CSARCH

Addendum No. 5

Date: 05-29-2024
Project Name: NECSD – New CTE Building
CSArch Project No. 108-2303
SED Control No. 44-16-00-01-0-053-001

This Addendum No. 5 forms part of the Contract Documents and modifies the original bidding documents dated April 15, 2024. Addendum No. 5 consists of 3 pages, 9 specification sections, and 31 drawings.

REGISTRATION EXPIRATION DATE: 12/31/2026

Architect's Seal

GENERAL INFORMATION

1. As part of this Addendum No. 5, the Bid Date is being changed to June 20, 2024. To provide consideration RFI must be received by the end of day May 31, 2024.
2. RFI Log: RFI questions and answers are included as an attachment to this addendum.

REVISIONS TO THE PROJECT MANUAL

1. **DELETE** specification section 001116. **ADD** revised specification 001116 Advertisement for Bids in its entirety, attached.
2. **DELETE** specification section 002113. **ADD** revised specification 002113 Instruction to Bidders in its entirety, attached.
3. **DELETE** specification section 003113.01. **ADD** revised specification 003113.01 Milestone Schedule in its entirety, attached.
4. **DELETE** specification section 011200.01. **ADD** revised specification 011200.01 Appendix A – Responsibility Matrix in its entirety, attached.
5. **DELETE** specification section 055100. **ADD** revised specification 055100 Metal Stairs in its entirety, attached.
6. **DELETE** specification section 071400. **ADD** revised specification 071400 Fluid Applied Waterproofing in its entirety, attached.
7. **DELETE** specification section 098316. **ADD** revised specification 098316 Spray Acoustic Treatment in its entirety, attached.
8. **DELETE** specification section 122400. **ADD** revised specification 122400 Window Shades in its entirety, attached.
9. **ADD** specification 331102 Water Utility Distribution Piping, attached.

REVISIONS TO THE CONTRACT DRAWINGS

1. **DELETE** drawing C150. **ADD** revised drawing C150, attached.
2. **DELETE** drawing C232. **ADD** revised drawing C232, attached.
3. **DELETE** drawing S001. **ADD** revised drawing S001, attached.

4. **DELETE** drawing S002. **ADD** revised drawing S002, attached.
5. **DELETE** drawing S501. **ADD** revised drawing S501, attached.
6. **DELETE** drawing A112. **ADD** revised drawing A112, attached.
7. **DELETE** drawing A301. **ADD** revised drawing A301, attached.
8. **DELETE** drawing A302. **ADD** revised drawing A302, attached.
9. **DELETE** drawing A303. **ADD** revised drawing A303, attached.
10. **DELETE** drawing A304. **ADD** revised drawing A304, attached.
11. **DELETE** drawing A305. **ADD** revised drawing A305, attached.
12. **DELETE** drawing A306. **ADD** revised drawing A306, attached.
13. **DELETE** drawing A308. **ADD** revised drawing A308, attached.
14. **DELETE** drawing A309. **ADD** revised drawing A309, attached.
15. **DELETE** drawing A310. **ADD** revised drawing A310, attached.
16. **DELETE** drawing A411. **ADD** revised drawing A411, attached.
17. **DELETE** drawing A412. **ADD** revised drawing A412, attached.
18. **DELETE** drawing A413. **ADD** revised drawing A413, attached.
19. **DELETE** drawing A601. **ADD** revised drawing A601, attached.
20. **DELETE** drawing A613. **ADD** revised drawing A613, attached.
21. **DELETE** drawing A615. **ADD** revised drawing A615, attached.
22. **DELETE** drawing A620. **ADD** revised drawing A620, attached.
23. **DELETE** drawing A902. **ADD** revised drawing A902, attached.
24. **DELETE** drawing P001. **ADD** revised drawing P001, attached.
25. **DELETE** drawing P101. **ADD** revised drawing P101, attached.
26. **DELETE** drawing P112. **ADD** revised drawing P112, attached.
27. **DELETE** drawing P122. **ADD** revised drawing P122, attached.

28. **DELETE** drawing P301. **ADD** revised drawing P301, attached.

29. **DELETE** drawing M902. **ADD** revised drawing M902, attached.

30. **DELETE** drawing E901. **ADD** revised drawing E901, attached.

31. **DELETE** drawing E904. **ADD** revised drawing E904, attached.

END OF ADDENDUM NO. 5

Newburgh ECSD - New CTE Building
Date: 5/29/2024

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 addendum #2	Yes	M902		Add #2
4	M	Controls & BMS	Controls /BMS : Please provide existing BMS details if any?	4/30/2024	ACS Systems Associates, Inc.	**Revised Response (5/20/2024): The building automation system will be Schneider Electric EcoStruxure by Day Automation Systems. It is the intent of the district to purchase the building automation system from the Day Automation Systems' OGS state contract number PT68783.**	Yes		250923	Add #4
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 addendum #3.	Yes	A604, A613, A615		Add #3
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	**Revised Response (5/20/2024): There are no MWBE goals for this project. Local, minority and female (LMF) participation is a part of the PLA agreement. Please refer to that agreement and any questions related to the agreement, the pre-apprenticeship or apprenticeship programs and LMF participation to the Hudson Valley Building Trades Council.**	No			

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.	**Revised Response (5/20/2024): The building automation system will be Schneider Electric EcoStruxure by Day Automation Systems. It is the intent of the district to purchase the building automation system from the Day Automation Systems' OGS state contract number PT68783.**	Yes		250923	Add #4
25	A/M	Welding Booth / Extraction Arms	The booth description (A040, A040A) in the Equipment Schedule on sheet CTE A615 indicates the power is 120V/1-ph which would imply one or both of those options should be included. However, I don't think they are listed anywhere. Also, I cannot find reference to the extraction arms. Below indicates the airflow (per arm) but no details. Do you know on which sheet if any they are identified?	5/3/2024	The Lincoln Electric Company	Refer to spec section 125713 – Welding Equipment in Volume 2 of the project manual. Revised as part of addendum #3.	Yes		125713	Add #3
26	A	Ceramic Tile	Finish Plan Dr. AF113 shows CWT wall tile at Locker Rooms. However elevations Dr. A611 shows no CWT. Please clarify.	5/6/2024	Worth Construction Co., Inc.	Revised as part of addendum #3	Yes	A611		Add #3
27	A	Security Grill Door	Door Schedule Dr. A902 shown Security Grill OH4 for Cafeteria. Please provide Basis of design and model #.	5/6/2024	Worth Construction Co., Inc.	Provided as part of addendum #3	Yes		083326	Add #3
28	M	Duct Liners	The liner spec p220, see below, indicates elastomeric liner in every duct type. Can you send an RFI to confirm this?	5/6/2024	Armistead Mechanical, Inc.	Lined Ducts are indicated on the drawings. Refer to Symbols on MG000.	No			
29	M	Fume Extraction Arms	Do you know what the lengths and diameters of the fume extraction arms is? I'm assuming 8' length and 8" diameter but my estimating department wanted to be sure.	5/6/2024	ADE Group	Revised as part of addendum #3.	Yes		125713	Add #3
30	M	Wood Dust Collector	For the wood dust collector, its only one unit, right (DC-A-1)?	5/6/2024	ADE Group	Yes, There is only one wood dust collector unit.	No			

31	G	Contracts	Contracts: As per Addendum 1 We have noticed that all trade bid forms are deleted and revised GC bid form is added. However, through Revplans its still showing 5 prime contracts . Kindly confirm whether it's a single Prime contract or Multiple Prime contracts?	5/8/2024	ACS Systems Associates, Inc.	As per addendum #1, it is a Single Prime Contract. Rev plans has updated their website.	No			
32	AF	Fluid Applied Flooring	Section 096700: Are alternate products accepted for this? Stonhard is proprietary	5/8/2024	Rizzo Companies	Product equivalents will be accepted.	No			
33	A	Coiling Doors	On the door schedule for 1st floor, there are (4) OH2 doors which are insulated coiling doors. 3 of the 4 doors have remark #2 and #8 which are "Overhead door" and "Standard Lift track" which doesn't apply to coiling doors. The 4th OH2 door on the schedule has remarks #2 and #9 which are "Overhead door" and "coiling door, motor operated" which does apply to coiling doors. I want to confirm that there are (4) OH2 doors on this project. It seems that there is only (1) coiling door and the other 3 should be sectional doors, and have been mis-labeled. Please advise	5/9/2024	Rizzo Companies	Revised as part of addendum #3.	Yes	A902		Add #3
34	A	Security Grill Door	Will an upcoming addendum contain a specification for the Coiling Security Grille?	5/9/2024	Rizzo Companies	Provided as part of addendum #3.	Yes		083326	Add #3
35	AF	Division 9	LVT-1 Adhesive; V-88 Adhesive by Mannington, V-95 Adhesive or XpressStep Spray Adhesive by Mannington for this bid scope ?	5/9/2024	Rizzo Companies Worth Construction Co., Inc. EW Howell Construction Group Pike Construction Services, Inc.	Bid as per section 096500-5, part 2.5.B.	No			
36	AF	Division 9	LVT-1, No diagonal layout installation is required for this bid scope, please confirm.	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	No diagonal layout required.	No			
37	AF	Division 9	See Detail 2 on Drawing CTE A504.00; are Rubber Stair Risers required for this bid scope, please advise.	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Provided as part of addendum #3.	Yes	A504, AF002	096500	Add #3

38	AF	Division 9	RST-1 Rubber Stair Treads; Please confirm optional Safety Inserts at nose of tread(s) are not required for this bid scope ?	5/9/2024	Rizzo Companies Worth Construction Co., Inc. EW Howell Construction Group Pike Construction Services, Inc.	Provided as part of addendum #3.	Yes		096500	Add #3
39	AF	Division 9	RT-1 Rubber Tile for intermediate landings; Marbleized is not available in 24" x 24" and not available in 3.5mm thickness, please advise.	5/9/2024	Rizzo Companies Worth Construction Co., Inc. EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	Yes	AF002	096500	Add #3
40	AF	Division 9	Stair Stringers Section 096500-4 para 2.3B are required for this bid scope, if yes please provide a detail ?	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	Yes		096500	Add #3
41	AF	Division 9	Sheet Vinyl Base HMB-1 Base is 4" High ?	5/9/2024	Rizzo Companies Worth Construction Co., Inc. EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	Yes	AF002		Add #3
42	AF	Division 9	Please provide a detail of HMB-1 Base; Cap Strip, Fillet Strip, Floor heat weld location ?	5/9/2024	Rizzo Companies Worth Construction Co., Inc. EW Howell Construction Group Pike Construction Services, Inc.	As per manufacturers standard details.	No			

43	AF	Division 9	Vent Cove Base 4" in section 096466-3 para 2.5A and RB-2 is 6" on Drawing AF002, please advise 4" is required for this bid scope.	5/9/2024	Rizzo Companies Worth Construction Co., Inc. EW Howell Construction Group Pike Construction	Revised as part of addendum #3.	Yes	AF002		Add #3
44	AF	Division 9	Polished Concrete Section 033543 installed complete procedure before all fixed millwork or casework ?	5/9/2024	Rizzo Companies EW Howell Construction Group	Polished concrete install to be complete prior to millwork and casework installation	No			
45	AF	Division 9	RST-1 at Landings - Detail 3 on A504 Tread Nosing to Polished Concrete; trip hazard or will concrete be recessed to accept tread nose ?	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	Yes	A504		Add #3
46	AF	Division 9	LVT-1 installed wall to wall and before all fixed millwork or casework ?	5/9/204	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Millwork to be installed prior to LVT flooring	No			
47	AF	Division 9	HMB Sheet Vinyl installed wall to wall and before all fixed millwork or casework ?	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Millwork to be installed prior to HMB flooring	No			
48	AF	Division 9	No HMB-1 on walls behind fixed casework or millwork at perimeter of rooms is required for this bid scope ?	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	No HMB-1 is required behind casework or millwork	No			
49	AF	Division 9	No RB-1 on walls behind fixed casework or millwork at perimeter of rooms is required for this bid scope ?	5/9/2024	Rizzo Companies EW Howell Construction Group	No RB-1 is required behind casework or millwork	No			

50	AF	Division 9	Drawing A901 Detail 7, HMB sheet vinyl to Polished Concrete; A Saddle Threshold or a Vinyl Transition Strip ?	5/9/2024	Rizzo Companies Worth Construction Co., Inc. EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	Yes	AF111		Add #3
51	AF	Division 9	Steps to electrical room from Roof, please confirm no Rubber Stair Treads are required for this bid scope ?	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	No, refer to drawing 11/A354.	No			
52	AF	Division 9	SDT-1; Grounding location and Ohm meter testing are to be provided by electrical contractor for this bid scope, please confirm.	5/9/2024	Rizzo Companies Worth Construction Co., Inc.	As per addendum #1, single prime contract.	No			
53	AF	Division 9	SDT-1; No (No Wax Logo tiles) are required for this bid scope, please confirm ?	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Bid as per specification 096500.	No			
54	AF	Division 9	Corridors 1st - 3rd floor wall base; Elevation Drawings A631-635, Details show SWB, Which walls get RB-1 and which get MT-1 ?	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	Yes	AF002		Add #3
55	AF	Division 9	Limits of MT-1 Metal Base at Vending 118A on 1st floor and same for Cafeteria 116 ?	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	Yes	AF002		Add #3
56	AF	Division 9	Limits of MT-1 Metal Base in Cafeteria 116 ?	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	Yes	AF002		Add #3

57	AF	Division 9	Section 033000-15 para 3.7D.3 Other Surfaces - Gym Wood system and Polished Concrete are Other Surfaces, please advise.	5/9/2024	Rizzo Companies EW Howell Construction Group	Yes.	No			
58	AF	Division 9	Section 096500-6 para 3.2H Feature Strips and LOGOS are not required for this bid scope, please confirm.	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	Yes		096500	Add #3
59	AF	Division 9	HMB Sheet Vinyl to HMB Sheet Vinyl at door threshold, Doors 202A, 202C, 202D; Heat weld seam only, please advise.	5/9/2024	Rizzo Companies Worth Construction Co., Inc. EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #3.	No	AF121		Add #3
60	AF	Division 9	Polished Concrete Section 033543-3 para 1.6B, Mock-up 50 sf. Is 50 SF required for each; PCON-1, PCON-2 and PCON-3, please advise.	5/9/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	As indicated per specification 033543.	No			
61	AF	Division 9	Many Abbreviations on Drawings AF001 do not apply to this scope, please confirm. WOM, BBT, CPT, RAF, STF, VCT, please advise.	5/9/2024	Rizzo Companies EW Howell Construction Group	Abbreviations listed may not apply to scope of work. Refer to the abbreviations indicated in the finish schedule and finish tag.	No			
62	AF	Division 9	Drawing AF133 Detail 1 description; THURD might be THIRD ?	5/9/2024	Rizzo Companies EW Howell Construction Group	Spelling error; should read THIRD.	No			
63	M	BMS	I was looking at the Newburgh School bid in section 250923 but there are no control vendors listed. Part 2 – Products has conduit and fitting in this section. I was wondering who the acceptable BMS manufacturers would be or did the school standardize on a control vendor.	5/9/2024	Stark Tech	**Revised Response (5/20/2024): The building automation system will be Schneider Electric EcoStruxure by Day Automation Systems. It is the intent of the district to purchase the building automation system from the Day Automation Systems' OGS state contract number PT68783.**	Yes		250923	Add #4
64	A	Cast Stone	Please clarify cast stone profiles locations. For instance: Dr.A201 /4 elevation shown second floor cast stone profile CS3 & CS4 Building Section dr. A307/3 shows CS1. Elevation dr. A201/2 shows CS3 building section shows CS2. And there are more discrepancies.	5/10/2024	Worth Construction Co., Inc.	Revised as part of addendum #3.	Yes	A201, A202, A203, A204, A205		Add #3

65	E	Site Lighting	In addendum #2, revised drawing C180 was issued which shows 25 type A site light fixtures. Drawing ES100 shows 29 site light fixtures (16 type 9 and 13 type 11) Should the electrical site drawing be updated to only show 25 fixtures? Also ES100 calls for 3 flood lights for the flagpole. Can you provide a part # for these?	5/13/2024	J&J Sass Electric Inc.	Revised as part of addendum #4.	Yes	C180, C230, ES100		Add #4
66	G	AISC Certification	Do you intend on waiving the AISC certification for this project or keeping it? Please let me know when you get the chance.	5/13/2024	Rizzo Companies	AISC certification is required. Bid as per specification section 051200, 1.5, D	No			
67	M	Weld Shop Collectors	"For the weld shop collector, please ask them which number they want below (1 or 2 ?): 1.One collector composed of 1 module with 3800sqft of filter media 2.One collector composed of 2 modules each with 3800sqft of filter media x 2 = 7600sqft total And for the weld shop collector's blower. Please ask them which number they want below (1, 2, or 3 ?): 1.One 13000cfm blower and motor 2.Two 6500cfm blowers and motors 3.Two 7400cfm blowers and motors"	5/13/2024	ADE Group	Refer to welding filtration unit schedule on sheet M902 and welding fume exhaust specification 233505.	No			
68	G	Apprentice Program	Item #3 on the Pre-Bid Conference Agenda states, "Per the PLA Contractors must participate in an Apprentice Program. Please become familiar with these requirements." Do all subcontractors have to participate in the Apprentice Program, or are there any exceptions based on number of employees on site for a particular company or value of their trade on this project?	5/13/2024	EW Howell Construction Group	Please refer to the PLA agreement and any questions related to the agreement, the pre-apprenticeship or apprenticeship programs and LMF participation to the Hudson Valley Building Trades Council.	No			
69	T	Vape Detection	Please provide specifications for the vape detection system.	5/13/2024	EW Howell Construction Group Worth Construction Co., Inc. Rizzo Companies	Refer to revised T001 as part of addendum #4 for vape detection basis of design. Vape Detection system furnished be the owner. Refer to revised specification section 011200.01 as part of addendum #4.	Yes	T001	011200.01	Add #4
70	E / T	Wiring	Specifications call for all wiring (concealed or exposed) to be single conductors in raceway. Please confirm that MC cable will be suitable for use within walls and above hung ceilings.	5/13/2024	EW Howell Construction Group Worth Construction Co., Inc. Rizzo Companies	MC cable can be used in situations described as per specification 260533, 3.1., A	No			
71	AF	Resinous Flooring	Stonhard products are proprietary resinous floor scope products. Please confirm if Dex-O-Tex equal system can be priced in lieu of Stonhard products.	5/13/2024	EW Howell Construction Group	Product equivalents will be accepted.	No			
72	G	BIM	Please advise if BIM Coordination is part of this project & scope of work.	5/13/2024	EW Howell Construction Group	Coordination drawings are required as per specification section 013100. CAD and REVIT files will be provided at no cost to the awarded contractor with the execution of the Digital Data Licensing Agreement release form C106-2013.	No			

73	M	Heat Exchangers	Drawing CTE-M902: HX schedule PFHX-A-1: Fouling factor isn't typically used for Plate & Frame heat exchangers as it isn't recommended by most manufacturers. When it is present, the value is usually much lower than what is currently scheduled. Please confirm whether or not a FF is necessary and what the correct value should be.	5/13/2024	Frank P. Langley, Co. Inc.	Revised as part of addendum #4.	Yes	M902		Add #4
74	M	Heat Exchangers	Heat exchanger for HVAC – Section 235700. Specification notes gaskets to be EPDM material. Is Nitrile also acceptable?	5/13/2024	Frank P. Langley, Co. Inc.	Bid as per specification section 235700 requirements.	No			
75	G	Bid Award / Notice to Proceed	Please provide the anticipated award date and anticipated notice to proceed date.	5/13/2024	Dobco, Inc.	Refer to addendum #2 for updated milestone schedule, specification section 003113.01. The anticipated award date is 6/18/2024 and the anticipated notice to proceed date is 6/19/2024.	No			
76	G	Bid	Please confirm that only one (1) Bid Proposal is required to be submitted.	5/13/2024	Dobco, Inc.	As per specification section 001116 Advertisement For Bids. (1) Hard Copy, (1) PDF copy submitted via email the following day. The bid form must be fully complete to qualify the bid. It is important to emphasize that the schedule of values breakdown and the unit price break down in addition to the other information being requested in the bid form is completed and submitted accurately.	No			
77	G	Permit Fees	Please confirm that the contractor is not responsible for any permit fees including the building permit's fees.	5/13/2024	Dobco, Inc.	As per specification section 007216 General Conditions AIA-A232, 3.7 Permits, Fees, Notices and Compliance with Laws.	No			
78	G	Retainage	Please confirm that the retainage is 2%.	5/13/2024	Dobco, Inc.	5% retainage. Provided as part of addendum #4.	Yes		012900	Add #4
79	G	Electronic Files	Please confirm that the Architect and Design Professionals will provide the contractor with all the CAD files and backgrounds at no cost to the contractor.	5/13/2024	Dobco, Inc.	CAD and REVIT files will be provided at no cost to the awarded contractor with the execution of the Digital Data Licensing Agreement release form C106-2013.	No			
80	G	LEED	Please confirm that the LEED administration will not be performed by the contractor.	5/13/2024	Dobco, Inc.	This project has no LEED requirements.	No			
81	G	Testing	Please confirm that all field testing and inspections will be performed and paid by the owner.	5/13/2024	Dobco, Inc.	Contractor shall be responsible to coordinate his work with the testing agent (which is provided and paid by the owner)	No			
82	G	AHJ	Please advise who is the authority having jurisdiction that will perform code compliance review and inspections.	5/13/2024	Dobco, Inc.	AHJ is New York State Education Departments Office of Facilities Planning	No			
83	G	AHJ	Please confirm that the authority having jurisdiction on the project have already reviewed plans and issuing permits is expected to happen within 15 days of receiving a Notice to Proceed.	5/13/2024	Dobco, Inc.	Plans have been approved by the AHJ and the building permit has already been issued. Bid as per specification section 007216 General Conditions AIA-A232, 3.7 Permits, Fees, Notices and Compliance with Laws.	No			
84	G	Owner Tax-Exempt	Please confirm that the owner is tax exempt, and a tax-exempt certificate will be provided to the contractor upon award so no sales taxes should be counted during the bid.	5/13/2024	Dobco, Inc.	As per specification section 007216 General Conditions AIA-A232, 3.6 Taxes.	No			
85	G	Percentage of Work	Please confirm that the contractor doesn't have to perform certain percentages of the scope of work by its own forces and if this is not the case, please advise what percentages are required by the contractor to perform.	5/13/2024	Dobco, Inc.	The Contractor is responsible to review the project specifications and documents to verify there is no requirement for a percentage of self-performing work.	No			

86	G	Temporary Facilities	Please clarify if the water and electrical power usage costs are to be carried by the Contractor. Since quantifying these costs is difficult, can this clause be waived and establish an allowance to carry the costs?	5/13/2024	Dobco, Inc.	**Response Provided (5/29/2024): The contractor is responsible for these costs as identified in specification section 011200 GC Summary of Work and 015001 Temporary Facilities and Controls.**	No			
87	G	Traffic control	Please confirm that the Contractor is not responsible for any traffic control and traffic control fees associated with deliveries. Please establish a Police Escort or Traffic Management Allowance of $100,000.00 to be used for the duration of the project for deliveries and erection of the structure.	5/13/2024	Dobco, Inc.	Traffic control and police escort fees are the contractors responsibilities and the contractor would be required to plan for these costs if they feel this is necessary to facilitate their work for the project.	No			
88	G	Self-Perform	Due to the complexity of the scope of work and the need for an aggressive schedule required to complete the project within the stipulated timeframes, please confirm that the contractor will have to certify ability to self-perform certain percentages of the contract in order to complete the milestones set forth for this project.	5/13/2024	Dobco, Inc.	The Contractor is responsible to review the project specifications and documents to verify there is no requirement for a percentage of self-performing work.	No			
89	G	Site Contaminates	Please confirm that NO site contaminants are existing on any of the site soils or ground water.	5/13/2024	Dobco, Inc.	There is no known site contaminants at this time. Bid as per specification section 007216 General Conditions AIA-A232, 3.7.3 Concealed or Unknown Conditions.	No			
90	G	Soils	Please confirm that all soils meet or under the NY residential requirements.	5/13/2024	Dobco, Inc.	Not a residential project.	No			
91	G	List of Subcontractors	Please advise what paperwork the bidder needs to submit for the listed subcontractors.	5/13/2024	Dobco, Inc.	Specification section 004336 - Proposed Subcontractors Form	No			
92	G	Bid Bond	Please confirm that the bid bond is 10% of the total lump sum bid but NTE $20,000.	5/13/2024	Dobco, Inc.	As per specification section 002113 - Instructions to Bidders 4.2, A., 1. "Bid Security shall be provided in the amount of five (5) percent of the dollar amount of the Base Bid." There is **NO** Not to Exceed amount.	No			
93	G	Colored Renderings	Please re-consider the request to provide electronic colored renderings, it will only help the bidders and subcontractors. we strongly recommend it for the exterior facades and interior elevations.	5/13/2024	Dobco, Inc.	Renderings are not part of the contract documents.	No			
94	G	AISC Certification	Please confirm that the listed Structural Steel Contractor must have an AISC fabrication certification.	5/13/2024	Dobco, Inc.	Yes, bid as per specification section 051200, 1.5, D	No			
95	G	Contractor Experience	Please confirm that the bidder must have prior experience constructing similar facilities in active areas similar to the site herein.	5/13/2024	Dobco, Inc.	Contractor shall have technical ability and experience in institutional and commercial construction including experience in K-12 public school construction in New York State. Additionally should have ground-up construction experience, have at a minimum constructed and completed similar projects of this square footage and cost, and have been successful. If determined to be the lowest bidders the Contractor is required to complete the AIA Document A305 Contractor Qualifications Statement which will be submitted and used at the bid leveling meeting to determine if the contractor is the lowest qualified bidder.	No			
96	G	Bid Form	Please confirm that the contractor needs to list only the plumbing, HVAC, electrical, subcontractors on the bid form.	5/13/2024	Dobco, Inc.	Subcontractors should be listed on the Proposed Subcontractors Form Specification section 004336. All subcontractors should be listed.	No			

97	G	AIA Document A305-2020	Please confirm that the AIA Document A305-2020 which includes Exhibits A – E is not required to be submitted with the bid proposal. Please confirm that the AIA Document A305-2020 and the Exhibits A-E will only be required by the low bidder.	5/13/2024	Dobco, Inc.	As per specification section 002113 - Instructions to Bidders 6.2, A.	No			
98	G	Bid Date	We respectfully request that the bid date be extended until the 6/24/2024 if possible, in order to be able to provide the Owner with a competitive bid package. Due to the bid date being close to the Memorial Day weekend many of our subcontractor and vendors will be on vacation and we are getting feedback that they do not have enough time to complete their quotes. Dobco would like to submit a competitive bid to the owner and we would appreciate the owner assistance on extending the bid date.	5/13/2024	Dobco, Inc.	At this time the bid date is to remain 6/6/2024.	No			
99	A	078100 - Applied Fire Protection	There is a discrepancy between the Life and Safety sheets LS101-LS102 and the specification section 078100. The Life and Safety plans show fireproofing plans that it calls out for the SOFP to be rated for 1-hour, whereas the specification section called for roof construction and supporting beams and joist to be 2-hours. Which of the two different rating should we abide by?	5/13/2024	Dobco, Inc.	Revised as part of addendum #4	Yes		078100	Add #4
100	S	Column Schedule	Column F-20 is scheduled to receive intumescent paint. The column schedules do not call out what the F-20 column is. Please determine the size of the HSS member at location F-20.	5/13/2024	Dobco, Inc.	Provided as part of addendum #4	Yes	S004		Add #4
101	S	Column Schedule	The column schedule legend shown on sheet S004 called out FP "Denotes fireproofing treatment required on column (do not shop prime)." This is correct when applying fireproofing but some of these columns will receive intumescent paint. Steel to receive intumescent paint is required to be shop primed with a compatible primer.	5/13/2024	Dobco, Inc.	Revised as part of addendum #4	Yes	S004		Add #4
102	A	Intumescent Paint	Clarify what primer will be applied for the steel to receive intumescent paint.	5/13/2024	Dobco, Inc.	Bid as per specification section 078123, 2.3, B.	No			
103	A	Wall Construction	Detail 3 on sheet A309 wall construction notes do not match the section drawn. Wall construction called out 2" of spray foam insulation of 5/8" exterior sheathing, and the detail shows rigid insulation being applied to CMU block. Which of the two different wall constructions should be abide?	5/13/2024	Dobco, Inc.	Revised as part of addendum #4	Yes	A309		Add 4
104	A	Wall Construction	Detail 3 on sheet A253 shows two details (3/A351 and 9/A354) representing the base and top of an exterior wall. These two details show two different wall constructions. 3/A351 has spray foam on exterior sheathing and 9/A354 has rigid insulation on cmu block. Please clarify the wall construction type in this area.	5/13/2024	Dobco, Inc.	Revised as part of addendum #4	Yes	A253		Add 4
105	A	Wall Construction	Detail 1 of sheet A303 wall construction calls for 8" CMU with fluid applied membrane barrier and 2-1/2" rigid insulation; the wall itself does not match the description it is given. Please clarify if this wall is supposed to be CMU or 6" CFMF with 2" of spray foam insulation as drawn.	5/13/2024	Dobco, Inc.	Revised as part of addendum #4	Yes	A303		Add 4

106	A	Gypsum Board	Spec 092116-2.3-B-3a states MR Gypsum Board throughout, however sheet A701, Note#8 goes into detail stating Type 'X' gypsum board unless listed below. Is the intent to have Type 'X-MR' gypsum board thru-out?	5/13/2024	Pike Construction Services, Inc.	Type 'X-MR' gypsum board thru-out. Revised as part of addendum #4.	Yes	A701, A702		
107	A	Batt Insulation	Is batt insulation in new metal framing acceptable? There is no mention of it in specifications.	5/13/2024	Pike Construction Services, Inc.	Bid as specified. Spray foam insulation shall be used in exterior metal framed walls as per specification section 072119. Acoustic insulation to be used at interior metal framed partitions as per specification section 092216, 2.1, F., 8.	No			
108	A	A604	Per detail 11/A604 there is a half wall at the section cut thru indicating detail 6/A604. Can a detail thru the 'B003' mirror area please be provided. (How are the mirrors attached/hung? Is there a wall behind them?)	5/13/2024	Pike Construction Services, Inc.	Revised as part of addendum #4.	Yes	A604		Add #4
109	A	Washer / Dryers	Reference specification 113013 Residential Appliances which mentions Contractor to carry Clothes Washer and Dryer. Drawing FS200 items 215 (Washer Machine) and 215.1 (Dryer Machine) are marked as "NIC – By others". Please confirm we are not to carry the cost of these with our bid.	5/13/2024	Pike Construction Services, Inc.	Revised as part of addendum #4.	Yes	A624, FS200		Add #4
110	A	Door Schedule	100A, 129A – "G" Door Type / no glazing type noted. Please advise	5/14/2024	Rizzo Companies	Revised as part of addendum #4.	Yes	A902		Add #4
111	A	Door Schedule	100J – "N" Door Type / no glazing type noted. Please advise	5/14/2024	Rizzo Companies	Revised as part of addendum #4.	Yes	A902		Add #4
112	A	Door Schedule	130, 130B, C102, C201 – "F" Type Door – G3 Glazing Noted. Are these doors to be flush or do they need lites (windows) in them. Please advise	5/14/2024	Rizzo Companies	Revised as part of addendum #4.	Yes	A902, A903		Add #4
113	A	Door Schedule	105, 106, 122, 129B, 130, 130A, 130B, C102, S101, S102, S103, S104, 203, 206, 222, S201, S202, S203, S204, 300, 303, S303, S304 – Type 3 Frame (double frame – 2" head) / Head Detail 5 (4" Masonry head). Please advise which is correct.	5/14/2024	Rizzo Companies	Revised as part of addendum #4.	Yes	A902, A903, A904		Add #4
114	A	Door Schedule	112 – Type 4 Frame (double frame – 4" head) / Head Detail 4 (2" head). Please advise which is correct.	5/14/2024	Rizzo Companies	Revised as part of addendum #4.	Yes	A902		Add #4
115	A	Door Schedule	116E, 204A – Type 2 Frame (single with 4" head) / Head Detail 4 (2" head). Please advise which is correct.	5/14/2024	Rizzo Companies	Revised as part of addendum #4.	Yes	A902, A903		Add #4
116	A	Door Schedule	206A, 210A, 215A, 216A – Type 1 Frame (single with 2" head) / Head Detail 5 (4" Masonry head). Please advise which is correct	5/14/2024	Rizzo Companies	Revised as part of addendum #4.	Yes	A903		Add #4
117	A	Wall Construction	Area 3 dr. A113 referring to wall section A309/3. Detail 3 / A309 showing CMU wall on 2nd floor, however wall construction description calls for different. Please clarify.	5/14/2024	Worth Construction Co., Inc.	Revised as part of addendum #4.	Yes	A309		Add #4
118	A	Casework	Casework detail 1 & 2 on Dr. A651, please explain what rooms this details should be use for.	5/14/2024	Worth Construction Co., Inc.	Details 1 & 2 on drawing A651 are typical details for plastic laminate casework. Refer to interior elevations for locations.	No			
119	A	Casework	Dr.123 no details shown for Rm. #224. Is the case work same kind as for Rm. #232? Please confirm.	5/14/2024	Worth Construction Co., Inc.	Revised as part of addendum #4.	Yes	A123		Add #4
120	G	Contract Award	Date Contract to be Awarded	5/14/2024	Joseph Lombardo Plumbing, Heating & Cooling, Inc.	Refer to addendum #2 for updated milestone schedule, specification section 003113.01. The anticipated award date is 6/18/2024 and the anticipated notice to proceed date is 6/19/2024.	No			

121	G	Schedule	Date of Work Commencing (I was only able to discern groundbreaking date of 7/9/24) - If you have any intel specific to Divisions 22 and 23, muchly appreciated in advance.	5/14/2024	Joseph Lombardo Plumbing, Heating & Cooling, Inc.	There are no schedule specific dates relative to Divisions 22 and 23 at this time.	No			
122	G	Schedule	Date of Work Completion	5/14/2024	Joseph Lombardo Plumbing, Heating & Cooling, Inc.	Refer to addendum #2 for updated milestone schedule, specification section 003113.01. The work completion date is 7/24/2026	No			
123	A	Equivalents	In accordance with the bid documents “Proposed Products Forms” and “Substitution Request Form” which would require the Contractor to submit the request for approval of equal products, please find the request to provide us with 4 or 5 equal Manufacturers/Products for each spec section of the bid package. Upon review of the specifications it came to our attention that majority of the spec sections have only 1 (one) manufacturer listed. Please review the example of the spec sections below that have only 1 manufacturer listed and approve the manufacturers below as equals. 081416 - FLUSH WOOD DOORS 083323 - OVERHEAD COILING DOORS 083343 - SMOKE CURTAINS 084313 - ALUMINUM-FRAMED STOREFRONTS 095100 - ACOUSTICAL CEILINGS 102123 - CUBICLE CURTAINS AND TRACK 102800 TOILET, BATH, AND LAUNDRY ACCESSORIES 104400 - FIRE PROTECTION SPECIALTIES 105113 - METAL LOCKERS 122400 - WINDOW SHADES	5/15/2024	Dobco, Inc.	The products specified are basis of design. It is not the intent of the Owner or Architect to deny products deemed to be equivalents. Products will not be reviewed or approved for equivalency prior to the bid date. Revised as part of addendum #4. Refer to section 002113, 3.3.	Yes		002113	Add #4
124	M	Refrigerant Lines	On the mechanical drawings there are now refrigerant lines sizes. Please provide sizes of the refrigerant lines or more detail.	5/16/2024	Pike Construction Services, Inc.	**Response Pending: Open RFI**	Yes			Future Add
125	M	Condensing Units	On M901 there seems to be missing information on air cooled condensing units CU-F-6, and CU-J-1 and what indoor units they serve. The VRF systems table is incomplete. Can you provide that information and complete the served indoor units table?	5/16/2024	Pike Construction Services, Inc.	Revised as part of addendum #4.	Yes	M901		Add #4
126	A/M	Paint Booth	Please clarify if the paint booth is owner provided. Can you provide more information on the paint booth as far as model #, accessories, and scope responsibilities? Can you provide contact info for the paint booth representative?	5/16/2024	Pike Construction Services, Inc.	As per the equipment schedule on drawing A616, the paint booth is contractor provided. Revised equipment plan provided as part of addendum #4. Refer to specification section 233500 for paint booth requirements.	Yes	A616		Add #4
127	E	Clock System	Confirm who is responsible to furnish the clock system (275313)	5/17/2024	Rizzo Companies	Refer to revised specification section 011200.01 as part of addendum #4.	Yes		011200.01	Add #4
128	E	Entry System	Confirm who is responsible to furnish the Audio Visual Entry System (281301)	5/17/2024	Rizzo Companies	Refer to revised specification section 011200.01 as part of addendum #4.	Yes		011200.01	Add #4
129	E	Gym Sound System	Is the gymnasium sound system being furnished by the owner’s vendor?	5/17/2024	Rizzo Companies	Gymnasium sound system shall be provided by the GC.	No			
130	C	Chain Link Fence	Sheet C-130 (Addendum #3) appears to have an overlay error on the Eastern-Side Parking lot. 4' High Chain Link Fence is called out in the same location as the parking lot directional arrows. Please advise.	5/17/2024	EW Howell Construction Group	Revised as part of addendum #4.	Yes	C130		Add #4

131	A	Door Schedule	There are hollow metal door frames shown with side lite glass on the floor plans. See rooms 116, 116C, 117A, 118, 119A, 120A, 221 & 302. These frame types are not shown on A901. The door schedule shows these frames as HM - Type 5 but that's for a pair of doors. Please review and advise on these HM frames with side lite glass. Also, please provide required glazing types for these frames.	5/17/2024	EW Howell Construction Group	Revised as part of addendum #4.	Yes	A901, A902, A903, A904		Add #4
132	C	MUTCD Signage	Please advise who is responsible for furnishing & installing the signs indicated on the MUTCD Sign Schedule, C-130.	5/17/2024	EW Howell Construction Group	MUTCD signage shall be provided by the Contractor.	No			
133	E	Emergency Standby Riser	Are there any additional requirements to provide 2 Hour Fire Rating for the Electrical feeders shown on Drawing E702, Detail 2 Electrical Emergency Standby Riser Diagram?	5/20/2024	Rizzo Companies	2 Hour Fire Rating for the electrical feeders shown is NOT required as per New York State Education Departments Office of Facilities Planning.	No			
134	E	ATS-LS	Drawing E112 Detail 2 Electrical Room Plan indicates the ATS-LS in the room with all the other normal Switchgear equipment. Does the ATS-LS or downstream distribution need to be in its own 2 Hour Fire Rated Closet?	5/20/2024	Rizzo Companies	ATS-LS does NOT need to be in its own 2 Hour Fire Rated Closet as per New York State Education Departments Office of Facilities Planning.	No			
135	P	Natural Gas Piping	What is the material specification for the natural gas piping that runs underground to the generator?	5/21/2024	Armistead Mechanical, Inc.	Revised as part of addendum #5.	Yes	C150		Add #5
136	P	Sump Pump	Detail 10 on drawing P-301 mentions pump SP-2. Is there a second sump pump needed for the elevator?	5/21/2024	Armistead Mechanical, Inc.	Revised as part of addendum #5.	Yes	P101, P301		Add #5
137	P	Shower Drains	Please provide a specification for the drains at the showers.	5/21/2024	Armistead Mechanical, Inc.	Drain shall be FD-A as indicated on drawing P001.	No			
138	P	Compressed Air	Please provide a detail for the CA termination for the hose reels.	5/21/2024	Armistead Mechanical, Inc.	Revised as part of addendum #5.	Yes	P001		Add #5
139	P	Compressed Air	What size is the CA for the scissor lift, motorcycle lift, and the H-frame press in the Auto Tech Shop?	5/21/2024	Armistead Mechanical, Inc.	Provide a ¾" line to each controller for the scissor lifts, a ¾" line secured to the wall near the motorcycle lift, and a ¾" drop to the H-frame press. Revised as part of addendum #5.	Yes	P112, P122		Add #5
140	P	Underground Plumbing	When will be the start date to install the underground waste & vent / storm any other underground plumbing @ Newburgh CTE?	5/21/2024	Joseph Lombardo Plumbing, Heating & Cooling, Inc.	This date is not determined yet. It is the awarded Contractors responsibility for establishing the construction project milestone schedule. Refer to section 011200, 1.11	No			
141	T	273100 Telephone System	Is the equipment described in this section owner or contractor furnished? If contractor furnished please identify handset quantities – they aren't show on the drawings.	5/21/2024	Upstate Electric	Telephone devices are furnished by the owner. Revised as part of addendum #5.	Yes		011200.01	Add #5
142	A	Spray Acoustic Treatment	Please confirm the thickness of the Spray Acoustic Treatment is to be ¾" per spec section 09 83 16, part 3.3A, rather than the 2" that is shown on the architectural drawings (ex: A-301 Floor Construction notes).	5/21/2024	Pike Construction Services, Inc.	Thickness to be 3/4". Revised as part of addendum #5.	Yes	A301, A302, A303, A304, A305, A306, A308, A309, A310	098316	Add #5
143	A	Welding Work Tables	Please provide specifications or details for the Welding Work Tables shown on A615 (table height & material, rollers, etc.)	5/21/2024	Pike Construction Services, Inc.	Welding Work Tables are provided by the owner. Revised as part of addendum #5.	Yes	A615		Add #5
144	G	AIA A232 Contract	The A232 which was included in the RFP has been highly modified from Base AIA language. We are greatly concerned with the changes and added language which depart drastically from the industry standard and, in addition, assign risk which is atypical in the industry. We request clarification in advance of bid day as to whether this document is negotiable, and if the owner will consider using something closer to the base language of the original AIA documents.	5/21/2024	Pike Construction Services, Inc.	It is part of the bid documents and therefore not negotiable. If there are specific clauses that you feel are extremely onerous, we would need them identified to consider if any changes would be made by addendum.	No			

145	G	Bid Period	Please advise if the Prime Bid Period can be extended by 1 - 2 weeks to allow contractors/subcontractors additional time to review the anticipated Addendum #5 document set and to allow for better subcontractor coverage as many are requesting additional time in order to provide pricing.	5/22/2024	Whiting-Turner	Bid date has been extended to June 20th. Revised as part of addendum #5.	Yes		001116	Add #5
146	G	004336 Subcontractors List	Please advise if multiple subcontractors can be listed for an assigned portion of the work under Specification Section 004336 as the final awarded Subcontractor may not be known by General Contractor at the time of bid submission (ex: Prime Contractor may list multiple Plumbing Subcontractors).	5/22/2024	Whiting-Turner	List the subcontractor you are basing your bid on. If the subcontractor is unknown at the time of the bid submission, you may list multiple subcontractors or TBD (to be determined).	No			
147	S	Fireproofing	Please identify what structural steel members are to receive spray fireproofing, intumescent paint, etc.	5/22/2024	Whiting-Turner	Structural steel members to receive fireproofing are identified on fire proofing plans 4/LS101 & 4/LS102. Columns to receive spray fireproofing are indicated on column schedules on drawings S003 & S004. Columns to receive intumescent paint are indicated on A113 identified with keynote (A4).	No			
148	A	Exterior Signage	Provide provisions for the exterior signage for the GC to furnish and install. Current language on the drawings is TBD	5/22/2024	Whiting-Turner	Provisions for exterior signage are to be carried under an allowance as indicated on the BID Form section 004116.01, 6., B.	No			
149	S	Delegated Design	Please confirm if the masonry stair tower construction/assembly is to be a delegated design component with signed and sealed calculations from a professional engineer registered in the state of New York.	5/22/2024	Whiting-Turner	The masonry shaft itself is to be constructed as shown on the drawings. Unless shown otherwise on plan, the metal pan stair construction (and attachment to the masonry shaft) is to be a delegated design component with signed and sealed calculations from a professional engineer registered in the state of New York (per Delegated Design Note 4 on S001, and specification 055100).	No			
150	A	Stair Treads	Please confirm the metal stair tread heights.	5/22/2024	Whiting-Turner	As indicated on detail 11/A354	No			
151	S	Concrete Strength	Please confirm the concrete strength for the metal stair pan infills.	5/22/2024	Whiting-Turner	Refer to specification section 2.3, D. Revised as part of addendum #5.	Yes		055100	Add #5
152	A	Autotech Shop	Please provide specifications for the waste fluid containers for the auto tech shop	5/22/2024	Whiting-Turner	Waste fluid containers are to be owner provided. Revised as part of addendum #5.	Yes	A613		Add #5
153	A	Chain Link Fence	Please provide specifications for the chain link fencing for the auto tech shop.	5/22/2024	Whiting-Turner	Refer to specification section 323113	No			
154	A	Welding Work Tables	Please provide sizes for the welding worktables on Drawing A615 and confirm that the basis of design is Lincoln Electric Co.	5/22/2024	Whiting-Turner	Welding Work Tables identified as WWT on A615 are provided by owner. Welding tables as accessories to the welding booths are indicated in specification	Yes	A615		Add #5
155	A	Countertops	Please provide specifications for the butcherblock countertop	5/22/2024	Whiting-Turner	Refer to specification section 123600.	No			
156	A	Lumber / Sheet Rock Storage	Please provide specifications for the lumber storage rack and the sheet rock storage rack for the construction shop room	5/22/2024	Whiting-Turner	Lumber storage rack and sheet rock storage rack are provided by the owner. Revised as part of addendum #5	Yes	A620		Add #5
157	A	Shop Power Poles	Please provide provisions for the power poles on the enlarged plan for the construction shop.	5/22/2024	Whiting-Turner	**Response Pending: Open RFI**				
158	A	Countertops	Please provide specifications for the epoxy resin, backsplash, and support framing for details associated with the biology lab per drawing A621.	5/22/2024	Whiting-Turner	Refer to specification section 123600.	No			
159	S	Grouting	Please advise if high-lift grouting techniques are approved for use on the project, or for specific applications. Reference Masonry Note 11 for additional information.	5/22/2024	Whiting-Turner	High lift grouting techniques can be used so long as they follow the TMS 602 requirements (i.e., cleanouts at base of walls shall be provided, lifts shall not exceed 5'-4" where bond beams are spaced tighter than that, etc…).	No			

160	A	Countertops	Please provide specifications for the solid surface countertop (SS).	5/22/2024	Whiting-Turner	Refer to specification section 123600.	No			
161	M	Control Wiring	Please provide any special control wiring requirements for the owner provided mechanical equipment listed on drawing M901.	5/22/2024	Whiting-Turner	**Response Pending: Open RFI**	Yes			Future Add
162	S	Compressible water stop	Please advise detail 12 for piping below grade takes precedent over Detail 15 on Drawing S501. Please confirm that compressible water stop may be provided in lieu of the steel pipe sleeve as shown in Detail 12 on Drawing S501.	5/22/2024	Whiting-Turner	Revised as part of addendum #5.	Yes			
163	A	Automotive Equipment	We have been advised by an automotive equipment distributor that the specified manufacturer for the automotive equipment "Snap-On" and their subsidiaries provide specialized pricing options to schools if the equipment is purchased direct. Please advise if the contractor should proceed to include pricing to furnish and install all of the scheduled automotive equipment on Drawings A613 & A617.	5/22/2024	Whiting-Turner	Equipment should be furnished and installed as indicated on the equipment schedules.	No			
164	A	Equipment	Please confirm that all specified auto related scheduled equipment is approved to be furnished and installed in a school technical educational building	5/22/2024	Whiting-Turner	All equipment has been approved to be furnished and installed as per New York State Education Departments Office of Facilities Planning.	No			
165	S	Concrete Reinforcements	Please advise if field cutting for concrete reinforcements can be permitted as referenced in Concrete Note 3 on Drawing S001	5/22/2024	Whiting-Turner	All reinforcing is intended to be shop fabricated. Straight bars may be field cut if needed, any other field modifications would require further approval.	No			
166	G	Project Labor Agreement	Please provide clarification on what equipment, items, and scope of work are defined and encompassed under the verbiage, "career tech education proprietary equipment," as described in Section 4.2 Union Referral Subsection F. on page 11 of the Project Labor Agreement for this project in Project Manual Vol 1.	5/22/2024	Whiting-Turner	Please refer to the PLA agreement and any questions related to the agreement, the pre-apprenticeship or apprenticeship programs and LMF participation to the Hudson Valley Building Trades Council.	No			
167	T	Vape Detection	Please provide specifications for the vape detection system.	5/22/2024	Whiting-Turner	Refer to revised T001 as part of addendum #4 for vape detection basis of design. Vape Detection system furnished be the owner. Refer to revised specification section 011200.01 as part of addendum #4.	Yes	T001	011200.01	Add #4
168	E	MC Cable	Specifications call for all wiring (concealed or exposed) to be single conductors in raceway. Confirm that MC cable will be suitable for use within walls and above hung ceilings.	5/22/2024	Whiting-Turner	MC cable can be used in situations described as per specification 260533, 3.1., A	No			
169	A	Roofing	Please advise if roofing system vapor barrier / waterproofing should be continued up CMU wall, under brick shelf angle, and under masonry system vapor barrier (TYP.). See Detail 8 on Drawing A352.	5/22/2024	Whiting-Turner	Roof system vapor barrier should be installed at concrete roof decks only and as per specification section 075323, 3.4, A. Revised as part of bid addendum #5	Yes	A411, A412, A413		Add #5
170	A	Tackboard	Drawing A601 Detail 2 shows a tack board, but no specific locations appear to have been provided on the floor plan. Please advise if and where these are required.	5/22/2024	Whiting-Turner	Revised as part of addendum #5.	Yes	A601		Add #5
171	A	Roller Shades	The spec section calls out "provide shades at all windows/storefront locations". Please confirm if there should be shades at all exterior windows or only where it calls out for shades at RS locations?	5/22/2024	Whiting-Turner	Roller Shades should be provided at locations as shown on drawings. Revised as part of addendum #5.	Yes		122400	Add #5

172	A	Roller Shades	Specs call out the manufacturer for interior manually operated roller shades as "Draper" with their product, "Manual Lightbloc Flexshade". However, the shade fabric, Soho - 1100 Series (1% open), is only produced by a different manufacturer, MechoShade Systems LLC. Please clarify exactly what shade fabric and manufacturer should be used.	5/22/2024	Whiting-Turner	Products specified are basis of design. Roller shade and shade fabric can be produced by different manufacturers.	No			
173	A	Door Schedule	Per the Door Schedule on sheet A902, Doors # CY101 & CY101A are shown to be FRP doors type DG with glass type G3. Glazing type G3 is shown to be fire rated glazing; no fire rating is shown on the door schedule for these openings. Please clarify if fire rated glass is required at these openings.	5/22/2024	Whiting-Turner EW Howell Construction Group	Revised as part of addendum #5.	Yes	A902		Add #5
174	A	Door Schedule	Per the Door Schedule on sheet A902, Doors # CY101 & CY101A are shown to be FRP doors type DG with glass type G3. These openings are shown to be door type DG which are stile & rail doors, all other FRP doors are shown to be flush doors type F or G and all the aluminum doors are shown as type DG. Please clarify if these are to be FRP stile & Rail doors or Aluminum.	5/22/2024	Whiting-Turner EW Howell Construction Group	Doors # CY101 and CY101A are to be door type DG as indicated on the door schedule.	No			
175	A	Welding Work Tables	"Please provide manufacturer and model and any necessary specifications for the welding worktable (WWT) as indicated on Drawing A615."	5/22/2024	Whiting-Turner	Welding worktables are provided by the owner. Revised as part of addendum #5	Yes	A615		Add #5
176	A	Crystaline Waterproofing	Is Section 07 16 16 Crystaline Waterproofing ONLY required at the elevator pit per 9/A502? Please confirm.	5/24/2024	EW Howell Construction Group	As per specification section 071616, only required at elevator pit.	No			
177	AF	Ceramic Wall Tile	Trim shapes are not available on manufacturer's website for materials which have CWT code. Please Confirm the following; Rondec will be used for materials which have CWT code. Cove base, inside and outside corner will be used for quarry tile.	5/24/2024	EW Howell Construction Group	**Response Pending: Open RFI**				
178	P	Lavatory Materials	The materials of SK3, SK4 and SK5 lavatories are not specified, please advise.	5/24/204	EW Howell Construction Group	**Response Pending: Open RFI**				
179	AF	Ceramic Wall Tile	CWT-1 is indicated for grooming in finish plan. However, CWT-4 is seen on room finish schedule. Please clarify which material will be used, CWT-1 or CWT-4.	5/24/2024	EW Howell Construction Group	**Response Pending: Open RFI**				
180	A	Drawing A112	Drawing CTE112 at Rooms 101, 101A-D; Enlarged Plan Reference to Drawing 1 on A605, might be Drawing 2 on A606, please advise.	5/28/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	Revised as part of addendum #5	Yes	A112		Add #5
181	A	Spec Section 096500	Section 096500-2 para 1.3H; please provide % or SF of Resilient Sheet Vinyl installed (not available in cartons) for Attic Stock, please advise	5/28/2024	Rizzo Companies EW Howell Construction Group Pike Construction Services, Inc.	**Response Pending: Open RFI**				
182	FP	Fire Pump	There is a fire sprinkler test header in Plumbing Equipment Room 105, but a fire pump is not shown. Please clarify.	5/28/2024	Pike Construction Services, Inc.	No fire pump. The test header is for forward flow testing of the backflow preventer.	No			

183	FP	Fire Protection	There are difference size beams and beam pockets throughout the facility. Depending on depth and distance apart, sprinklers may be required in every beam space or pocket. Can there be some guidance on where they are required?	5/28/2024	Pike Construction Services, Inc.	The licensed contractor would have to evaluate with regards to NFPA 13, the type of sprinklers used, the other obstructions in the ceiling plane, ect.	No			
184	G	Work Restrictions	Spec Section 011400 – Work Restrictions, paragraphs 1.3 Occupancy Requirements, 1.4 Use of Premises, and 1.8 Uniform Safety Standards […], and Section 011410 – NYSED 155.5 Regulations are substantially dedicated to describing how the Contractor will share use of the premise with the Owner during construction. They refer to coordinating construction operations to minimize conflicts and facilitate Owner usage, and discuss conditions, procedures, and safety requirements related to work in an existing, occupied building. Please confirm that these specification sections/paragraphs and others related to existing and/or occupied buildings and/or Owner's shared use of the premises during construction are not applicable.	5/28/2024	Pike Construction Services, Inc.	**Response Pending: Open RFI**				
185	G	Contract Language	After careful review of the provided contract, we have identified the following issues (see attachment). We request that the current form of contract be replaced with an unmodified version, or that the successful bidder be allowed to negotiate contract terms. Please advise	5/28/2024	Pike Construction Services, Inc.	**Response Pending: Open RFI**				
186	A	Fluid Applied Waterproofing	Section 07 14 00 Fluid Applied Waterproofing is included in the specification manual, however, only Crystalline waterproofing is mentioned at the elevator pit. Please advise on the location of Fluid-Applied Waterproofing if included within the project.	5/28/2024	EW Howell Construction Group	Section 071400 Fluid Applied Waterproofing shall be at all below grade foundations. Revised as part of addendum #5.	Yes		071400	Add #5

SECTION 001116 – ADVERTISMENT FOR BIDS (Bid Extension)

Architect
CSArch
19 Front Street
Newburgh, New York 12550

PH: 845-561-3179

Project Information
Newburgh Enlarged City School District,
201 Fullerton Ave
Newburgh, New York 12550

New CTE Building

The Owner, Newburgh Enlarged City School District, will receive sealed bids to furnish materials and labor to complete the New CTE building (CTE). Each bid shall be on a stipulated sum basis for the following prime contract:

Contract No. 01 GC-01 – General Construction

Bids shall not include New York State sales and compensating use taxes on materials and supplies incorporated into the Work, the Owner being exempt therefrom. One copy of sealed bids in an envelope with contract no., company name, address, project title and hand delivered to Newburgh Enlarged City School District, 124 Grand Street, Newburgh, NY 12550 Attn: Purchasing Agent no later than **3:00 PM**. **on Thursday June 20th, 2024**. One copy of bid in PDF format to be emailed no later than the next day before close of business for record keeping purposes. Bids received after 3:00 PM on June 20th,2024 will not be accepted and returned to the Bidder unopened at the bidder's expense. Bids will be opened publicly and read aloud after the specified receipt time. All interested parties are invited to attend.

