES IN WALLS, FLOORS, AND CEILINGS FOR HORIZONTAL AND VERTICAL CABLING. SIZE SLEEVES FOR NO MORE THAN 40% FILL AND LABEL CABLES AT SLEEVE FOR THE SYSTEM THEY SERVE. CAMERA AND NETWORK CABLING SHALL HAVE SEPARATE DEDICATED SLEEVES.

DETAIL SPECIFIC NOTES:

(1) QUANTITY OF PATCH PANELS SHALL BE AS REQUIRED TO ACCOMODATE NUMBER OF CABLES PLUS 25% FUTURE CAPACITY.

6 TYPICAL RACK DETAIL
T500 NO SCALE



INCOMING FIBER LINE: TWO (2) 4"C SHALL BE PROVIDED BY THE EC FROM THE MDF ROOM TO THE SERVICE PROVIDER NETWORK.

CONTRACTOR SHALL COORDINATE ALL CONNECTIONS AND FIBER REQUIREMENTS WITH LOCAL NETWORK PROVIDER.

GENERAL NOTES:

A. ALL DATA RACKS SHALL BE IN A LOCKED AND MONITORED IT CLOSET AND SHALL BE OPEN 4-POST RACKS BY APC OR APPROVED EQUAL.
B. ALL PDU'S SHALL BE PROVIDED WITH C-13/C-19 CONNECTIONS. ALL RACK MOUNTED EQUIPMENT SHALL BE PROVIDED WITH C-13/C-19 PLUGS. NETWORK EQUIPMENT PROVIDED BY OWNER. COORDINATE PLUG AND RECEPTACLE REQUIREMENTS WITH OWNER.
C. COORDINATE DATA RACK LAYOUTS BASED ON DRAWING QUANTITIES, REQUIREMENTS, AND FIELD CONDITIONS.
D. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
E. REFER TO DRAWINGS FOR DEMISING LINES DICTATING WHICH DEVICES WILL BE CONNECTED TO WHICH IT CLOSET LOCATION.
F. ALL FIBER SHALL BE RUN IN INNERDUCT BETWEEN DATA RACKS AND ROUTED IN THE CABLE TRAY.

DRAWING NOTES:

1. PROVIDE THREE (3) FOUR INCH CONDUITS BETWEEN SECOND FLOOR DATA CLOSET AND FIRST FLOOR CUSTODIAL ROOM TO ROUTE DATA CABLES BETWEEN FLOORS.
2. PROVIDE CONDUIT SLEEVES FOR FIBER ROUTING BETWEEN THE FIRST, SECOND, AND THIRD FLOOR FOR FIBER ROUTING BETWEEN THE MDF AND IDF ROOMS. CONDUIT SHALL BE HIDDEN IN WALLS AND LABELED AS FIBER. PROVIDE CONDUIT ROUTING TO SUITE FIELD CONDITIONS. COORDINATE WITH ALL OTHER TRADES.

5 LOW VOLTAGE RISER DIAGRAM
T500 1/8" = 1'-0"

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071881
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Cert. of Auth: 0018443

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Sheet Title
DETAILS

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CTE
T500

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