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. Bidding Documents, Drawings and Specifications, may be viewed online free of charge at www.csarchplanroom.com under "public projects," or electronically downloaded for a non-refundable charge of one-hundred dollars ($100.00.)

Complete sets of Bidding Documents, Drawings and Specifications, on compact disc (CD) in PDF format may be obtained from Rev, 28 Church Street, Unit 7, Warwick, New York 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.

All bid addenda will be transmitted to registered plan holders via e-mail and will be available on www.csarchplanroom.com. Plan holders who have paid for hard copies of the bid 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. There will be no charge for registered plan holders to obtain hard copies of the bid addenda.

Each Bidder must deposit a Bid Security in the amount and form per the conditions provided in Instructions to Bidders. All Bids will remain subject to acceptance for forty-five (45) days after the Bid opening. Owner may, in its sole discretion, release any Bid and return Bid Security prior to that date.

A full performance bond, together with labor and material payment bonds in the form acceptable to the Owner, shall be required of the successful Bidder for the full contract amount.

The award of the bid pursuant to this notice is subject to the appropriation of funds for this purpose in accordance with the applicable provisions of the General Municipal Law. All bids must meet the requirements of the General Municipal law of the State of New York and all other applicable statutes and have attached a statement of non-collusion. All documents submitted in connection with this bid will become the property of the Newburgh Enlarged City School District, and the district will not return bids or bid documents.

The contract will be awarded by the school district to the lowest responsible bidder. In cases where two or more responsible Bidders submit identical bids as to price, the school district may award the contract to either of such bidders. The school district reserves the right to reject all bids and re-advertise for new bids at its discretion and/or to waive any informality in any bid which it deems immaterial in nature.

This project is publicly funded. The Bidders must comply with New York State Department of Labor Prevailing Wage Rate Schedule and conditions of employment. This Contract is subject to a Project Labor Agreement ("PLA") entered into between the Newburgh Enlarged City School District ("Owner") and Hudson Valley Building and Construction Trade Council, on behalf of itself and its affiliated Local Unions and signatory Local Unions on behalf of themselves and their members . By submitting a Bid, the contractor agrees that the PLA is binding on the Contractor and Subcontractors of all tiers. Please refer to the Bid Documents for further information. The Bidders to be awarded the Contract, as well as the Bidder's Subcontractors, will be required to execute a "Letter of Assent" prior to the award. Failure to execute the Letter of Assent will result in rejection of the Bidder.

The bidder is advised to review the PLA and the Letter of Assent, all of which are attached to AIA Document A232-2009 General Conditions of the Contract for Construction.

The Newburgh Enlarged City School District reserves the right to waive any informalities or irregularities in the Bids received, or to reject all Bids without explanation.

By Order Of:

Newburgh Enlarged City School District
END OF SECTION 001116

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~~ ***by the end of day 5/31/2024. (Bid Addendum #5)***

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 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. (**Bid Addendum #4)**

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.

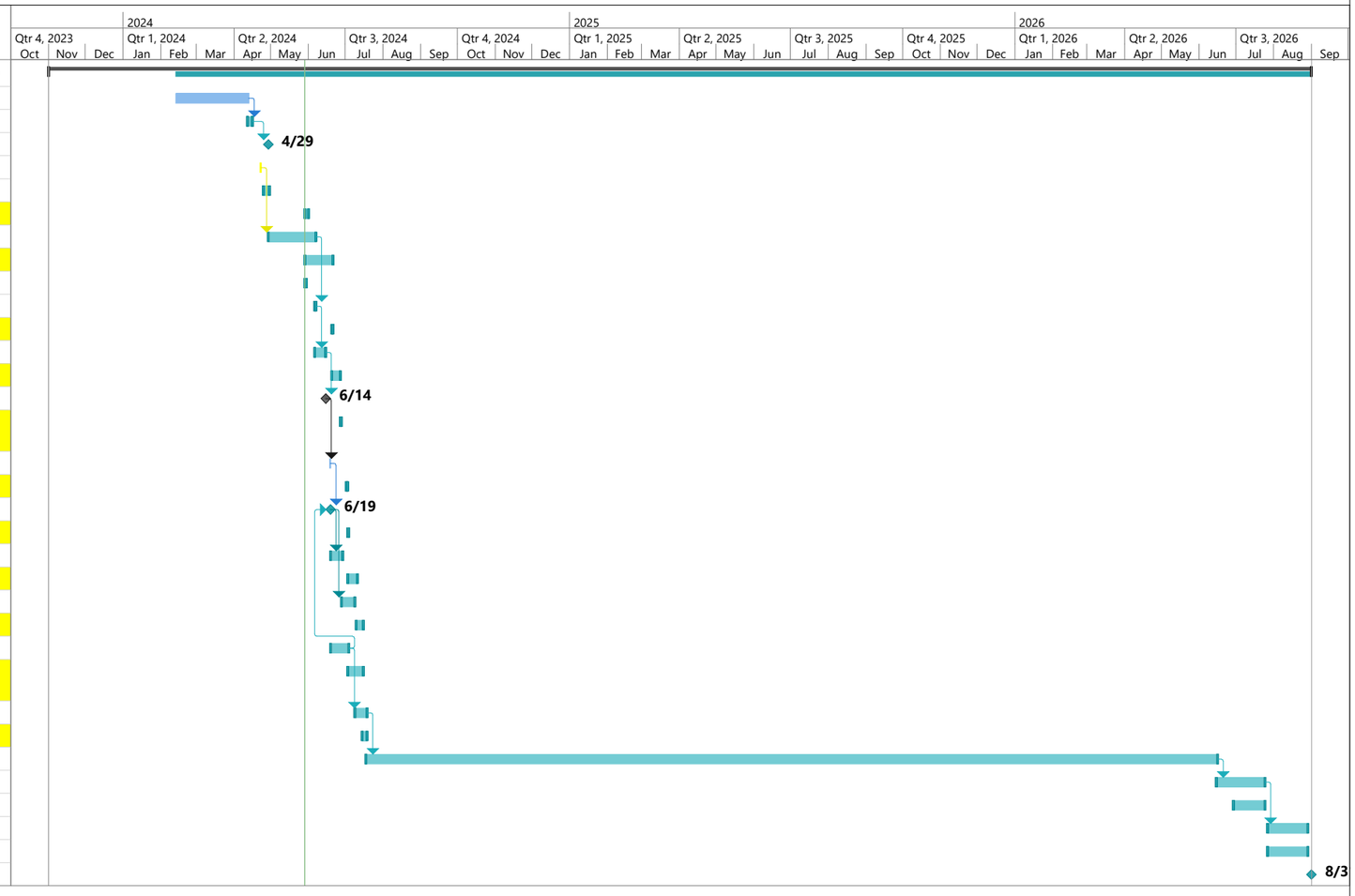
PART 7 – AGREEMENT FORM BETWEEN OWNER AND CONTRACTOR

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		Readvertisement#2, extend bid opening date per bidders request	3 days	Wed 5/29/24	Fri 5/31/24
8		Bid exention #1 switch to single prime contract	39 days	Mon 4/29/24	Thu 6/6/24
9		Bid extention #2, per bidders request	23 days	Wed 5/29/24	Thu 6/20/24
10		Orginal Bid Opening date	1 day	Wed 5/29/24	Wed 5/29/24
11		Revision#1 Bid Opening switched to single prime contract	1 day	Thu 6/6/24	Thu 6/6/24
12		Revision#2 Bid Opening, bidders request for extention	1 day	Thu 6/20/24	Thu 6/20/24
13		Revision#1 Bid leveling	9 days	Thu 6/6/24	Fri 6/14/24
14		Revision#2 Bid Leveling, bidders extention request	7 days	Thu 6/20/24	Wed 6/26/24
15		Revision#1 Lowest Qualified Bidder Recommendation to BOE	0 days	Fri 6/14/24	Fri 6/14/24
16		Revision#2 Lowest Qualified Bidder Recommendation to BOE, bidders extention request	1 day	Thu 6/27/24	Thu 6/27/24
17		Revision#1 BOE approval of Lowest qualified bidder	1 day	Tue 6/18/24	Tue 6/18/24
18		Revision#2 BOE approval of Lowest qualified bidder, bidders extention reque	1 day	Tue 7/2/24	Tue 7/2/24
19		Revision#1 NTP issued to bidder	0 days	Wed 6/19/24	Wed 6/19/24
20		Revision#2 NTP issued to bidder	1 day	Wed 7/3/24	Wed 7/3/24
21		Revision#1 Contract issued to Low Bidder	10 days	Wed 6/19/24	Fri 6/28/24
22		Revision#2 Contract issued to Low Bidder	8 days	Wed 7/3/24	Wed 7/10/24
23		Revised Awarded contractor upfront submittals IE: insurance, bonds	11 days	Fri 6/28/24	Mon 7/8/24
24		Revision#2 Awarded contractor upfronts submittals IE: Insurance, bonds	6 days	Wed 7/10/24	Mon 7/15/24
25		Revised GC submits first site logistics plan-See contract for other requiremen	15 days	Wed 6/19/24	Wed 7/3/24
26		Revision#2 GC submits first site logistics plan-See contract for other requirements	13 days	Wed 7/3/24	Mon 7/15/24
27		Revised Site work Commennces	10 days	Tue 7/9/24	Thu 7/18/24
28		Revision#2 Site work Commennces	4 days	Mon 7/15/24	Thu 7/18/24
29		Construction in progress	698 days	Thu 7/18/24	Mon 6/15/26
30		Construction Substantial Completion	40 days	Mon 6/15/26	Fri 7/24/26
31		Temp Trailer/Electric Demobolization parking lot Completion	26 days	Mon 6/29/26	Fri 7/24/26
32		District setup interiors	33 days	Mon 7/27/26	Fri 8/28/26
33		Testing DATA systems- Finals	33 days	Mon 7/27/26	Fri 8/28/26
34		Move In	0 days	Mon 8/31/26	Mon 8/31/26



CTE Milestone Schedule
Date: Wed 5/29/24

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

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
273100 - Telephone System												
Telephone System Equipment	X					X						
Telephone System Cabling and Pathways						X						
Telephone Programming and Training	X											
275113 - Public Address System												
Public Address Equipment	X					X						
Public Address Cabling and Pathways						X						
Public Address Programming and Training	X											
275313 - Clock Systems												
Clock Equipment	X					X						
Clock Cabling and Pathways						X						
Clock 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											

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
281301 - Audio Visual Entry System												
Audio Visual Entrance Equipment			X			X						
Audio Visual Entrance Cabling and Pathways						X						
Audio Visual Entrance Programming and Training			X									
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											
283100 - Fire Detection and Alarm												
Devices	X					X						
Programming	X											
Cabling and Pathways						X						
Vape Detection as indicated on 'T' Series Drawings												
Vape Detection Devices	X					X						
Vape Detection Pathways and Cabling for Cameras						X						
Vape Detection Programming	X											

SECTION 055100 - METAL STAIRS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Stairs with concrete treads.

B. Structural steel stair framing and supports.

C. Shop primed, field painted.

1.2 SUBMITTALS

A. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories.
   1. Indicate welded connections using standard AWS A2.4 welding symbols. Indicate net weld lengths.
   2. Include the design engineer's seal and signature on each sheet of shop drawings.

B. Design Data: As required by authorities having jurisdiction.

C. Design Data, Seismic Performance: Submit documentation that stairs meet performance requirements specified.

D. Welders' Qualification Statement: Welders' certificates in accordance with AWS B2.1/B2.1M and dated no more than 12 months before start of scheduled welding work.

E. Designer's Qualification Statement.

F. Fabricator's Qualification Statement: Provide documentation showing steel fabricator is certified under AISC 201, or

G. Fabricator's Qualification Statement: Provide documentation showing steel fabricator is accredited under IAS AC172.

1.3 QUALITY ASSURANCE

A. Structural Designer Qualifications: Professional Structural Engineer experienced in design of this work and licensed in the State in which the Project is located, or personnel under direct supervision of such an engineer.

B. Welder Qualifications: Welding processes and welding operators qualified in accordance with AWS D1.1/D1.1M and dated no more than 12 months before start of scheduled welding work.

C. Fabricator Qualifications:
   1. A qualified steel fabricator that is certified by the American Institute for Steel Construction (AISC) under AISC 201, or
   2. A qualified steel fabricator that is accredited by the International Accreditation Service (IAS) Fabricator Inspection Program for Structural Steel in accordance with IAS AC172.

PART 2 PRODUCTS

2.1 METAL STAIRS - GENERAL

A. Metal Stairs: Provide stairs of the design specified, complete with landing platforms, vertical and horizontal supports, railings, and guards, fabricated accurately for anchorage to each other and to building structure.
   1. Regulatory Requirements: Provide stairs and railings that comply with most stringent requirements of local, state, and federal regulations; where requirements of Contract Documents exceed those of regulations, comply with Contract Documents.
   2. Handrails: Comply with applicable accessibility requirements of ADA Standards.
   3. Structural Design: Provide complete stair and railing assemblies that comply with the applicable local code.
   4. Dimensions: As indicated on drawings.
   5. Shop assemble components; disassemble into largest practical sections suitable for transport and access to site.
   6. No sharp or rough areas on exposed travel surfaces and surfaces accessible to touch.
   7. Separate dissimilar metals using paint or permanent tape.

B. Metal Jointing and Finish Quality Levels:
   1. Architectural: All joints as inconspicuous as possible, whether welded or mechanical.
      a. Welded Joints: Continuously welded and ground smooth and flush.
      b. Mechanical Joints: Butted tight, flush, and hairline; concealed fastenings only.
      c. Exposed Edges and Corners: Eased to small uniform radius.
      d. Metal Surfaces to be Painted: Sanded or ground smooth, suitable for highest quality gloss finish.

C. Fasteners: Same material or compatible with materials being fastened; type consistent with design and specified quality level.

D. Anchors and Related Components: Same material and finish as item to be anchored, except where specifically indicated otherwise; provide all anchors and fasteners required.

2.2 METAL STAIRS WITH CONCRETE TREADS

A. Jointing and Finish Quality Level: Architectural, as defined above.

B. Risers: Closed.

C. Treads: Metal pan with field-installed concrete fill.
1. Concrete Depth: 1-1/2 inches, minimum.
2. ~~Precast Concrete Treads:~~
   a. ~~Concrete Strength: 5,000 psi at 28 days, minimum.~~
   b. ~~Air Content: 4 to 6 percent.~~
   c. ~~Cement Color: Natural gray.~~ ***(Bid Addednum #5)***
3. Tread Pan Material: Steel sheet.
4. Tread Pan Thickness: As required by design; 14 gauge, 0.075 inch minimum.
5. Concrete Reinforcement: Welded wire mesh.
6. Concrete Finish: Steel troweled.

D. Risers: Same material and thickness as tread pans.
1. Nosing Depth: Not more than 1-1/2 inch overhang.
2. Nosing Return: Flush with top of concrete fill, not more than 1/2 inch wide.

E. Stringers: Rolled steel channels.
1. Stringer Depth: as indicated.
2. End Closure: Sheet steel of same thickness as risers welded across ends.

F. Landings: Same construction as treads, supported and reinforced as required to achieve design load capacity.

G. Finish: Shop- or factory-prime painted.

H. Under Side of Stair: Exposed to view, to be finished same as specified for other exposed to view surfaces.

2.3 MATERIALS

A. Steel Sections: ASTM A36/A36M.

B. Steel Plates: ASTM A6/A6M or ASTM A283/A283M.

C. Ungalvanized Steel Sheet: Hot- or cold-rolled, except use cold-rolled where finished work will be exposed to view.
   1. Hot-Rolled Steel Sheet: ASTM A1011/A1011M, Designation CS (commercial steel).
   2. Cold-Rolled Steel Sheet: ASTM A1008/A1008M, Designation CS (commercial steel).

D. Concrete Fill: Portland cement Type I, 3000 psi 28 day strength, 2 to 3 inch slump, unless otherwise specified.

E. Concrete Reinforcement: Mesh type as detailed, galvanized.

2.4 ACCESSORIES

A. Steel Bolts, Nuts, and Washers: ASTM F3125/F3125M, Type 1, and galvanized to ASTM A153/A153M where connecting galvanized components.

B. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded.

C. Shop and Touch-Up Primer: SSPC-Paint 15, and comply with VOC limitations of authorities having jurisdiction.

2.5 SHOP FINISHING

A. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.

B. Do not prime surfaces in direct contact with concrete or where field welding is required.

C. Prime Painting: Use specified shop- and touch-up primer.
   1. Preparation of Steel: In accordance with SSPC-SP 2 Hand Tool Cleaning.
   2. Number of Coats: One.

PART 3 EXECUTION

3.1 EXAMINATION

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

3.2 PREPARATION

A. When field welding is required, clean and strip primed steel items to bare metal.

B. Supply items required to be cast into concrete and embedded in masonry with setting templates.

3.3 INSTALLATION

A. Install components plumb and level, accurately fitted, free from distortion or defects.

B. Provide anchors, plates, angles, hangers, and struts required for connecting stairs to structure.

C. Allow for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.

D. Provide welded field joints where specifically indicated on drawings. Perform field welding in accordance with AWS D1.1/D1.1M.

E. Other field joints may be either welded or bolted provided the result complies with the limitations specified for jointing quality levels.

F. Obtain approval prior to site cutting or creating adjustments not scheduled.

G. After erection, prime welds, abrasions, and surfaces not shop primed or galvanized, except surfaces to be in contact with concrete.

3.4 TOLERANCES

A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.

B. Maximum Offset From True Alignment: 1/4 inch.

END OF SECTION

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SECTION 071400 - FLUID-APPLIED WATERPROOFING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Modified polymer elastomeric fluid-applied waterproofing.
   1. ***Locations: All below grade foundations (Bid Addendum #5)***

1.2 REFERENCE STANDARDS

A. ASTM C661 - Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer; 2015 (Reapproved 2022).

B. ASTM C836/C836M - Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course; 2018 (Reapproved 2022).

C. ASTM D2370 - Standard Test Method for Tensile Properties of Organic Coatings; 2016 (Reapproved 2021).

D. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2022a, with Editorial Revision (2023).

1.3 SUBMITTALS

A. Product Data: Provide data for membrane, surface conditioner, flexible flashings, joint cover sheet, and joint and crack sealants.

B. Shop Drawings: Indicate special joint or termination conditions and conditions of interface with other materials.

C. Certificate: Certify that products meet or exceed specified requirements.

D. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention, and acceptable installation temperatures.

E. Manufacturer's qualification statement.

F. Installer's qualification statement.

G. Warranty:
   1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

2. Submit installer's certification that installation complies with warranty conditions for the waterproofing membrane.

1.4 QUALITY ASSURANCE

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

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

1.5 MOCK-UPs

A. Construct mock-up consisting of 100 sq ft of horizontal waterproofed panel to represent finished work including internal and external corners, drainage panel, base flashings, control joints, expansion joints, counterflashings, and protective cover.

B. Locate where directed.

C. Mock-up may remain as part of work.

1.6 FIELD CONDITIONS

A. Maintain ambient temperatures above 40 degrees F for 24 hours before and during application and until cured.

1.7 WARRANTY

A. Contractor to correct defective work within a five-year period after Date of Substantial Completion; remove and replace materials concealing waterproofing at no cost to Owner.

B. Provide five year manufacturer warranty against failure of waterproofing to resist penetration of water, except where such failures are the result of structural failures of building.
1. Hairline cracking of concrete due to temperature change or concrete shrinkage is not considered a structural failure.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Fluid-Applied Waterproofing:
1. Carlisle Coatings & Waterproofing: www.carlisleccw.com/#sle.

2.2 PRODUCT TYPES

A. Modified Polymer Elastomeric Fluid-Applied Waterproofing:
   1. ***Locations: All Below Grade Foundations*** ~~Vertical Surfaces: Apply directly to concrete substrate.~~***(Bid Addendum #5)***
   2. Cover with protection board.

2.3 MATERIALS

A. Modified Polymer Elastomeric Fluid-Applied Waterproofing: Fluid-applied, single-component, moisture-reacted, elastomeric, modified polymer waterproof membrane complying with ASTM C836/C836M
   1. Product:
      a. Carlisle Coatings & Waterproofing Inc; MiraSEAL.
   2. Cured Thickness: 60 mil, 0.060 inch, minimum.
   3. Suitable for installation over concrete substrates.
   4. Tensile Strength: 95 psi, minimum, measured in accordance with ASTM D2370.
   5. Ultimate Elongation: 350 percent, minimum, measured in accordance with ASTM D2370.
   6. Hardness: 10, plus or minus 3, measured in accordance with ASTM C661 using Shore A durometer.
   7. Water Vapor Transmission: 0.06 perm inch, maximum, measured in accordance with ASTM E96/E96M.
   8. Reinforcing: 1.18 oz/sq yd spunbonded polyester fabric.
      a. Thickness: 7.1 mil, 0.0071 inch.
      b. Width: 36 inches.
      c. Product:
         1) Carlisle Coatings & Waterproofing, Inc; CCW-500 Reinforcing Fabric.
   9. Protection Board: Provide type capable of preventing damage to waterproofing due to backfilling and construction traffic for either horizontal (H) or vertical (V) applications.
      a. Thickness: 90 mil, 0.090 inch, minimum.
      b. High-density, rigid, expanded polystyrene foam board.
      c. Product:
         1) Carlisle Coatings & Waterproofing Inc; CCW Protection Board-V.
   10. Adhesives, Sealants, Tapes, and Accessories: As indicated below or by waterproofing manufacturer in accordance with requirements.

2.4 ACCESSORIES

A. Seaming Materials: As recommended by waterproofing manufacturer.

B. Membrane Sealant: As recommended by waterproofing manufacturer.

C. Adhesives: As recommended by waterproofing manufacturer.

D. Thinner and Cleaner: As recommended by adhesive manufacturer, compatible with fluid-applied waterproofing.

E. Sealant for Cracks and Joints In Substrates: Resilient elastomeric joint sealant compatible with substrates and waterproofing materials, as recommended by waterproofing manufacturer.

F. Backer Rods: Closed-cell polyethylene foam rod, as recommended by waterproofing manufacturer.

G. Primer: Synthetic rubber solvent-based primer and surface cleaner.
   1. Product:
      a. Carlisle Coatings & Waterproofing Inc; Sure-Seal HP-250 Primer.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify existing conditions before starting this work.

B. Verify substrate surfaces are free of frozen matter, dampness, loose particles, cracks, pits, projections, penetrations, or foreign matter detrimental to adhesion or application of waterproofing system.

C. Verify that substrate surfaces are smooth, free of honeycomb or pitting, and not detrimental to full contact bond of waterproofing materials.

D. Verify that items penetrating surfaces to receive waterproofing are securely installed.

E. Where existing conditions are responsibility of another installer, notify Architect of unsatisfactory conditions.

F. Do not proceed with work until unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect adjacent surfaces from damage not designated to receive waterproofing.

B. Clean and prepare surfaces to receive waterproofing in accordance with manufacturer's instructions; vacuum substrate clean.

C. Do not apply waterproofing to surfaces unacceptable to waterproofing manufacturer.

D. Fill nonmoving joints and cracks with a filler compatible with waterproofing materials.

E. Seal moving cracks with sealant and nonrigid filler, using procedures recommended by sealant and waterproofing manufacturers.

F. Prepare building expansion joints at locations as indicated on drawings.

G. Install cant strips at inside corners.

3.3 INSTALLATION

A. Install fluid-applied waterproofing in accordance with manufacturers instructions and applicable requirements.

B. Apply primer or surface conditioner at a rate recommended by manufacturer; protect conditioner from rain or frost until dry.

C. At joints and cracks less than 1/2 inch in width including joints between horizontal and vertical surfaces, apply 12 inch wide strip of joint cover sheet.

D. At joints from 1/2 inch to 1 inch in width, loop joint cover sheet down into joint between 1-1/4 inch to 1-3/4 inch, and extend sheet at least 6 inches on either side of expansion joint.

E. Center joint cover sheet over joints, roll sheet into 1/8 inch thick coating of waterproofing material and apply second coat over sheet extending at least 6 inches beyond sheet edges.

F. Extend membrane over cants and up intersecting surfaces at membrane perimeter minimum 6 inches above horizontal surface for first ply and ____ inches at subsequent plies laid in shingle fashion.

G. Apply extra thickness of waterproofing material at corners, intersections, and angles.

H. Flexible Flashings: Seal items watertight that penetrate through waterproofing membrane.

I. Seal membrane and flashings to adjoining surfaces.
   1. Install termination bar along edges.

3.4 INSTALLATION - DRAINAGE COMPOSITE and PROTECTION BOARD

A. Immediately after cooling, dust membrane with tack-reducing surfacing at rate of approximately 10 lb per 100 sq ft.

B. After membrane has cooled, but before it becomes dusty, apply separation sheet and lap joints to ensure complete coverage.

C. Place protection board directly against cooled membrane; butt joints, and scribe and cut boards around projections, penetrations, and interruptions.

D. Adhere protection board to substrate with compatible adhesive.

3.5 PROTECTION

A. Do not permit traffic over unprotected or uncovered membrane.

END OF SECTION

SECTION 098316 - – SPRAY ACOUSTIC TREATMENT

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 spray applied acoustic finish system.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: For the following products:
   1. Sample of finished product on rigid backing indicating finished texture.

1.4 Quality Assurance

A. Applicator: Licensed by manufacturer.

B. Manufacturer must subscribe to independent laboratory follow-up inspection services of Underwriters Laboratories. Each bag shall be labeled accordingly.

C. Mockups: Provide a full-thickness finish mockup to demonstrate aesthetic effects and set quality standards for materials and execution.
   1. Architect will select representative surfaces and conditions for application of each type of gypsum veneer plaster and substrate.
   2. Provide mockups of ceilings in sizes of at least 100 sq. ft. (9 sq. m).
   3. Apply according to requirements for the completed Work, after permanent lighting and other environmental services have been activated.
   4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 FIELD CONDITIONS

A. Environmental Limitations: Comply with manufacturer's written recommendations.

1.6 Delivery, Storage and Handling

A. Deliver in original, unopened containers bearing name of manufacturer, product identification and reference to U.L. testing.

B. Store materials dry, off ground and under cover.

C. Protect liquid adhesive from freezing.

PART 1 PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain products from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials that comply with a Class A finish.
   1. Flame Spread Index: 5. Per ASTM E-84/UL 723.
   2. Smoke Developed: 5. Per ASTM E-84/UL 723

B. Manufacturer's written certification that product contains no asbestos, fiberglass or other man-made mineral fibers.

2.3 SPRAY ACOUSTIC FINISH – Type 1

A. Basis-of-Design Product: Subject to compliance with requirements, provide International Cellulose Corporation; SonaSpray FC or equal.
   1. Color: To be selected by architect. Dark Gray.
   2. Texture Finish: Smooth. Finish achieved by hand troweling to smooth out finish.
   3. Thickness: ~~0.50 inches.~~***0.75 inches. (Bid Addendum #5)***
   4. NRC: ~~0.65.~~***0.80 (Bid Addendum #5)***

2.4 ACCESSORIES

A. Provide primers or tie coats as recommended by the manufacturer to ensure product installation success. Primers and tie coats are to be included with this product design.

PART 2 EXECUTION

3.1 Examination

A. Examine surfaces and report unsatisfactory conditions in writing. Do not proceed until unsatisfactory conditions are corrected.

B. Verify surfaces to receive spray insulation to determine if priming/sealing is required to ensure bonding and/or to prevent discoloration caused by migratory stains.

3.2 Preparation

A. Provide masking, drop cloths or other satisfactory coverings for materials/surfaces that are not to receive insulation to protect from over-spray.

B. Coordinate installation of the sprayed cellulose fiber with work of other trades.

C. Prime all surfaces as required by manufacturer's instructions or as determined by examination.

D. Clean all deck prior to start of work to ensure starting with a clean substrate. All surfaces to be primed to stop rust bleeding thru finished surface. Primer to be compatible with acoustic system.

3.3 Installation

A. Average to a thickness of ¾ inch to achieve minimum NRC of 0.80. ~~*Addendum 2.*~~ ***(Bid Addendum #5)***

B. Install spray applied acoustical finish according to manufacturer's recommendations.

C. Apply spray material to metal deck only, protect structure from overspray.

D. Cure material with continuous natural or mechanical ventilation.

E. Remove and dispose of over spray.

END OF SECTION

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SECTION 122400 - WINDOW SHADES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Interior manual roller shades.
   1. Blackout shades at Science Classrooms, Computer Classrooms.
   2. Filtering shades at all other locations, unless otherwise indicated.

B. Provide shades ***at locations shown on drawings.*** ~~at all window/storefront locations~~. ***(Bid Addendum #5)***

1.2 REFERENCE STANDARDS

A. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi; 2015, with Editorial Revision (2021).

B. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films; 2019.

1.3 ADMINISTRATIVE REQUIREMENTS

A. Sequencing:
   1. Do not fabricate shades until field dimensions for each opening have been taken with field conditions in place.
   2. Do not install shades until final surface finishes and painting are complete.

1.4 SUBMITTALS

A. Product Data: Provide manufacturer's standard catalog pages and data sheets, including materials, finishes, fabrication details, dimensions, profiles, mounting requirements, and accessories.

B. Shop Drawings: Include shade schedule indicating size, location and keys to details, head, jamb and sill details, mounting dimension requirements for each product and condition, and operation direction.

C. Selection Samples: Include fabric samples in full range of available colors and patterns.

D. Manufacturer's Instructions: Include instructions for storage, handling, protection, examination, preparation, and installation of product.

E. Operation and Maintenance Data: List of all components with part numbers, sources of supply, and operation and maintenance instructions; include copy of shop drawings.

F. Warranty: Submit sample of manufacturer's warranty and documentation of final executed warranty completed in Owner's name and registered with manufacturer.

1.5 QUALITY ASSURANCE

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

B. Installer Qualifications: Company specializing in performing work of this type with minimum three years of documented experience with shading systems of similar size and type.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver shades in manufacturer's unopened packaging, labeled to identify each shade for each opening.

B. Handle and store shades in accordance with manufacturer's recommendations.

1.7 FIELD CONDITIONS

A. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

A. Provide manufacturer's warranty from Date of Substantial Completion, covering the following:
   1. Shade Hardware: 25 years.
   2. Fabric: 25 years.
   3. Aluminum and Steel Coatings: One year.

PART 2 PRODUCTS

2.1 Manufacturers

A. Interior Manually Operated Roller Shades:
   1. Draper, Inc; Manual LightBloc FlexShade: www.draperinc.com/#sle.

B. Source Limitations: Furnish products produced by a single manufacturer and obtained from a single supplier.

2.2 Roller Shades

A. General:
1. Provide shade system components that are easy to remove or adjust without removal of mounted shade brackets.
2. Provide shade system that operates smoothly when shades are raised or lowered.

B. Interior Roller Shades - Basis of Design: Draper, Inc; Manual LightBloc FlexShade: www.draperinc.com/#sle.
1. Description: Single roller, manually operated fabric window shade system complete with mounting brackets, roller tubes, hembars, hardware, and other components necessary for complete installation.
a. Drop Position: Regular roll.
b. Mounting: Wall mounted.
c. Roll Direction: Roll down, closed position is at window sill.
d. Size: As indicated on drawings.
e. Fabric: As indicated under Shade Fabric article.
2. Brackets and Mounting Hardware: As recommended by manufacturer for mounting indicated and to accommodate shade fabric roll-up size and weight.
3. Roller Tubes: As required for type of shade operation; designed for removal without removing mounting hardware.
a. Material: Extruded aluminum or steel, with wall thickness and material selected by manufacturer.
b. Size: As recommended by manufacturer; selected for suitability for installation conditions, span, and weight of shades.
4. Hembars: Designed to maintain bottom of shade straight and flat, selected from manufacturer's standard options.
5. Manual Operation:
a. Drive Chain: Continuous loop stainless steel beaded ball chain, 95 lb minimum breaking strength. Provide upper and lower limit stops.
1) Polyester Chain Color: to be selected.
b. Shade Lift Assistance: Manufacturer's standard spring device contained in the idler end of roller tube to reduce force required to lift shades; as required based on shade weight.
c. Chain Retainer:
1) Manufacturer's standard clip.
6. Accessories:
a. Fascia: Extruded aluminum, size as required to conceal shade mounting, attachable to mounting end caps, without exposed fasteners; clear anodized finish.
1) Color: to be selected..
b. Fasteners: Noncorrosive, and as recommended by shade manufacturer.

2.3 Shade Fabric

A. Fabric for Light-Filtering Shades: Nonflammable, color-fast, impervious to heat and moisture, glare control, and able to retain its shape under normal operation.
   1. Manufacturers:
      a. MechoShade Systems LLC; Soho - 1100 Series (1% open): www.mechoshade.com/#sle.
   2. Material: Vinyl coated fiberglass.
   3. Performance Requirements:
      a. Flammability: Pass NFPA 701 large and small tests.
      b. Fungal Resistance: No growth when tested according to ASTM G21.
      c. Solar Transmittance (Ts): 5.
      d. Visible Light Transmittance (Tv): 5.
      e. Solar Reflectance (Rs): 73.
   4. Openness Factor: 3%.
   5. Weight: 14.1 ounces per square yard.
   6. Color: As selected by Architect from manufacturer's full range of colors.
   7. Fabrication:
      a. Fabric Orientation: Railroaded, fabric is turned 90 degrees off the roll.

B. Fabric - Type RS2: Nonflammable, color-fast, impervious to heat and moisture, black out, and able to retain its shape under normal operation.
   1. Manufacturers:
      a. MechoShade Systems LLC; Soho - 1100 Series (1% open): www.mechoshade.com/#sle.
   2. Material: 100 percent polyester.
   3. Performance Requirements:
      a. Fungal Resistance: No growth when tested according to ASTM G21.
      b. Solar Transmittance (Ts): 0.
      c. Visible Light Transmittance (Tv): 0.
      d. Solar Reflectance (Rs): 70.
   4. Openness Factor: Opaque.
   5. Weight: 12.4 ounces per square yard.
   6. Color: As selected by Architect from manufacturer's full range of colors.
   7. Fabrication:
      a. Fabric Orientation: Railroaded, fabric is turned 90 degrees off the roll.

2.4 Roller Shade FABRICATION

A. Field measure finished openings prior to ordering or fabrication.

B. Dimensional Tolerances: Fabricate shades to fit openings within specified tolerances.

1. Vertical Dimensions: Fill openings from head to sill with 1/2 inch space between bottom bar and window stool.
2. Horizontal Dimensions - Inside Mounting: Fill openings from jamb to jamb.

C. Dimensional Tolerances: As recommended in writing by manufacturer.

D. At openings requiring continuous multiple shade units with separate rollers, locate roller joints at window mullion centers; butt rollers end-to-end.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine finished openings for deficiencies that may preclude satisfactory installation.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

C. Start of installation shall be considered acceptance of substrates.

3.2 PREPARATION

A. Prepare surfaces using methods recommended by manufacturer for achieving best result for substrate under the project conditions.

B. Coordinate with window installation and placement of concealed blocking to support shades.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions and approved shop drawings, using mounting devices as indicated.

B. Replace shades that exceed specified dimensional tolerances at no extra cost to Owner.

C. Adjust level, projection, and shade centering from mounting bracket. Verify there is no telescoping of shade fabric. Ensure smooth shade operation.

3.4 CLEANING

A. Clean soiled shades and exposed components as recommended by manufacturer.

B. Replace shades that cannot be cleaned to "like new" condition.

3.5 PROTECTION

A. Protect installed products from subsequent construction operations.

B. Touch-up, repair, or replace damaged products before Substantial Completion.

END OF SECTION

SECTION 33 11 02 - WATER UTILITY DISTRIBUTION PIPING

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. These specifications cover the installation of water distribution piping and appurtenances.

1.02 RELATED SECTIONS

A. Section 31 00 00 - Earthwork

1.03 REFERENCED STANDARDS

A. Recommended Standards for Water Works (Ten States Standards), latest Edition, Great Lakes Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, as amended.

B. AWWA/ANSI C151/A21.51 - Ductile Iron Pipe.

C. AWWA/ANSI C600 – Installation of Ductile Iron Water Mains and their Appurtenances.

D. AWWA/ANSI C104/A21.4 - Cement Mortar Lining for ductile iron pipe and fittings.

E. AWWA C508 - Swing-Check Valves for Waterworks Service, 2 in. Through 24 in. NPS.

F. AWWA C509 - Resilient-Seated Gate Valves for Water-Supply Service.

G. ASTM B88 - Standard Specification for Seamless Copper Water Tube.

H. ASTM D1557 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (6,000 ft-lbf/ft3).

I. ASME B16.22 - Wrought Copper and Bronze Solder-Joint Pressure Fittings.

1.04 SUBMITTALS

A. General: Submit the following in accordance with the Contract Document requirements.

B. Product data for pipe materials, pipe fittings, valves, hydrants, tapping sleeve, valve boxes, curb boxes, corporation valves, curb stops and accessories. Provide manufacturer's catalog information. Indicate valve data and ratings.

C. Product data for check valves, utility vaults and accessories.

D. Manufacturer's certificates.

E. Project record documents.

F. Pressure, Flushing and Disinfection Test Reports performed as well as any laboratory results received as part of this work. Specifically:

1. Pressure Report:
    a. Hydrostatic Test Pressure.
    b. Dates and time for start and completion of pressure testing.
    c. Pressure results at start and finish of each section tested.
    d. Amount of Water Used during testing.
    e. Signature of person performing tests and signature of witness.
2. Flushing Report
    a. Dates and times for flushing of each water main section.
    b. Length of flushing time, pipe size and flushing flow rate.
3. Disinfection report:
    a. Type and form of disinfectant used.
    b. Date and time of disinfectant injection start and time of completion.
    c. Test locations.
    d. Initial and final disinfectant residuals (quantity in treated water) in ppm for each outlet tested.
    e. Date and time of flushing start and completion.
    f. Disinfectant residual after flushing in ppm for each outlet tested.
    g. Procedure for neutralizing disinfectant and for discharge of flushed water.
    h. Signature of person performing tests and signature of witness.
4. Bacteriological report:
    a. Date issued, project name, and testing laboratory name, address, and telephone number.
    b. Time and date of water sample collection.
    c. Name of person collecting samples.
    d. Test locations.
    e. Initial and final disinfectant residuals in ppm for each outlet tested.
    f. MFT Coliform bacteria test results for each outlet tested. (Other testing methods are not acceptable).
    g. Certification that water conforms, or fails to conform, to bacterial standards of Orange County Department of Health.

G. Operation and maintenance data.

H. Spare parts and maintenance materials.

I. Warranties.

1.05 QUALITY ASSURANCE

A. Environmental Compliance: Comply with applicable portions of local health department and environmental agency regulations pertaining to water service systems.

B. Utility Compliance: Comply with Owner regulations and standards pertaining to water service.

C. Ensure products and installations of specified products are in conformance with recommendations and requirements of the following organizations:
National Sanitation Foundation (NSF).
American Society of Mechanical Engineers (ASME).
National Electrical Manufacturer's Association (NEMA).
Underwriters Laboratories (UL).

d. Piping materials shall bear label, stamp, or other markings of specified testing agency.

e. Comply with NSF 61 for materials for water-service piping and specialties for domestic water.

f. Perform Work in accordance with Orange County Department of Health requirements.

g. Valves: Manufacturer's name and pressure rating marked on valve body.

h. All products shall be produced within the United States of America and/or the Dominion of Canada and in new condition

1.06 PROJECT CONDITIONS

A. Location of Water Service Piping: The location, elevations, and grades of water service piping are shown on the Drawings and shall be adhered to as closely as possible. If, during construction of the project, it becomes necessary to make changes in the location or grades of the piping, the Owner’s representative will issue appropriate directions after being contacted by the Contractor.

B. Site Information: Contractor shall inspect the Work site, research public utility records, and verify existing utility locations. Verify that water service piping may be installed in compliance with original design and referenced standards.

C. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

1. Notify Engineer and Owner's Representative not less than three days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without Owner's Representative's permission.

1.07 DELIVERY, STORAGE AND HANDLING

A. Deliver, store, protect and handle products at site under provisions of the General Conditions. Elevate above grade.

B. Accept valves on site in shipping containers with labeling in place. Inspect for damage.

C. Provide temporary protective coating on cast iron and steel valves.

D. Provide temporary end caps and closures on piping and fittings. Maintain in place until installation.

E. Protect piping systems from entry of foreign materials by temporary covers, completing sections of the work, and isolating parts of completed system

i. Products lost or damaged by the Contractor shall be replaced at the sole cost of the Contractor.

1.08 SEQUENCING AND SCHEDULING

A. Coordinate connection to existing water systems as per Drawings.

B. Coordinate with other utility work.

PART 2 - PRODUCTS

2.01 PIPE AND FITTINGS

A. General: Provide pipe and pipe fitting materials compatible with each other. Where more than one type of materials or products is indicated, selection is Installer's option.

B. In other Part 2 articles where subparagraph titles below introduce lists, the following requirements apply for product selection:

1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the products specified.

2. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the manufacturers specified.

C. Water distribution piping 4" and larger: Ductile iron pipe shall be Class 52, cement lined, rubber-gasket, locking type for push-on joints, or mechanical restrained-joint type, rated for 350 psi working pressure, with mechanical joint cast iron/ductile iron fittings conforming to the following specifications:

1.	Rubber gaskets joints	AWWA/ANSI C111/A21.11
2.	Ductile iron and gray iron fittings	AWWA/ANSI C110/A21.10
3.	Ductile iron compact fittings	AWWA/ANSI C153/A21.53
4.	Ductile iron pipe	AWWA/ANSI C151/A21.51

D. End Caps: Ductile iron, AWWA C110 as manufactured by U.S. Pipe and Foundry, American Ductile Iron Pipe Company, Clow or approved equal.

E. Joint Restraint: AWWA C111. Joint restraints shall be U.L. listed and Factory Mutual approved to withstand a minimum pressure of 250 psi. The joint restraints shall be provided for ductile iron push on or mechanical joint pipe with twist off indicators and shall be as manufactured by EBAA Iron Megalug for mechanical joint pipe, U.S. Pipe and Foundry FIELD LOK 350 for push on joint, or approved equal

F. Transition Couplings:

1. Underground Piping, NPS 1-1/2 and Smaller: Manufactured fitting or coupling same size as, with pressure rating at least equal to and ends compatible with, piping to be joined. Connecting copper CTS tubing shall be completed using Mueller110 compression coupling H-15403. Connecting copper tubing (CTS) to iron pipe size (IPS) piping shall be completed using McDonald compression coupling model 74758-22-55.

2. Underground Piping, NPS 2 and Larger: AWWA C219, metal, sleeve-type coupling same size as, with pressure rating at least equal to and ends compatible with, piping to be joined, Dresser Style 38, Smith-Blair 411, or approved equal. These flexible couplings are not intended to be used in unrestrained pipe conditions where potential pullout of pipe ends can occur. For restraint of pipe and fittings are required, provide Roma Style 501 transition coupling with RomaGrip.

I. Concrete for cradles, pipe encasement, and special structures shall conform to ACI-318, with minimum compressive strength of 3,000 psi at 28 days, 5% to 7% entrained air, w/c ration less than 0.45, ¾ inch max size aggregate, and four (4) inch slump, unless otherwise noted.

J. Steel reinforcement embedded in concrete shall conform to ASTM A615, Grade 40 or 60, deformed bars, unless otherwise noted.

2.02 VALVES AND ACCESSORIES

A. General: Ductile iron by Clow, Mueller, Fairbanks, or approved equal.

B. AWWA, Cast-Iron Gate Valves:

1. Available Manufacturers and Models: Mueller, Clow (Model 2639/2640), American Flow Control (Series 2500).

2. Nonrising-Stem, Resilient-Seated Gate Valves: AWWA C509, gray- or ductile-iron body and bonnet; with bronze or gray- or ductile-iron gate, resilient seats, bronze stem, shall open by turning to the left (counterclockwise), shall be furnished with 2" square operating nut and wrench and shall be designed to take full pressure on either face with no pressure on the opposite face.
   a. Minimum Working Pressure: 250 psig.
   b. End Connections: Mechanical joint.
   c. Interior Coating: Complying with AWWA C550.

C. Valve Boxes: Valve boxes shall be shall be manufactured by Tyler Pipe Co., Ford, or Bingham & Taylor and shall be from one manufacturer. Valve boxes shall be of the sliding adjustable telescope type with a barrel not less than 5 ¼" in diameter with a round or oval base to fit the valve on which it is to be installed. Two "T" type valve wrenches of proper size shall be furnished for each type of valve. Wrenches shall be long enough to reach the deepest valve on the project with "T' handle three to five feet above grade. Valve boxes shall be provided with mating cast-iron drop covers. The direction of opening of the valve shall be indicated by an arrow in the direction of opening the word "open", cast in the cover. The word "water" shall be cast in the cover.

2.03 FIRE HYDRANTS

A. Manufacturer and Model: Clow Centurion Medallion.

B. Hydrants shall comply with AWWA C502 standards and conform to City of Newburgh standards. Hydrant shall be of the compression type, with the main valve opening against water pressure. The hydrant shall be dry-top, the bonnet and stuffing box shall be sealed from contact with water in the upper barrel. Hydrant shall be rated for a working pressure of 250 psig. Hydrants shall be traffic type with breakable safety flange.

C. Hydrant shall be furnished with two (2) 2 ½" national standard thread hose nozzles and one (1) 4 ½" national standard thread pumper nozzle. Nozzles shall be field replaceable. Outlets shall have cast iron caps with non-kinking steel chains.

D. Hydrant shall have minimum main valve opening of 5 ¼"and have a 6" mechanical joint inlet foot piece.

E. Hydrant shall open counter clockwise (left) and shall be so marked on the hydrant bonnet. Operating nut: Pentagon 1 ½" point to flat.

F. Hydrant shall have the name monogrammed or initialed by the manufacturer.

G. Minimum bury depth shall be five (5) feet measured from the top of the valve body to the finished ground surface.

H. Hydrant Extensions: Provide hydrant barrel extension in multiples of 6 inches with rod and coupling to increase barrel length as required to match finished grade at hydrant location.

I. Finish: Primer and two coats of red enamel in color, color subject to approval by the Owner's Representative.

J. As a general rule, hydrants should be oriented with the pumper outlet perpendicular to the curb or edge of pavement.

2.04 IDENTIFICATION

A. Detectable Warning Tapes: Acid- and alkali-resistant polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide by 4 mils thick, solid blue in color with continuously inscribed caption in black letters "CAUTION-WATER LINE BURIED BELOW", with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep.

B. Install warning tape directly above pipe, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

2.05 CONCRETE AS CONTROLLED BACKFILL

A. General: Concrete for use in trenches as controlled backfill shall conform to NYSDOT Standard Specifications. All other concrete shall conform to NYSDOT Standard specification 500.

2.06 INSPECTION OF MATERIALS

A. The manufacturers of materials shall furnish the Owner's Representative a Certificate of Inspection, certified by factory inspector, or reports of tests made by an independent testing laboratory, in three copies, showing that materials furnished conform to applicable specifications set out herein. Each inspection certificate or laboratory report shall identify the materials by number of pieces shipped and date of invoice.

B. A careful field inspection shall be made of all material before installation, and any material found to be damaged in shipment or not meeting the requirements of the Specifications will be rejected and replaced.

PART 3 - EXECUTION

3.01 ALIGNMENT, LINES, AND GRADES

A. The Contractor will be responsible for the proper execution of the work to the alignment, lines and grades established. Wherever obstructions not shown on the Drawings are encountered during the progress of the work and interfere to such an extent that an alteration of the line and/or grade is required, the Owner's representative shall have the authority to order a deviation from the line and grade.

3.02 AS-BUILT DRAWINGS

A. The Contractor is to maintain detailed notes and a red-line as-built set of marked-up Contract Drawings throughout construction. Prior to the close of the contract, the Contractor will be required to provide the Owner with a copy of the field notes and red-line as-built drawings.

B. The Contractor shall legibly mark and record actual locations, elevations, and dimensions of installed Work on a single set of the Contract Drawings. Installed Work

includes, but is not limited to, water mains and fittings such as bends and tees, valves, curb box, and individual water service lines.

C. Location of installed work shall be determined from cross tie measurements from at least two (2) fix objects such as utility pole, building corner, monument, etc.…

3.03 PREPARATION OF FOUNDATION FOR BURIED WATER SERVICE

A. Grade trench bottom to provide a smooth, firm, stable, and rock-free foundation, throughout the length of the pipe.

B. Remove unstable, soft, and unsuitable materials at the surface upon which pipes are to be laid, and backfill with clean sand or pea gravel to indicated level as directed by the Owner's representative.

C. Shape bottom of trench to fit bottom of pipe. Fill unevenness with tamped sand backfill. Dig bell holes at each pipe joint to relieve the bells of all loads and to ensure continuous bearing of the pipe barrel on the foundation.

3.04 INSTALLATION, GENERAL

A. General Locations and Arrangements: Drawings (plans and details) indicate the general location and arrangement of the water service piping. Location and arrangement of piping layout take into account many design considerations. Install the piping as indicated, to the extent practical. Establish elevations of buried piping to ensure not less than 5 ft of cover, or as specified in the contract plans. If, during construction of the project, it becomes necessary to make changes in the location or grades, the Owner's representative will issue appropriate directions after being contacted by the Contractor.

B. Use proper size increasers, reducers, and couplings, where different size or material of pipes and fittings are connected.

3.05 WATER MAINS RELATION TO EXISTING SEWERS

A. Maintain separation of water main from sewer and other utilities in accordance with contract plans and Orange County Department of Health requirements.

B. Horizontal Separation: Whenever possible, water mains shall be laid at least 10 feet, horizontally, from any existing or proposed gravity and force main sewers. The distance shall be measured edge to edge.

C. Vertical Separation: Whenever water mains must cross sewers, the water mains shall

be laid to provide a minimum clear vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. At crossings, one full length of water main should be centered over the sewer so that both joints will be as far from the sewer as possible.

D. Special Conditions: When it is impossible to obtain proper horizontal and vertical separation as stipulated above:

- the water main should be constructed of a slip-on or mechanical-joint ductile iron pipe, and the sewer constructed of mechanical-joint ductile iron pipe conforming to AWWA standards and both pressure tested to assure water tightness, OR

- Concrete encasement and/or offsetting of the waterline shall be required.

3.06 PIPE JOINT CONSTRUCTION AND INSTALLATION

A. Make pipe joints according to the following:

1. Ductile-Iron Piping, Gasketed Joints for Water-Service Piping: AWWA C600 and AWWA M41.

B. Join and install pipe as follows:

1. Restrained Pipe and fittings: Restrained push-on joint gaskets and/or mechanical joint restraint as per ANSI A21-51.
2. Where required for thrust restraint, provide and install restrained joint gaskets such as FieldLok 350 [U.S. Pipe] or Grip [American Pipe] for push-on pipe joints and mechanical joint restraints such as Megalug [EBAA Iron] or Uni-Flange [Ford Meter Box Company] for mechanical joint fittings and valves in accordance with manufacturer's recommendations.

C. Dissimilar Materials Piping Joints: Join different types of pipe with standard manufactured couplings and fittings intended for that purpose. Use adapters compatible with both piping materials, with OD, and with system working pressure.

3.07 PIPE INSTALLATION, GENERAL

A. Install in accordance with manufacturer's instructions and in conformance to AWWA C600.

B. Provide non-conducting dielectric connections wherever jointing dissimilar metals.

C. Route piping in orderly manner and maintain gradient.

D. Install piping to allow for expansion and contraction without stressing pipe, joints, or connected equipment.

E. To insure electrical conductivity, install a minimum of 3 bronze wedges at each mechanical or push on joint.

3.08 INSTALLATION – VALVES AND HYDRANTS

A. Valves

1. Set valves on solid concrete block.

2. Center and plumb valve box over valve. The boxes shall be fitted together securely and set so that the cover is flush with the surface of the ground and street. Before permanent paving or surface restoration is placed, the Contractor shall, if necessary, raise or lower the valve boxes so that the covers shall be even with the final surface of the permanent paving or surface restoration.

B. Hydrants

1. Set hydrants plumb; locate pumper nozzle perpendicular to and facing roadway.

2. Set hydrants to grade, with nozzles at least 20 inches above ground.

3. Provide a drainage pit 36 inches square by 24 inches deep filled with crushed stone. Encase elbow of hydrant in crushed stone to 6 inches (150 mm) above drain opening. Do not connect drain opening to sewer. Hydrant drains shall be plugged in areas of high ground water. Hydrants with plugged drains shall be noted on the as constructed drawings.

3.10 FIELD QUALITY CONTROL

A. Cleaning: Clear interior of piping and structures of dirt and other superfluous material as work progresses. Maintain swab or drag in piping and pull past each joint as it is completed.

B. Place plugs in ends of uncompleted pipe at the end of the day or whenever work stops.

C. Flush piping to remove collected debris.

D. Interior Inspection: Inspect piping to determine whether line displacement or other damage has occurred.

E. Make inspections after pipe has been installed and approximately 2 feet of backfill is in place, and again at completion of project.

F. If inspection indicates poor alignment, debris, displaced pipe, infiltration, or other defects, correct such defects and reinspect.

3.11 TESTING, FLUSHING, CLEANING AND DISINFECTION

A. Installation and testing of the proposed water mains shall be inspected and certified by the Owner's representative. The Contractor shall notify the Owner's representative 3 working days prior to commencing work, and again 3 working days hours prior to performing the required testing.

B. After completion of construction and before any user is permitted to connect, the water main shall be tested for pressure and leakage in accordance with AWWA C600 (latest edition) for 4 hours. All mains, including hydrants shall be included in the pressure and leakage test. Fill piping and conduct piping tests after thrust blocks have hardened sufficiently. Fill pipeline 24 hours before testing and apply test pressure to stabilize system. Use only potable water. Pressure and leakage tests shall be performed on sections between valves of not more than 1,500 feet in length. All equipment and labor for the hydrostatic test shall be provided by the Contractor.

C. Clean interior of piping systems. Remove dirt and debris as work progresses.

D. The Contractor will be allowed to use reasonable amounts of water from the existing Owner's distribution system for filling, flushing, pressure testing and disinfection of water mains. However, the Contractor will be required to coordinate this operation with the Owner's Operation's Department a minimum of 3 working days prior to each use to allow the Owner to maximize storage in the system so existing customers are not impacted. Water required due to Contractor's failure to meet testing specifications will be billed to the Contractor by the Owner at twice the Owner's standard water rate.

E. Pressure Testing:

1. Prior to starting work, verify system is complete, flushed and clean.

2. Perform pressure testing at 1.5 times the operating pressure for the system, at not less than 150 psi and in accordance with AWWA C600 standards for a minimum of 4 hours. Perform the pressure testing in conformance with the

pressure test requirements as indicated in the contract plans. Test pressure shall be maintained by the addition of water such that the minimum test pressure is maintained at all times.

3. The Owner's Representative shall witness all pressure testing and all pressure test results shall be subject to review and approval of the Owner's Representative and the Orange County Department of Health.

4. The section to be tested shall be slowly filled with water and the specified pressure applied by pump. Provisions shall be made to relieve air trapped at high points in the system through service lines or adjacent hydrants or through taps installed for this purpose by the Contractor as may be necessary.

5. The maximum allowable leakage shall be per AWWA C-600.

6. If leakage in system exceeds the specified amount, the Contractor shall, at no added cost to the Owner, locate, repair, and/or replace defect(s) and re-test piping system.

F. Flushing.

Perform flushing operations as follows:

1. Flushing water shall be obtained from the existing water system and directional flushing shall proceed from the water source into the new water mains, isolating sections not being flushed or not required to supply water.

2. The water mains shall be flushed at a minimum velocity of 2.5 feet per second for a minimum duration of 30 minutes.

3. The Contractor is alerted that all water shall be discharged in accordance with the following maximum chlorine residual levels as measured by the free chlorine content:

   a. In no case shall the chlorine residual be greater than 0.005ppm.
   b. Where the water is discharged to a trout spawning stream or its drainage basin, the chlorine residual shall not be greater than 0.001 ppm.

4. The Contractor shall provide and maintain all required de-chlorination facilities, including but not limited to holding tanks, chemical holding tanks and feed systems, test materials and or devices, and all piping and appurtenances as necessary to meet the above prescribed limits.

G. Disinfect water-distribution piping as follows

Use purging and disinfecting procedure prescribed by authorities having jurisdiction or, if method is not prescribed by authorities having jurisdiction, use procedure described in AWWA C651 as described below except that the tablet method shall not be used:

1. Fill system or part of system with water/chlorine solution containing at least 50 ppm of chlorine; isolate and allow to stand for 24 hours. After 24 hour holding period, free chlorine residual shall be measured. Free chlorine residual after 24 hour holding shall not be less than 25 mg/L. Should this level not be achieved, re-chlorination is required.

2. After standing time and achieving required free chlorine residuals, flush system with clean, potable water until chlorine residual matches water coming from system. The discharge, chlorine residual and de-chlorination requirements for this flushing water shall be the same as listed in Section 3.10 C above.

3. Submit water samples in sterile bottles to independent testing laboratory approved by the Owner. Provide two (2) sets of sample results with a second sample collected approximately 24 hours after the first sample. The Owner's Representative shall witness all disinfection sampling.

4. If any of the above samples fail to meet the standards of the Orange County Department of Health for drinking water, the water main shall be re-flushed, re-disinfected and re-sampled until satisfactory results are obtained. Water required for re-flushing or retesting shall be at the Contractor's expense.

H. Prepare reports of pressure testing, flushing and disinfecting activities.

3.12 INSTALLATION OF IDENTIFICATION

A. Install continuous plastic underground warning tape during backfilling of trench for underground mains and water service piping. Install warning tape directly above pipe, 12 inches below finished grade, except 6 inches below subgrade under pavements and sidewalks.

3.13 CLEANING UP

A. As work progresses, the Contractor shall clean up the streets and rights-of-way, and the backfill shall be rounded within the limits of the excavation. Soft trenches shall be marked and protected with signs and adequate lights, and subsequent settlement shall be promptly refilled.

B. All backfill trenches and surrounding areas of work in progress shall be maintained as clean and dust-free as practical, as determined by the Owner's Representative. Water, mechanical sweepers or other means as may be required shall be employed by the Contractor to satisfy the Owner's Representative.

C. Upon the completion of the work, all dirt, debris and rubbish shall be hauled and disposed of at an approved disposal site provided by the Contractor and the construction site left clean to the satisfaction of the Owner's Representative. All surplus materials furnished by the Contractor and all tools and temporary structures shall be removed from the site by the applicant.

3.14 RESTORATION AND MAINTENANCE OF PAVEMENTS, DAMAGED SURFACES AND PROPERTY

A. The Contractor shall restore or replace all removed or damaged paving, curbing, sidewalks, paved and grassed swales, gutters, graveled and paved driveways, mailboxes, shrubbery, grass, fences, sod or other disturbed surfaces or structures in a condition equal to that before the work began and to the satisfaction of the Owner's Representative and shall furnish all labor and material incidental thereto. In restoring improved surfaces, new pavement shall be laid, except that granite paving blocks, sound brick or sound concrete paving blocks may be reused.

B. Pavement replacement shall be made in accordance with the Contract Drawings and in accordance with the specifications and directions of State, County or Town authorities having jurisdiction over the pavement.

C. After the certification by the Owner's Representative of the completion of work, the Contractor shall maintain the surface of unpaved trenches and adjacent curbs and gutters, sidewalks, shrubbery, fences, sod and grass areas, and other disturbed surfaces until full restoration is established. The Contractor shall maintain, for one (1) year after certification of completion, areas that have been repaved and curbs, gutters and sidewalks that have been replaced, unless otherwise required by State, County or Town officials having jurisdiction. All material and labor required for the maintenance of affected areas shall be supplied by the Contractor, and the maintenance shall be done in a manner satisfactory to the Owner's Representative.

END OF SECTION 33 11 02

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	D CB	D ST
SANITARY SEWER & MANHOLE	S	S
WATER LINE		W
SANITARY SEWER		SA
NATURAL GAS (SEE DWG. P101)		G
ELECTRIC (SEE DWG. ES100 & E111)		E

UDIG·NY
SAFE DIGGING STARTS HERE

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, SANTIARY, 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.

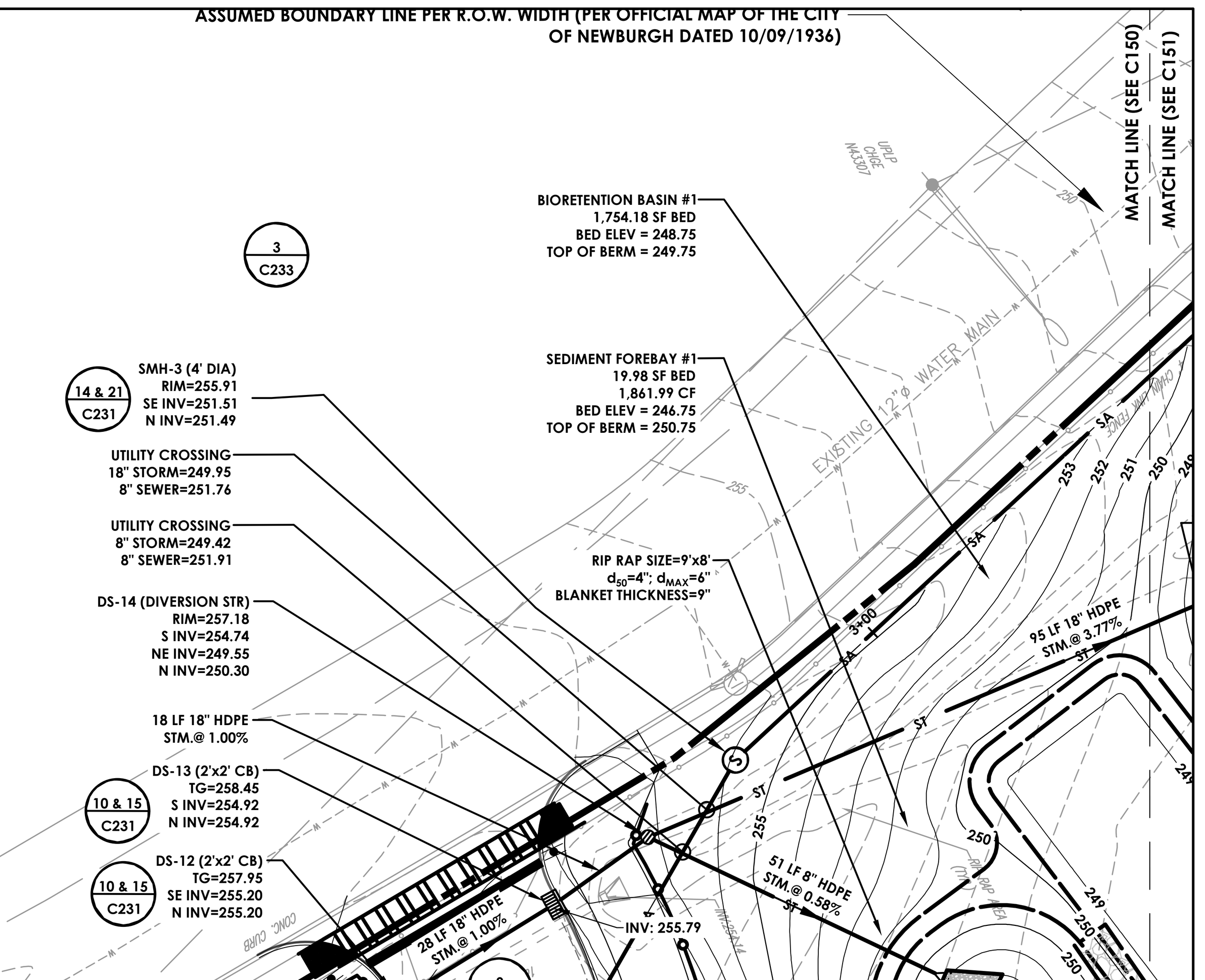
TESTS

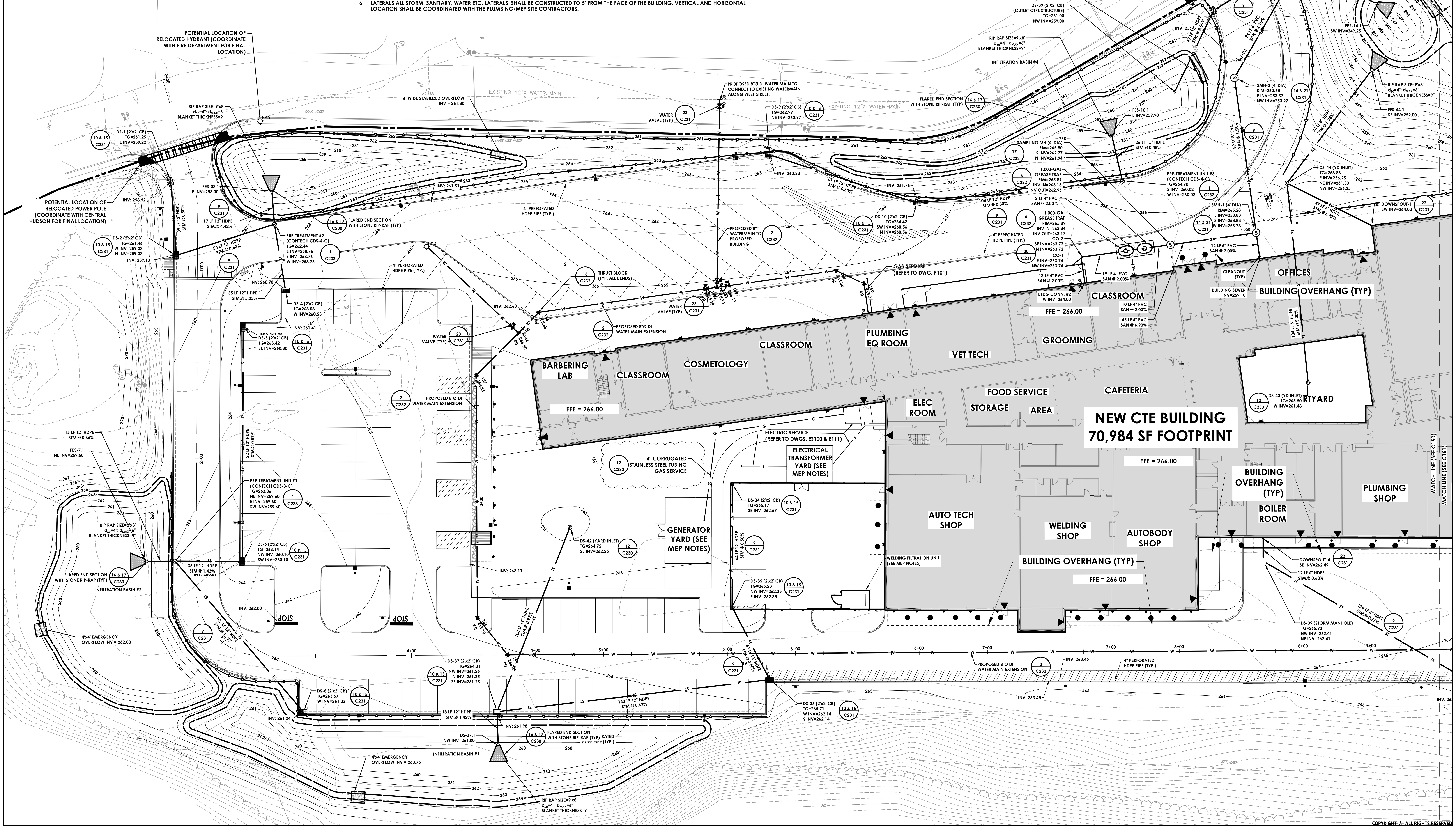
1. WATER MAINS SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA 605-13 WITH ENGINEER PRESENT.
2. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C-651. AFTER FLUSHING AND DISINFECTING THE WATER MAIN, CONSECUTIVE BACTERIOLOGICAL SAMPLES SHALL BE TAKEN. FIRE HYDRANTS ARE NOT 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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Consultant

Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH

STATE OF NEW YORK · CHRISTOPHER J. LAPORTA · 102592 · LICENSED PROFESSIONAL ENGINEER

#	DATE	DESCRIPTION
5	5/29/2024	BID ADDENDUM #5
4	5/20/2024	BID ADDENDUM #4
3	5/13/2024	BID ADDENDUM #3
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

UTIILTY PLAN

Sheet No.

CTE
C150

CONSTRUCTION DOCUMENTS

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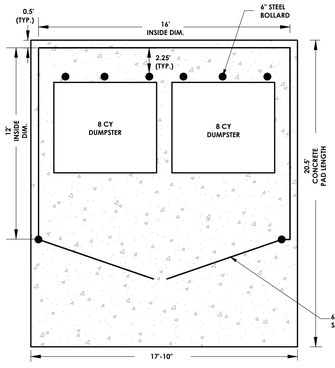
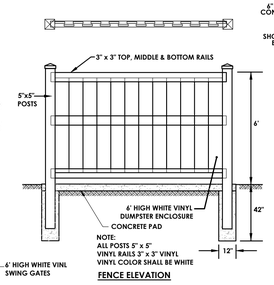
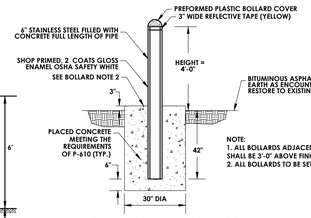


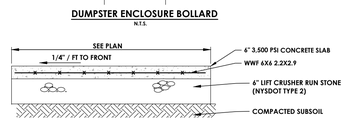
ENCLOSURE PLAN



FENCE ELEVATION



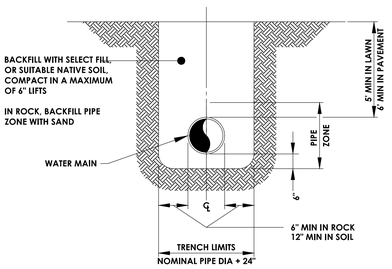
DUMPSTER ENCLOSURE BOLLARD



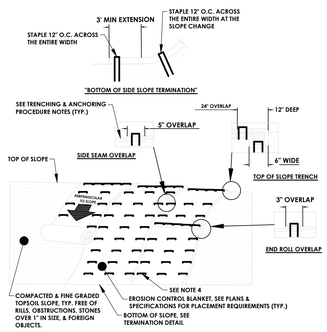
1. EACH LIFT TO BE COMPACTED WITH VIBRATORY ROLLER.

CONCRETE PAD DETAIL

1 DUMPSTER ENCLOSURE DETAIL
N.T.S.



2 WATERMAIN TRENCH DETAIL
N.T.S.



3 EROSION CONTROL BLANKET INSTALLATION DETAIL
N.T.S.

NOTES:

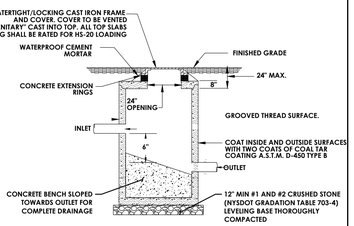
1. PREPARE THE TOPSOIL (SEEDBED) FIRST BY RAKING, SHAPING, FINE GRADING, COMPACTING, SEEDING & FERTILIZING THE SLOPES.
2. USE THE TRENCHING & ANCHORING PROCEDURES DETAILED HEREIN TO SECURE ANY EXPOSED MATERIAL ENDS. SECURE ALL PRODUCT OVERLAPS, OVERLAP IN THE DIRECTION OF WATER FLOW, PERPENDICULAR TO 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.

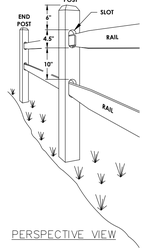
END ROLL OVERLAP: CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE SHALL BE PLACED END OVER END (SINGLE-STYLE) WITH A 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREAS, 12" APART ACROSS THE ENTIRE WIDTH.



17 SAMPLING MANHOLE DETAIL
N.T.S.

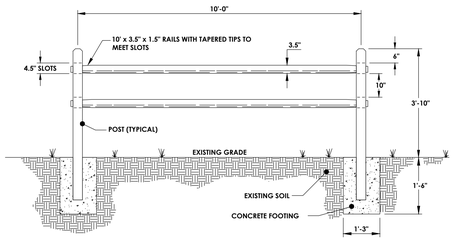
NOTES:

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.



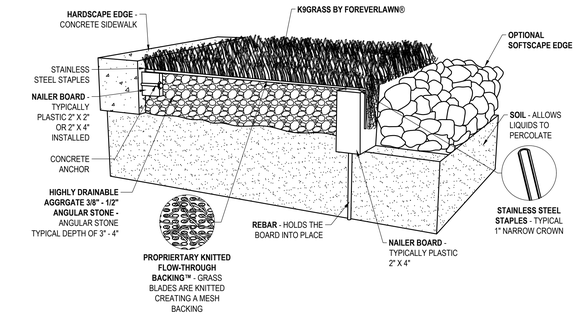
PERSPECTIVE VIEW

NOTES:
1) ALL WOOD FOR SPLIT RAIL FENCE TO BE PRESSURE TREATED.
2) END POST SHALL BE TERMINAL POST.



FRONT VIEW

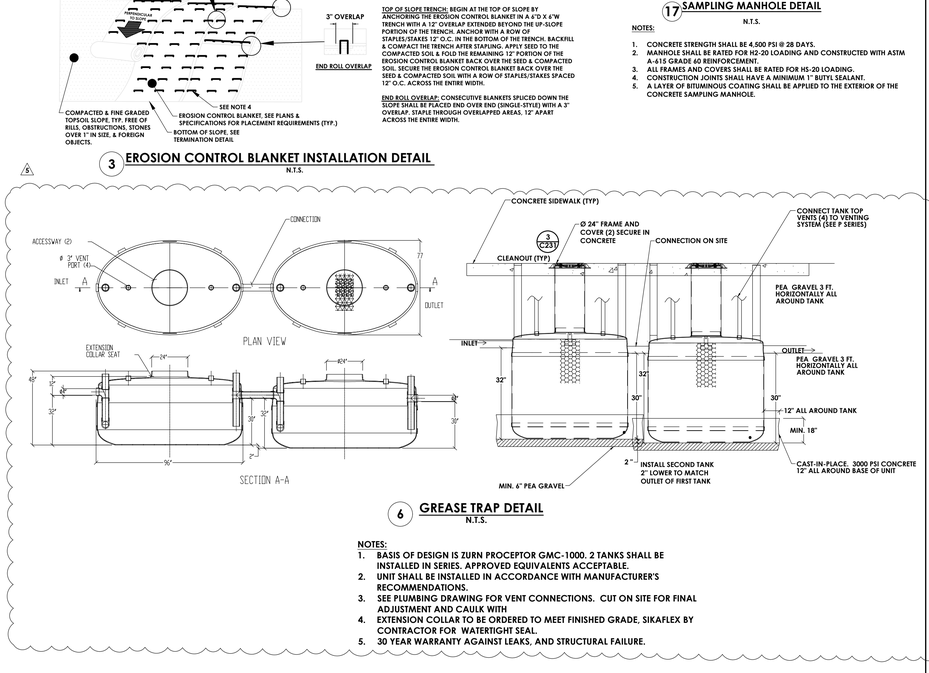
4 STANDARD SPLIT-RAIL FENCE
(TO BE INSTALLED NEAR BIORETENTION AREAS)
N.T.S.



PERSPECTIVE

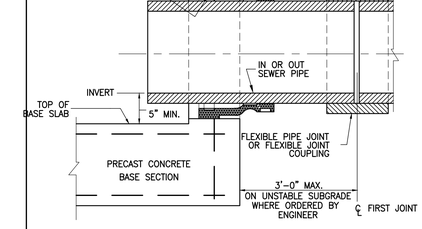
NOTES
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

5 ARTIFICIAL TURF DETAIL
(TO BE INSTALLED AT DOG RUN)
N.T.S.



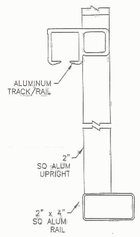
6 GREASE TRAP DETAIL
N.T.S.

NOTES:
1. BASIS OF DESIGN IS ZURN PROCEPTOR GMC-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 DRAWING FOR VENT CONNECTIONS. CUT ON SITE FOR FINAL ADJUSTMENT AND CAULK WITH
4. EXTENSION COLLAR TO BE ORDERED TO MEET FINISHED GRADE, SIKAFLEX BY CONTRACTOR FOR WATERTIGHT SEAL.
5. 30 YEAR WARRANTY AGAINST LEAKS, AND STRUCTURAL FAILURE.

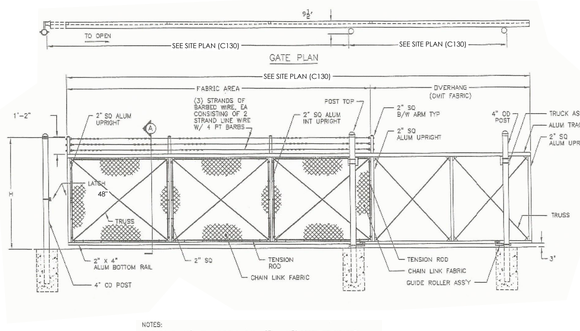


7 FLEXIBLE PIPE TO M.H./C.B. CONNECTION DETAIL
N.T.S.

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"	1'6"-0"	5'-0"	(1) ONE	(1) ONE
7'-0"	1'2"-0"	5'-0"	(1) ONE	(1) ONE
8'-0"	1'3"-0"	5'6"-0"	(1) ONE	(1) ONE
9'-0"	1'4"-0"	5'-0"	(2) TWO	(1) ONE
10'-0"	1'5"-0"	5'6"-0"	(2) TWO	(1) ONE
12'-0"	1'8"-0"	6'-0"	(2) TWO	(1) ONE
14'-0"	20'-8"	6'-0"	(2) TWO	(1) ONE
16'-0"	23'-6"	7'-0"	(3) THREE	(2) TWO
18'-0"	26'-0"	7'6"-8"	(3) THREE	(2) TWO
20'-0"	28'-6"	8'-0"	(3) THREE	(2) TWO
22'-0"	31'-6"	9'-0"	(4) FOUR	(2) TWO
24'-0"	34'-6"	10'-0"	(4) FOUR	(2) TWO
26'-0"	37'-6"	11'-0"	(4) FOUR	(2) TWO
28'-0"	40'-6"	12'-0"	(5) FIVE	(2) TWO
30'-0"	42'-6"	12'-8"	(5) FIVE	(2) TWO

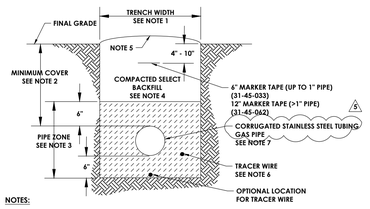


SECTION A-A
(6' THRU 30' OPENINGS)



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.



NOTES:

1. THE MINIMUM TRENCH WIDTH SHALL BE AS FOLLOWS:

PIPE SIZE	TRENCH WIDTH
UP TO 1" CTS	4"
1 ½" - 2"	12"
3" - 6"	PIPE O.D. + 12"

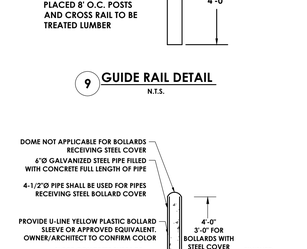
2. MINIMUM DEPTH OF COVER FROM FINAL GRADE TO TOP OF PIPE SHALL BE AS FOLLOWS:

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 03 004.1 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 4" 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.



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

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.

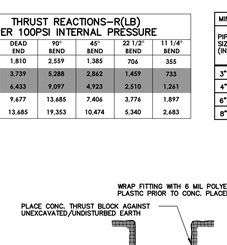
SOIL	BEARING STRENGTH ≤ (LB/SQ FT)
MUCK	0
SOFT CLAY	1,000
SILT	1,500
SANDY SILT	2,000
SAND	4,000
SANDY CLAY	6,000
HARD CLAY	9,000

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.

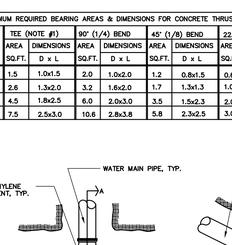
THRUST REACTIONS–R(LB) PER 100PSI INTERNAL PRESSURE					
NOM PIPE DIA IN.	DEAD END	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1,810	2,559	1,385	706	355
6	3,739	5,288	2,862	1,459	733
8	6,433	9,097	4,923	2,510	1,261
10	9,677	13,685	7,406	3,776	1,897
12	13,685	19,353	10,474	5,340	2,683

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

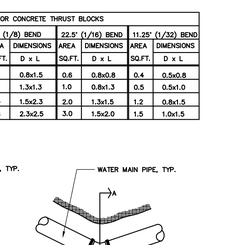
16 THRUST BLOCK RESTRAINTS
N.T.S.



SECTION A–A'

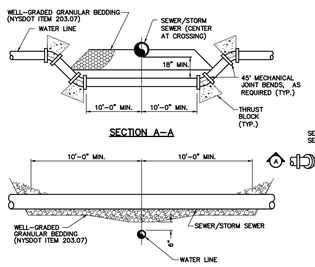


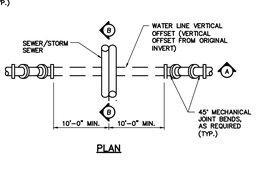
PLAN VIEW OF TEE INTERSECTION



PLAN VIEW OF WATER MAIN FITTING (BENDS)

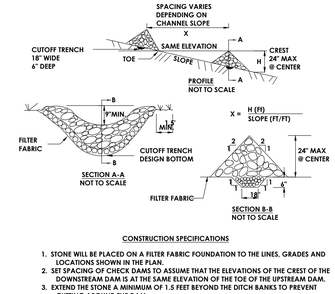
11 BOLLARD
N.T.S.





13 WATER LINE/SEWER LINE CROSSING DETAIL
N.T.S.

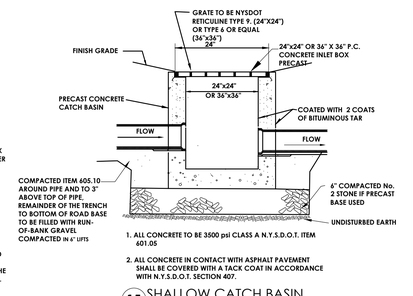
NOTES:
1. IF MUCK, PEAT, OR RECENTLY PLACED FILL ARE ENCOUNTERED/REQUIRED, ALL THRUSTS SHALL BE RESISTED BY PILES OR TIE RODS TO SOLID FOUNDATIONS, OR BY REMOVAL OF SUCH UNSTABLE MATERIAL AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS.



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.



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.

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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH

STATE OF NEW YORK
CHRISTOPHER J. TAPOROSKI
102593
LICENSED PROFESSIONAL ENGINEER

5	5/29/2024	BID ADDENDUM #5
4	5/28/2024	BID ADDENDUM #4
3	5/13/2024	BID ADDENDUM #3
2	5/3/2024	BID ADDENDUM #2
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Sheet Title
SITE DETAILS

Sheet No.
CTE C232

CONSTRUCTION DOCUMENTS

GENERAL NOTES:

1. ALL STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, HVAC, AND PLUMBING DRAWINGS AND SPECIFICATIONS.
2. THE CONTRACTOR(S) SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, ELEVATIONS, ETC. IN THE FIELD AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION OR SHOP DRAWINGS.
3. THE DRAWINGS ARE INTENDED TO REQUIRE AND TO INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT PROPER FOR THE WORK.
4. ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE AND NATIONAL CODES AND REQUIREMENTS.
5. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND SAFETY PROCEDURES. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR THEIR AGENTS OR EMPLOYEES OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK.
6. OBSERVE ALL OSHA AND OTHER APPLICABLE SAFETY REQUIREMENTS INCLUDING THE USE OF SAFETY GLASSES, HARD HATS, AND PROTECTION OF AREA WHEN WORKING OVERHEAD. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR CONSTRUCTION SAFETY AT ALL TIMES.
7. COORDINATE WORK OF ALL DISCIPLINES (STRUCT., ARCH., MECH., ELECT., ETC.) WITH EXISTING CONDITIONS, SPECIAL REQUIREMENTS, CONSTRUCTION SCHEDULE AND OTHER CONTRACTORS PERFORMING WORK AT THE SITE.
8. ALL TEMPORARY SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL DESIGN AND PROVIDE ANY TEMPORARY SHORING, BRACING, ETC., AS NEEDED FOR THE WORK SO AS NOT TO ENDANGER THE STRUCTURAL INTEGRITY OF ANY EXISTING FEATURE.
9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY DAMAGE DONE TO EXISTING FEATURES AS A RESULT OF THIS WORK. DAMAGED ITEMS SHALL BE REPLACED IN KIND AND AT NO ADDITIONAL COST TO THE OWNER.
10. DO NOT SCALE DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO CONSTRUCTION. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND CIVIL DRAWINGS AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. IMMEDIATELY. SEE THE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS FOR OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS. CHANGES AFFECTING THE LAYOUT SHOWN MUST BE SPECIFIC AND CLEARLY CONVEYED TO THE OWNER'S REPRESENTATIVE IN WRITTEN FORM AS A CHANGE FOR INCLUSION INTO THESE PLANS.
11. SHOP DRAWINGS: REPRODUCTION OF DESIGN DRAWINGS SHALL NOT BE PERMITTED FOR SHOP DRAWING SUBMISSIONS. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND PROVIDE REVIEW STAMP ON SHOP DRAWING SUBMISSIONS PRIOR TO SUBMITTAL TO ARCHITECT/ENGINEER INDICATING UNDERSTANDING AND ACCEPTANCE OF SUBMITTAL AND CONFIRMING CONFORMANCE TO PROJECT PLANS/SPECIFICATIONS.
12. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS MAY BE NECESSARY.
13. EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, PROCESS OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE PERTINENT TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK. EXCESS COST RELATED TO VARIATION IN THESE REQUIREMENTS SHALL BE BORNE BY THE APPROPRIATE CONTRACTOR.

FOUNDATION NOTES

1. FOUNDATION DESIGN IS BASED ON GEOTECHNICAL SUBSURFACE INVESTIGATION REPORT BY QUALITY GEO ENGINEERING, P.C., PROJECT NO. SE20-042, AND DATED JANUARY 6, 2021. THE CONTRACTOR SHALL THOROUGHLY REVIEW AND UNDERSTAND ALL PERTINENT CONSTRUCTION ASPECTS OF THIS REPORT BEFORE BEGINNING ANY WORK AND SHALL ENSURE ALL APPLICABLE WORK IS DONE IN ACCORDANCE WITH THIS REPORT.
2. DESIGN OF FOOTINGS AND FOUNDATION WALLS IS BASED ON THE FOLLOWING CRITERIA:
   A. MAXIMUM ALLOWABLE BEARING PRESSURE = 3,000 PSF
3. FOOTING ELEVATION SHOWN REPRESENT THE MINIMUM DEPTH TO WHICH FOOTINGS SHALL BE PLACED, BUT SHALL BEAR AT A DEPTH BELOW FINISHED GRADE NO LESS THAN 4' - 0". FOOTINGS SHALL BE LOWERED AS REQUIRED TO OBTAIN SUITABLE BEARING. WHERE FOOTINGS ARE REQUIRED TO BE LOWERED MORE THAN 1 FOOT, NOTIFY THE ENGINEER OF RECORD.
4. ALL UNSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED WITH FOOTINGS RESTING ON UNDISTURBED SOIL OR STRUCTURAL FILL WITH A MINIMUM BEARING CAPACITY OF 3,000 PSF, UNLESS OTHERWISE INDICATED. ALL EXISTING 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.
5. (5) IT HAS BEEN DETERMINED THAT BEDROCK MAY BE ENCOUNTERED DURING FOUNDATION EXCAVATION. IF DISCOVERED, THE ROCK IS TO BE REMOVED TO A MINIMUM OF 6" BELOW FOUNDATION BEARING ELEVATION. THIS OVEREXCAVATION SHALL BE BACKFILLED WITH DRAINAGE STONE TO THE BEARING ELEVATION INDICATED ON THE CONTRACT DRAWINGS, PER THE GEOTECHNICAL REPORT RECOMMENDATIONS.
6. A GEOTECHNICAL ENGINEER SHALL OBSERVE THE OPEN EXCAVATION TO DETERMINE THAT THE SOIL TYPE AND CONDITIONS ARE CONSISTENT WITH DESIGN CRITERIA OF THE SOIL REPORT. IF THE SOIL PROPERTIES ARE FOUND TO BE DIFFERENT FROM THIS CRITERIA THE OWNER'S REPRESENTATIVE SHALL BE PROMPTLY NOTIFIED SO THAT THE FOUNDATION DESIGN MAY BE REVIEWED.
7. NO FOUNDATION CONCRETE SHALL BE INSTALLED UNTIL ALL FOUNDATION WORK HAS BEEN COORDINATED WITH UNDERGROUND UTILITIES. FOOTINGS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES. WHERE FOOTINGS ARE REQUIRED TO BE LOWERED MORE THAN 1 FOOT, NOTIFY THE ENGINEER OF RECORD.
8. TO MINIMIZE WEATHERING, THE LAST 6 INCHES OF EXCAVATION FOR ALL FOOTINGS SHALL BE MADE IMMEDIATELY PRIOR TO PLACEMENT OF FOOTINGS.
9. (5) - NOTE NOT USED -
10. UNLESS OTHERWISE SHOWN, THE CENTERLINES OF ALL PIERS AND COLUMN FOOTINGS SHALL BE LOCATED ON COLUMN CENTERLINES.

CONCRETE NOTES

1. COMPLY WITH THE FOLLOWING CODES AND STANDARDS:
   A. ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
   B. ACI 305, ACI 306, ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
   C. ACI DETAILING MANUAL (ACI SP-66-04).
   D. ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORM WORK".
   E. CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE".
   F. ACI 304 "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE".
2. MATERIALS:
   A. REINFORCING BARS - ASTM A615, GRADE 60, DEFORMED
   B. WELDED WIRE FABRIC (WWF) - ASTM A185, FLAT SHEETS.
   C. PORTLAND CEMENT-ASTM C150, TYPE II.
   D. AGGREGATES-ASTM C33.
   E. AIR ENTRAINING ADMIXTURE-ASTM C260, CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER REQUIRED ADMIXTURES.
   F. PROHIBITED ADMIXTURES-CALCIUM CHLORIDE THYOCYANATES OR ADMIXTURES CONTAINING MORE THAN 0.1% CHLORIDE IONS ARE NOT PERMITTED.
3. CONTINUOUS REINFORCING IN WALLS AND SLABS MAY BE SPLICED, AS REQUIRED, PROVIDING BARS ARE OF THE LONGEST PRACTICABLE LENGTH AND SPLICES ARE SHOWN ON REINFORCING SHOP DRAWINGS. WHEREVER POSSIBLE, SPLICES SHALL BE STAGGERED. FIELD CUTTING OF REINFORCEMENT WILL NOT BE PERMITTED.
4. UNLESS OTHERWISE SHOWN, BARS AT WALL AND CONTINUOUS FOOTING CORNERS AND INTERSECTIONS SHALL BE DETAILED AS SHOWN ON FIGURE 15 OF ACI SP-66-04. CORNER BARS SHALL BE DETAILED AS SHOWN FOR OUTSIDE LOADED ONLY CORNERS. INTERSECTIONS SHALL BE DETAILED WITHOUT DIAGONAL BARS. ALL END HOOKS SHALL BE STANDARD 90 DEGREE END HOOKS AND CORNER BARS SHALL BE 48 BAR DIAMETERS X 48 BAR DIAMETERS MINIMUM UNLESS NOTED OTHERWISE.
5. PROVIDE DOWELS TO MATCH REINFORCEMENT SIZE AND SPACING INDICATED FOR ALL STRUCTURAL ELEMENTS, UNLESS OTHERWISE INDICATED. DOWELS MUST BE PLACED AND SECURED PRIOR TO CONCRETE PLACEMENT (WET STICKING REINFORCING NOT PERMITTED").
6. MAJOR CONSTRUCTION JOINTS ARE SHOWN ON THE DRAWINGS. INTERMEDIATE JOINTS IN WALLS, SLABS, AND FLOOR FRAMING ARE NOT SHOWN. CONSTRUCTION JOINTS MAY BE ADDED, OMITTED OR RELOCATED IF PROPERLY DETAILED ON SHOP DRAWINGS AND APPROVED BY THE OWNER'S REPRESENTATIVE.
7. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF OPENINGS AND SLEEVES IN CONCRETE WALLS AND SUPPORTED FLOORS. SPREAD REINFORCEMENT AT OPENINGS AND SLEEVES UNLESS OTHERWISE SHOWN. DO NOT CUT REINFORCEMENT. SEE TYPICAL REINFORCEMENT DETAILS FOR OPENINGS IN SLABS AND WALLS FOR ADDITIONAL REQUIREMENTS.
8. PLACING OF REINFORCEMENT: PROVIDE CHAIRS, BOLSTERS, ADDITIONAL REINFORCEMENT, AND ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITION SHOWN ON DRAWINGS. SUPPORT OF REINFORCEMENT ON FORM TIES, WOOD, BRICK, BRICKBAT OR OTHER UNACCEPTABLE MATERIAL, WILL NOT BE PERMITTED.
9. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS FOR SIZE AND LOCATION OF ALL EMBEDDED ITEMS, SLEEVES, SLAB DEPRESSIONS, OPENINGS, ETC. REQUIRED BY OTHER TRADES. RECONCILE THEIR EXACT SIZES AND LOCATIONS BEFORE PROCEEDING WITH THE WORK. ALL ITEMS SHALL BE FURNISHED AND INSTALLED PRIOR TO PLACEMENT OF CONCRETE. SECURE THE APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO PLACING OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS
10. IN SLABS-ON-GRADE, PROVIDE (2) #4 X 4' - 0" LONG DIAGONAL BARS IN THE MIDDLE OF THE SLAB AT EACH CORNER OF OPENINGS OVER 1' 0" SQUARE AND AT RE-ENTRANT CORNERS. SEE RE-ENTRANT CORNER TYPICAL DETAIL.
11. PROVIDE CONTROL JOINTS IN CAST-IN-PLACE CONCRETE SLABS-ON-GRADE AT 12 FEET O.C. MAX. LOCATE CONTROL JOINTS TO FORM APPROXIMATE SQUARE PANELS WITH THE LENGTH OF ONE SIDE NOT EXCEEDING THE ADJACENT SIDE BY A FACTOR OF 1.5. CONTROL JOINTS MAY BE CONTRACTION JOINTS, CONSTRUCTION JOINTS, OR EXPANSION JOINTS.
12. CONCRETE WALLS SHALL BE TEMPORARILY BRACED AGAINST EARTH PRESSURE AND OTHER FORCES UNTIL FLOOR SLABS ARE IN PLACE AND HAVE ATTAINED REQUIRED STRENGTHS.
13. WHERE CONSTRUCTION JOINTS ARE REQUIRED BUT ARE NOT INDICATED ON THE DRAWINGS, THEY SHALL BE LOCATED AT THE MID-SPAN OF BEAMS, SLABS AND WALLS AND SHALL BE SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE. UNLESS NOTED OTHERWISE OR SHOWN ON THE DRAWINGS, AT CONCRETE SLABS ON STEEL DECK, SUPPORTED BY STEEL BEAMS AND GIRDERS, CONSTRUCTION JOINTS SHALL BE PLACED AT MID-SPAN OF DECK AND MID-WAY BETWEEN GIRDERS
14. CHAMFER EDGES OF PERMANENTLY EXPOSED CONCRETE SURFACES 3/4-INCH, UNO.
15. SLABS AND BEAMS OR JOISTS SHALL BE CAST MONOLITHICALLY UNLESS OTHERWISE INDICATED.
16. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHEN IT IS SAFE TO REMOVE FORMS AND/OR SHORING. FORMS AND SHORING MUST NOT BE REMOVED UNTIL THE CONCRETE IS STRONG ENOUGH TO CARRY ITS OWN WEIGHT AND ANY ANTICIPATED SUPERIMPOSED LOADS. WHEN FORMS ARE STRIPPED THERE MUST BE NO EXCESSIVE DEFLECTION, DISTORTION, DISCOLORATION, AND NO EVIDENCE OF DAMAGE TO THE CONCRETE.

MASONRY NOTES:

1. MASONRY WORK SHALL CONFORM TO THE LATEST EDITIONS OF ACI 530 AND 530.1.
2. MATERIALS:
   A. CONCRETE MASONRY UNITS: HOLLOW OR SOLID UNITS ASTM C90. ALL UNITS SHALL BE TYPE I, NORMAL WEIGHT AUTOCLAVED CURED. MOISTURE CONTENT SHALL NOT EXCEED 30% OF MAXIMUM ABSORPTION, AND SHRINKAGE SHALL BE LESS THAN 0.35% AS PER ASTM C426.
   B. MORTAR: ASTM C270, TYPE S. NO MASONRY CEMENT WILL BE ALLOWED.
   C. f'_m = 2,000 psi
   D. REINFORCEMENT BARS: ASTM A615 GRADE 60.
   E. JOINT REINFORCEMENT: TRUSS TYPE WITH 0.148 INCH DIAMETER
   F. FINE GROUT: ASTM C476.
3. USE UNIT TEST METHOD, ACCORDING TO ASTM C -140, TO VERIFY MATERIALS PROPERTIES.
4. REINFORCING BARS IN MASONRY SHALL BE FULLY GROUTED FOR THEIR ENTIRE LENGTH AND SHALL BE LAP SPLICED 48 BAR DIAMETERS,UNO. VERTICAL REINFORCEMENT SHALL CONFORM TO ASTM A615 GRADE 60.
5. UNLESS OTHERWISE NOTED OR SHOWN, PROVIDE CMU LINTELS OVER OPENINGS IN CMU WALLS IN ACCORDANCE WITH TYPICAL CMU LINTEL SCHEDULE.
6. UNLESS OTHERWISE SHOWN, PROVIDE SOLID MASONRY BLOCK COURSES, CONSISTING OF SOLID BLOCKS OR GROUT FILLED BLOCKS FOR BEARING UNDER STRUCTURAL MEMBERS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:
   A. ONE COURSE UNDER OPEN WEB STEEL JOISTS
   B. THREE COURSES UNDER LONGSPAN STEEL JOISTS (2' 0" EACH SIDE OF JOIST)
   C. THREE COURSES UNDER STEEL BEAMS AND COLUMNS (2' 0" EACH SIDE OF MEMBER)
7. ALL EXPOSED MORTAR JOINTS SHALL BE TOOLED.
8. CMU WALLS SHALL RECEIVE TEMPORARY BRACING. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED BY THE ROOF (IF ONE STORY IN HEIGHT) OR AT EACH FLOOR/ROOF LEVEL (IF OVER ONE STORY IN HEIGHT).
9. PROTECT MASONRY WORK FROM DAMAGE DUE TO OTHER WORK AND THE WEATHER AS RECOMMENDED BY NCMA. ALL UNITS SHALL BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. SOLID UNITS SHALL BE LAID WITH FULL HEAD AND BED JOINTS, 3/8" THICK. LAY IN FULL RUNNING BOND UNLESS INDICATED OTHERWISE.
10. PLACE HORIZONTAL REINFORCING ON FULL MORTAR BED AT 16" OC MIN OR AS INDICATED ON DRAWINGS. VERTICAL REINFORCING IN MASONRY WHERE SHOWN SHALL BE PLACED IN GROUT FILLED CORES AND PROPERLY LOCATED AS INDICATED. SPLICES SHALL BE MINIMUM 36 X BAR DIAMETER.
11. USE LOW-LIFT GROUTING TECHNIQUES TO FILL CORES, UNLESS HIGH-LIFT GROUTING (VERTICAL PLACEMENT >4'0") IS APPROVED BY THE OWNER'S REPRESENTATIVE IN WRITING.
12. PROVIDE DOWELS TO MATCH REINFORCEMENT SIZE AND SPACING INDICATED FOR ALL STRUCTURAL ELEMENTS, UNLESS OTHERWISE INDICTED. DOWELS MUST BE PLACED AND SECURED PRIOR TO CONCRETE PLACEMENT ("WET-STICKING" REINFORCING NOT PERMITED).

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL WORK INCLUDES ALL STRUCTURAL STEEL TO BE FURNISHED AND ERECTED, BEAMS, COLUMNS, CHANNELS, ANGLES, JOISTS, LINTELS, BEARING PLATES, ETC., AS INDICATED ON THE DRAWINGS.
2. COMPLY WITH THE FOLLOWING CODES AND STANDARDS:
   A. AISC STEEL CONSTRUCTION MANUAL, ASD, 14TH EDITION
   B. AMERICAN WELDING SOCIETY (AWS) D1.1 "STRUCTURAL WELDING CODE STEEL", 2015.
   C. CURRENT OSHA ERECTION AND FABRICATION REQUIREMENTS.
3. MATERIALS:
   A. WIDE FLANGE BEAMS, GIRDERS AND COLUMNS: ASTM A992
   B. ANGLES, BARS AND PLATES: ASTM A36.
   C. HOLLOW STRUCTRUAL SECTIONS "HSS": ASTM A500, GRADE C
   D. PIPE: SCHEDULE 40 CONFORMING TO ASTM A53, GRADE B. U.N.O.
   E. HIGH STRENGTH BOLTS: ASTM A 325.
   F. WELDS: E70XX ELECTRODES.
4. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT-DIPPED GALVANIZED.
5. ALL STRUCTURAL STEEL SHOP CONNECTIONS SHALL BE WELDED AND ALL FIELD CONNECTIONS SHALL BE HIGH-STRENGTH BOLTED UNLESS SHOWN OTHERWISE.
6. ALL BOLTS SHALL BE TIGHTENED TO THE SNUG TIGHT CONDITION UNLESS NOTED OTHERWISE. SLIP CRITICAL BOLTS SHALL BE USED AT ALL MOMENT CONNECTIONS.
7. BOLTS SHALL BE 3/4 INCH DIAMETER, TYPE A325N, UNLESS OTHERWISE INDICATED. FOR DELEGATED DESIGN CONNECTIONS, BOLT SIZE, GRADE AND TYPE SHALL BE AS SPECIFIED BY THE DELEGATED CONNECTIONS DESIGN ENGINEER (ASTM A325N, 3/4 INCH DIAMETER, MINIMUM).
8. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, GRADE 36, UNLESS NOTED OTHERWISE. SWAGED ANCHOR BOLTS AND ANCHOR BOLTS WITH HOOKED END ANCHORAGE ARE NOT ALLOWED.
9. IN ACCORDANCE WITH AISC 303-10, CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES (STEEL CONNECTION DESIGN - OPTION 3), SHEAR CONNECTIONS FOR SIMPLY SUPPORTED BEAMS SHALL BE DESIGNED FOR THE LRFD REACTIONS INDICATED ON THE FRAMING PLANS IN ACCORDANCE WITH AISC REQUIREMENTS. WHERE NONE ARE INDICATED, BEAMS SHALL BE DESIGNED FOR AN END REACTION EQUAL TO NO LESS THAN 15 KIPS. DETERMINATION OF BOLT SIZE, TYPE, GRADE AND CONNECTING MATERIAL THICKNESS AND SIZE IS THE RESPONSIBILITY OF THE DELEGATED ENGINEER. CONNECTION DESIGN SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK (WHO IS CONTRACTED AND WORKING FOR THE FABRICATOR) AND SUBMITTED FOR REVIEW WITH THE STRUCTURAL STEEL SHOP DRAWINGS.
10. BOLTED MOMENT CONNECTIONS SHALL BE SLIP-CRITICAL CONNECTIONS. OTHER CONNECTIONS SHALL BE BEARING CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANES.
11. WELDS INDICATED "CJP" SHALL BE COMPLETE JOINT PENETRATION GROOVE WELDS. FABRICATOR SHALL PRODUCE COMPLETE JOINT PENETRATION GROOVE WELDS WHICH CONFORM TO ALL AWS D1.1 QUALIFIED WELD REQUIREMENTS AND WHICH ARE APPLICABLE TO THE SPECIFIC CONDITIONS SHOWN.
12. WELDS INDICATED "PJP" SHALL BE PARTIAL JOINT PENETRATION GROOVE WELDS. FABRICATOR SHALL PRODUCE PARTIAL JOINT PENETRATION GROOVE WELDS WHICH CONFORM TO ALL AWS D1.1 QUALIFIED WELD REQUIREMENTS AND WHICH ARE APPLICABLE TO THE SPECIFIC CONDITIONS SHOWN.
13. WHERE THE WORK OF OTHER TRADES REQUIRES CUTS, HOLES, ETC., IN STRUCTURAL STEEL MEMBERS, CUTS, HOLES, ETC., SHALL BE MADE IN THE SHOP AND SHALL BE SHOWN ON THE SHOP DRAWINGS. MAKING HOLES OR CUTS IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL NOT BE PERMITTED WITHOUT SPECIFIC APPROVAL OF THE OWNER'S REPRESENTATIVE.
14. STRUCTURAL STEEL AND PORTIONS OF THE UNDERSIDE OF STEEL DECK SHALL BE PROTECTED WITH SPRAYED FIRE PROTECTION AS INDICATED. SEE ARCHITECTURAL DRAWINGS FOR FIREPROOFING DETAILS. FOR STRUCTURAL STEEL THAT WILL RECEIVE FIRE PROOFING MATERAL, COORDINATE SHOP PRIMER REQUIREMENTS WITH FIRE PROOFING PRODUCT MANUFACTURER. (4)
15. COMPOSITE SLABS SHALL BE PLACED TO A MINIMUM OF THE THICKNESS INDICATED AND SHALL BE SCREEDED LEVEL.
16. SHEAR CONNECTORS FOR COMPOSITE BEAMS SHALL BE 3/4 INCH DIAMETER x 4 INCH LONG STUDS OF THE QUANTITY INDICATED ON THE FLOOR PLAN. DISTRIBUTE STUDS UNIFORMLY ALONG BEAMS AND GIRDERS WHERE QUANTITY IS SHOWN AS A SINGLE NUMBER. WHERE QUANTITY IS SHOWN AS MULTIPLE CALLOUTS ALONG A GIRDER DISTRIBUTE STUDS UNIFORMLY ALONG EACH SEGMENT. WHERE THE FLUTE OF THE DECK IS PERPENDICULAR TO THE BEAM, PROVIDE NO MORE THAN ONE STUD IN A FLUTE PER ROW (ALONG THE LENGTH OF THE BEAM). WHERE ONE ROW OF STUDS WILL NOT ACCOMMODATE THE REQUIRED QUANTITY OF STUDS, DISTRIBUTE HALF OF THE REMAINDER TO EACH END OF THE BEAM USING TWO ROWS OF STUDS WITH A MINIMUM CENTER-TO-CENTER SPACING BETWEEN ROWS OF 3 INCHES. WHERE THE FLUTE OF THE DECK IS PARALLEL TO THE GIRDERS PROVIDE A MINIMUM LONGITUDINAL SPACING OF 4 1/2 INCHES BETWEEN THE STUDS
17. WHERE PARTITIONS OF ANY MATERIAL ABUT STEEL COLUMN ENCASEMENTS, INCREASE THE DISTANCE FROM STEEL COLUMN TO FACE OF ENCASEMENT AS REQUIRED TO PROVIDE AN UNBROKEN SURFACE FOR THE WALL FINISH
18. THE LATERAL LOAD RESISTING SYSTEM INCLUDES STRUCTURAL STEEL, NON-STRUCTURAL STEEL ELEMENTS, AND THE DIAPHRAGM AS INDICATED BELOW. ALL ELEMENTS OF THE LATERAL LOAD RESISTING SYSTEM AND DIAPHRAGM ARE REQUIRED TO BE COMPLETE AS INDICATED AND DETAILED IN THE STRUCTURAL CONTRACT DOCUMENTS TO PROVIDE THE LATERAL STRENGTH AND STABILITY OF THE STEEL STRUCTURE. THE STRUCTURE SHALL BE CONSIDERED UNSTABLE UNTIL THESE SYSTEMS AND ELEMENTS ARE COMPLETE.
19. THE LATERAL LOAD RESISTING SYSTEM FOR THE STEEL STRUCTURE INCLUDES THE FOLLOWING ELEMENTS AS INDICATED AND DETAILED IN THE STRUCTURAL CONTRACT DOCUMENTS:
   A. BRACED FRAMES
   B. CONNECTIONS, BASEPLATES, ANCHOR BOLTS, AND GROUT
   C. MASONRY SHEAR WALLS
20. THE LATERAL LOAD RESISTING DIAPHRAGM FOR THE STEEL STRUCTURE INCLUDES THE FOLLOWING ELEMENTS AS INDICATED AND DETAILED IN THE STRUCTURAL CONTRACT DOCUMENTS:
   A. STEEL FLOOR DECK WITH CONCRETE AT 28-DAY STRENGTH
   B. STEEL ROOF DECK
21. STABILITY BRACING: THE STABILITY OF STRUCTURAL STEEL ELEMENTS INCLUDING INDIVIDUAL HOT-ROLLED STEEL SHAPES AND FABRICATED TRUSSES IS PROVIDED BY THE FOLLOWING ELEMENTS AS INDICATED AND DETAILED IN THE STRUCTURAL CONTRACT DOCUMENTS. THESE ELEMENTS SHALL BE COMPLETE AS SHOWN IN THE STRUCTURAL CONTRACT DOCUMENTS BEFORE ANY TEMPORARY MEANS AND METHODS REQUIRED FOR ERECTION ARE REMOVED.
   A. STEEL FLOOR DECK WITH CONCRETE AT 28-DAY STRENGTH
   B. STEEL ROOF DECK
   C. STRUCTURAL STEEL BRACING AND KICKERS

STEEL JOIST AND JOIST GIRDER NOTES:

1. COMPLY WITH THE FOLLOWING CODES AND STANDARDS:
   A. SJI 100 - 2020 - STANDARD SPECIFICATION FOR K-SERIES, LH-SERIES AND DLH-SERIES OPEN WEB STEEL JOISTS AND FOR JOIST GIRDERS
   B. SJI-COSP-2020 - CODE OF STANDARD PRACTICE FOR STEEL JOISTS AND JOIST GIRDERS
   C. TECHNICAL DIGEST NO. 8 - WELDING OF OPEN WEB STEEL JOISTS AND JOIST GIRDERS
   D. TECHNICAL DIGEST NO. 9 - HANDLING AND ERECTION OF STEEL JOISTS AND JOIST GIRDERS
   E. TECHNICAL DIGEST NO. 11 - DESIGN OF LATERAL LOAD RESISTING FRAMES USING STEEL JOISTS AND JOIST GIRDERS
   F. AISC DESIGN GUIDE 40 - RAIN LOADS AND PONDING
2. MATERIALS:
   A. CARBON STRUCTURAL STEEL - ASTM A36
   B. COLD-FORMED WELDED AND SEAMLESS CARBON STEEL STRUCTURAL TUBING IN ROUNDS AND SHAPES - ASTM A500
   C. WELDS: E70XX ELECTRODES
3. STEEL JOISTS SHALL RECEIVE STANDARD SHOP PAINT. DO NOT PRIME PAINT STEEL TO RECEIVE SPRAY-APPLIED FIREPROOFING, OR SPRAY-APPLIED ACOUSTIC TREATMENTS. REFER TO ARCH DRAWINGS FOR LOCATIONS OF ACOUSTIC TREATMENTS
4. STEEL JOIST DEFLECTION DUE TO DESIGN LIVE LOAD SHALL NOT EXCEED THE FOLLOWING:
   A. ROOFS: 1/360 OF SPAN
5. STEEL JOIST SPACING SHALL NOT EXCEED SPACING INDICATED ON DRAWINGS AND PLACEMENT OF JOISTS SHALL BE CAREFULLY COORDINATED WITH PARTITIONS AND WORK OF OTHER TRADES TO AVOID INTERFERENCES.
6. STEEL JOISTS, AS DESIGNED, DO NOT ACCOUNT FOR ROOF SLOPE. JOIST MFR TO VERIFY SIZE INDICATED IS ADEQUATE BASED ON ROOF SLOPE, ROOF LIVE LOAD AS INDICATED.
7. STEEL JOISTS SHALL BE DESIGNED FOR THE WIND UPLIFT PRESURES SHOWN ON S005 AND S006.
8. CONCENTRATED LOADS IN EXCESS OF 100 POUNDS APPLIED TO JOISTS SHALL BE APPLIED AT PANEL POINTS, UNLESS AN ADDED WEB MEMBER IS PROVIDED FROM POINT OF APPLICATION OF LOAD ON CHORD TO THE NEAREST PANEL POINT ON OPPOSITE CHORD.
9. PROVIDE JOIST BRIDGING IN ACCORDANCE WITH SJI SPECIFICATIONS. OMIT JOIST BRIDGING WHERE REQUIRED TO ALLOW INSTALLATION OF WORK OF OTHER TRADES. PROVIDE DIAGONAL BRIDGING IN EACH ADJACENT BAY IN LINE WITH OMITTED BRIDGING. ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE CONSTRUCTION LOADS ARE PLACED ON THE JOISTS.

STEEL DECK NOTES:

1. COMPLY WITH THE FOLLOWING CODES AND STANDARDS:
   A. AISI / STEEL DECK INSTITUTE "C-2011 STANDARD FOR COMPOSITE STEEL DECK-SLABS"
   B. AMERICAN WELDING SOCIETY (AWS) D1.3 "STRUCTURAL WELDING CODE- SHEET STEEL", 2015.
2. ROOF AND FLOOR DECK CONNECTIONS: IN ACCORDANCE WITH TYPICAL DECK ATTACHMENT DETAIL.
3. ALL METAL DECK HAS BEEN DESIGNED TO BE CONTINUOUS OVER THREE SPANS MINIMUM, AND SHALL BEAR AT LEAST 2 INCHES MINIMUM ON STEEL SUPPORTS OR MORE AS REQUIRED BY DECK MANUFACTURER. FOR ONE OR TWO SPAN CONDITIONS, THE CONTRACTOR SHALL PROVIDE SHORING AS REQUIRED, OR FURNISH HIGHER GAGE DECK AS REQUIRED TO SUPPORT ALL THE APPLICABLE LOADS. CONTRACTOR SHALL SUBMIT ALTERNATE FOR APPROVAL. CONTRACTOR SHALL ENSURE THAT CONSTRUCTION LOADS ON STEEL DECK DO NOT EXCEED SDI PUBLISHED CONSTRUCTION LOAD CRITERIA.
4. DESIGN ROOF DECK IN ACCORDANCE WITH THE FOLLOWING:
   A. YEILD STRENGTH, Fy = 50 KSI
   B. DEPTH: AS INDICATED
   C. MINIMUM SECTION MODULUS, Sp: 0.224 INCHES^3
   D. MINIMUM MOMENT OF INERTIA, In: 0.217 INCHES^4
5. DESIGN FLOOR DECK IN ACCORDANCE WITH THE FOLLOWING:
   A. YEILD STRENGTH, Fy = 50 KSI
   B. DEPTH: AS INDICATED
   C. MINIMUM SECTION MODULUS, Sp: 0.326 INCHES^3
   D. MINIMUM MOMENT OF INERTIA, In: 0.407 INCHES^4
6. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES, INSERTS, ETC., WITH SHOP DRAWINGS OF THE EQUIPMENT TO BE INSTALLED. SEE MECHANICAL DRAWINGS FOR LOCATIONS OF PIPE SLEEVES. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF OPENINGS IN ROOF.

COLD-FORMED METAL FRAMING NOTES:

1. FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE "LIGHT GAGE COLD FORMED STEEL DESIGN MANUAL", LATEST EDITION AND THE AISI SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, LATEST EDITION.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE FINAL DESIGN AND PERFORMANCE OF ALL COLD-FORMED METAL FRAMING. ALL SIZES, GAGES AND DESIGN REQUIREMENTS SHOWN ON THESE DRAWINGS ARE TO BE CONSIDERED MINIMUM REQUIREMENTS AND NOT FINAL REQUIREMENTS.
3. PROVIDE CLIPS, CONNECTIONS, STRAPPING AND/OR BRIDGING FOR TEMPORARY LATERAL BRACING AND ALL ITEMS NECESSARY FOR COMPLETE INSTALLATION.
4. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE – SHEET STEEL", LATEST EDITION AND PERFORMED BY CERTIFIED, LICENSED WELDER.
5. DETAILING AND FABRICATION OF ALL COLD-FORMED STRUCTURAL MEMBERS SHALL CONFORM TO THE AISI SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, LATEST EDITION.
6. TEMPORARY BRACING SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED. WALL STUD BRIDGING SHALL BE INSTALLED IN A MANNER AS TO PREVENT ROTATION AND ALSO IN A MANNER TO PROVIDE RESISTANCE TO BOTH MINOR AXIS BENDING AND ROTATION. BRIDGING ROWS SHALL BE EQUALLY SPACED AT 4'-0" ON CENTER MAXIMUM, UNLESS APPROVED OTHERWISE.
7. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ALL COLD FORMED METAL FRAMING LOCATIONS AND REQUIREMENTS. COORDINATE LOCATIONS AND DESIGN FOR ALL WALL HUNG EQUIPMENT.
8. PROVIDE AND COORDINATE VERTICAL SLIP CONNECTIONS TO STRUCTURAL STEEL MEMBERS WHERE REQUIRED. ACCOUNT FOR A MINIMUM DEFLECTION OF 1 INCH UNLESS NOTED OTHERWISE.

POST-INSTALLED ANCHOR NOTES:

1. POST INSTALLED ANCHORS HAVE BEEN DESIGNED WITH HILTI ANCHORS (NOTED BELOW) AS THE BASIS OF DESIGN, UNLESS NOTED OTHERWISE ON CONTRACTOR DRAWINGS. INSTALL ANCHORS PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
   A. EXPANSION ANCHORS: KWIK BOLT 3 OR TZ2
   B. SLEEVE ANCHORS: HIT-SC SLEEVE ANCHOR
   C. ADHESIVE ANCHORS: HIT HY-200
   D. SCREEN TUBE ANCHORS: HIT HY-270
2. CONTRACTOR MAY PROVIDE EQUIVALENT ANCHORS WITH SIZE AND FINISH AS NOTED AND EQUIVALENT SHEAR AND TENSION CAPACITIES AFTER MODIFICATION DUE TO EMBEDMENT, SPACING AND EDGE DISTANCES AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE
3. ALL ADHESIVE ANCHORS FOR REINFORCING SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS.
4. DESIGN ADHESIVE BOND STRENGTH FOR ADHESIVE ANCHORS IN CONCRETE HAS BEEN BASED ON ACI 355.4, TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE DRILL BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS.
5. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318 D.9.2.4.

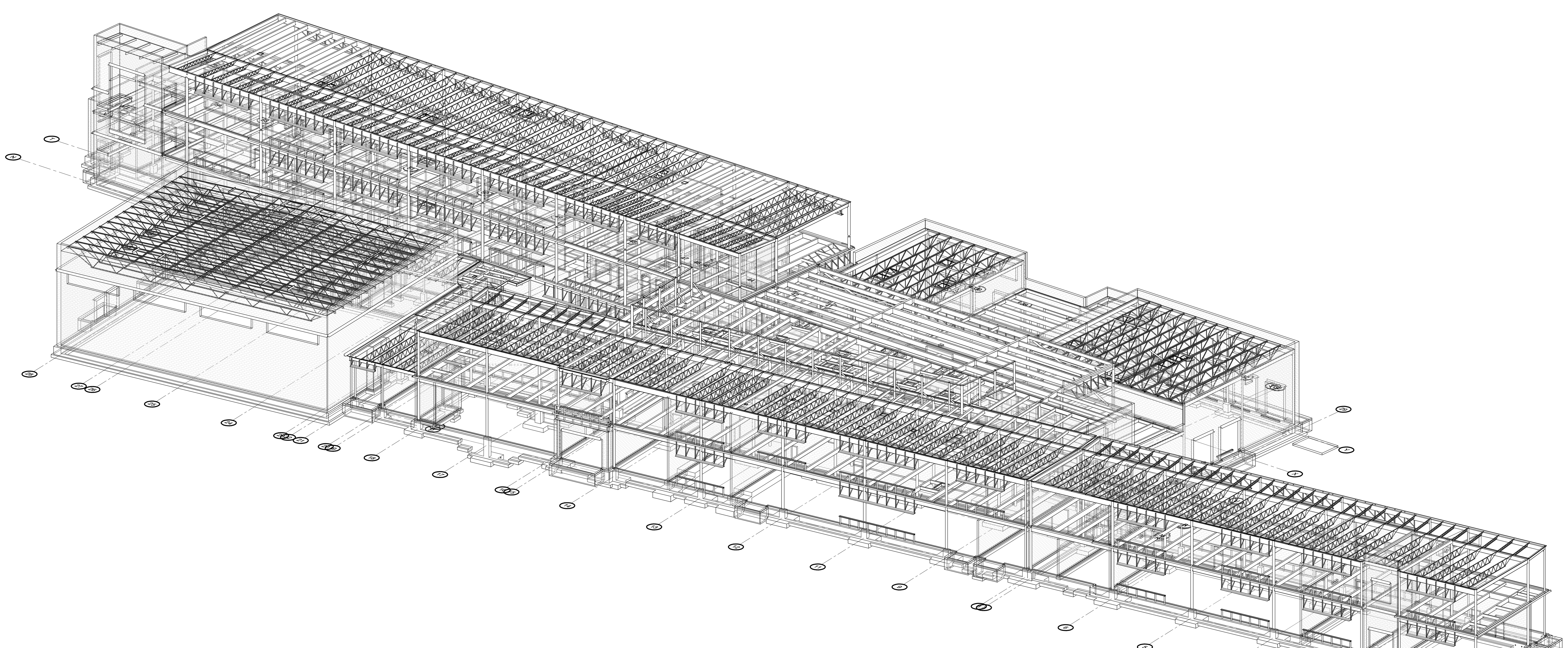
DELEGATED DESIGN NOTES:

PROVIDE DOCUMENTS, DOCUMENTATION, AND INFORMATION INDICATED PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE THE WORK IS PERFORMED.

1. TEMPORARY SHORING
2. SOIL BEARING AND SURFACE CONDITIONS FOR STRUCTURAL WORK ON EARTH OR FILL.
3. STRUCTURAL STEEL CONNECTIONS.
4. STAIRS, GUARDRAILS, AND RAILINGS
5. CONCRETE FORMWORK
6. COLD-FORMED STEEL (OR METAL) FRAMING (CFSF OR CFMF).
7. CAST STONE ACHORAGE TO STRUCTURAL BACKUP.
8. PERFORMANCE-BASED DESIGN.
9. ANCHORS AND FASTENERS IN-LIEU OF SPECIFIED FASTENERS.

SPECIAL INSPECTION NOTES:

1. SPECIAL INSPECTIONS WILL BE PERFORMED IN ACCORDANCE WITH THE STATEMENT OF SPECIAL INSPECTIONS.
2. OWNER, OR ARCHITECT/STRUCTURAL ENGINEER OF RECORD ACTING AS THE OWNER'S AGENT, SHALL DIRECTLY EMPLOY AND PAY FOR SERVICES OF THE SPECIAL INSPECTORS TO PERFORM REQUIRED SPECIAL INSPECTIONS.



1 ISOMETRIC VIEW LOOKING SOUTHEAST

NOTES:
1. *FOR REFERENCE PURPOSES ONLY. NOT FOR CONSTRUCTION*
2. *ISOMETRIC VIEW MAY NOT BE AN ACCURATE REPRESENTATION OF FRAMING CONDITIONS. SEE PLANS AND SECTIONS FOR ALL CONDITIONS.*

Autodesk Docs://NECSD - New CTE Bldg/NECSD CTE - Struct.rvt

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Consultant
PASSERO engineering architecture
STRUCTURAL

Project Title
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · 100938 · LICENSED PROFESSIONAL ENGINEER

#	DATE	DESCRIPTION
5	5/29/2024	BID ADDENDUM #5
4	5/20/2024	BID ADDENDUM #4

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Sheet Title
GENERAL NOTES

Sheet No.
CTE S001

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 SEISMIC 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 LOADING (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	#4 BARS @ 12" OC	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

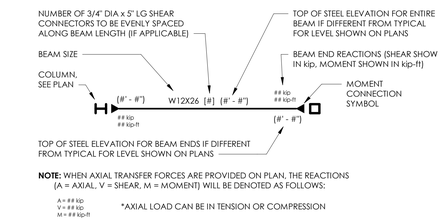
STRUCTURAL ELEMENT		*MIN COVER (IN)*
CAST AGAINST EARTH		3"
EXPOSED TO EARTH OR WEATHER	#5 BARS AND SMALLER, WWF	1-1/2"
	#6 BARS AND LARGER	2"
NOT EXPOSED TO EARTH OR WEATHER	SLABS & WALLS: #11 BARS AND SMALLER, WWF	3/4"
	SLABS & WALLS: #14 BARS AND LARGER	1-1/2"
	BEAMS AND COLUMNS	1-1/2"

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(ED)(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:

*AXIAL LOAD CAN BE IN TENSION OR COMPRESSION

TYPICAL BEAM PLAN ANNOTATIONS

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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

1	5/29/2024	BID ADDENDUM #1
2	5/5/2024	BID ADDENDUM #2
NO.	DATE	DESCRIPTION

Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
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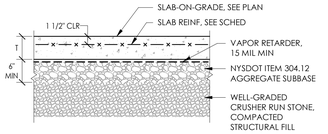
Sheet Title
DESIGN CRITERIA AND SCHEDULES

Sheet No.
CTE S002

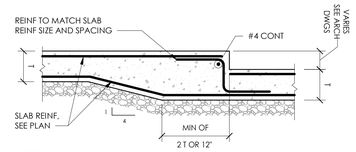
CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/NECSD CTE - Struct.rvt



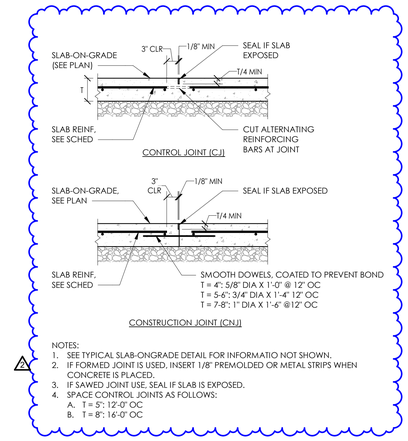
NOTES:
1. SEE SLAB-ON-GRADE SCHEDULE FOR SLAB THICKNESS, T.
2. PROVIDE CHAIRS TO SUPPORT SLAB REINFORCING AT SPECIFIED ELEVATION.
3. (E) FILL TYPE MATERIALS TO BE REMOVED WITHIN THE PROPOSED BUILDING FOOTPRINT AND AN ADDITIONAL HORIZONTAL DISTANCE OF 5'-0" BEYOND THE BUILDING FOOTPRINT. EXCAVATION TO BE BACKFILLED WITH COMPACTED STRUCTURAL FILL, AS SHOWN ABOVE.

1 SLAB-ON-GRADE
N.T.S.



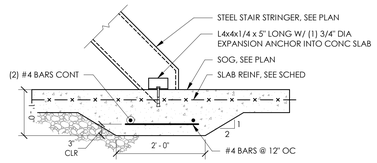
NOTES:
1. SEE ARCH DRAWINGS FOR LOCATION AND DEPTH OF SLAB DEPRESSION.
2. SEE TYPICAL STRUCTURAL SLAB DETAIL THIS SHEET, FOR SLAB DETAILS NOT SHOWN.
3. SEE STRUCTURAL SLAB SCHEDULE FOR SLAB THICKNESS.

2 SLAB ON GROUND DEPRESSION DETAIL
N.T.S.



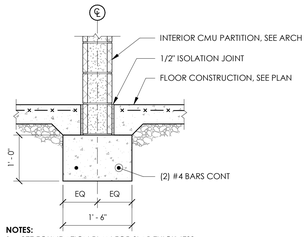
NOTES:
1. SEE TYPICAL SLAB-ONGRADE DETAIL FOR INFORMATIO NOT SHOWN.
2. IF FORMED JOINT IS USED, INSERT 1/8" PREMOLDED OR METAL STRIPS WHEN CONCRETE IS PLACED.
3. IF SAWED JOINT USE, SEAL IF SLAB IS EXPOSED.
4. SPACE CONTROL JOINTS AS FOLLOWS:
   A. T = 5": 12'-0" OC
   B. T = 8": 16'-0" OC

3 SOG CONTROL/CONSTRUCTION JOINT
N.T.S.



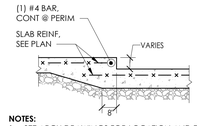
NOTE:
SEE TYPICAL SLAB-ON-GRADE DETAIL FOR INFORMATION NOT SHOWN.

4 THICKENED SLAB AT STEEL STAIR STRINGER
N.T.S.



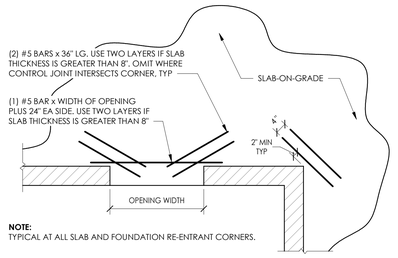
NOTES:
1. SEE FOUNDATION PLAN FOR SLAB THICKNESS.
2. PROVIDE CONTINUOUS FOOTING UNDER ALL INTERIOR CMU PARTITIONS EXCEEDING 8'-0" IN LENGTH.
3. SEE TYPICAL SLAB-ON-GRADE DETAIL, ON THIS SHEET, FOR SLAB DETAILS NOT SHOWN.

5 FOOTING DETAIL AT CMU PARTITION WALL
3/4" = 1'-0"



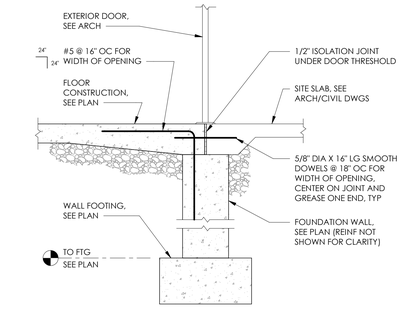
NOTES:
1. SEE ARCH DRAWINGS FOR LOCATION AND DEPTH OF SLAB DEPRESSION.
2. SEE TYPICAL SLAB-ON-GRADE DETAIL, ON THIS SHEET, FOR SLAB DETAILS NOT SHOWN.
3. SEE SLAB-ON-GRADE SCHEDULE FOR SLAB THICKNESS.

6 SLAB-ON-GRADE DEPRESSION
N.T.S.

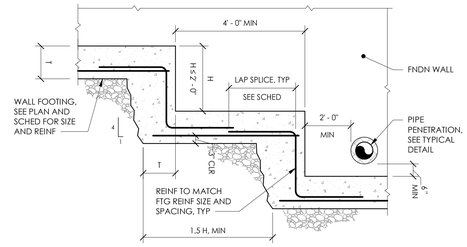


NOTE:
TYPICAL AT ALL SLAB AND FOUNDATION RE-ENTRANT CORNERS.

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.

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 PIPE SLEEVE SYSTEM SHALL BE FURNISHED AND INSTALLED BY THE TRADE REQUIRING THE CONTINUOUS PIPE PENETRATION (SEE TYP PIPE SLEEVE DETAIL).
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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NEW CTE

5	5/29/2024	BID ADDENDUM #5
2	5/3/2024	BID ADDENDUM #2
#:	DATE	DESCRIPTION

Drawn By:	JRC
Checked By:	LCA
Proj. #:	44-16-00-01-0-053-001
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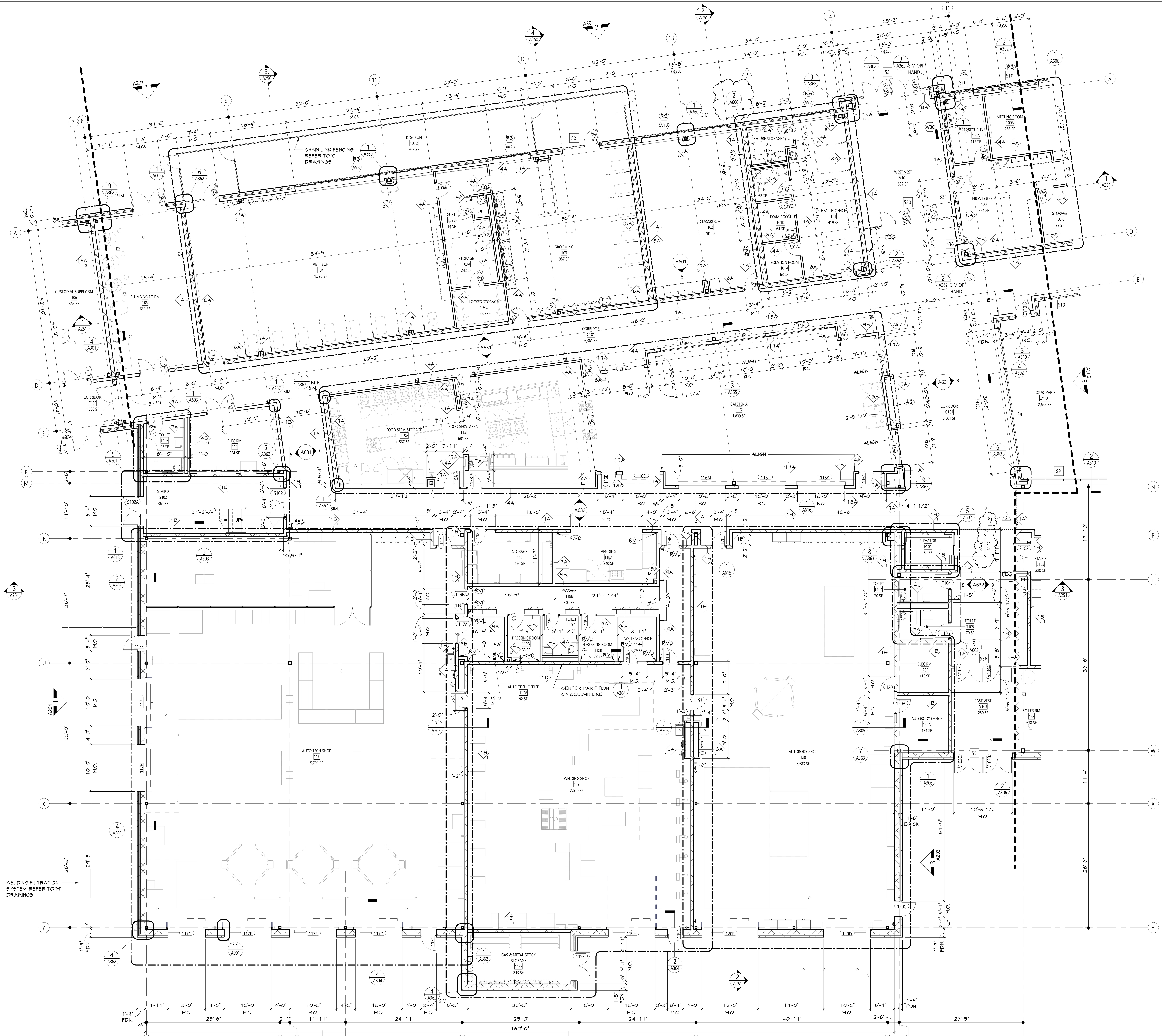
Sheet Title
TYPICAL CONCRETE DETAILS

Sheet No.
CTE S501

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/NECSD CTE - Struct.rvt



1 PARTIAL FIRST FLOOR PLAN - AREA 2

A112 1/8" = 1'-0"

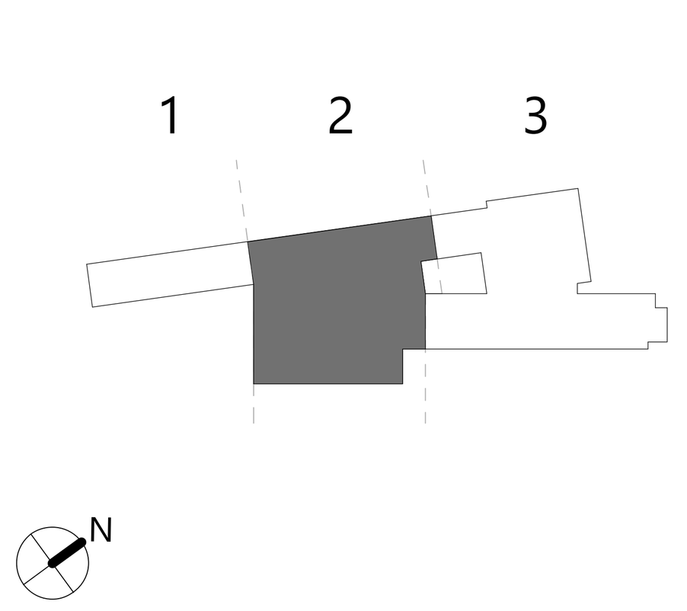
GENERAL NOTES

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 A701 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



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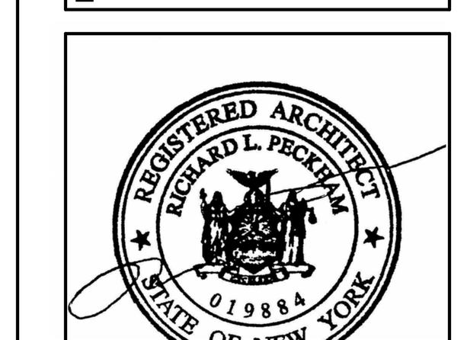


REGISTRATION EXPIRATION DATE: 12/31/2026

#	DATE	DESCRIPTION
5	5/29/2024	Bid Addendum #5
2	5/3/2024	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

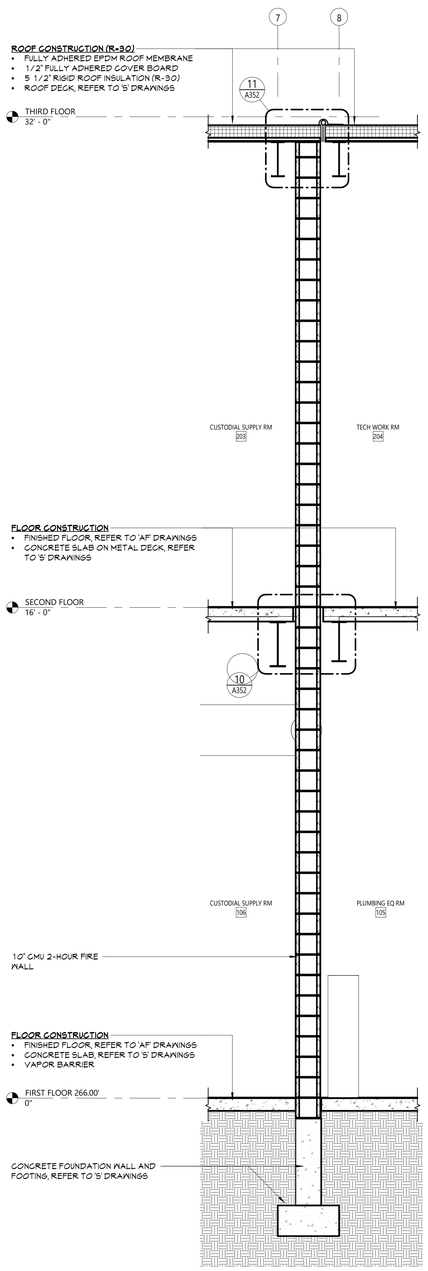
Sheet Title

PARTIAL FIRST FLOOR PLAN - AREA 2

Sheet No.

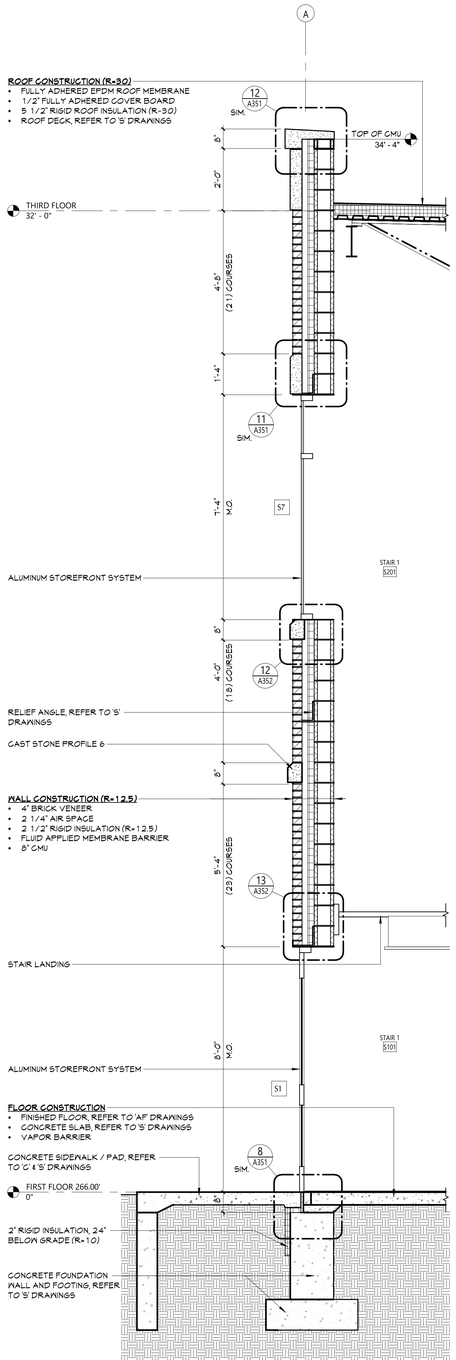
CTE A112

CONSTRUCTION DOCUMENTS



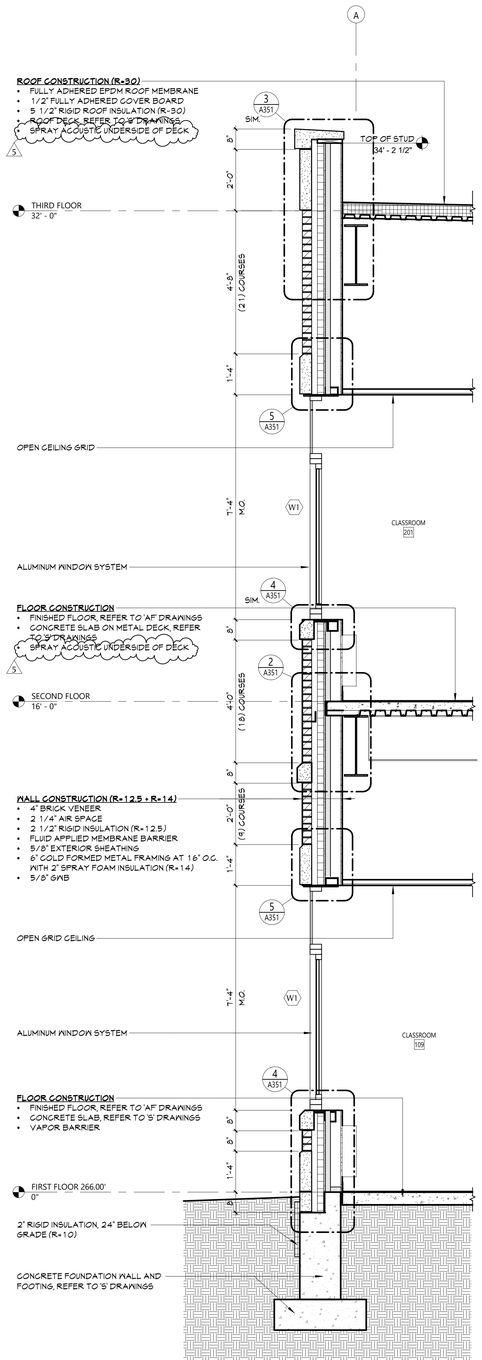
4 WALL SECTION - FIRE WALL

A301 1/2" = 1'-0"



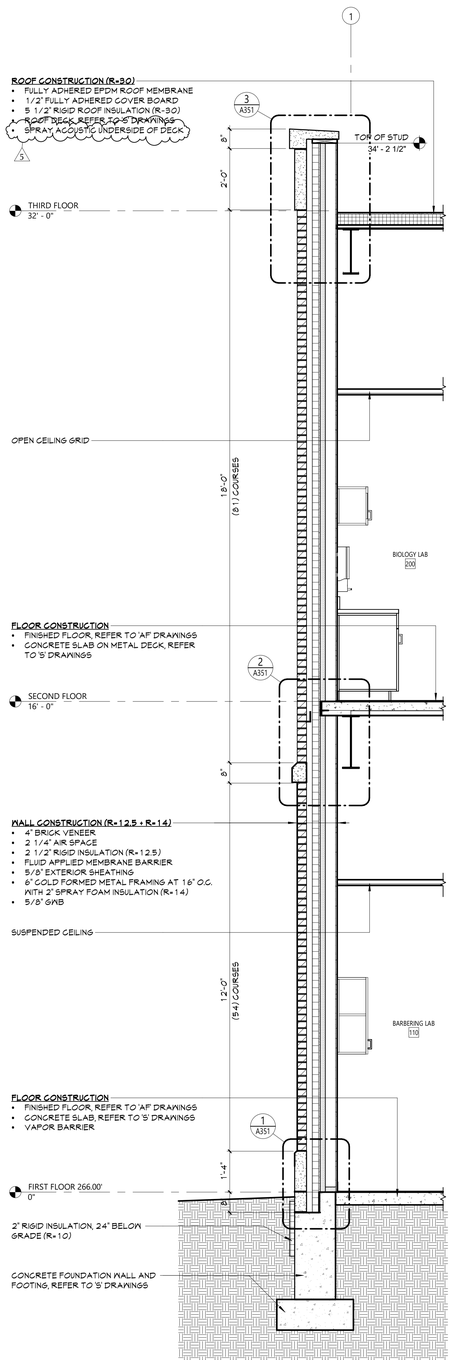
3 WALL SECTION

A301 1/2" = 1'-0"



2 WALL SECTION

A301 1/2" = 1'-0"



1 WALL SECTION

A301 1/2" = 1'-0"

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Project Title

REGISTERED ARCHITECT
RICHARD L. PROCTOR
021984
STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

#	DATE	DESCRIPTION
1	5/29/2024	Bid Addendum #1

Drawn By:	
Checked By:	
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

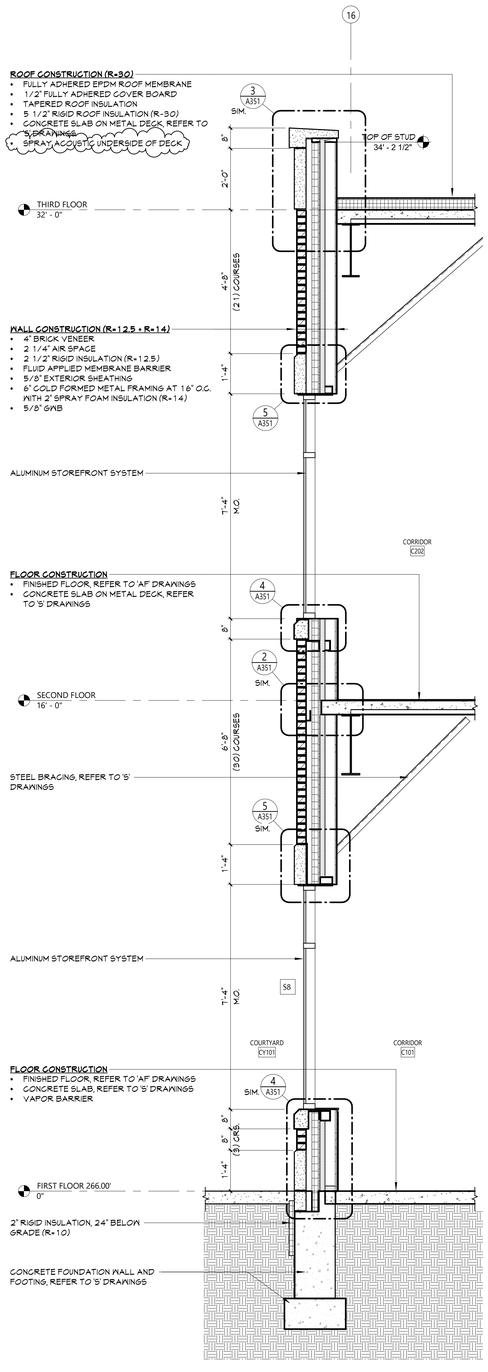
Sheet Title

WALL SECTIONS - AREA 1

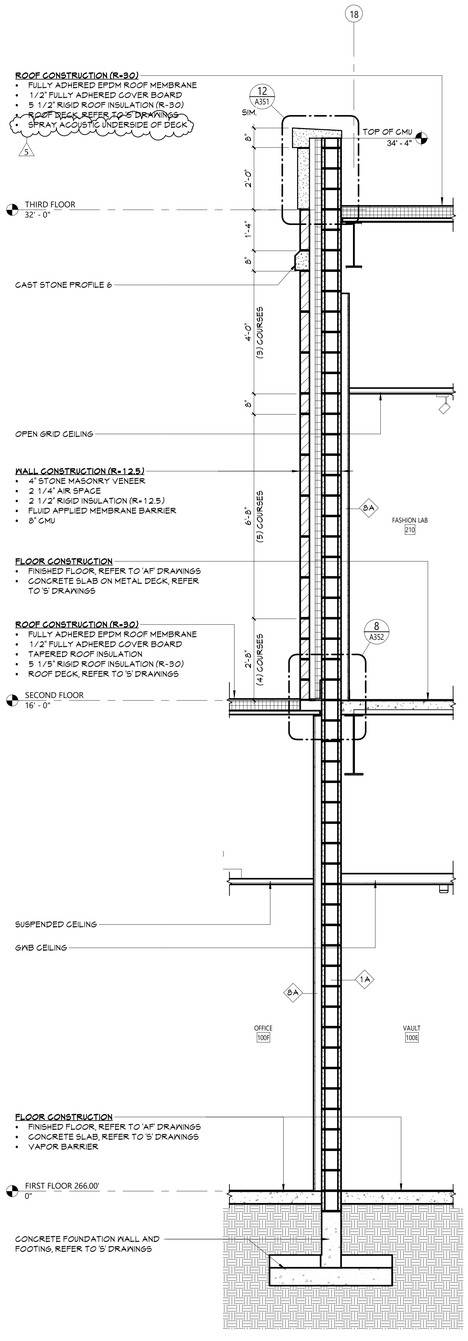
Sheet No.

CTE A301

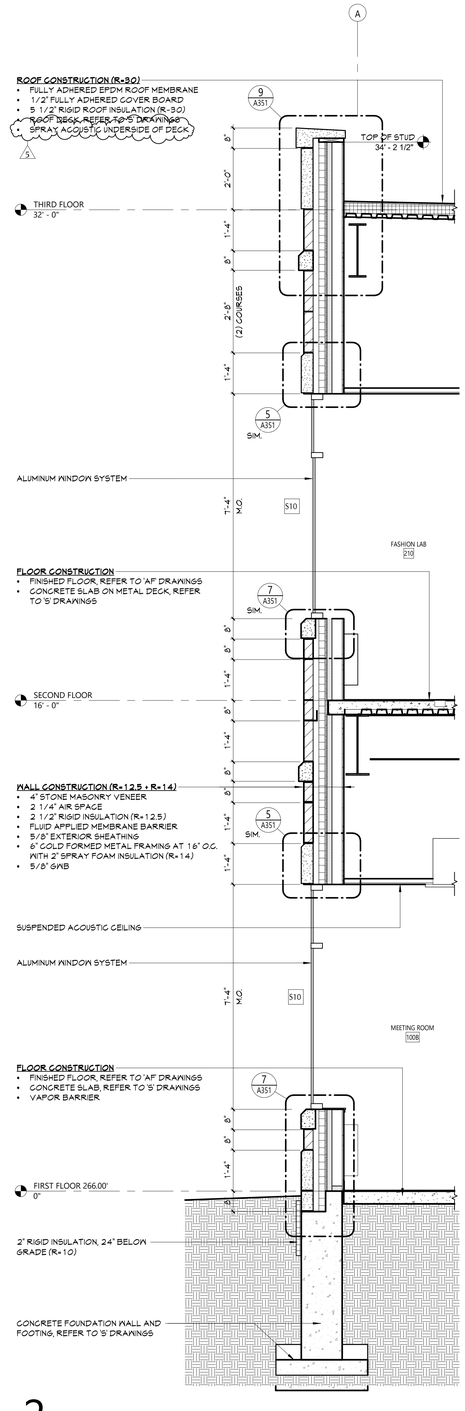
CONSTRUCTION DOCUMENTS



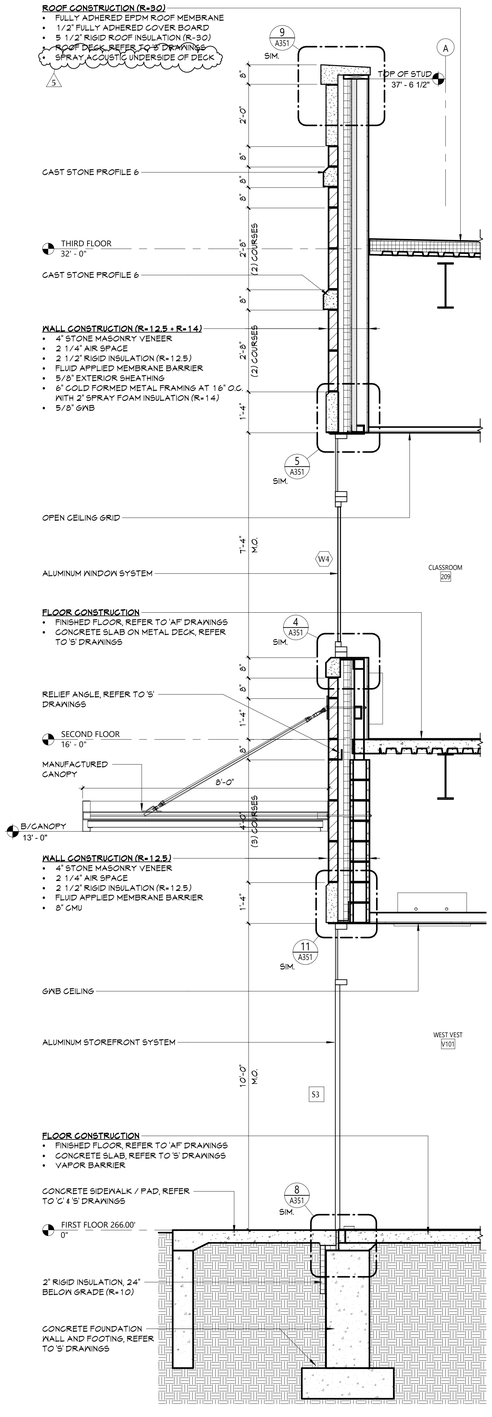
4 WALL SECTION
A302 1/2" = 1'-0"



3 WALL SECTION
A302 1/2" = 1'-0"



2 WALL SECTION
A302 1/2" = 1'-0"



1 WALL SECTION
A302 1/2" = 1'-0"

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

REGISTERED ARCHITECT RICHARD L. PRESSMAN 019984 STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

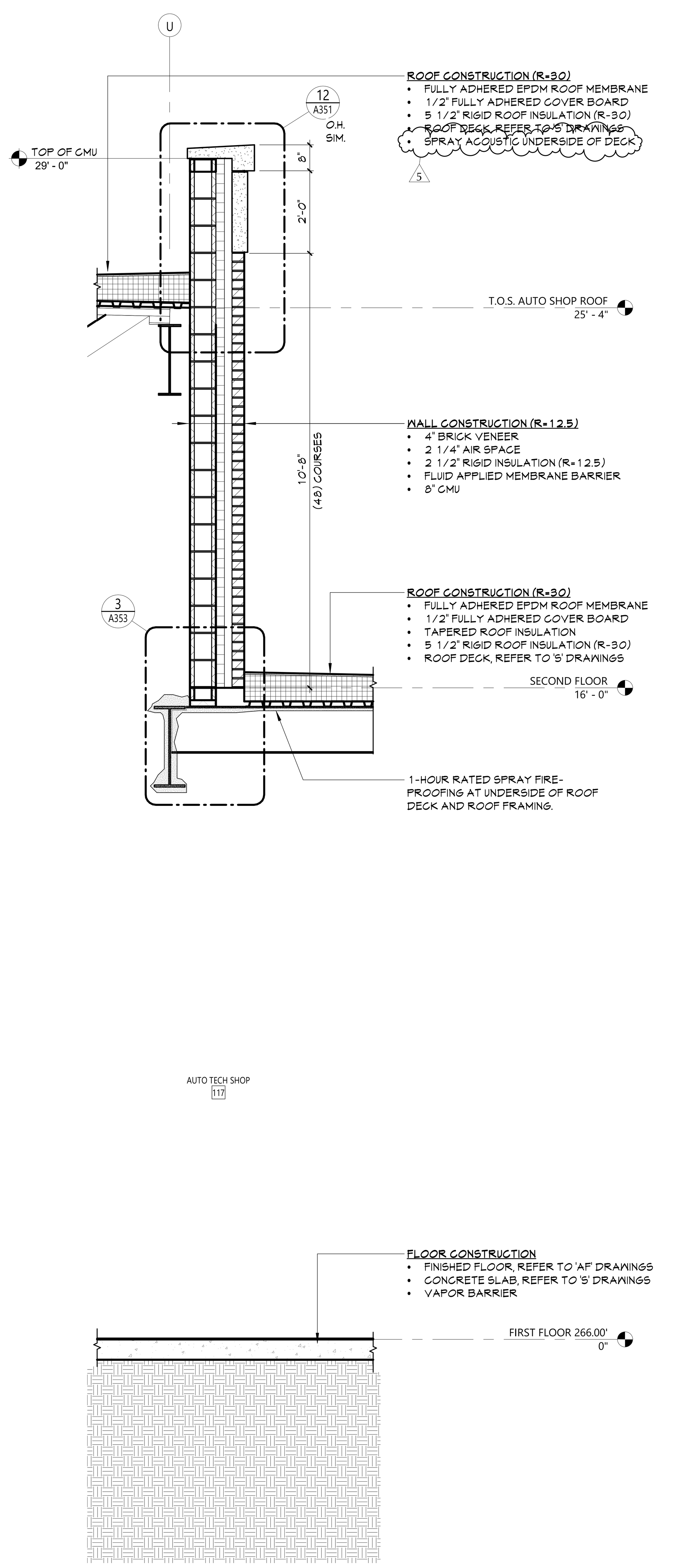
#	DATE	DESCRIPTION
1	5/29/2024	Bid Addendum #1

Drawn By:	
Checked By:	
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

Sheet Title
WALL SECTIONS - AREA 2

Sheet No.
CTE A302

CONSTRUCTION DOCUMENTS



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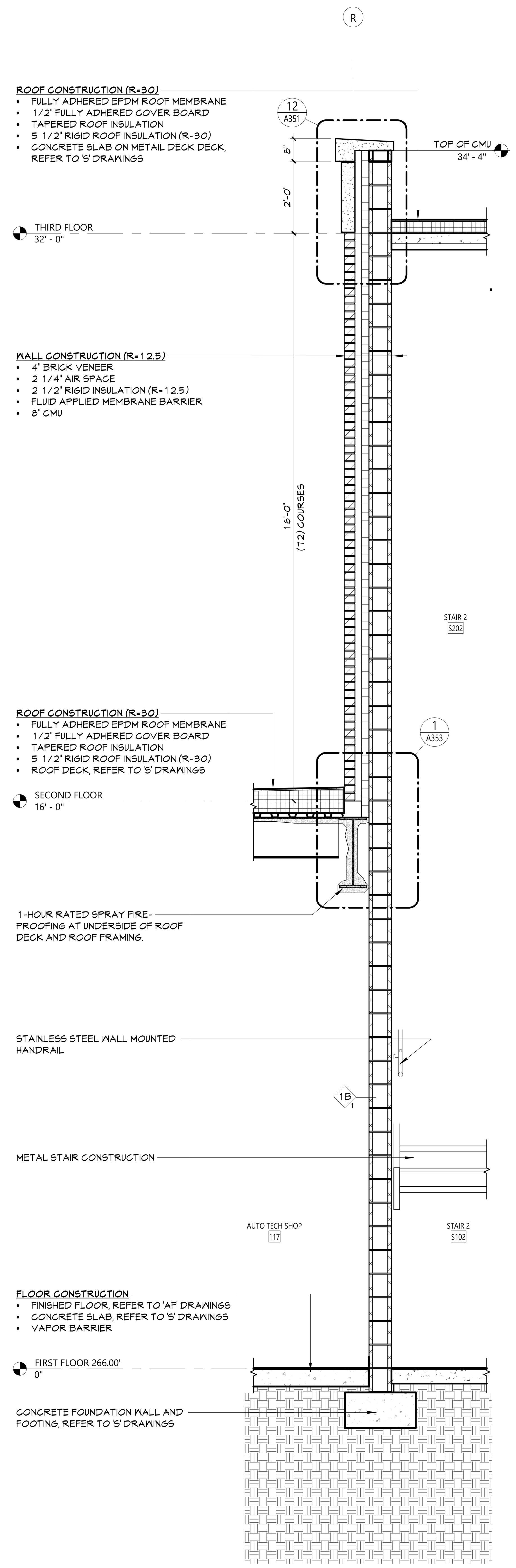

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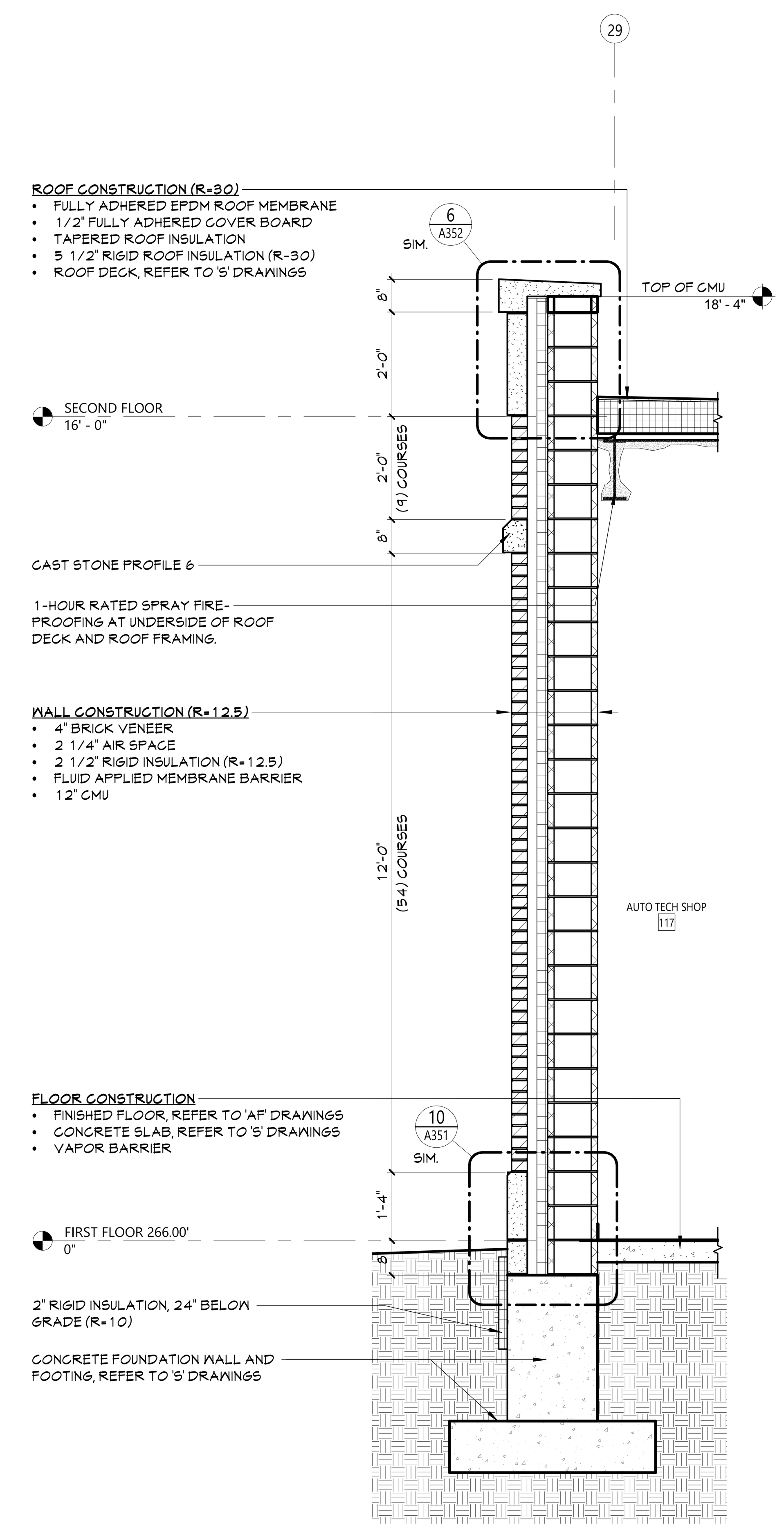

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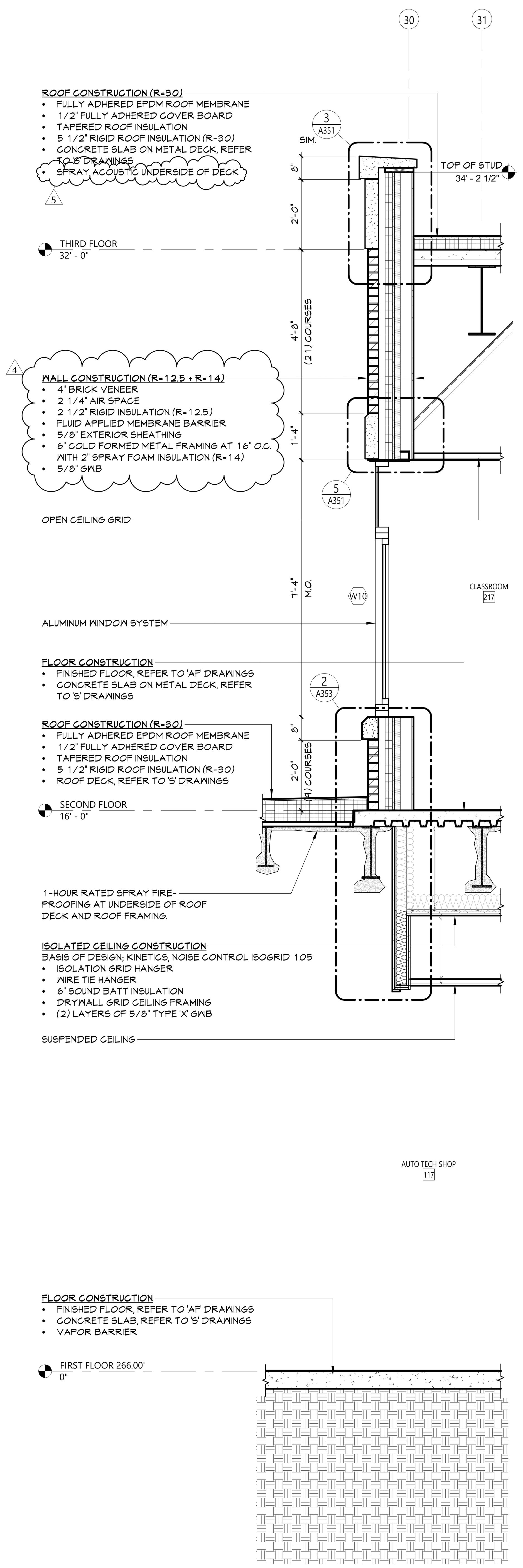

1 WALL SECTION
A303 1/2" = 1'-0"

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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
5	5/29/2024	Bid Addendum #5
4	5/20/2024	BID Addendum #4

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Sheet Title

WALL SECTIONS - AREA 2

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CTE A303

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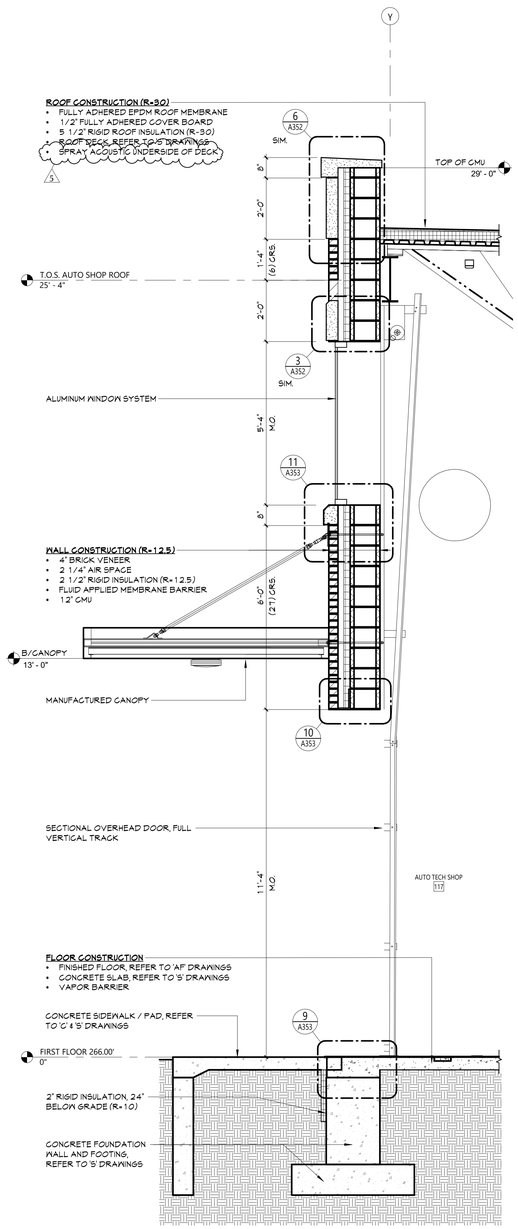

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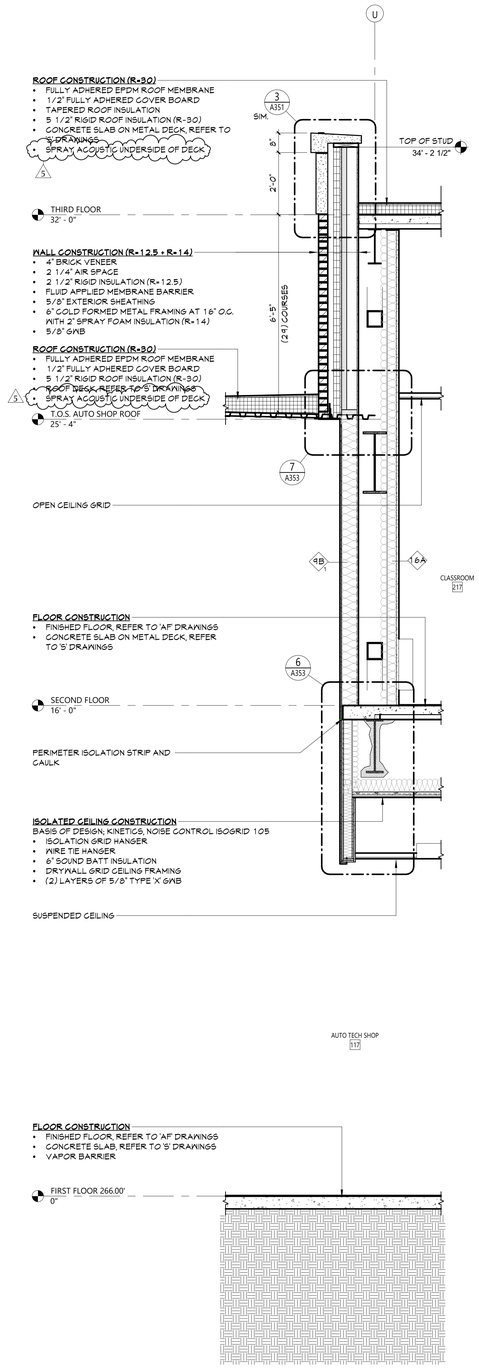

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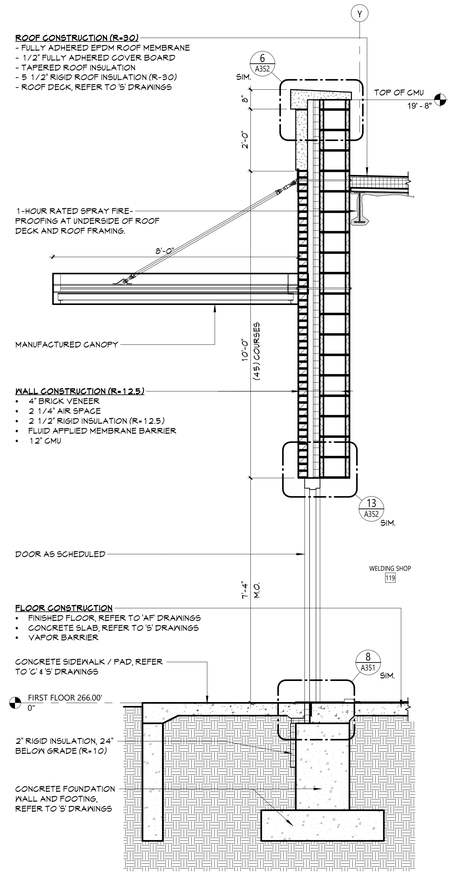

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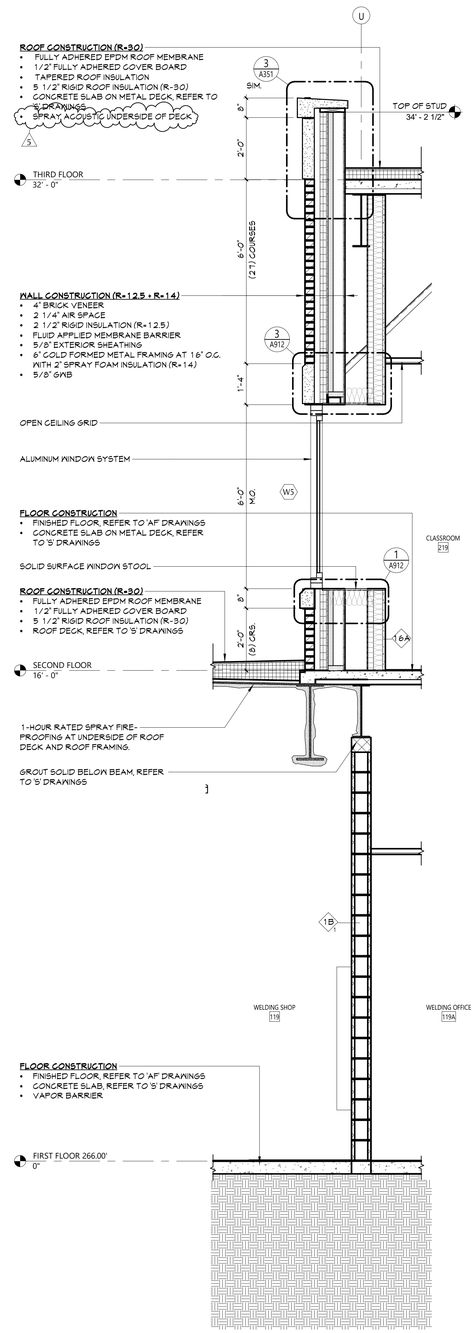

1 WALL SECTION
A304 1/2" = 1'-0"

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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT NEW CTE BUILDING

REGISTERED ARCHITECT RICHARD L. PROSSER STATE OF NEW YORK 031955
REGISTRATION EXPIRATION DATE: 12/31/2026

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WALL SECTIONS - AREA 2

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CTE A304

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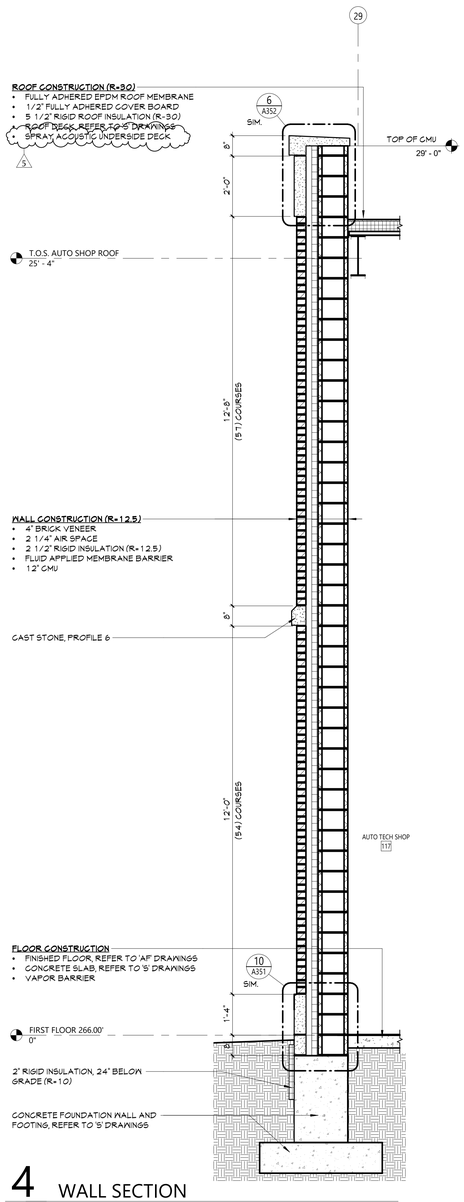

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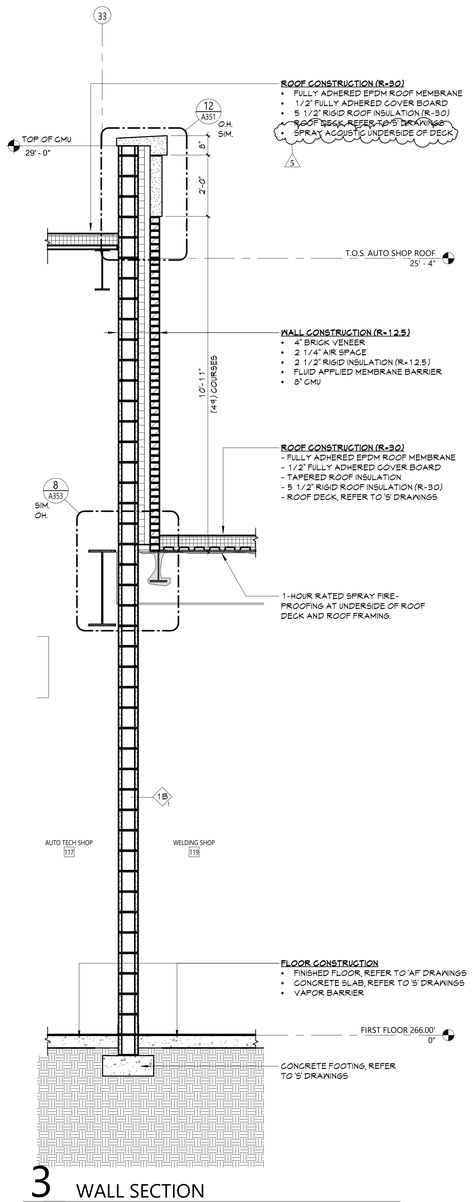

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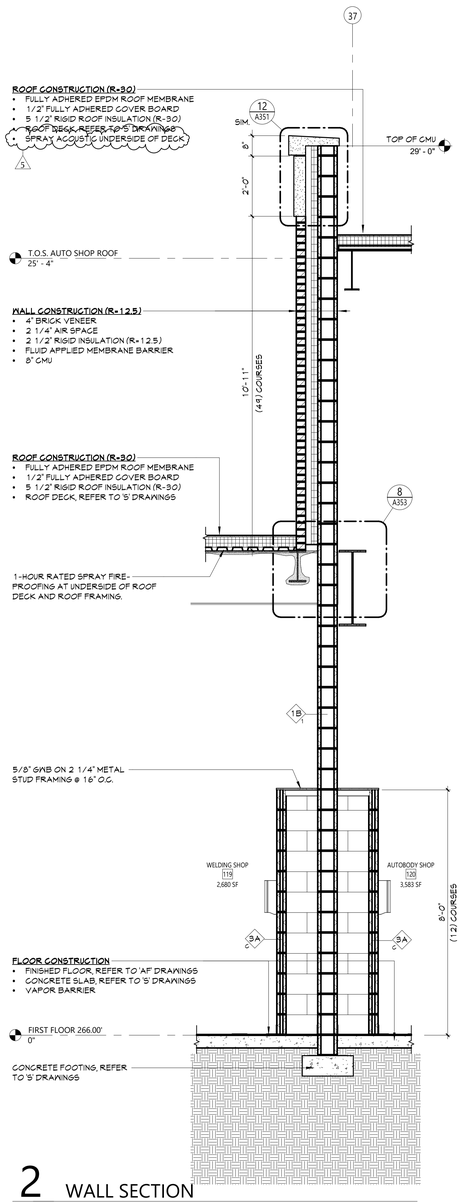

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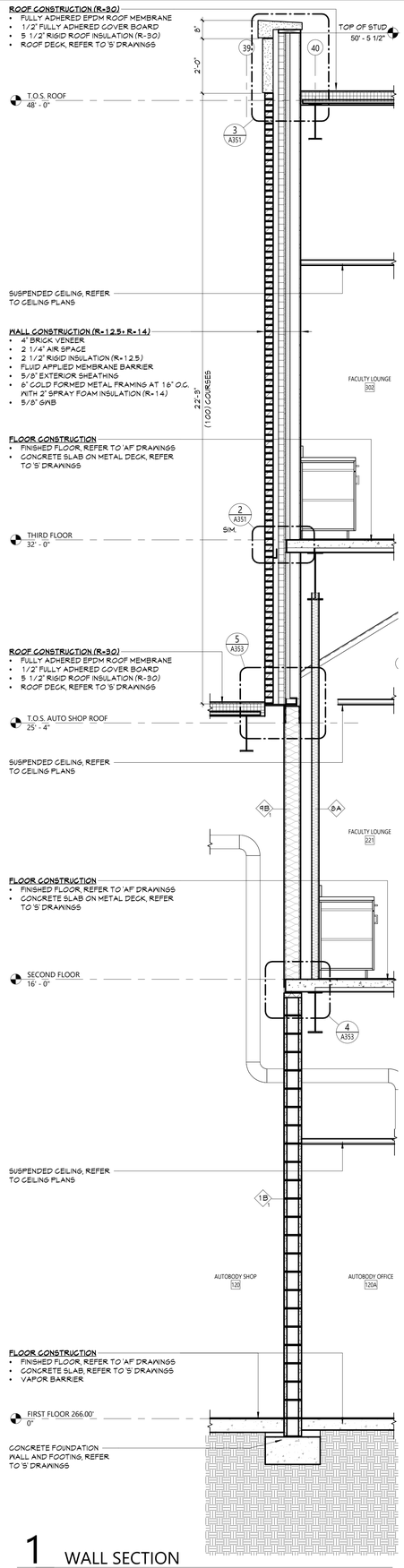

1 WALL SECTION
A305 1/2" = 1'-0"

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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT
RICHARD L. PROCTOR
019984
STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

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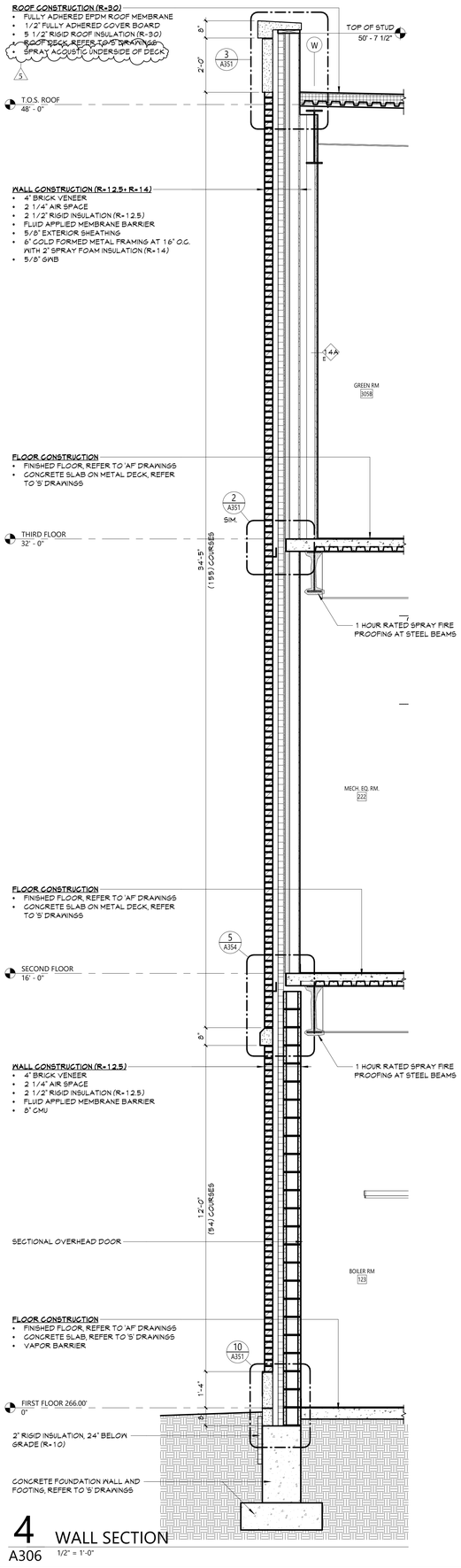

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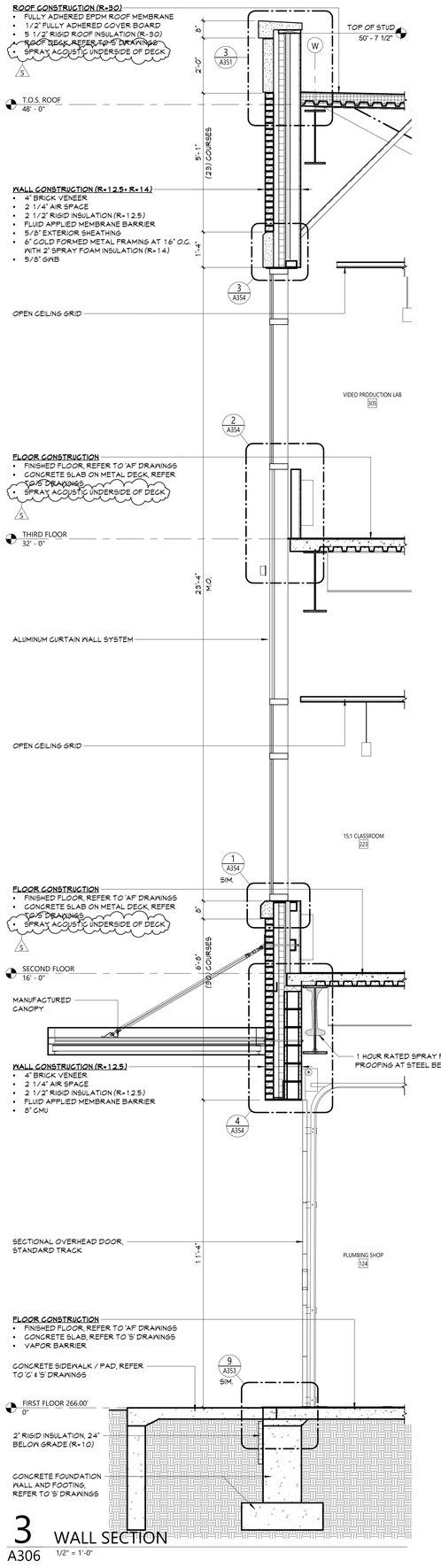

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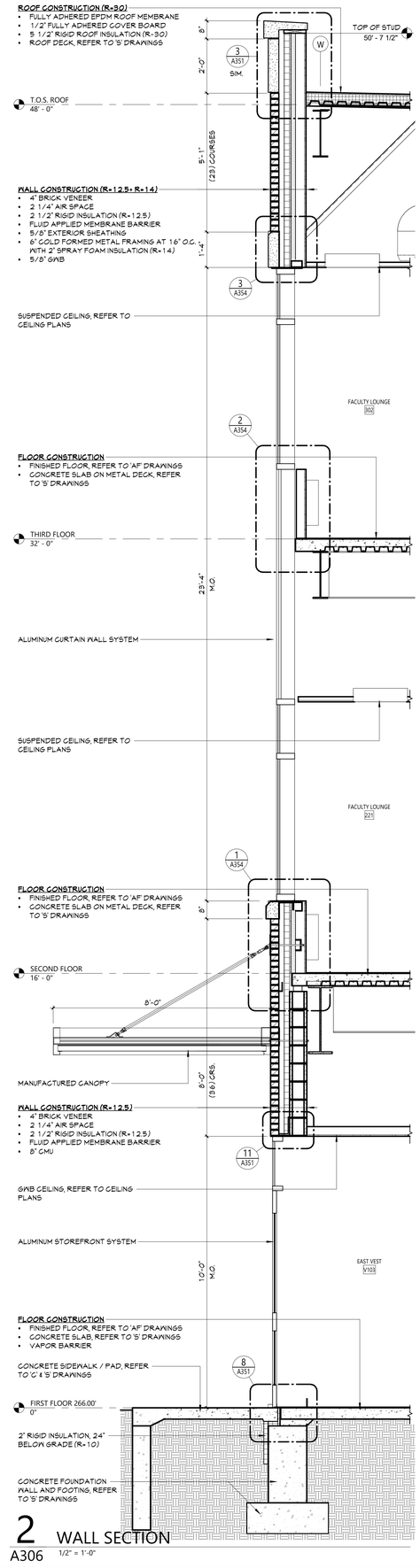

2 WALL SECTION

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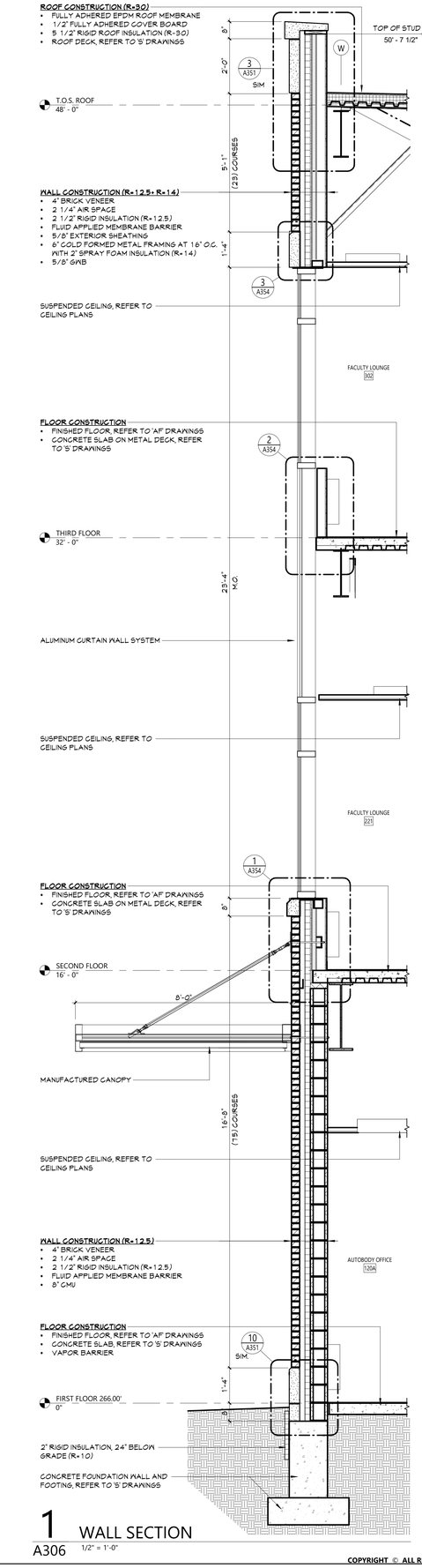

1 WALL SECTION

A306 1/2" = 1'-0"

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

REGISTERED ARCHITECT RAYMOND L. PROCHILO 019084 STATE OF NEW YORK

REGISTRATION EXPIRATION DATE: 12/31/2026

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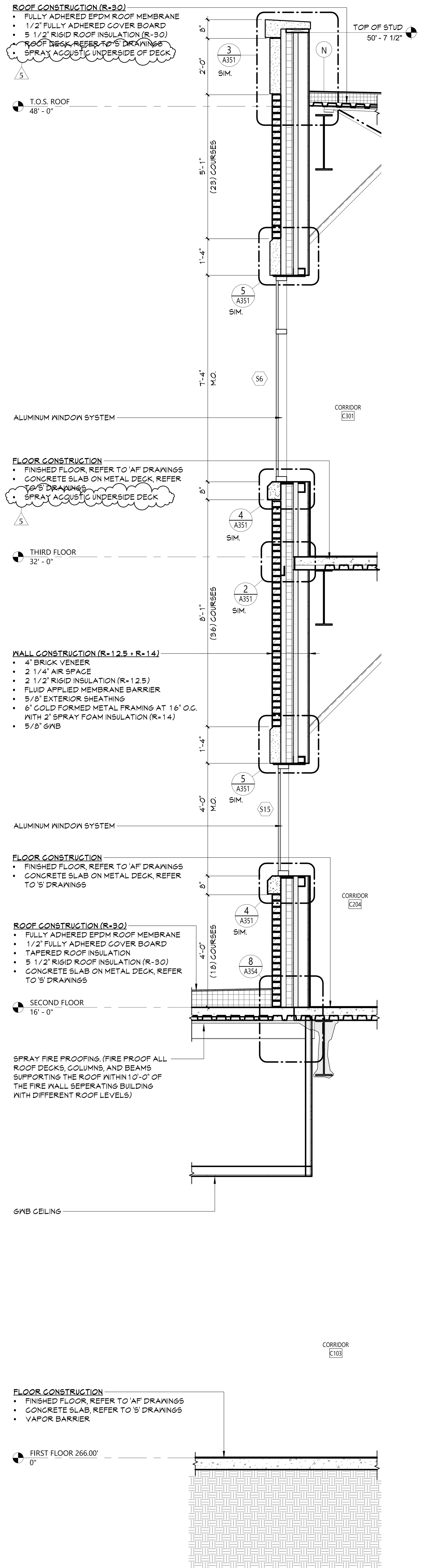
Sheet Title

WALL SECTIONS - AREA 3

Sheet No.

CTE A306

CONSTRUCTION DOCUMENTS



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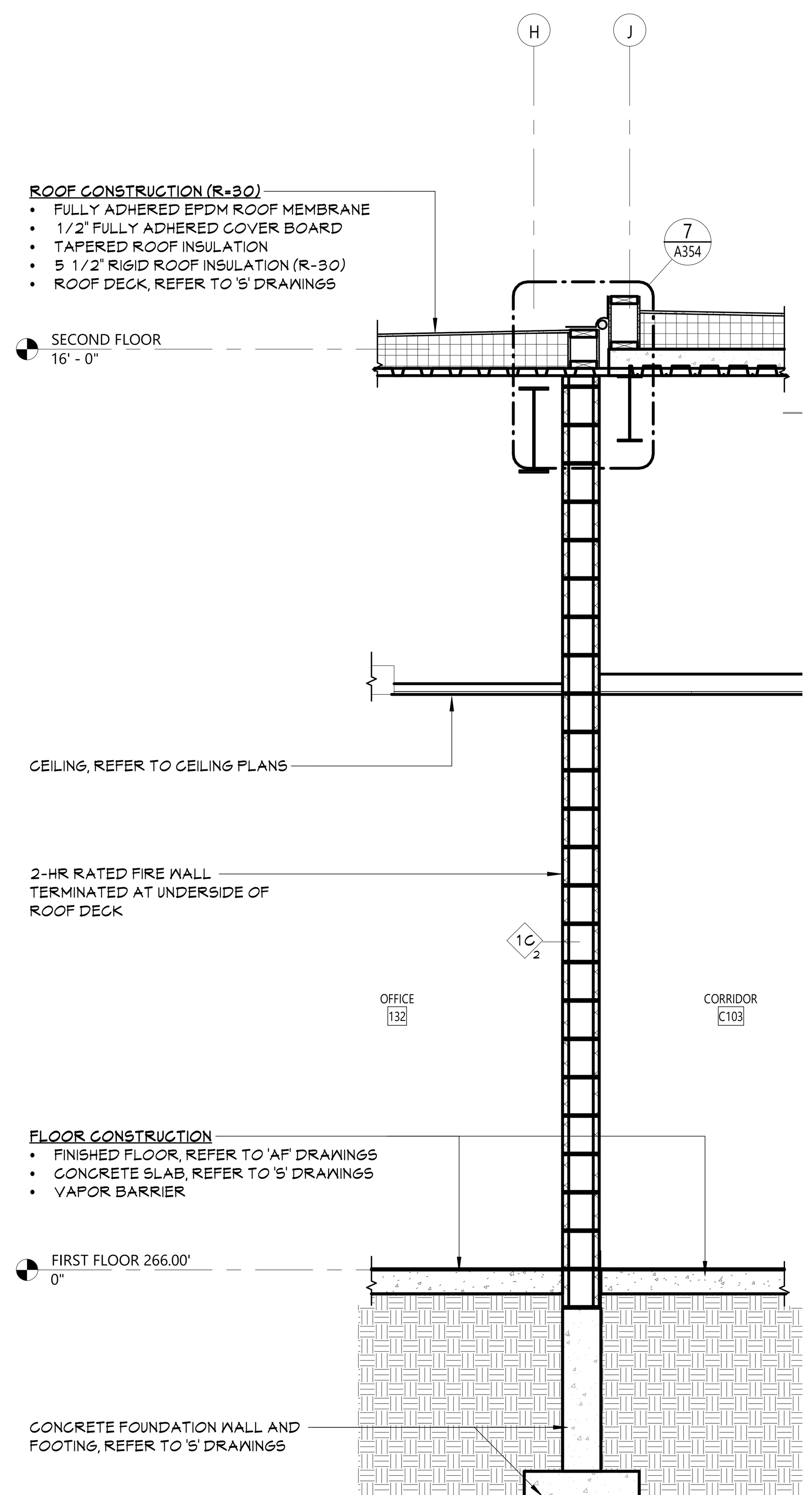

3 WALL SECTION
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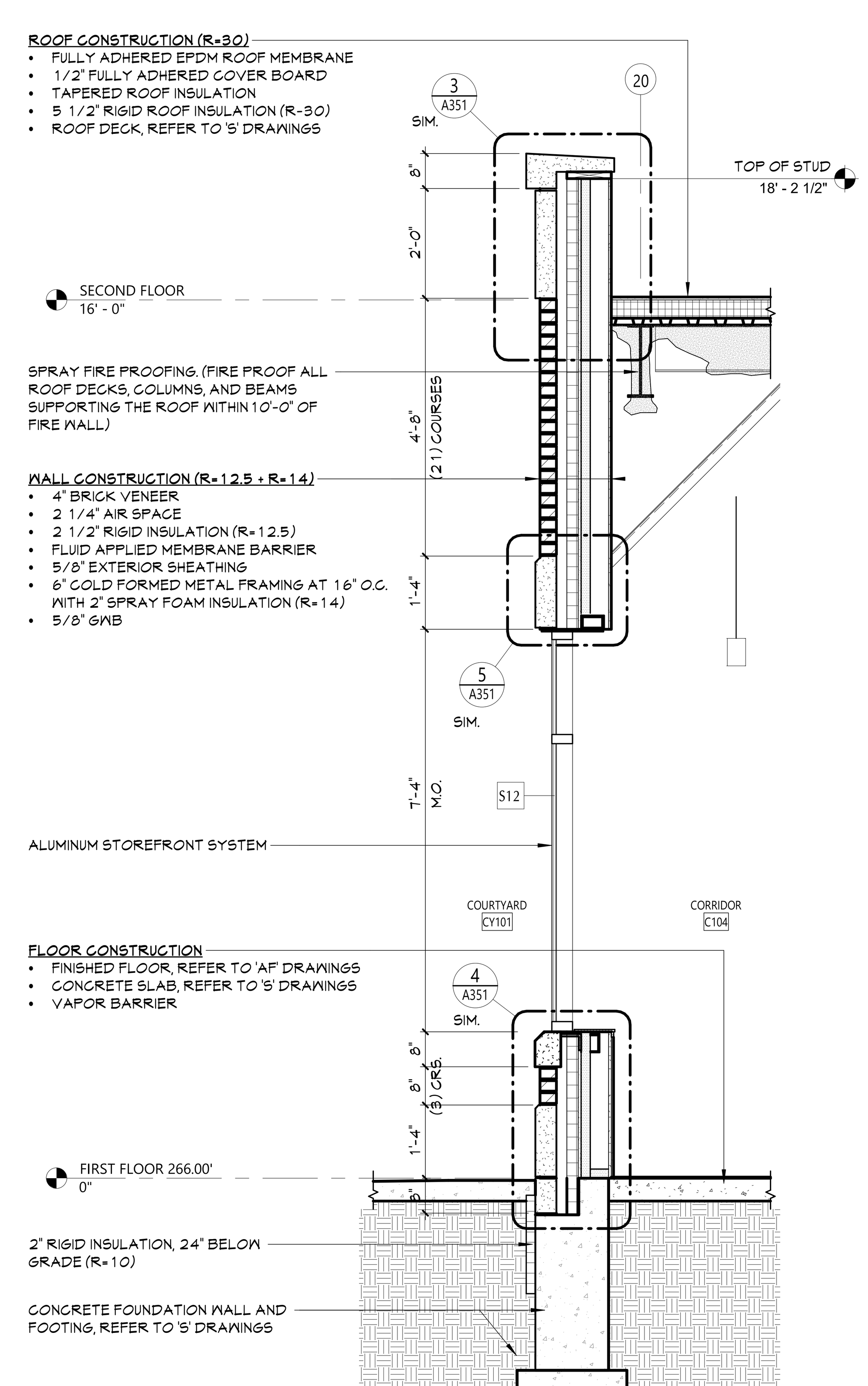

2 WALL SECTION
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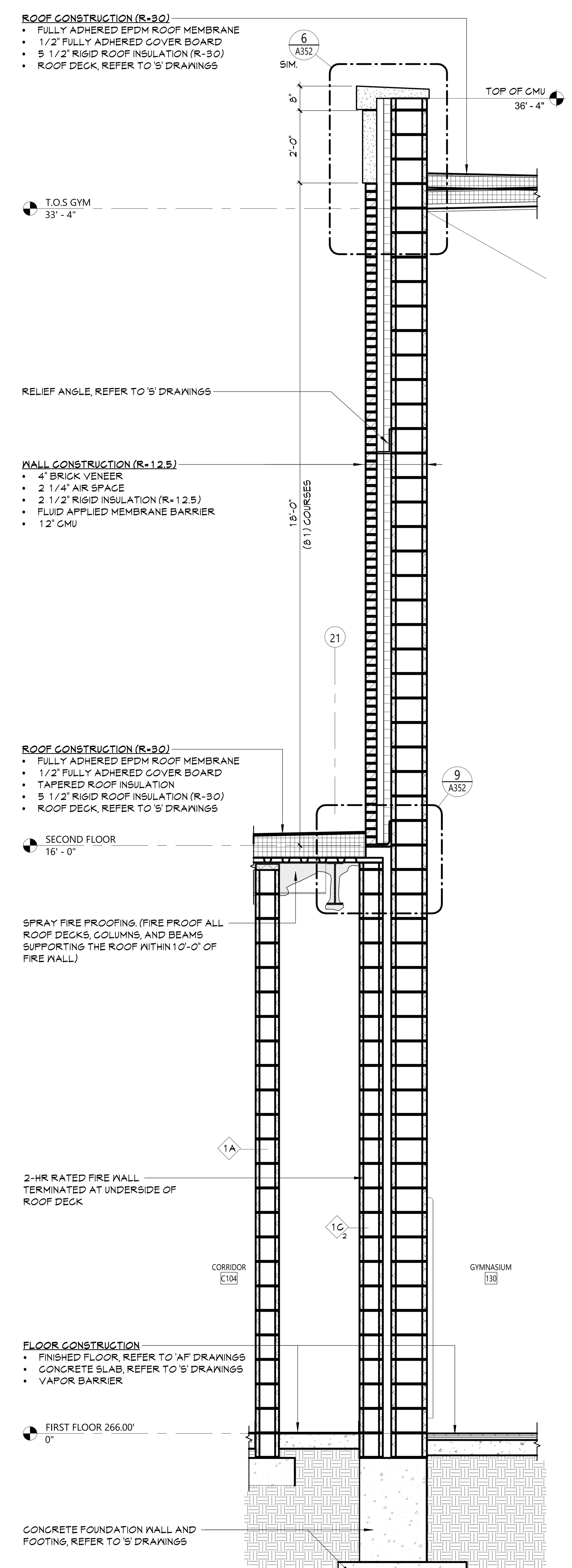

1 WALL SECTION
A308 1/2" = 1'-0"

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Project Title
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Sheet Title
WALL SECTIONS - AREA 3

Sheet No.
CTE A308

CONSTRUCTION DOCUMENTS

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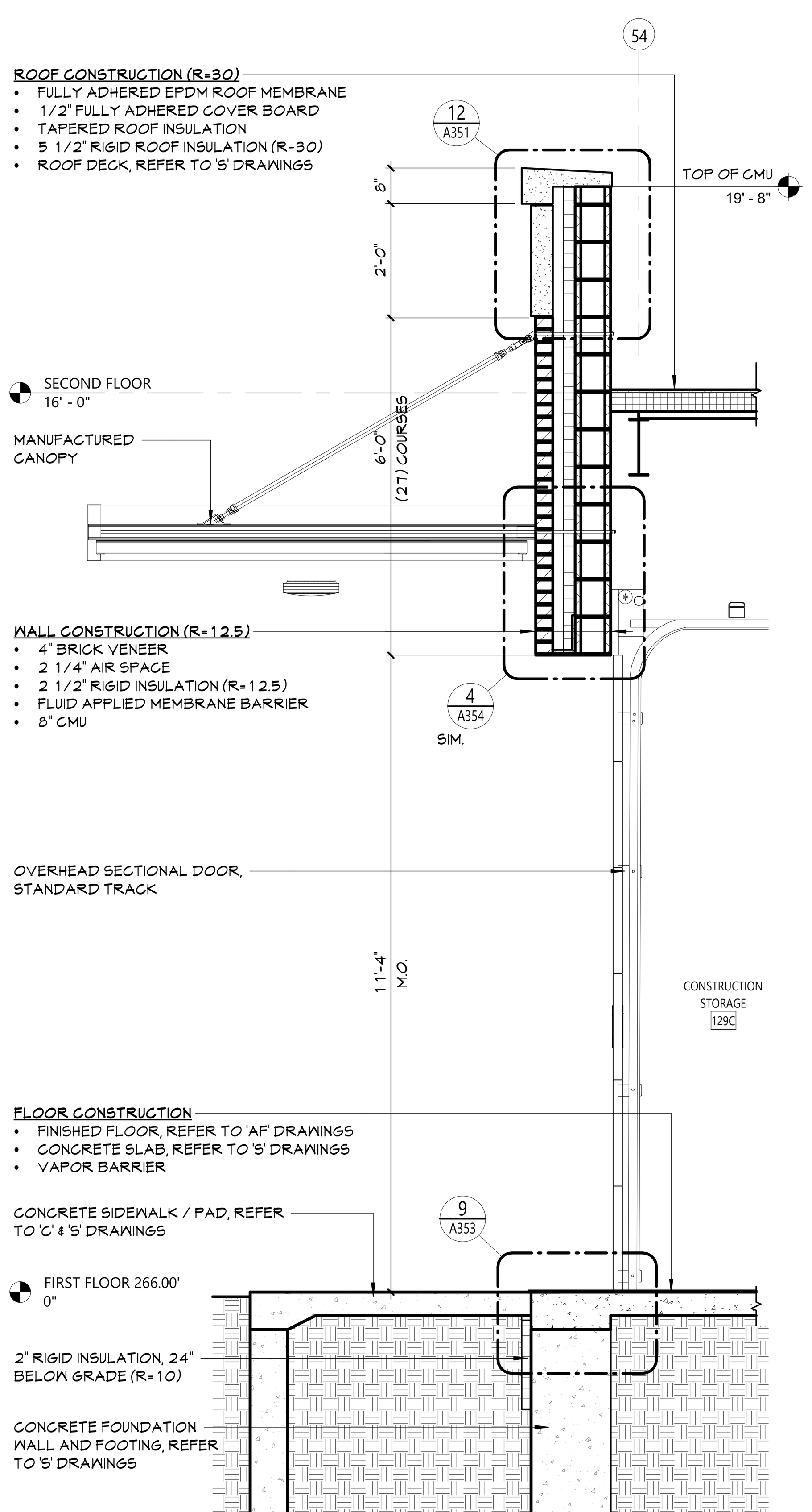

4 WALL SECTION
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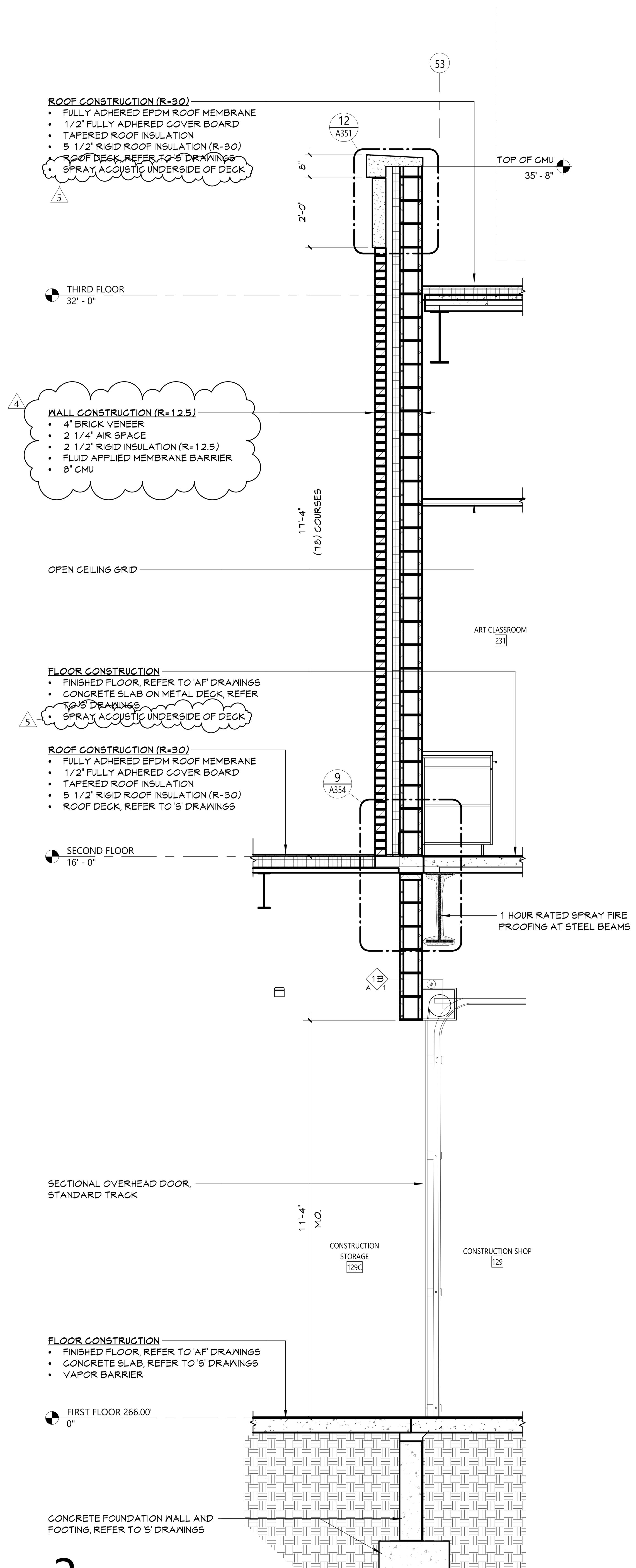
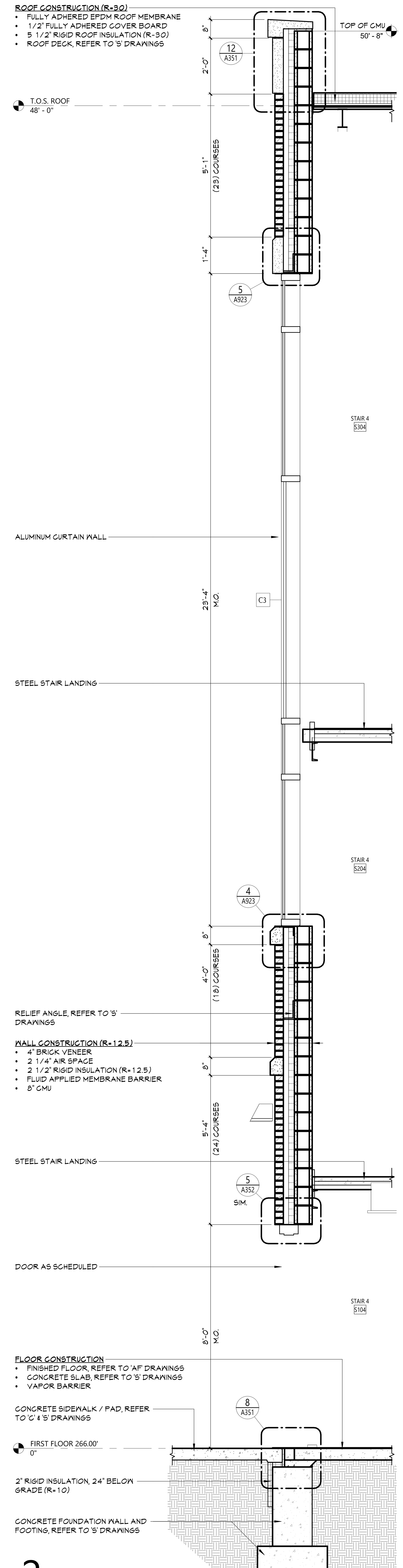
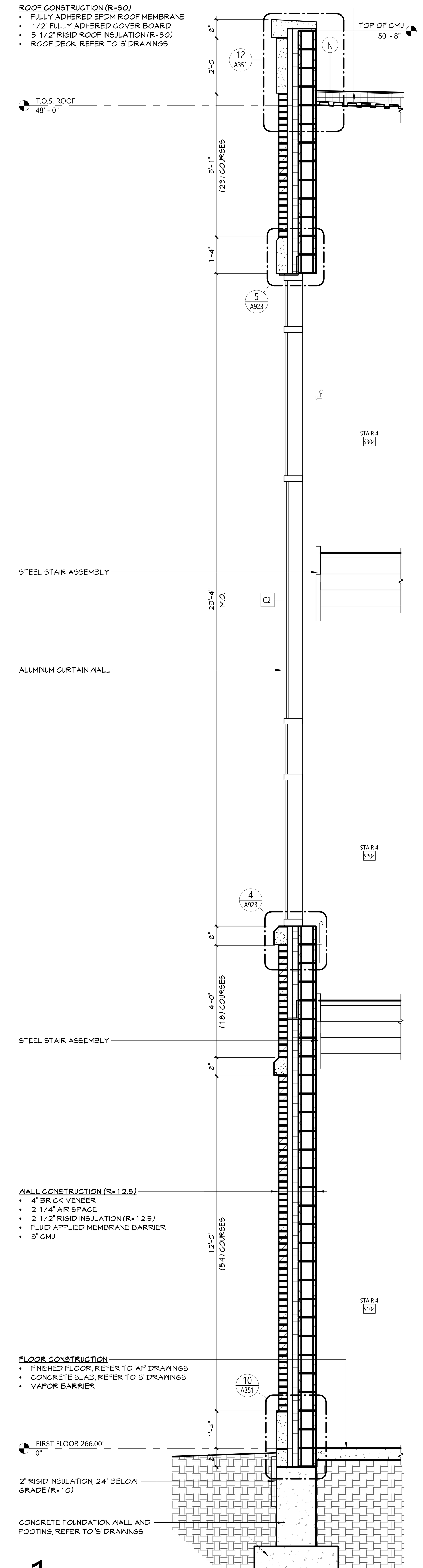


3 WALL SECTION
A309 1/2" = 1'-0"



2 WALL SECTION
A309 1/2" = 1'-0"



1 WALL SECTION
A309 1/2" = 1'-0"

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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT NEW CTE BUILDING

REGISTERED ARCHITECT · STATE OF NEW YORK
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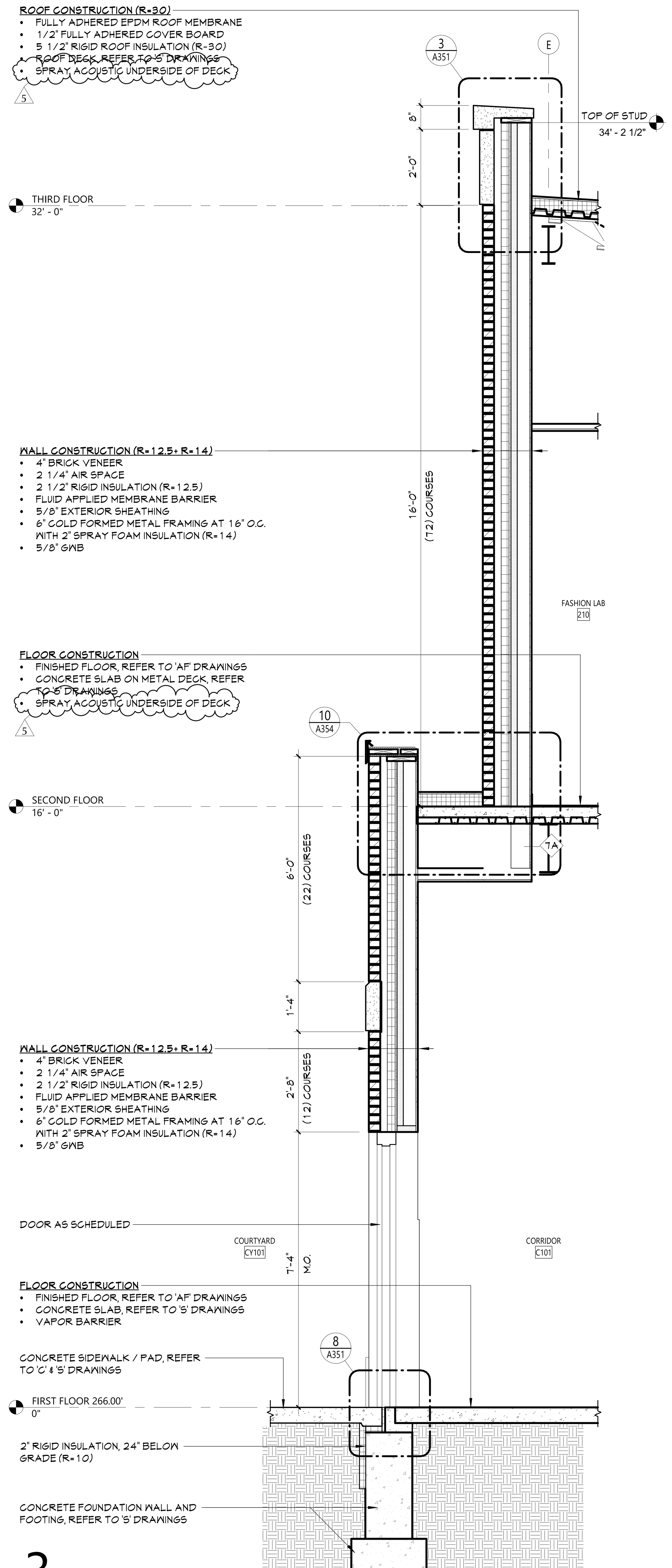
WALL SECTIONS - AREA 3

Sheet No.

CTE A309

CONSTRUCTION DOCUMENTS



3 WALL SECTION
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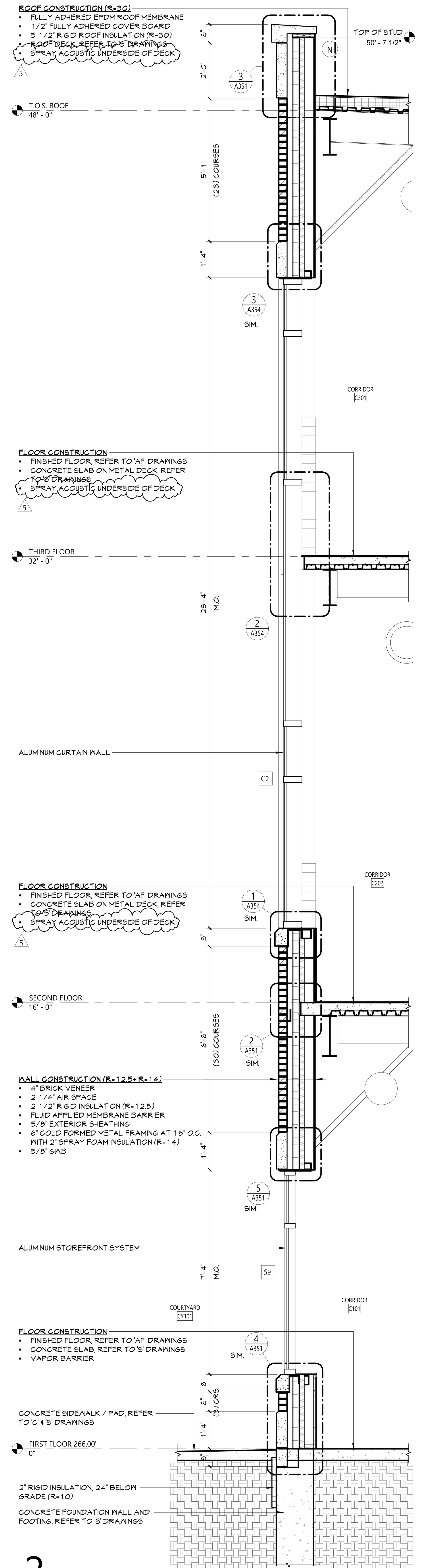

2 WALL SECTION
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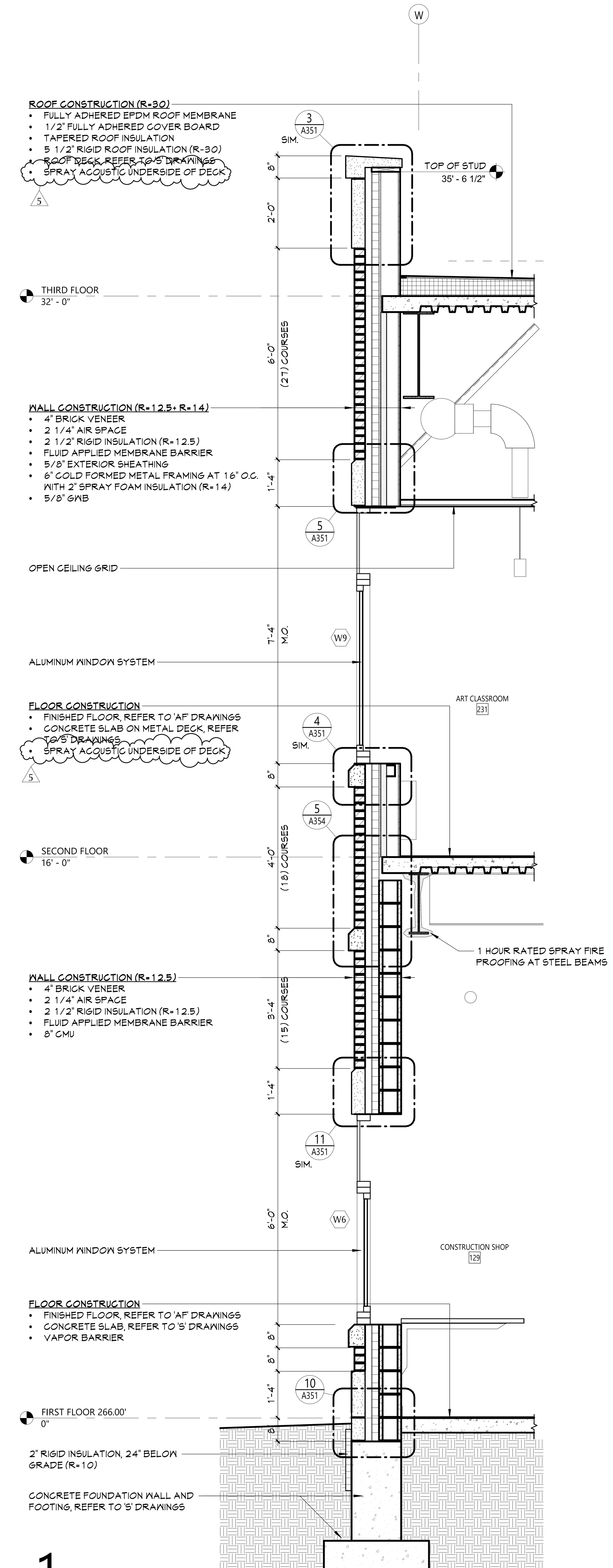

1 WALL SECTION
A310 1/2" = 1'-0"

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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

REGISTERED ARCHITECT · RICHARD L. PECKHAM · STATE OF NEW YORK · 019884
REGISTRATION EXPIRATION DATE: 12/31/2026

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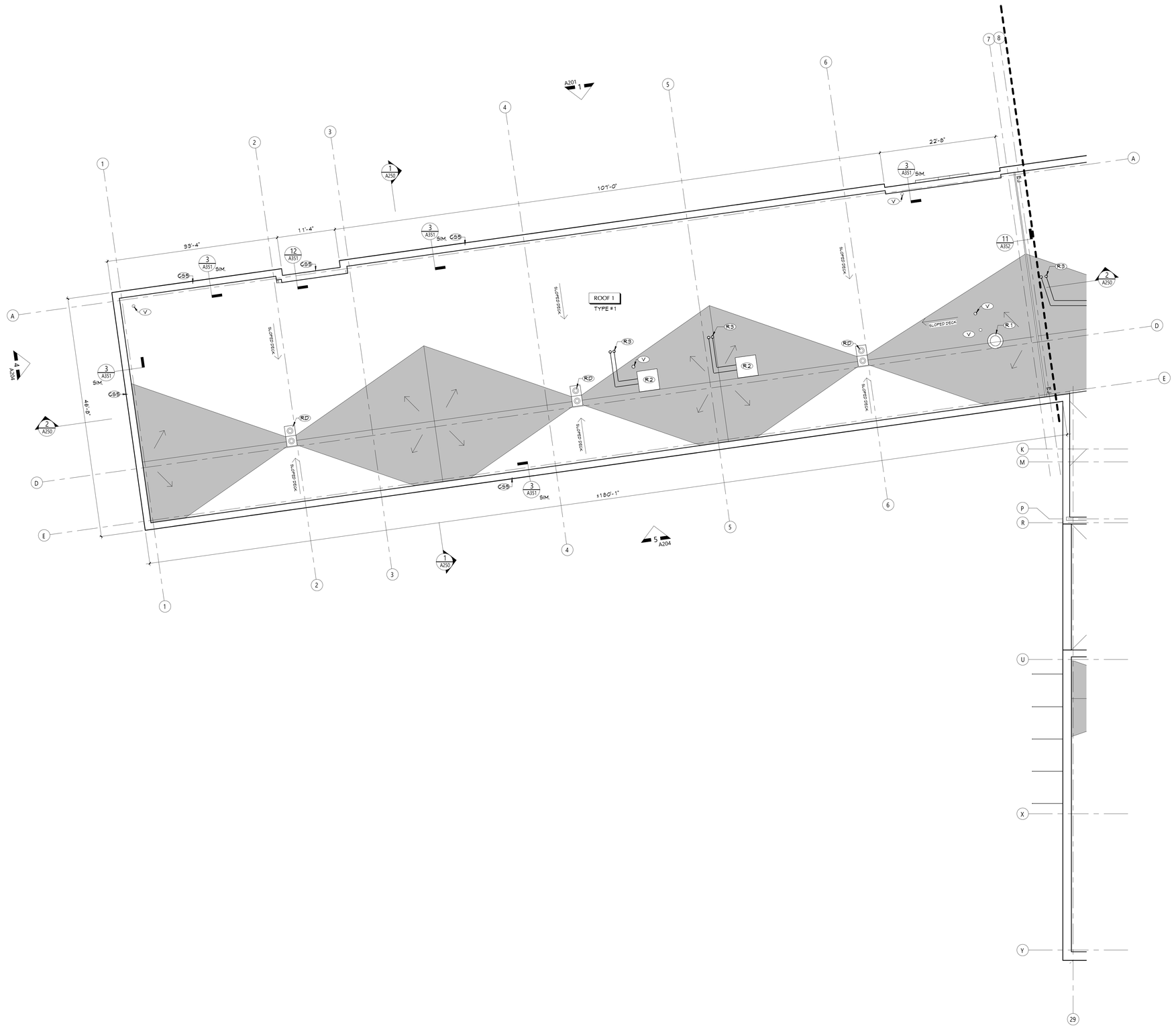
WALL SECTIONS - AREA 3

Sheet No.
CTE A310

CONSTRUCTION DOCUMENTS



1 PARTIAL ROOF PLAN - AREA 1
A411 1/8" = 1'-0"

ROOF GENERAL NOTES

1. CURB SIZES SHOWN REFLECT PENETRATING DUCT SIZE. CURB SIZE MAY VARY. REFER TO MECHANICAL DRAWINGS. COORDINATE ACTUAL SIZE OF CURBS IN APPROVED SUBMITTALS.
2. ROOF INSULATION FASTENERS TO ENGAGE HIGH POINT OF STEEL DECK FLUTES.

ROOF DESCRIPTIONS

ROOF TYPE #1
1. FULLY ADHERED EPDM ROOF MEMBRANE
2. 1/2 COVER BOARD
3. (2) LAYERS OF RIGID ROOF INSULATION (TOTAL THICKNESS 5 1/2", MIN R-30
4. METAL DECK, REFER TO 'S' DRAWINGS

ROOF TYPE #2
1. FULLY ADHERED EPDM ROOF MEMBRANE
2. 1/2 COVER BOARD
3. TAPERED INSULATION, SLOPE 1/4" PER FOOT, U.N.O.
4. (2) LAYERS OF RIGID ROOF INSULATION (TOTAL THICKNESS 5 1/2", MIN R-30
5. METAL DECK, REFER TO 'S' DRAWINGS

ROOF TYPE #3
1. FULLY ADHERED EPDM ROOF MEMBRANE
2. 1/2 COVER BOARD
3. TAPERED INSULATION, SLOPE 1/4" PER FOOT, U.N.O.
4. (2) LAYERS OF RIGID ROOF INSULATION (TOTAL THICKNESS 5 1/2", MIN R-30
5. VAPOR BARRIER
6. CONCRETE ON METAL DECK, REFER TO 'S' DRAWINGS

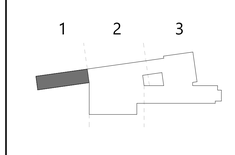
ROOF LEGEND

RD	DUAL ROOF DRAIN, REFER TO PLUMBING DRAWINGS
SC	ROOF SCUPPER
V	VENT PIPE, REFER TO PLUMBING DRAWINGS
	ROOF PENETRATIONS, REFER TO MECHANICAL DRAWINGS
AH	ROOF ACCESS HATCH
	INDICATES DIRECTION OF SLOPE AT 1/4" PER FOOT MINIMUM, UNO
L	ROOF LADDER
EJ	EXPANSION JOINT
	TAPERED INSULATION, SLOPE 1/4" PER FOOT, U.N.O.
	ROOF CRICKET, SLOPE 1/2" PER FOOT, U.N.O.

KEYNOTES

#	DESCRIPTION
CS5	CAST STONE PROFILE #5
R1	MECHANICAL UNIT ON CURB, REFER TO DETAILS
R2	MECHANICAL UNIT ON RAILS, REFER TO DETAILS
R3	PIPE PORTAL THROUGH ROOF, REFER TO DETAILS
RD	DUAL ROOF DRAIN, REFER TO PLUMBING DRAWINGS
V	VENT, REFER TO PLUMBING DRAWINGS

KEY PLAN



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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

REGISTERED ARCHITECT RICHARD L. PROCTOR 031985 STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

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Sheet Title
PARTIAL ROOF PLAN - AREA 1

Sheet No.
CTE A411

CONSTRUCTION DOCUMENTS

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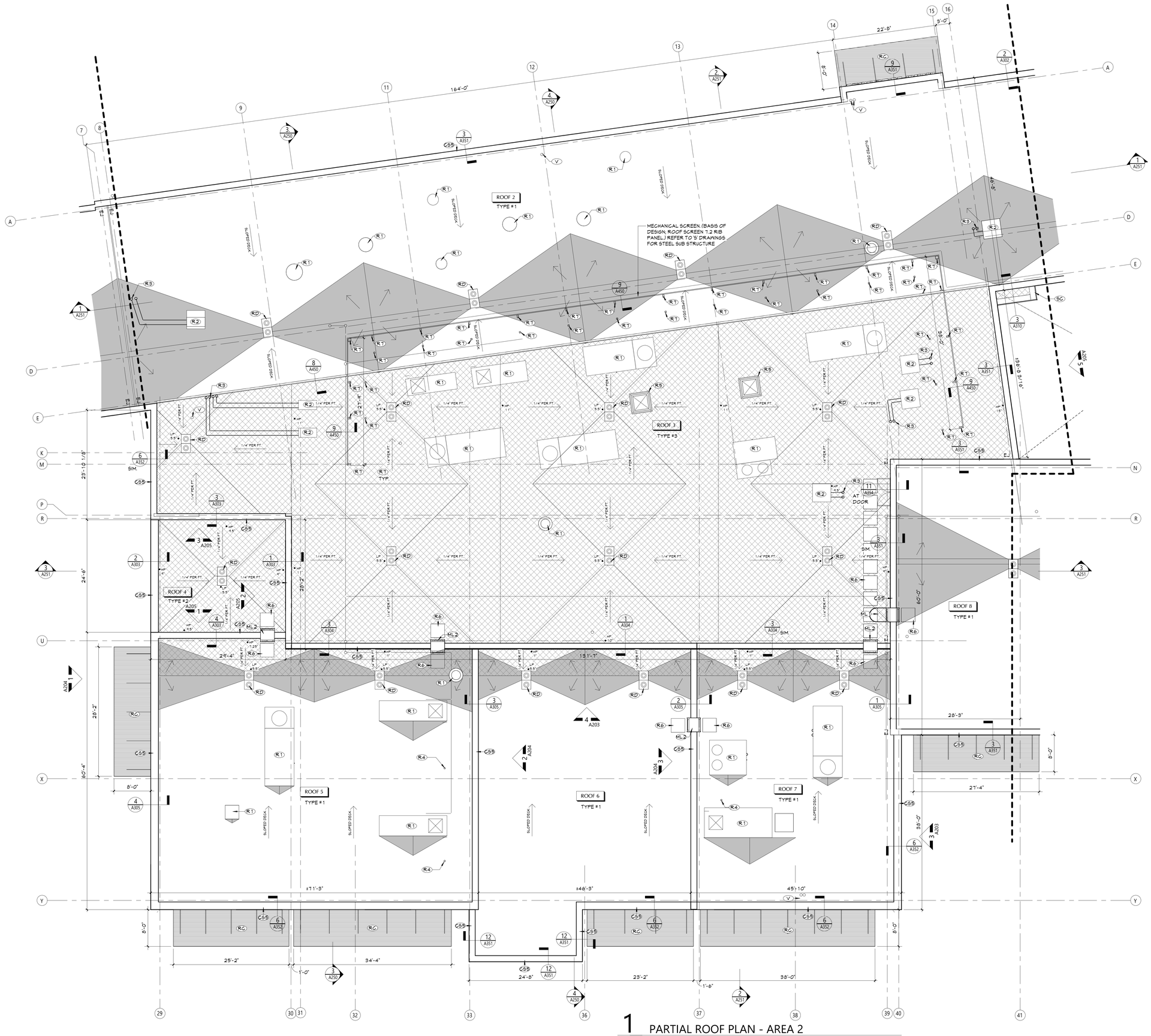


1 PARTIAL ROOF PLAN - AREA 2
A412 1/8" = 1'-0"

ROOF GENERAL NOTES

1. CURB SIZES SHOWN REFLECT PENETRATING DUCT SIZE. CURB SIZE MAY VARY. REFER TO MECHANICAL DRAWINGS. COORDINATE ACTUAL SIZE OF CURBS IN APPROVED SUBMITTALS.
2. ROOF INSULATION FASTENERS TO ENGAGE HIGH POINT OF STEEL DECK FLUTES.

ROOF DESCRIPTIONS

ROOF TYPE #1
1. FULLY ADHERED EPDM ROOF MEMBRANE
2. 1/2 COVER BOARD
3. (2) LAYERS OF RIGID ROOF INSULATION (TOTAL THICKNESS 5 1/2", MIN R-30
4. METAL DECK, REFER TO 'S' DRAWINGS

ROOF TYPE #2
1. FULLY ADHERED EPDM ROOF MEMBRANE
2. 1/2 COVER BOARD
3. TAPERED INSULATION, SLOPE 1/4" PER FOOT, U.N.O.
4. (2) LAYERS OF RIGID ROOF INSULATION (TOTAL THICKNESS 5 1/2", MIN R-30
5. METAL DECK, REFER TO 'S' DRAWINGS

ROOF TYPE #3
1. FULLY ADHERED EPDM ROOF MEMBRANE
2. 1/2 COVER BOARD
3. TAPERED INSULATION, SLOPE 1/4" PER FOOT, U.N.O.
4. (2) LAYERS OF RIGID ROOF INSULATION (TOTAL THICKNESS 5 1/2", MIN R-30
5. VAPOR BARRIER
6. CONCRETE ON METAL DECK, REFER TO 'S' DRAWINGS

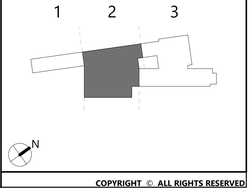
ROOF LEGEND

RD	DUAL ROOF DRAIN, REFER TO PLUMBING DRAWINGS
SC	ROOF SCUPPER
V	VENT PIPE, REFER TO PLUMBING DRAWINGS
	ROOF PENETRATIONS, REFER TO MECHANICAL DRAWINGS
AH	ROOF ACCESS HATCH
	INDICATES DIRECTION OF SLOPE AT 1/4" PER FOOT MINIMUM, UNO
L	ROOF LADDER
EJ	EXPANSION JOINT
	TAPERED INSULATION, SLOPE 1/4" PER FOOT, U.N.O.
	ROOF CRICKET, SLOPE 1/2" PER FOOT, U.N.O.

KEYNOTES

#	DESCRIPTION
CS5	CAST STONE PROFILE #5
ML1	METAL ROOF LADDER WITH CAGE
ML2	METAL ROOF LADDER
R1	MECHANICAL UNIT ON CURB, REFER TO DETAILS
R2	MECHANICAL UNIT ON RAILS, REFER TO DETAILS
R3	PIPE PORTAL THROUGH ROOF. REFER TO DETAILS
R4	PROVIDE FALL PROTECTION TIE-OFF DEVICE, REFER TO DETAILS.
R5	4'x4' SKYLIGHT.
R6	PROVIDE WALKWAY PADS, TYP.
R7	PROVIDE FULLY ADHERED MEMBRANE FLASHING AT STEEL STRUCTURE PENETRATIONS.
RC	MANUFACTURED CANOPY
RD	DUAL ROOF DRAIN, REFER TO PLUMBING DRAWINGS
SC	ROOF SCUPPER
V	VENT, REFER TO PLUMBING DRAWINGS

KEY PLAN



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NEWBURGH ENLARGED CITY SCHOOL DISTRICT NEW CTE BUILDING

Project Title

REGISTERED ARCHITECT RAYMOND L. PECKHAM 019884 STATE OF NEW YORK
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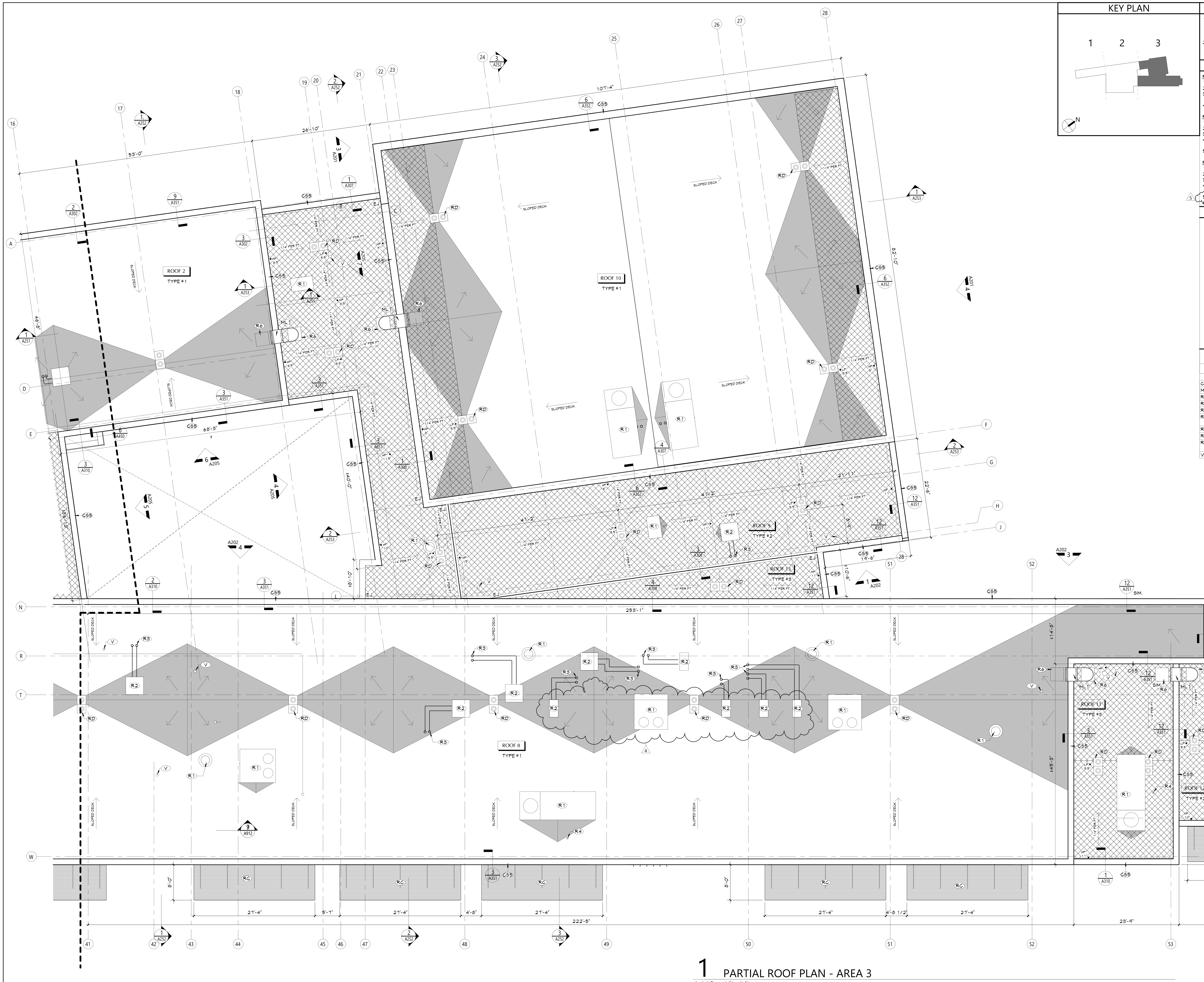
Issued for Bid:	4/15/2024

Sheet Title
PARTIAL ROOF PLAN - AREA 2

Sheet No.
CTE A412

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - ARCH.rvt



1 PARTIAL ROOF PLAN - AREA 3

A413 1/8" = 1'-0"

KEY PLAN

ROOF GENERAL NOTES

1. CURB SIZES SHOWN REFLECT PENETRATING DUCT SIZE. CURB SIZE MAY VARY, REFER TO MECHANICAL DRAWINGS, COORDINATE ACTUAL SIZE OF CURBS IN APPROVED SUBMITTALS.
2. ROOF INSULATION FASTENERS TO ENGAGE HIGH POINT OF STEEL DECK FLUTES.

ROOF DESCRIPTIONS

ROOF TYPE #1
1. FULLY ADHERED EPDM ROOF MEMBRANE
2. 1/2 COVER BOARD
3. (2) LAYERS OF RIGID ROOF INSULATION (TOTAL THICKNESS 5 1/2", MIN R-30
4. METAL DECK, REFER TO 'S' DRAWINGS

ROOF TYPE #2
1. FULLY ADHERED EPDM ROOF MEMBRANE
2. 1/2 COVER BOARD
3. TAPERED INSULATION, SLOPE 1/4" PER FOOT, U.N.O.
4. (2) LAYERS OF RIGID ROOF INSULATION (TOTAL THICKNESS 5 1/2", MIN R-30
5. METAL DECK, REFER TO 'S' DRAWINGS

ROOF TYPE #3
1. FULLY ADHERED EPDM ROOF MEMBRANE
2. 1/2 COVER BOARD
3. TAPERED INSULATION, SLOPE 1/4" PER FOOT, U.N.O.
4. (2) LAYERS OF RIGID ROOF INSULATION (TOTAL THICKNESS 5 1/2", MIN R-30
5. VAPOR BARRIER
6. CONCRETE ON METAL DECK, REFER TO 'S' DRAWINGS

ROOF LEGEND

RD — DUAL ROOF DRAIN, REFER TO PLUMBING DRAWINGS
SC — ROOF SCUPPER
V — VENT PIPE, REFER TO PLUMBING DRAWINGS
ROOF PENETRATIONS, REFER TO MECHANICAL DRAWINGS
AH — ROOF ACCESS HATCH
INDICATES DIRECTION OF SLOPE AT 1/4" PER FOOT MINIMUM, UNO
ROOF LADDER
EJ — EXPANSION JOINT
TAPERED INSULATION, SLOPE 1/4" PER FOOT, U.N.O.
ROOF CRICKET, SLOPE 1/2" PER FOOT, U.N.O.

KEYNOTES

#	DESCRIPTION
CS5	CAST STONE PROFILE #5
ML1	METAL ROOF LADDER WITH CAGE
R1	MECHANICAL UNIT ON CURB, REFER TO DETAILS
R2	MECHANICAL UNIT ON RAILS, REFER TO DETAILS
R3	PIPE PORTAL THROUGH ROOF. REFER TO DETAILS
R4	PROVIDE FALL PROTECTION TIE-OFF DEVICE, REFER TO DETAILS.
R6	PROVIDE WALKWAY PADS, TYP.
RC	MANUFACTURED CANOPY
RD	DUAL ROOF DRAIN, REFER TO PLUMBING DRAWINGS
V	VENT, REFER TO PLUMBING DRAWINGS

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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
5	5/29/2024	Bid Addendum #5
4	5/20/2024	BID Addendum #4

Drawn By:	Author
Checked By:	Checker
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Issued for Bid:	4/15/2024

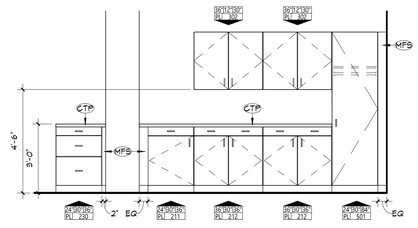
Sheet Title

PARTIAL ROOF PLAN - AREA 3

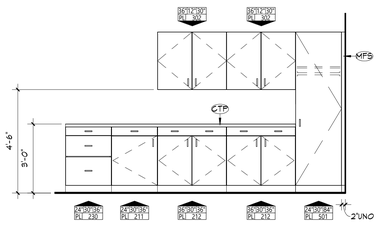
Sheet No.

CTE A413

CONSTRUCTION DOCUMENTS



5 INTERIOR ELEVATION
TYPICAL CLASSROOM CASEWORK
A601 3/8" = 1'-0"



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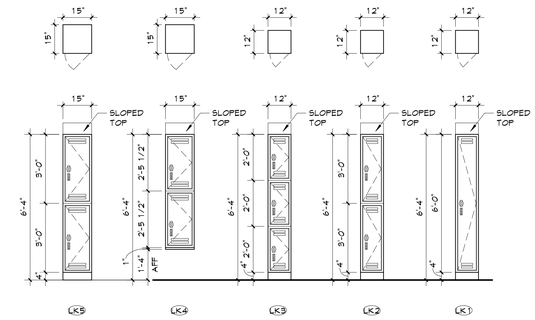
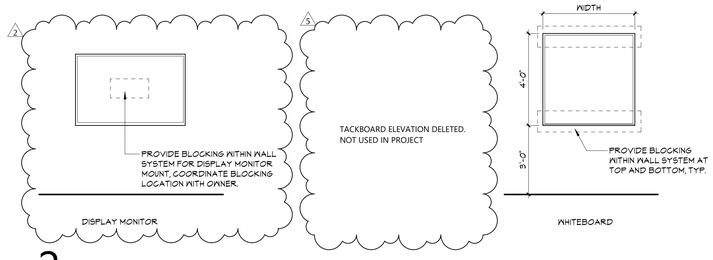
TYPICAL CLASSROOM CASEWORK
A601 3/8" = 1'-0"

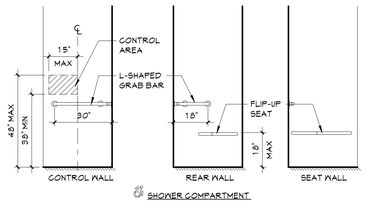


NOTE:
1. REFER TO A600 DRAWINGS FOR ADA LOCKER LOCATIONS
2. ADA LOCKERS SHALL HAVE ACCESSIBLE ELEMENTS WITHIN SIDE REACH GUIDELINES, 15" MINIMUM AND 48" MAXIMUM ABOVE FINISH FLOOR AND SHALL HAVE AN ADA WHEELCHAIR SIGN VISIBLE FROM THE OUTSIDE OF THE LOCKER.

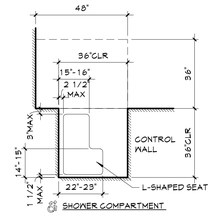
3 LOCKER TYPES
A601 3/8" = 1'-0"



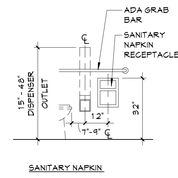
2 TYPICAL CLASSROOM EQUIPMENT
A601 3/8" = 1'-0"



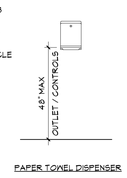
SHOWER COMPARTMENT



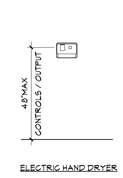
SHOWER COMPARTMENT



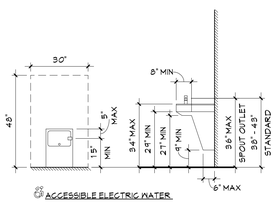
SANITARY NAPKIN



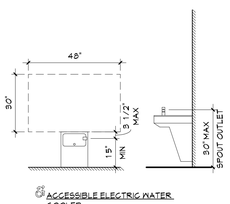
PAPER TOWEL DISPENSER



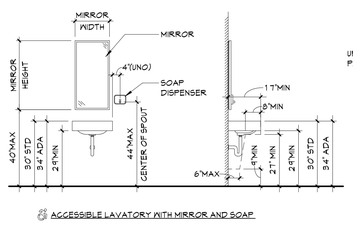
ELECTRIC HAND DRYER



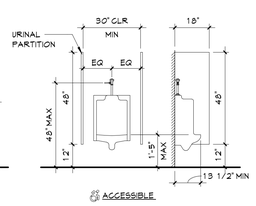
ACCESSIBLE ELECTRIC WATER



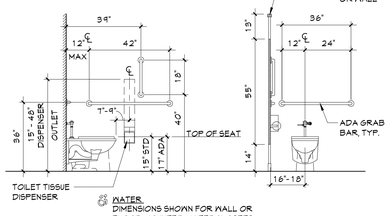
ACCESSIBLE ELECTRIC WATER COOLER



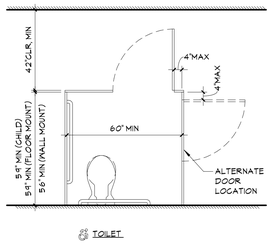
ACCESSIBLE LAVATORY WITH MIRROR AND SOAP



ACCESSIBLE



WATER DIMENSIONS SHOWN FOR WALL OR FLOOR MOUNTED WATERCLOSETS



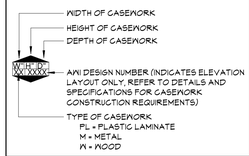
TOILET

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



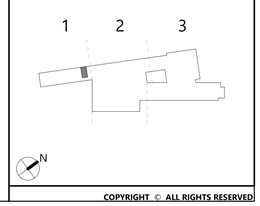
TOILET ROOM NOTES

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. PROCIDA STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

#	DATE	DESCRIPTION
5	5/29/2024	Bid Addendum #1
2	5/3/2024	BID Addendum #2

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Sheet Title
TYPICAL EQUIPMENT PLANS, ELEVATIONS AND DETAILS

Sheet No.
CTE
A601

CONSTRUCTION DOCUMENTS

EQUIPMENT SCHEDULE - AUTO TETCH SHOP

EQUIPMENT #	QUANTITY	DESCRIPTION	MANUFACTURER	MODEL	MOUNTING	POWER	HORSEPOWER	WATER	DUST COLLECTION	COMPRESSED AIR	FURNISHED	INSTALLED
A001	5	3-TON FLOOR JACK	SNAP-ON	FJ300	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A002	4	6-TON JACK STAND	SNAP-ON	JS600	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A003	4	4-TON JACK STAND	SNAP-ON	JS400	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A004	1	WORKSTATION CART	SNAP-ON	KRSC4130PCM	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A005	1	SAFETY CABINET	CONDOR	45AE88	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A006	3	WASTE OIL DRAIN	SNAP-ON	5180	FREE STANDING	-	-	-	-	-	OWNER	OWNER
A007	4	ENGINE STAND	OMEGA	OMG30750	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A008	1	TIRE RACK	TENNSCO	ZST-6084S	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A009	6	STANDARD CREEPER	SNAP-ON	JCW62R	FREE STANDING	-	-	-	-	-	OWNER	OWNER
A010	1	WELDER	MILLER ELECTRIC MFG.	907734	FREE STANDING	230V,1 PH, 39.5A	-	-	-	-	OWNER	OWNER
A011	1	AC MACHINE	SNAP-ON	EEAC333B	FREE STANDING	120V, 1PH, 10.0A			-		OWNER	OWNER
A012	1	MLL/DRILL MACHINE	WEISS	VM18L	COUNTER	120V, 1PH, 10.0A	-	-	-	-	CONTRACTOR	CONTRACTOR
A013	3	PARTS WASHER	SNAP-ON	PBD3222A	FREE STANDING	120V, 1PH, 10.0A	-	-	-		CONTRACTOR	CONTRACTOR
A014	1	TIRE CHANGER	HUNTER ENGINEERING COMPANY	TC33	FLOOR	230V, 1PH, 6.0A	-	-	-	115-175 PSI	CONTRACTOR	CONTRACTOR
A014A	1	TIRE CHANGER	HUNTER ENGINEERING COMPANY	TCRH	FLOOR	230V, 1PH, 23.0A	-	-	-	125±25 PSI	CONTRACTOR	CONTRACTOR
A015	2	WHEEL BALANCER	HUNTER ENGINEERING COMPANY	SWE33	FLOOR	230V, 1PH, 10A	-	-	-	100-175 PSI	CONTRACTOR	CONTRACTOR
A016	10	TOOL CART	SNAP-ON	KRBC7TDPJJ	FREE STANDING	-	-	-	-	-	OWNER	OWNER
A017	1	OIL FILTER CRUSHER	RANGER	RP-30FCH	FREE STANDING	230V, 1PH, 10A	2HP	-	-	-	CONTRACTOR	CONTRACTOR
A018	2	SCISSOR LIFT	HUNTER ENGINEERING COMPANY	RX12KIS 3	FREE STANDING	230V, 1PH, 26.0A	-	-	-	130-150 PSI	CONTRACTOR	CONTRACTOR
A019	2	HEAD UNIT	HUNTER ENGINEERING COMPANY	HE421CM3E		230V, 1PH, 3.0A					CONTRACTOR	CONTRACTOR
A020	2	BENCH GRINDER WITH STAND	JET	577102K & 48RJ30	FREE STANDING	120V, 1PH, 12.0A	1HP	-	-	-	CONTRACTOR	CONTRACTOR
A021	5	POST LIFT	CHALLENGER LIFTS	CL12A	FLOOR	230V, 1PH, 30.0A	-	-	-	-	CONTRACTOR	CONTRACTOR
A022	1	AIR/HAND OPERATED H-FRAME PRESS	BAILEIGH INDUSTRIAL	HSP-50A	FLOOR	-		-	-	YES	CONTRACTOR	CONTRACTOR
A023	1	STRUT SPRING COMPRESSOR	BRANICK	7600	WALL	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A026	1	BRAKE LATHE	HUNTER ENGINEERING COMPANY	BL73	FLOOR	230V, 1PH, 7.5A 50/60 Hz, 1ph	1.5 HP	-	-	-	CONTRACTOR	CONTRACTOR
A033	1	ENGINE HOIST	GRAINGER	3ZC71	MOBILE	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A056	1	MOTORCYCLE LIFT	BENDPAK	RML-1500XL	FREE STANDING	-	-	-	-	90-160 PSI	CONTRACTOR	CONTRACTOR
A059	1	2 TON ENGINE CRANE	OMEGA	44020	MOBILE	-	-	-	-	-	CONTRACTOR	CONTRACTOR

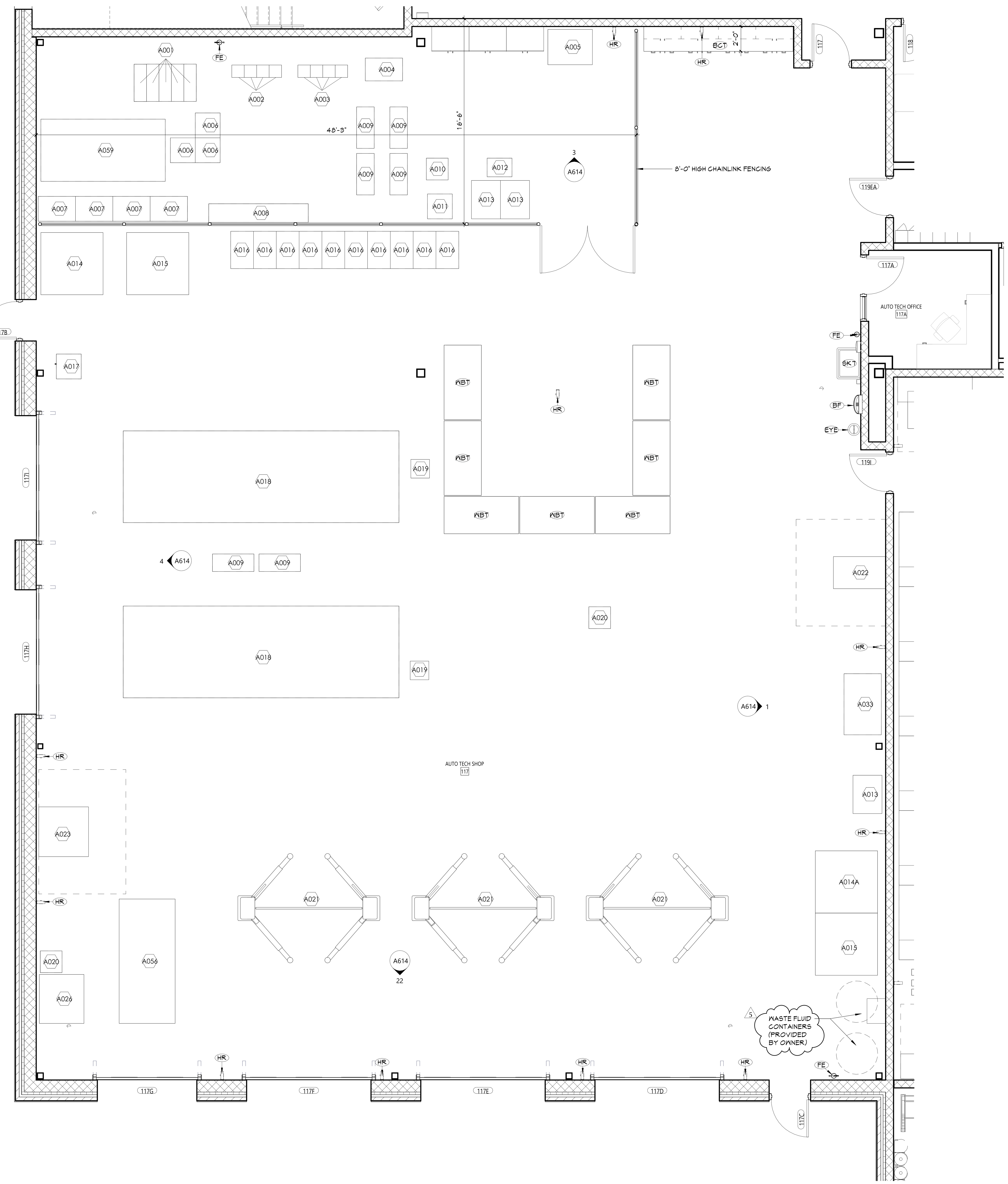
PROVIDE THE ACCOMPANYING ACCESSORIES FOR THE FOLLOWING EQUIPMENT LISTED BELOW

A012 - MILL/DRILL MACHINE
SUPPORT WITH CABINET AND DRAWER, 30201035

A014 - HEAD UNIT
WINALIGN LARGE PREMIUM CONSOLE, WA440E SERIES

A026 - BRAKE LATHE
ELITE CONE ADAPTER KIT, MODEL # 20-2615-1
DUAL QUICKCHUCK ADAPTOR, MODEL #175-423-2

3



1 ENLARGED FLOOR PLAN - AUTO TECH SHOP
A613 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

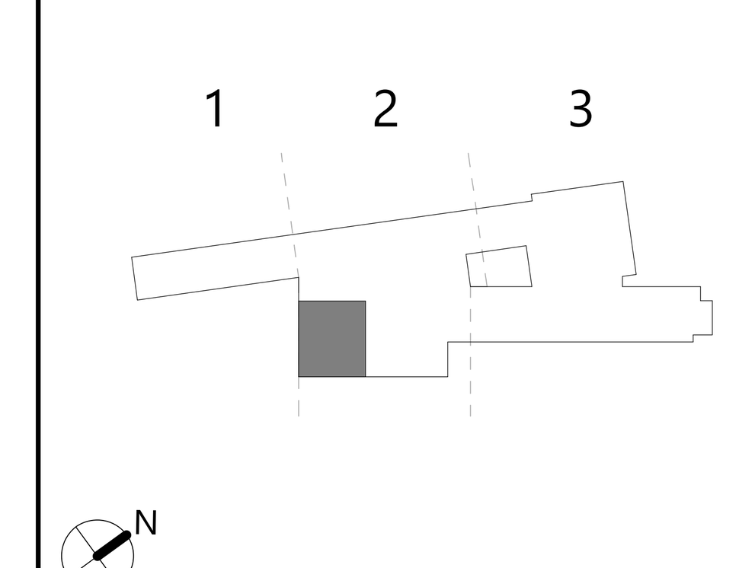
W" H" D"
XX XXXX

- WIDTH OF CASEWORK
- HEIGHT OF CASEWORK
- DEPTH OF CASEWORK
- AWI DESIGN NUMBER (INDICATES ELEVATION LAYOUT ONLY, REFER TO DETAILS AND SPECIFICATIONS FOR CASEWORK CONSTRUCTION REQUIREMENTS)
- TYPE OF CASEWORK
  - PL = PLASTIC LAMINATE
  - M = METAL
  - W = WOOD

KEYNOTES

#	DESCRIPTION
BCT	BUTCHERBLOCK COUNTER TOP
BF	BOTTLE FILLER, REFER TO PLUMBING DRAWINGS
EYE	EYEWASH STATION, REFER TO PLUMBING DRAWINGS
FE	FIRE EXTINGUISHER, WALL MOUNT
HR	HOSE REEL
SK7	SINGLE BAY UTILITY SINK, REFER TO PLUMBING DRAWINGS
WBT	WORKBENCH TABLE (PROVIDED BY OWNER)

KEY PLAN



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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

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5	5/29/2024	Bid Addendum #5
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Drawn By:	ACG
Checked By:	
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
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Sheet Title
ENLARGED PLAN - AUTO TECH SHOP

Sheet No.
CTE A613

CONSTRUCTION DOCUMENTS

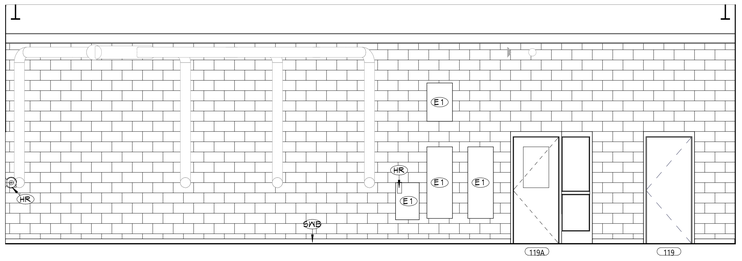
EQUIPMENT SCHEDULE - WELDING SHOP

EQUIPMENT #	QUANTITY	DESCRIPTION	MANUFACTURER	MODEL	MOUNTING	POWER	HORSEPOWER	WATER	DUST COLLECTION	COMPRESSED AIR	FURNISHED	INSTALLED
A030	3	MIG WELDER	LINCOLN	K6080-1	FREE STANDING	230V, 1PH, 22.5A	-	-	-	-	OWNER	OWNER
A30A	2	MIG WELDER	LINCOLN	K4778-1	FREE STANDING	480V, 1PH, 25.0A	-	-	-	-	OWNER	OWNER
A030B	4	MIG WELDER	LINCOLN	K3520-1 w/ K3667-1 & K3750-2	FREE STANDING	480V, 1PH, 27.0A	-	-	-	-	OWNER	OWNER
A034	2	DRILL PRESS	DAKE	SB-16 / PART # 977200-1	FLOOR	120V, 1PH, 14.0A	1/2 HP	-	-	-	CONTRACTOR	CONTRACTOR
A039	3	TIG WELDER	LINCOLN	K2618-1	MOBILE	480V, APH, 47.0A	-	-	-	-	OWNER	OWNER
A39A	1	TIG WELDER	LINCOLN	K5585-1	FREE STANDING	230V, 1PH, 30.0A	-	-	-	-	OWNER	OWNER
A040	10	WELDING BOOTH	LINCOLN	6'X6'	FREE STANDING	120V, 1PH, 1.0A	-	-	-	-	CONTRACTOR	CONTRACTOR
A040A	4	WELDING BOOTH	LINCOLN	6'X6' STARTER	FREE STANDING	120V, 1PH, 1.0A	-	-	-	-	CONTRACTOR	CONTRACTOR
A041	1	PLASMA CUTTER TABLE	TRICK TOOLS	05-0085-001	FREE STANDING	-					CONTRACTOR	CONTRACTOR
A042	1	PLASMA CUTTER	HYPERTHERM	POWERMAX85 SYNC 3	FREE STANDING	480V, 3PH, 18.0A					CONTRACTOR	CONTRACTOR
A044	6	WELDING BOOTH	LINCOLN	4'X6'	FREE STANDING	120V, 1PH, 1.0A	-	-	-	-	CONTRACTOR	CONTRACTOR
A045	1	VERTICAL BAND SAW	BAILEIGH INDUSTRIAL	BSV-20VS-V2	FLOOR	240V, 1PH, 12.0A	2HP	-	-	-	CONTRACTOR	CONTRACTOR
A046	1	MANUAL COLD SAW	BAILEIGH INDUSTRIAL	CS-250EU	FLOOR	120V, 1PH, 10.0A	1HP	-	-	-	CONTRACTOR	CONTRACTOR
A047	4	TROLLEY	WESTWARD	32H856	FREE STANDING	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A048	2	GRINDER WITH BELT SANDER	JET	IBGB-248	STAND	120V, 1PH, 11.0A	1HP	-	-	-	CONTRACTOR	CONTRACTOR
A049	2	GRINDING TABLE	LINCOLN	K2751-10	FLOOR	208-230/460V/3PH/60HZ	-	-	-	-	CONTRACTOR	CONTRACTOR
A050	1	HORIZONTAL BANDSAW	DAKE	983101 - MODEL SE912	MOBILE	120V, 1PH, 16.0A	1HP	-	-	-	CONTRACTOR	CONTRACTOR
A051	1	HYDRAULIC IRONWORKER	BAILEIGH INDUSTRIAL	SW-441	FLOOR	230V, 1PH, 20.0A	3HP	-	-	-	CONTRACTOR	CONTRACTOR
A052	4	ROLLER CONVEYOR	ASHLAND CONVEYOR	WHG190B3603	FREE STANDING			-	-	-	CONTRACTOR	CONTRACTOR
A053	1	UTILITY HYDRAULIC PRESS	DAKE	FB-20 / PART # 972220 3	FLOOR	-	-	-	-	-	CONTRACTOR	CONTRACTOR
A054	3	SAWHORSE / SPEEDHORSE	BORA	PM-4500	FREE STANDING	-	-	-	-	-	OWNER	OWNER
A055	7	STICK-TIG WELDER	LINCOLN	K4868-1	FREE STANDING	480V, 3PH, 19.0A	-	-	-	-	OWNER	OWNER

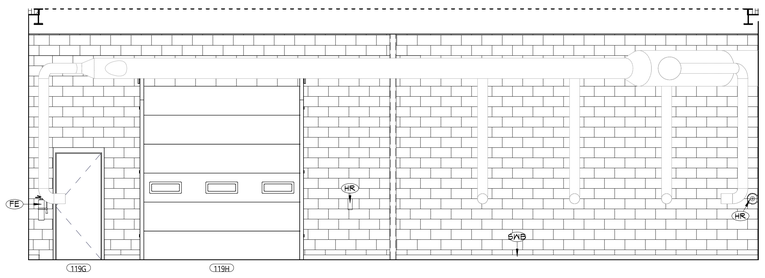
PROVIDE THE ACCOMPANYING ACCESSORIES FOR THE FOLLOWING EQUIPMENT LISTED BELOW

A048 - GRINDER WITH BELT SANDER
STAND, JT4-578172

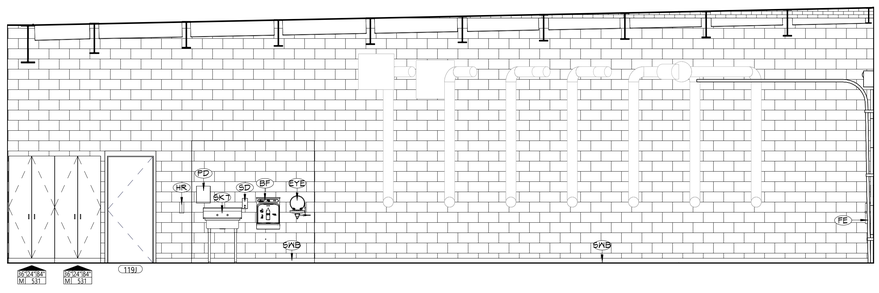
3



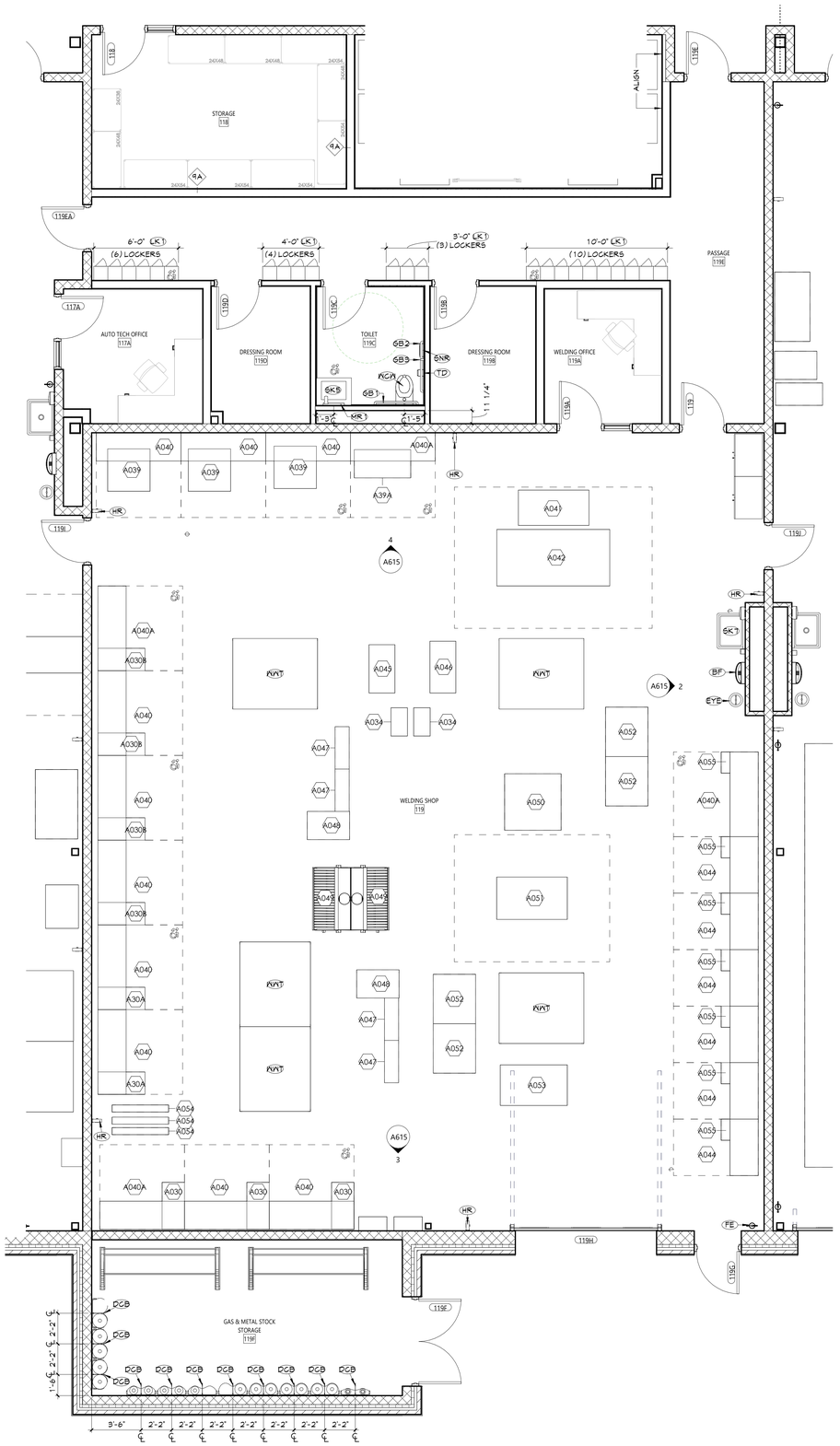
4 INTERIOR ELEVATION WELDING SHOP - WEST
A615 1/4" = 1'-0"



3 INTERIOR ELEVATION WELDING SHOP - EAST
A615 1/4" = 1'-0"



2 INTERIOR ELEVATION WELDING SHOP - NORTH
A615 1/4" = 1'-0"

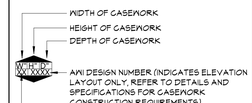


1 ENLARGED FLOOR PLAN - WELDING SHOP
A615 1/4" = 1'-0"

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

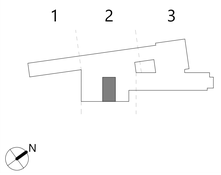


KEYNOTES

#	DESCRIPTION
BF	BOTTLE FILLER, REFER TO PLUMBING DRAWINGS
DCB	DOUBLE CYLINDER BRACKET, STEEL, WITH CHAINS, 25" WIDTH
E1	ELECTRICAL EQUIPMENT, REFER TO ELECTRICAL DRAWINGS
EYE	EYEWASH STATION, REFER TO PLUMBING DRAWINGS
FE	FIRE EXTINGUISHER, WALL MOUNT
GB1	36" GRAB BAR
GB2	42" GRAB BAR
GB3	18" VERTICAL GRAB BAR
HR	HOSE REEL
LK1	SINGLE-TIER METAL LOCKER
MR1	18"X30" CHANNEL FRAMED GLASS MIRROR
PD	PAPER TOWEL DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED)
SD	SOAP DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED)
SK5	SINGLE STATION LAVATORY, REFER TO PLUMBING DRAWINGS
SK7	SINGLE BAY UTILITY SINK, REFER TO PLUMBING DRAWINGS
SNR	SANITARY NAPKIN WASTE RECEPTACLE
SWB	SCHEDULED WALL BASE
TD	TOILET PAPER DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED)
WCN	WATER CLOSET, WALL MOUNTED, REFER TO PLUMBING DRAWINGS
WKT	WELDING WORK TABLE (PROVIDED BY OWNER)

5

KEY PLAN



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Consultant

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

REGISTERED ARCHITECT RICHARD L. PROCTOR STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

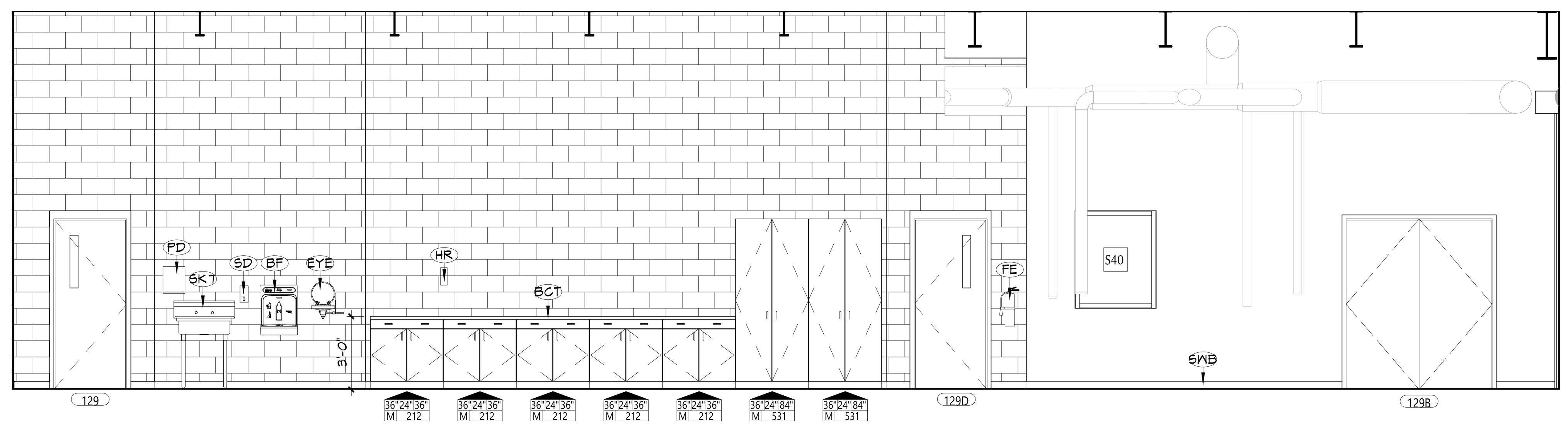
#	DATE	DESCRIPTION
5	5/29/2024	Bid Addendum #1
3	5/13/2024	BID Addendum #3

Drawn By:	ACG
Checked By:	
Proj. #:	44-16-00-01-0-053-001
CSArch Proj. #:	108-2303
Issued for Bid:	4/15/2024

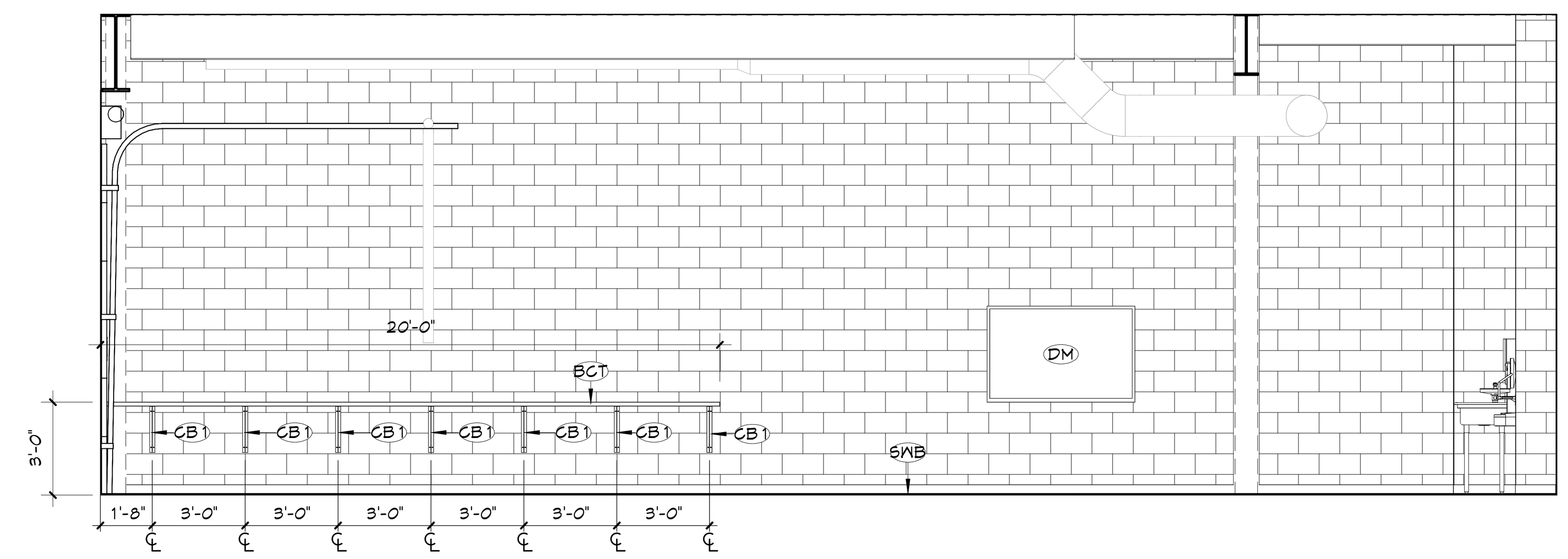
Sheet Title
ENLARGED PLAN - WELDING SHOP

Sheet No.
CTE A615

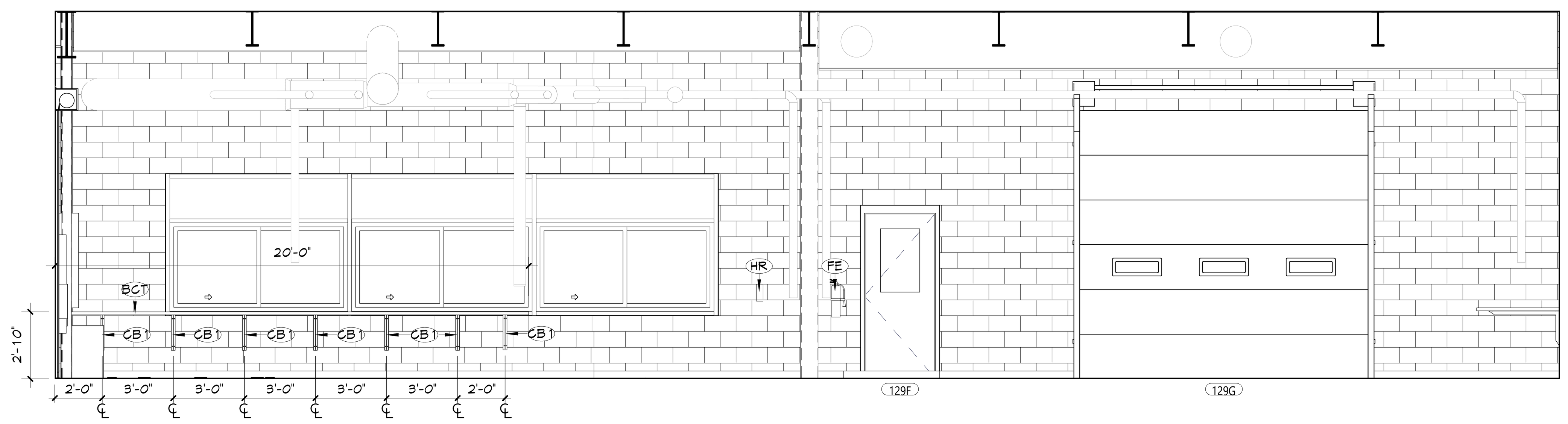
CONSTRUCTION DOCUMENTS



5 INTERIOR ELEVATION
CONSTRUCTION SHOP - WEST
A620 1/4" = 1'-0"



3 INTERIOR ELEVATION
CONSTRUCTION SHOP - SOUTH
A620 1/4" = 1'-0"

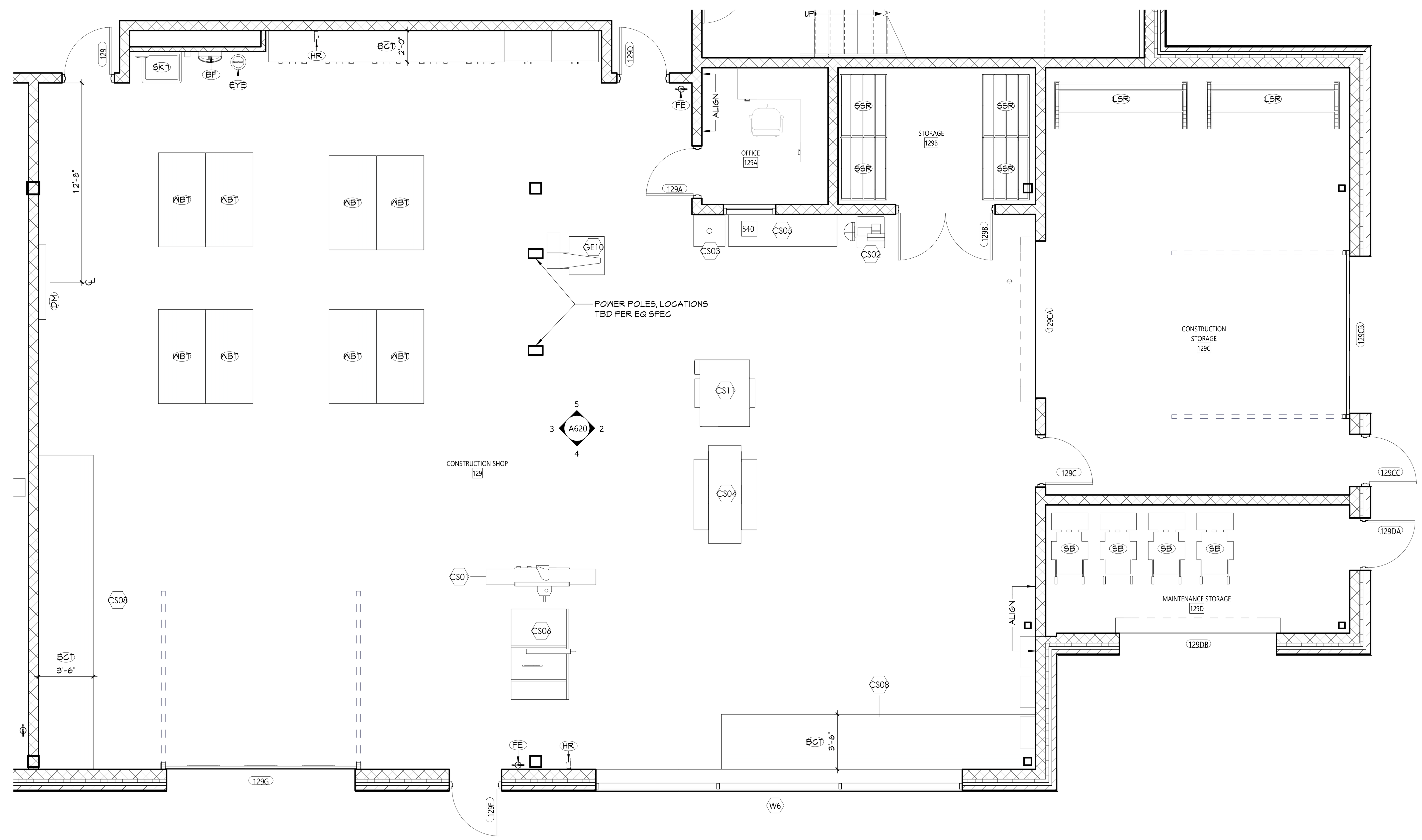


4 INTERIOR ELEVATION
CONSTRUCTION SHOP - EAST
A620 1/4" = 1'-0"

2 INTERIOR ELEVATION
CONSTRUCTION SHOP - NORTH
A620 1/4" = 1'-0"

EQUIPMENT SCHEDULE - CONSTRUCTION SHOP

EQUIPMENT. #	QUANTITY	DESCRIPTION	MANUFACTURER	MODEL	MOUNTING	POWER	HORSEPOWER	WATER	DUST COLLECTION	COMPRESSED AIR	FURNISHED	INSTALLED
CS01	1	JOINTER	CANTEK	J127LH	FREE STANDING	230V, 3PH, 15.2A	3HP/5HP	-	YES	-	CONTRACTOR	CONTRACTOR
CS02	1	BELT DISK SANDER	POWERMATIC	31A	FREE STANDING	120V, 1PH, 14.0A	1.5 HP	-	YES	-	CONTRACTOR	CONTRACTOR
CS03	1	OSCILLATING SPINDLE SANDER	JET	JOSS-S / STOCK # JT9-723950	FREE STANDING	120V, 1PH, 14.0A	1HP	-	300CFM	-	CONTRACTOR	CONTRACTOR
CS04	1	WIDE BELT SANDER	POWERMATIC	WB-37 / STOCK # 1790837	FREE STANDING	230V, 3PH, 70.0A	1HP	-	1,600 CFM	-	CONTRACTOR	CONTRACTOR
CS05	1	OSCILLATING EDGE SANDER	CANTEK	PW120E	FLOOR	230V, 3PH, 9.6A	3HP	-	YES	-	CONTRACTOR	CONTRACTOR
CS06	1	CABINET SAW	SAWSTOP	INDUSTRIAL CABINET SAW	FREE STANDING	230V, 3PH, 11.0A	3HP	-	YES	-	CONTRACTOR	CONTRACTOR
CS08	2	COMPOUND MITER SAW	DEWALT	DWS780	COUNTER	120V, 1PH, 15.0A		-	YES	-	CONTRACTOR	CONTRACTOR
CS11	1	PLANER	CANTEK	P630HV	FLOOR	230V, 3PH, 30.0A	10HP	-	YES	-	CONTRACTOR	CONTRACTOR
GE10	1	BANDSAW	CANTEK	HB600R	FREE STANDING	230V, 1PH, 17.0A	3HP	-	YES	-	CONTRACTOR	CONTRACTOR



1 ENLARGED FLOOR PLAN - CONSTRUCTION SHOP
A620 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

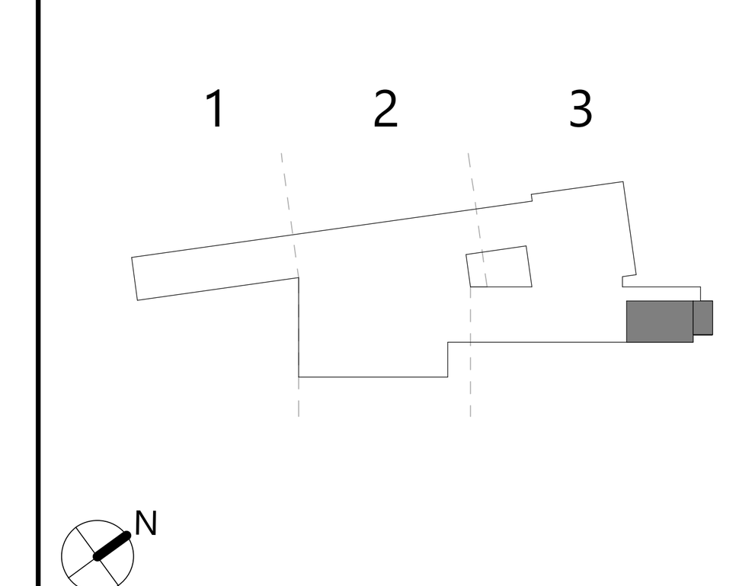
W" H" D"
XX XXXX

- WIDTH OF CASEWORK
- HEIGHT OF CASEWORK
- DEPTH OF CASEWORK
- AWI DESIGN NUMBER (INDICATES ELEVATION LAYOUT ONLY, REFER TO DETAILS AND SPECIFICATIONS FOR CASEWORK CONSTRUCTION REQUIREMENTS)
- TYPE OF CASEWORK
  - PL = PLASTIC LAMINATE
  - M = METAL
  - W = WOOD

KEYNOTES

#	DESCRIPTION
BCT	BUTCHERBLOCK COUNTER TOP
BF	BOTTLE FILLER, REFER TO PLUMBING DRAWINGS
CB1	COUNTER SUPPORT BRACKET
DM	DISPLAY MONITOR (OWNER FURNISHED, CONTRACTOR INSTALLED)
E1	ELECTRICAL EQUIPMENT, REFER TO ELECTRICAL DRAWINGS
EYE	EYEWASH STATION, REFER TO PLUMBING DRAWINGS
FE	FIRE EXTINGUISHER, WALL MOUNT
HR	HOSE REEL
LSR	LUMBER STORAGE RACK (PROVIDED BY OWNER)
M1	MECHANICAL EQUIPMENT. REFER TO MECHANICAL DRAWINGS.
PD	PAPER TOWEL DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED)
SB	SNOW BLOWER (PROVIDED BY OWNER)
SD	SOAP DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED)
SK7	SINGLE BAY UTILITY SINK, REFER TO PLUMBING DRAWINGS
SSR	SHEETROCK STORAGE RACK (PROVIDED BY OWNER)
SWB	SCHEDULED WALL BASE
WBT	WORKBENCH TABLE (PROVIDED BY OWNER)

KEY PLAN



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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
5	5/29/2024	Bid Addendum #5

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 - CONSTRUCTION SHOP

Sheet No.
CTE A620

CONSTRUCTION DOCUMENTS

Autodesk Docs://NECSD - New CTE Bldg/108-2303 NECSD CTE - ARCH.rvt

DOOR SCHEDULE - FIRST 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
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	-	G5	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	-	G5	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	4	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	4	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	3	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	6	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	6	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	1	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	7	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	7	HM	PT	5/A901	1/A901	7/A901	-	G3	15.0	-	-	1	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	7	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	7	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	4	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 / 9	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 / 9	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	-	G5	12.0	-	-		129A
129B	PR	129	CONSTRUCTION SHOP	129B	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	4	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 / 9	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	4	HM	PT	5/A901	1/A901	6/A352	90	-	10.0	-	-		130
130A	PR	130	GYMNASIUM	130A	GYM STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	4	HM	PT	5/A901	1/A901	7/A901	-	-	23.0	-	-		130A

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

DOOR SCHEDULE - FIRST 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
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	4	HM	PT	5/A901	1/A901	6/A352	90	-	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	4	HM	PT	5/A901	1/A901	7/A901	90	-	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	-	G7	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	-	G7	63.0	-	AC	10	CY101A
S101	PR	C102	CORRIDOR	S101	STAIR 1	3' - 0"	7' - 0"	1 3/4"	DG	WD	FF	4	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	4	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	4	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	4	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

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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
5	5/29/2024	Bid Addendum #5
4	5/20/2024	BID Addendum #4
3	5/13/2024	BID Addendum #3
2	5/3/2024	BID Addendum #2

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Sheet Title
DOOR SCHEDULE - FIRST FLOOR

Sheet No.
CTE A902

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 115A	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 WASH(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, 39" 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 REFILLIING 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

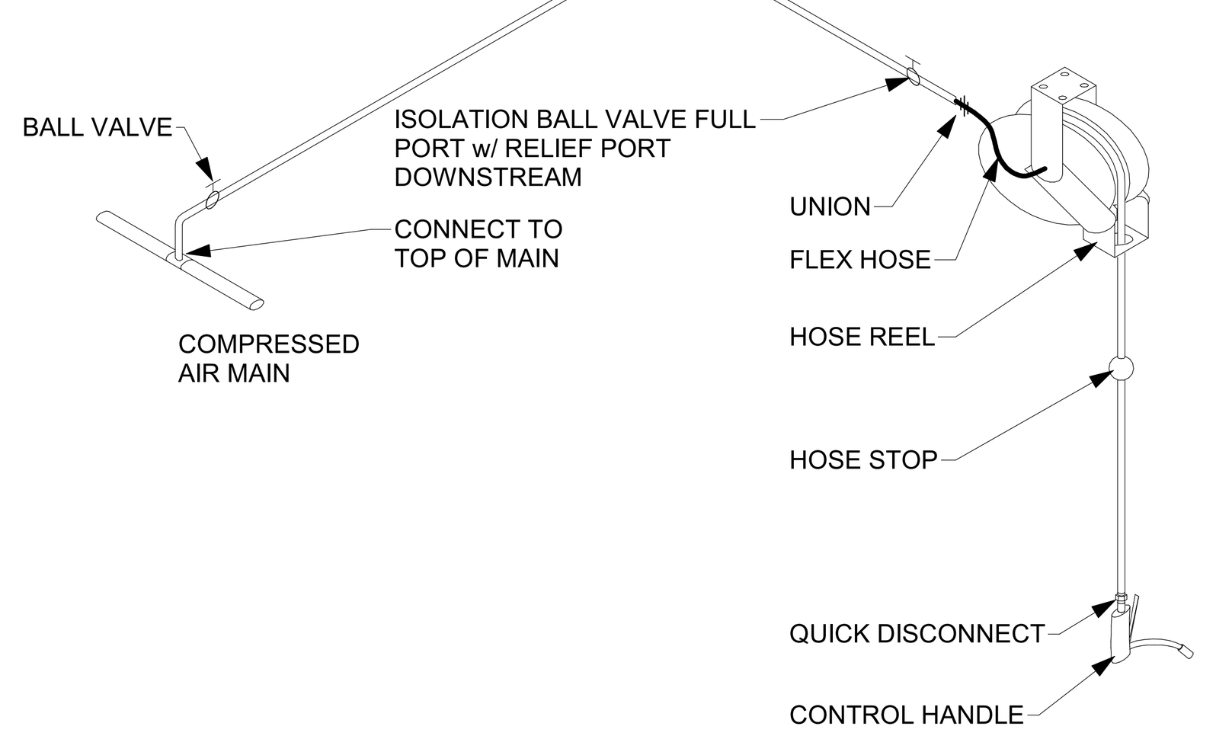
NO.	LOCATION	SERVICE	ACFM	MAX PRESSURE	MOTOR			TYPE	DESIGN MAKE
					HP	VOLTAGE	PHASE		
AC-1	PLUMBING 105	AUTO SHOP	51.0	175	15	230	3	RECIPRO	RAND 7100E15 WITH DRYER, FILTER AND SEPERATOR

EXPANSION TANK SCHEDULE

TAG NO.	LOCATION	SERVICE	MAXIMIUM 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



GENERAL NOTES:

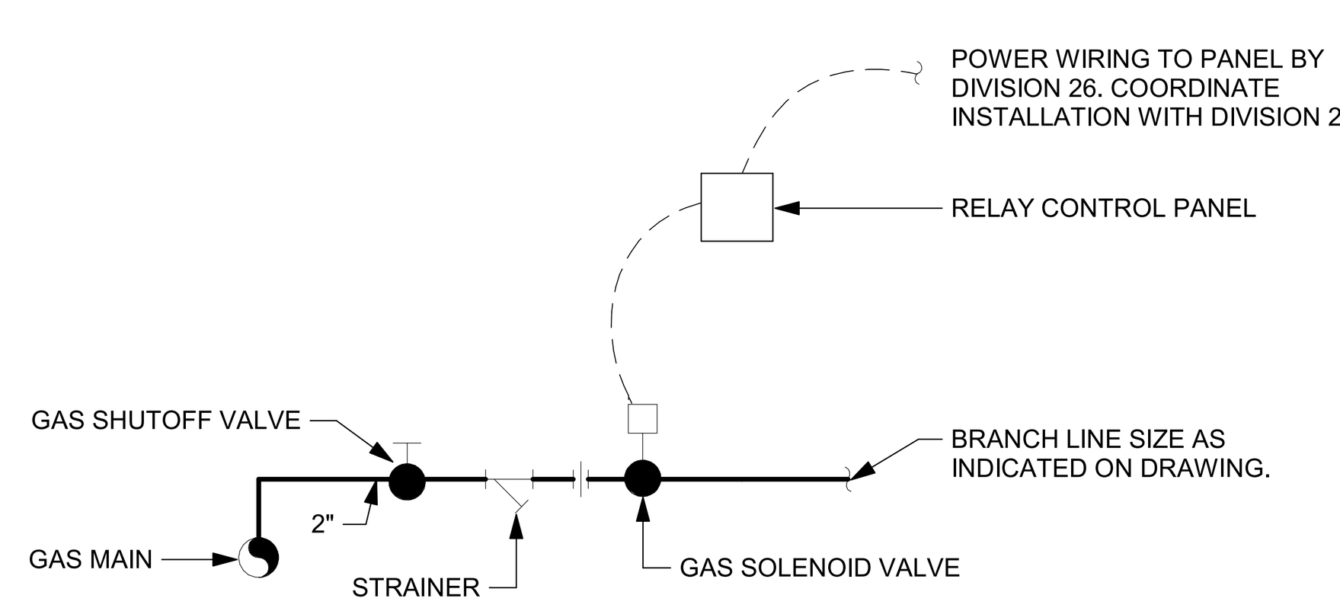
A. ADJUST HOSE STOPS AND REEL TENSION. CONTROL HANDLE TO HANG AT 4'-6" AFF UNLESS OTHERWISE REQUESTED BY OWNER.

B. QUICK DISCONNECT TO MATCH OWNER'S MODEL FOR RENOVATIONS

C. COLOR CODE EXPOSED PIPING IN SERVICE BAYS. PAINT 12" BAND ON PIPING ON 20 FOOT CENTERS WITH UNIQUE COLOR FOR EACH PIPE CONTENTS. PROVIDE CHART WITH KEY TO COLORS TO OWNER.

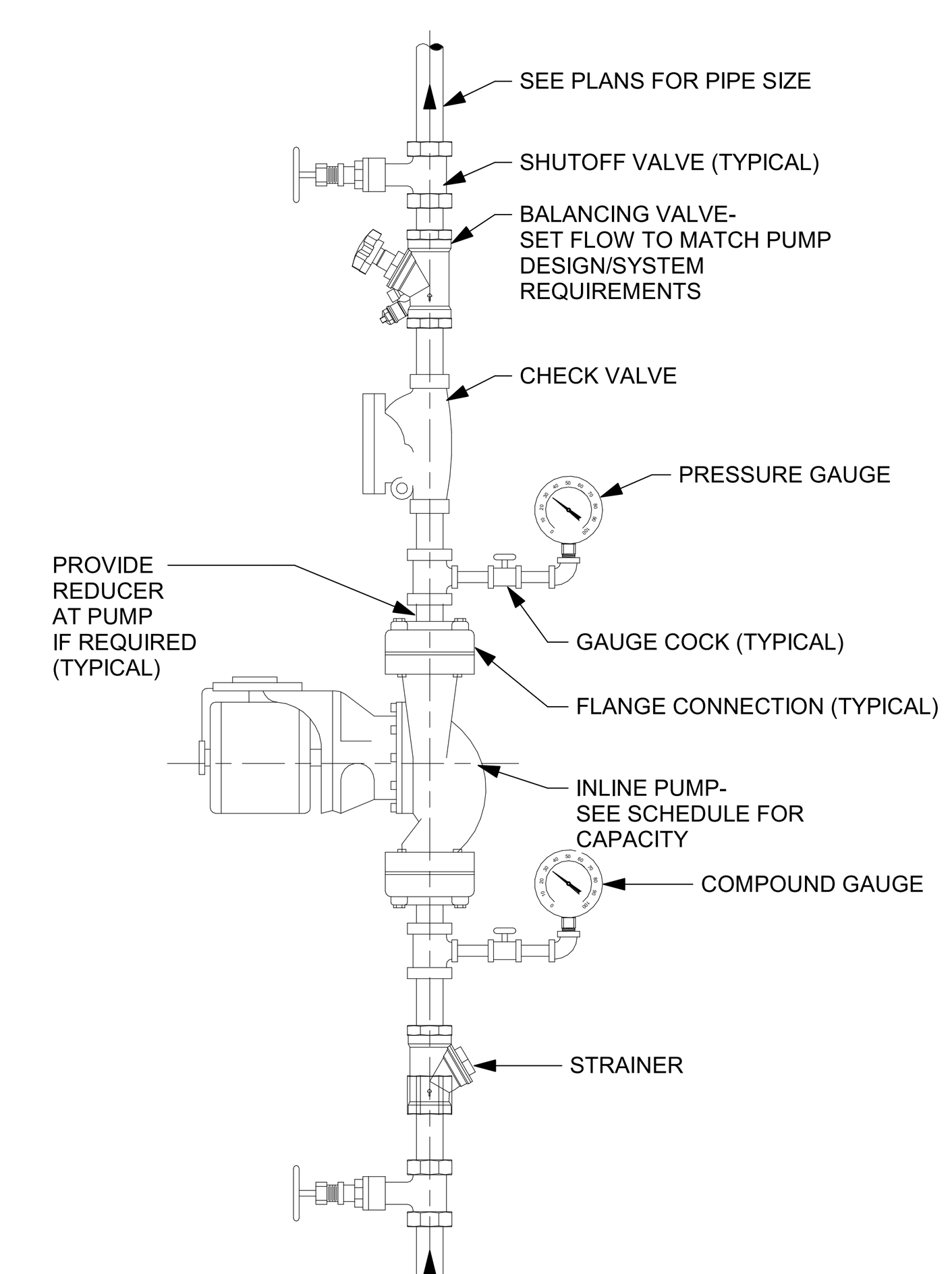
5 COMPRESSED AIR - HOSE REEL DETAIL

P001 NOT TO SCALE



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.

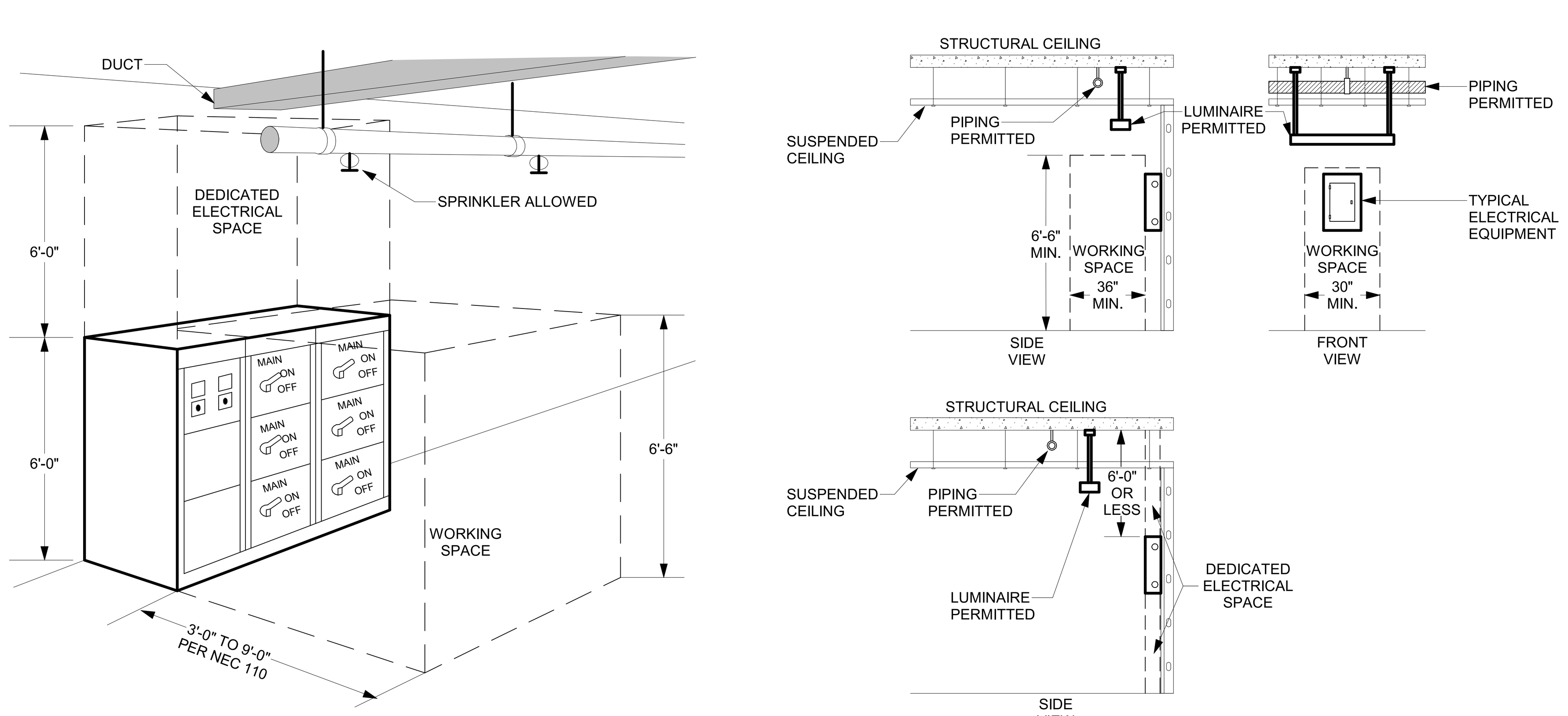
B. PROVIDE UNION ON PUMP INLET AND OUTLET IF PUMP IS NOT FLANGED.

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:

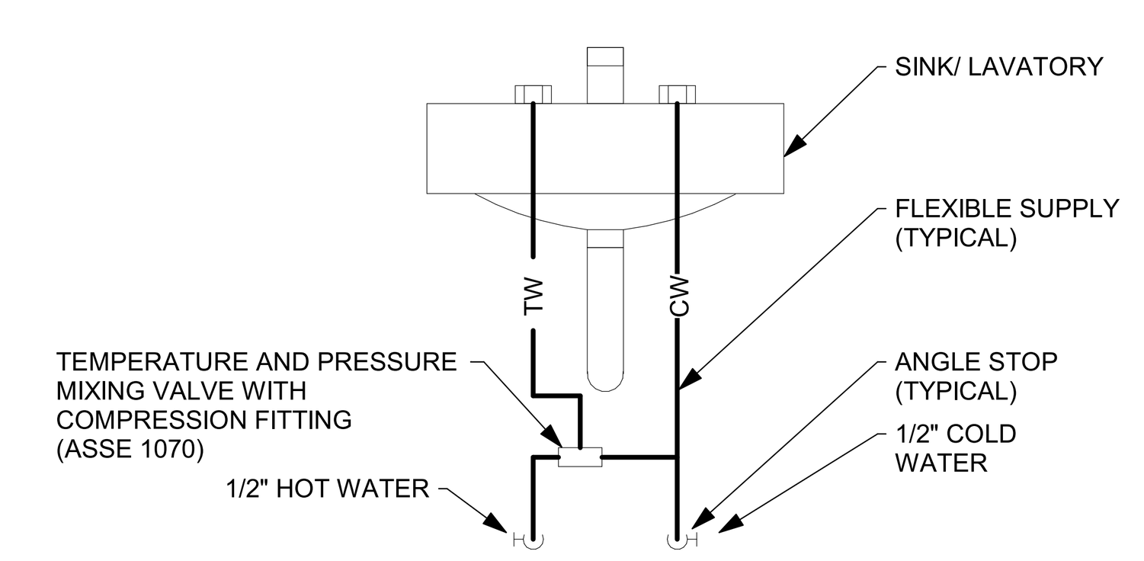
A. ELECTRICAL EQUIPMENT INCLUDES PANELS, TRANSFORMERS, DISCONNECTS, STARTERS, MOTOR CONTROL CENTERS, SWITCHGEAR, ADJUSTABLE SPEED DRIVES, AND FUSED SWITCHES (THIS ALSO APPLIES TO ELECTRICAL GEAR MOUNTED DIRECTLY ON MECHANICAL EQUIPMENT).

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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Consultant: M/E ENGINEERING
M/E PROJECT: 233139.00

Project Title: NEWBURGH ENLARGED CITY SCHOOL DISTRICT NEW CTE BUILDING

STATE OF NEW YORK · MICHAEL K. SULLIVAN · 077887-1 · LICENSED PROFESSIONAL ENGINEER
Reg. Exp: 05/31/2024
Cert. of Auth: 0018443

#	DATE	DESCRIPTION
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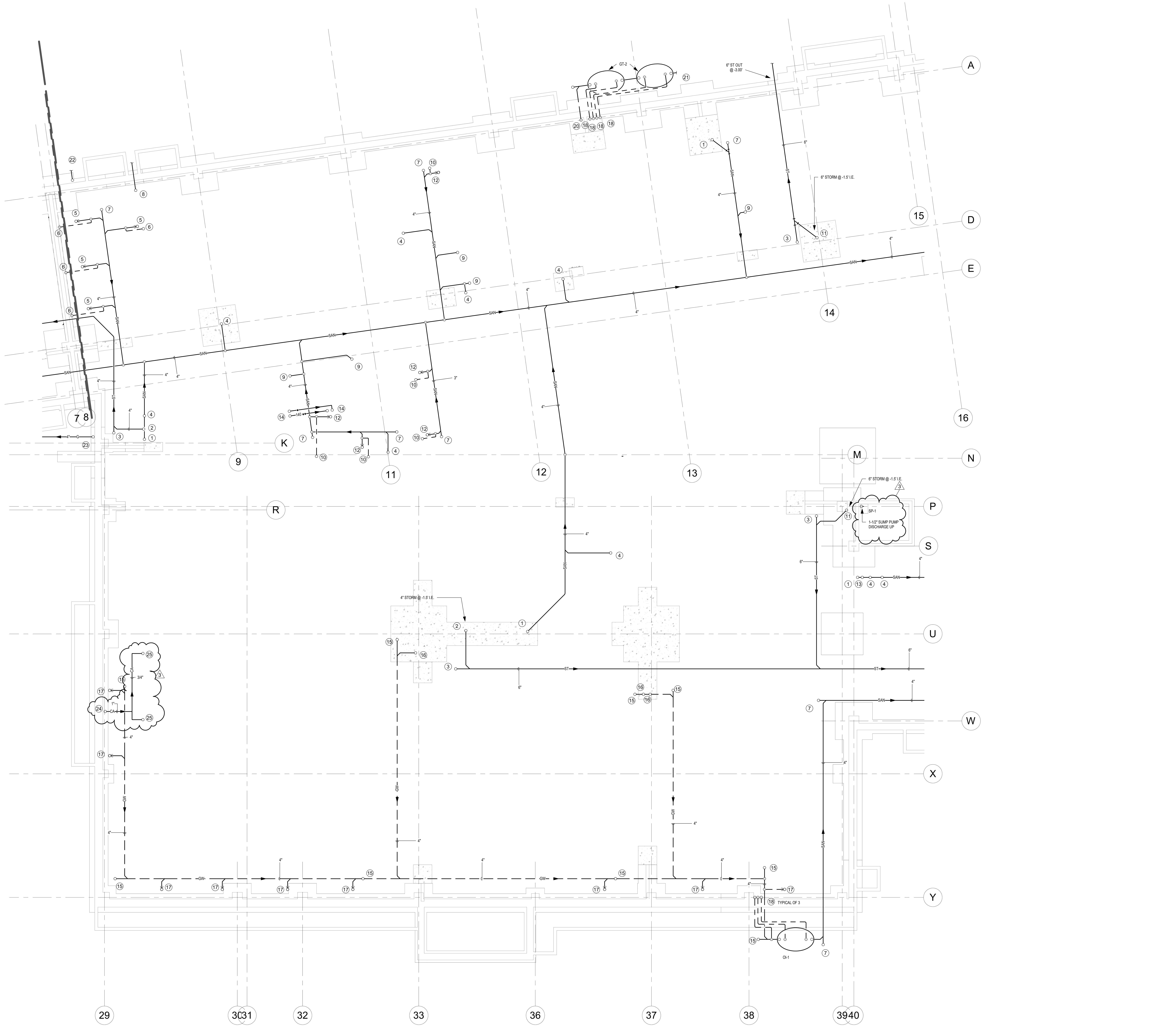
Sheet Title: PLUMBING NOTES, SYMBOLS AND SCHEDULES

Sheet No.: CTE P001

CONSTRUCTION DOCUMENTS

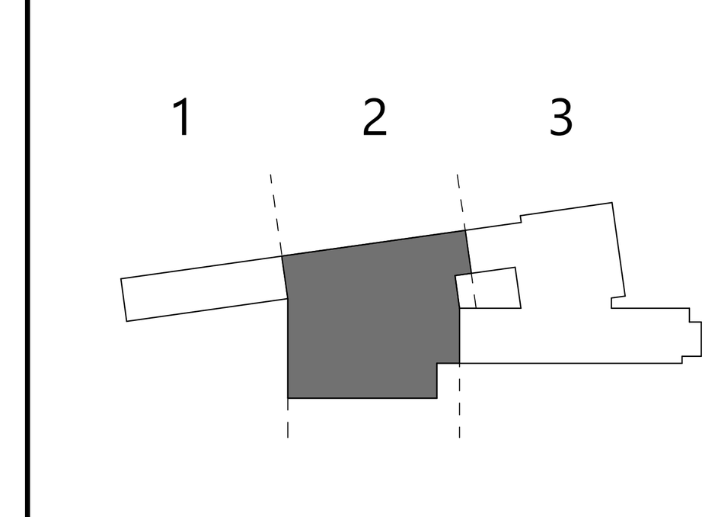


1 UNDERSLAB - AREA 2 - PLUMBING
P101 1/8" = 1'-0"

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
24 1" COMPRESSED AIR UP
25 3/4" COMPRESSED AIR UP TO LIFT CONTROLLERS

KEY PLAN



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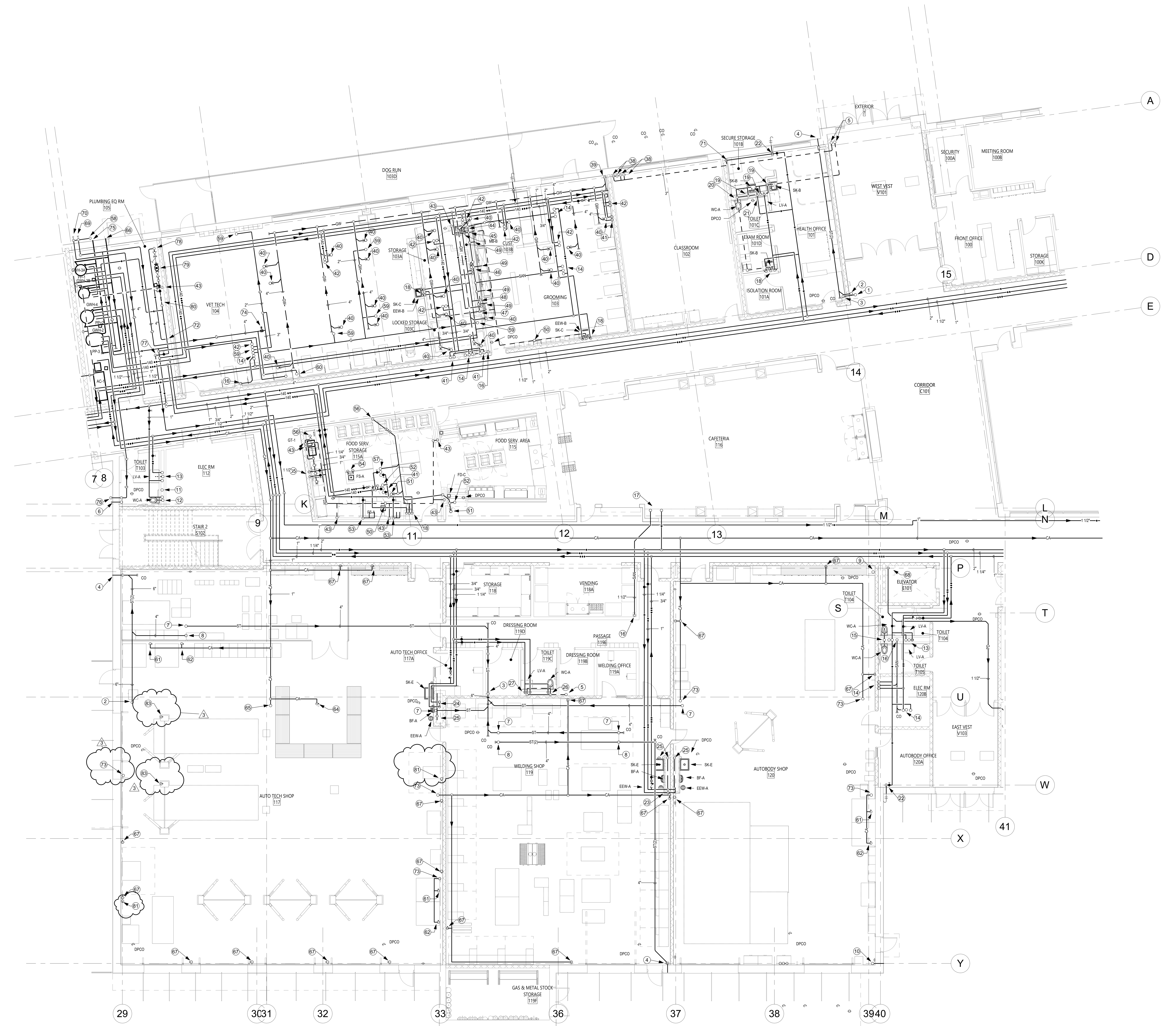
Sheet Title
PARTIAL UNDERSLAB PLAN - AREA 2 - PLUMBING

Sheet No.
CTE P101

CONSTRUCTION DOCUMENTS



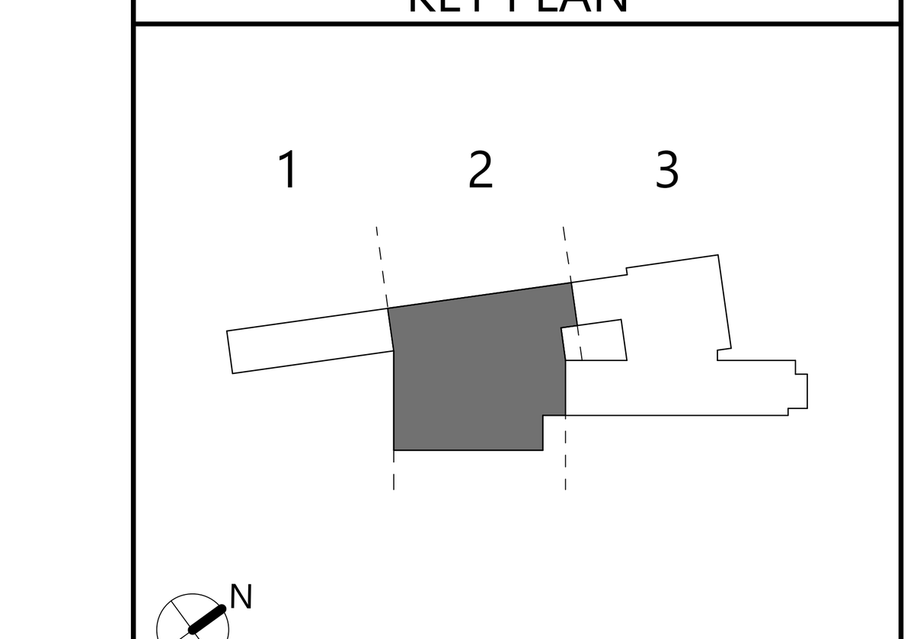
1 FIRST FLOOR - AREA 2 - PLUMBING PLAN

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 5650OLP - 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 <varies>
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
81 <varies>
83 3/4" COMPRESSED AIR RISE UP TO LIFT CONTROLLER

KEY PLAN



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Project Title

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

STATE OF NEW YORK · MICHAEL K. SULLIVAN · 077887-1 · LICENSED PROFESSIONAL ENGINEER
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Sheet Title
PARTIAL FIRST FLOOR PLAN - AREA 2 - PLUMBING

Sheet No.
CTE P112

CONSTRUCTION DOCUMENTS

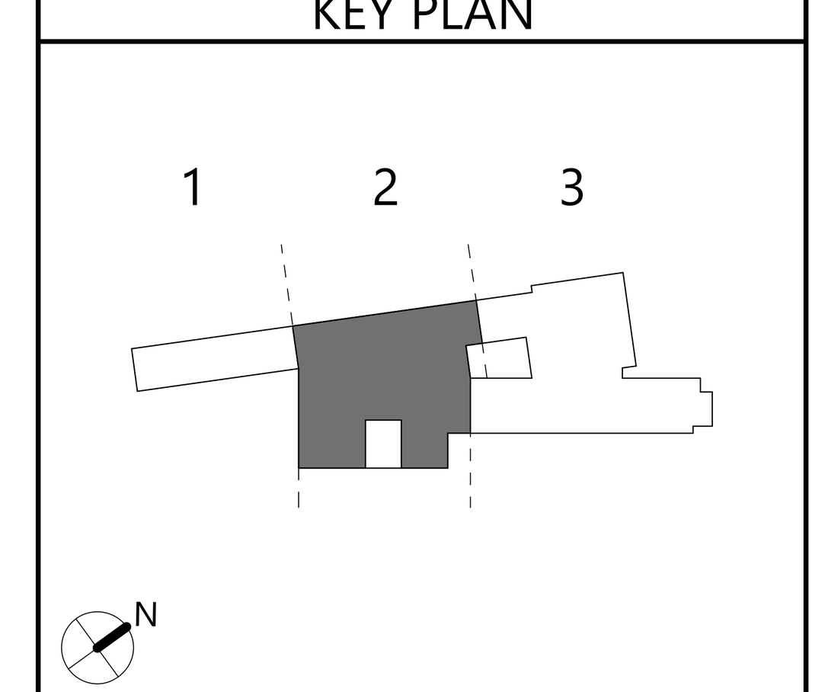
1
P122
SECOND FLOOR - AREA 2 - PLUMBING PLAN
1/8" = 1'-0"

Autodesk Docs://NECSD - New CTE Bldg/233139_NECSD_CTE_PL_CENTRAL_R22.rvt

P122 DRAWING NOTES

1 4" PRIMARY STORM UP
2 4" SECONDARY STORM UP
3 4" PRIMARY STORM DOWN
4 4" SECONDARY STORM DOWN
5 6" PRIMARY STORM DOWN
6 6" SECONDARY STORM DOWN
7 4" PRIMARY STORM DOWN
8 4" VENT UP, 4" VENT THROUGH ROOF
9 2" SANITARY DOWN, 2" VENT RISE
10 4" SANITARY DOWN, 4" VENT RISE
11 3" VENT UP AND DOWN
12 1/2" HOT AND COLD WATER RISE TO MIXING VALVE/ FAUCET SUPPLIES. PROVIDE 1-1/2" INDIRECT DRAIN FROM FIXTURE ABOVE TO FLOOR SINK AND DISCHARGE 1" ABOVE FINISH FLOOR ELEVATION.
13 3" VENT UP, 3" VENT THROUGH ROOF
14 1-1/2" SANITARY DOWN, 1-1/2" VENT RISE; 1/2" HOT AND COLD WATER RISE TO MIXING VALVE/ FAUCET SUPPLIES
15 3/4" HOT AND COLD WATER RISE TO FIXTURE SUPPLIES. PROVIDE 1-1/2" INDIRECT DRAIN FROM FIXTURE ABOVE TO FLOOR SINK AND DISCHARGE 1" ABOVE FINISH FLOOR ELEVATION.
16 3/4" HOT AND COLD WATER RISE; 1/2" HOT AND COLD WATER TO MIXING VALVE/ FAUCET SUPPLIES. PROVIDE 1-1/2" INDIRECT DRAIN FROM FIXTURE ABOVE TO FLOOR SINK AND DISCHARGE 1" ABOVE FINISH FLOOR ELEVATION.
17 1/2" HOT AND COLD WATER TO MIXING VALVE/ FAUCET SUPPLIES. PROVIDE 1-1/2" INDIRECT DRAIN FROM FIXTURE ABOVE TO FLOOR SINK AND DISCHARGE 1" ABOVE FINISH FLOOR ELEVATION.
18 4" SANITARY, 4" VENT, 1" COLD WATER UP
19 1-1/2" SANITARY UP; 1/2" HOT AND COLD WATER UP TO MIXING VALVE/ FAUCET SUPPLIES
20 1-1/2" SANITARY DROP, 2" SANITARY DOWN; 1/2" HOT AND COLD WATER DROP TO MIXING VALVE/ FAUCET SUPPLIES. 1/2" HOT AND COLD WATER DOWN
21 1-1/2" SANITARY DOWN, 1-1/2" VENT RISE; 1/2" HOT AND COLD WATER RISE TO MIXING VALVE/ FAUCET SUPPLIES
22 1-1/2" SANITARY DOWN, 1-1/2" VENT RISE, P-TRAP IN WALL; 1/2" COLD WATER RISE
23 1-1/2" SANITARY DOWN, 1-1/2" VENT RISE, P-TRAP IN WALL; 1/2" HOT AND COLD WATER RISE TO WASHING MACHINE SUPPLY BOX
24 1-1/2" VENT RISE; 3/4" HOT AND COLD WATER RISE
25 3/4" COLD WATER UP TO FROST FREE ROOF HYDRANT
26 2" VENT RISE
27 1-1/2" VENT RISE
28 ROUTE 3/4" INDIRECT WASTE DRAIN FROM COOLER/FREEZER AND DISCHARGE ABOVE FLOOR DRAIN WITH FUNNEL ATTACHMENT
29 3" VENT UP AND DOWN, 3" VENT THROUGH ROOF
30 4" SECONDARY STORM DOWN
31 1/2" COLD WATER RISE TO ICE MACHINE. ROUTE 3/4" DRAIN TO FLOOR TROUGH
32 2" NATURAL GAS RISE TO UTILITY WALL SYSTEM. PROVIDE SOLENOID VALVE FOR AUTOMATIC SHUT OFF. COORDINATE WITH HOOD FIRE SUPPRESSION SYSTEM.
33 1-1/2" COLD AND 3/4" HOT WATER UP TO UTILITY WALL SYSTEM
34 1-1/4" DRAIN FROM EACH SINK BAY TO 2" SANITARY DISCHARGE 1" ABOVE FLOOR SINK. 3/4" HOT AND COLD WATER RISE; ROUTE TO EACH FAUCET SUPPLY
35 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
36 3/4" HOT AND COLD WATER RISE. ROUTE HOT AND COLD TO EACH FAUCET SUPPLY
37 2" NATURAL GAS RISE. PROVIDE SOLENOID VALVE IN COORDINATION WITH SUPPRESSION SYSTEM IN HOOD
38 2" NATURAL GAS ON ROOF TO PAINT BOOTH AHU
39 2" NATURAL GAS UP ON ROOF TO HIGHER ROOF LEVEL
40 4" NATURAL GAS UP AND DOWN
41 1" COMPRESSED AIR RISE
42 1/2" DROP DOWN TO HOSE REEL
43 2" NATURAL GAS TO MAU-A-119.2
44 2" NATURAL GAS TO MAU-A-119.1
45 1/2" COLD WATER DROP DOWN AND UP TO SUPPLY BOX IN WALL FOR REFRIGERATOR
46 1" COMPRESSED AIR DROP DOWN TO LIFT CONTROLLERS
47 3/4" COMPRESSED AIR DROP DOWN TO MOTORCYCLE LIFT
48 3/4" COMPRESSED AIR DROP DOWN
49 1" COMPRESSED AIR DROP DOWN

KEY PLAN



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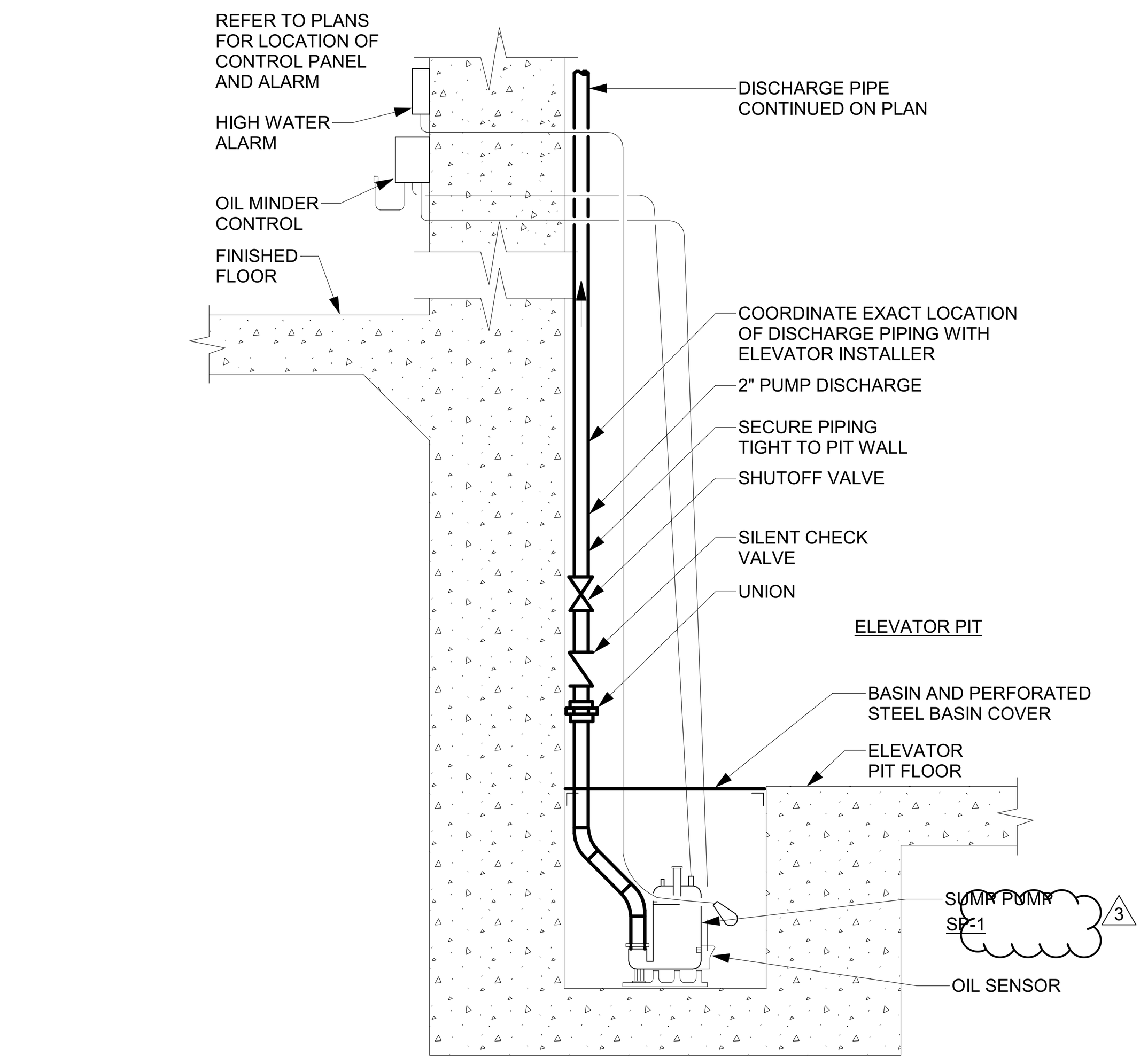
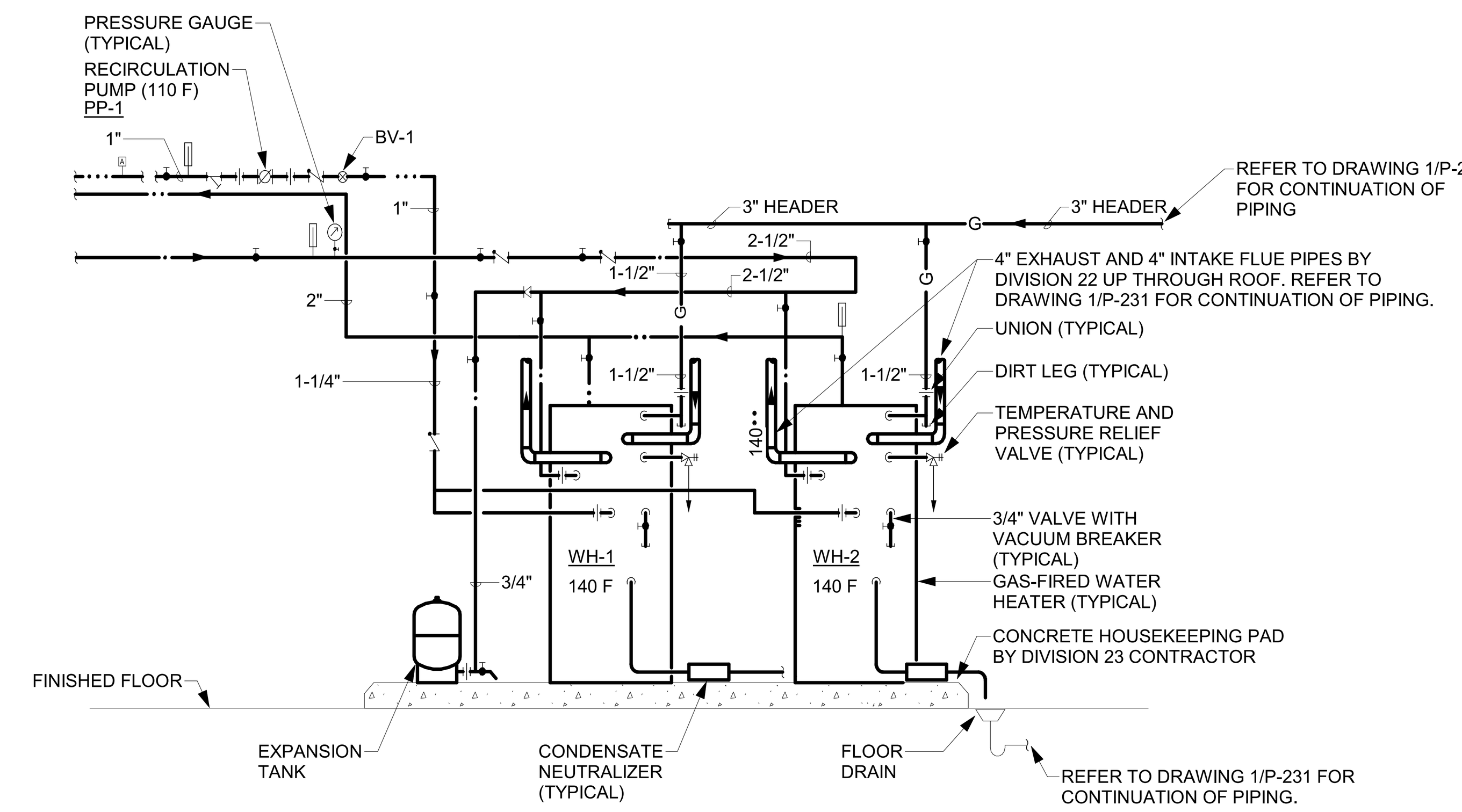
Sheet Title
PARTIAL SECOND FLOOR PLAN - AREA 2 - PLUMBING

Sheet No.
CTE P122

CONSTRUCTION DOCUMENTS



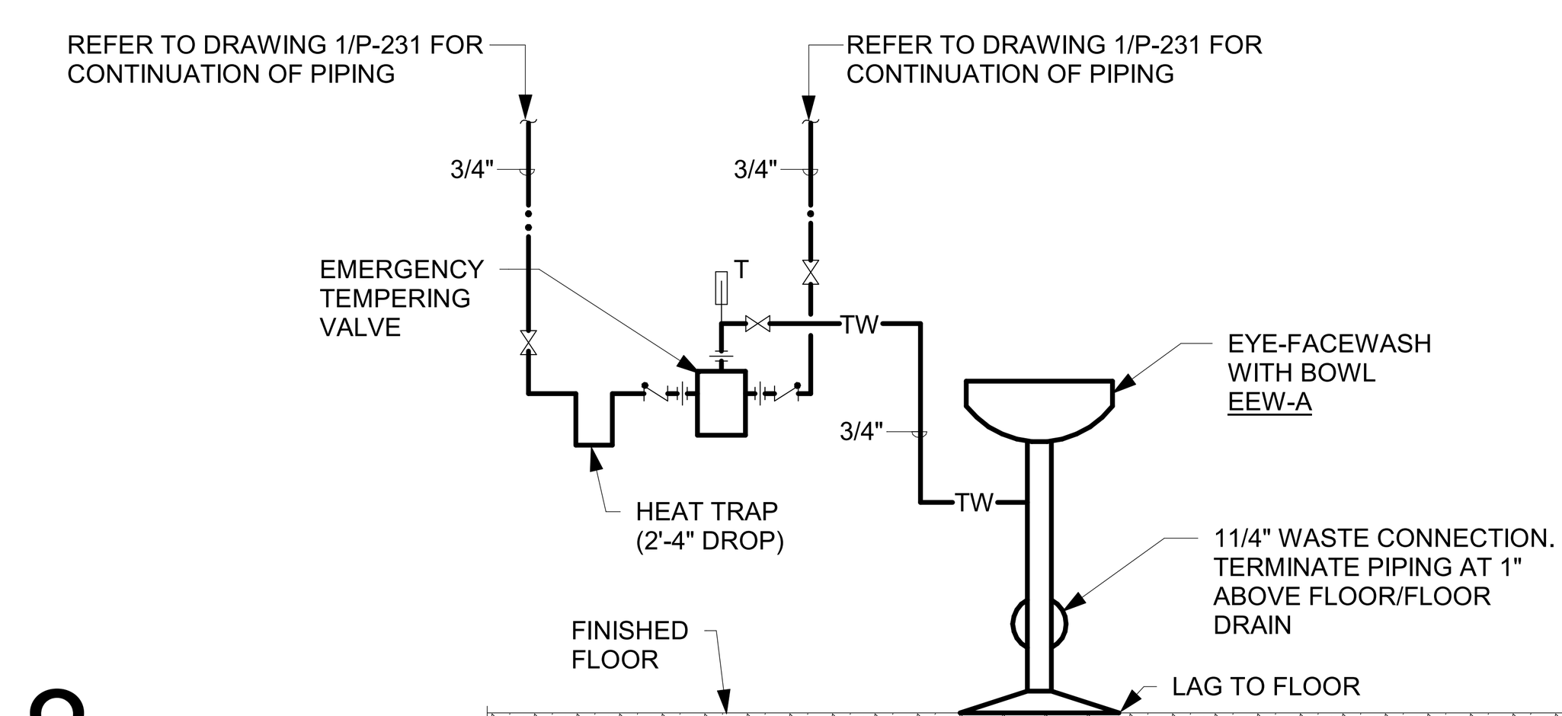
10 ELEVATOR SUMP PUMP DETAIL - BASIN IN SHAFT
P301 NOT TO SCALE



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 AL29-4C 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

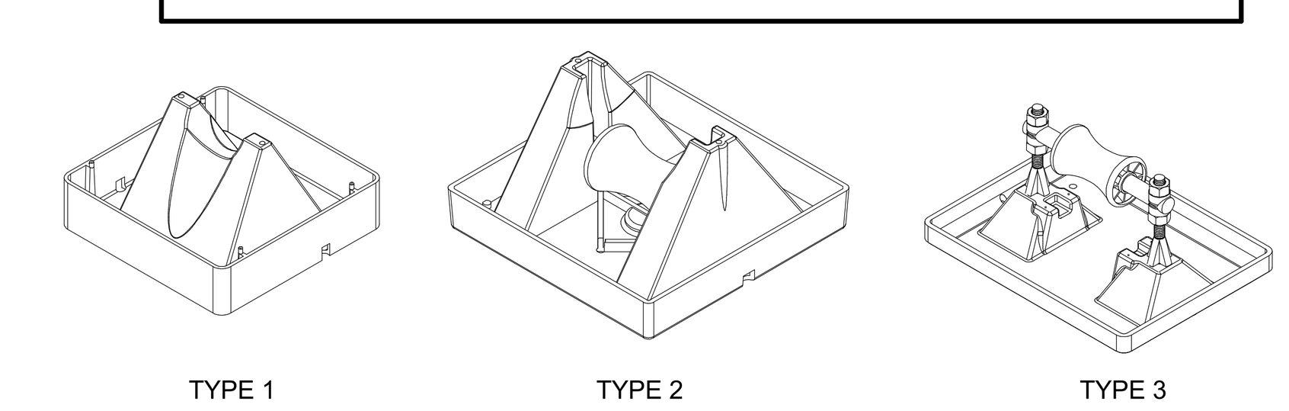


8 EMERGENCY SHOWER/EYEWASH DETAIL
P301 NOT TO SCALE

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"	

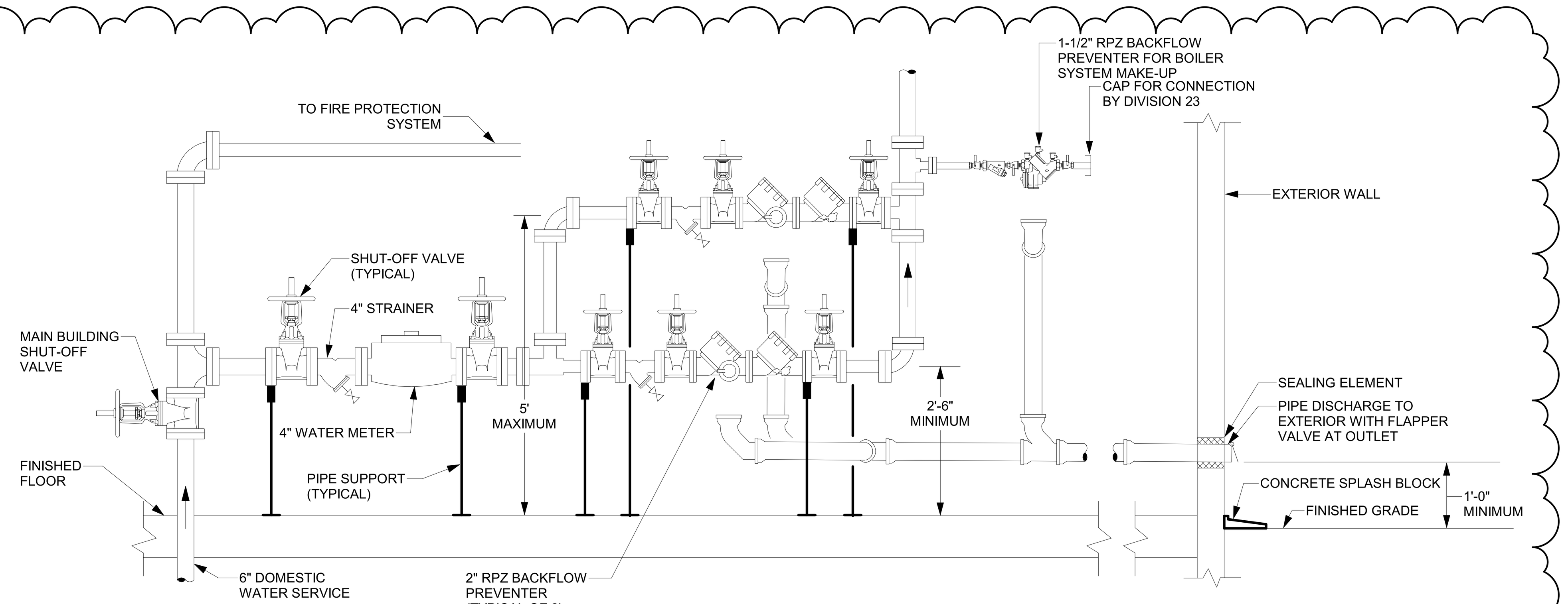
NOTES:
1. WITHOUT ROLLER.
2. 1 OR 2 SPACER UNITS MAY BE STACKED FOR MORE CLEARANCE, EACH 2" HIGH.
3. UNITS MAY BE STACKED UP TO 3 HIGH FOR MORE CLEARANCE, ADD 1 1/2" E ACH.



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.

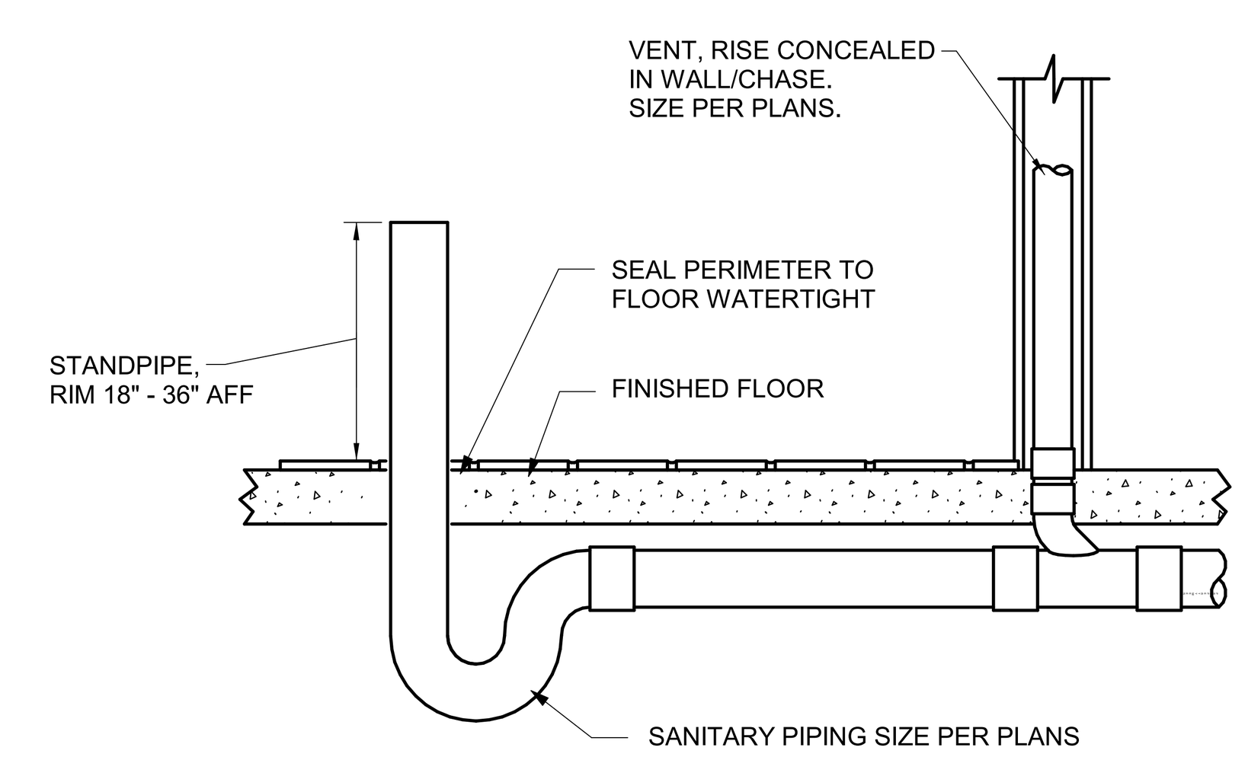
5 GAS PIPING ROOF SUPPORT DETAIL
P301 NOT TO SCALE



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.

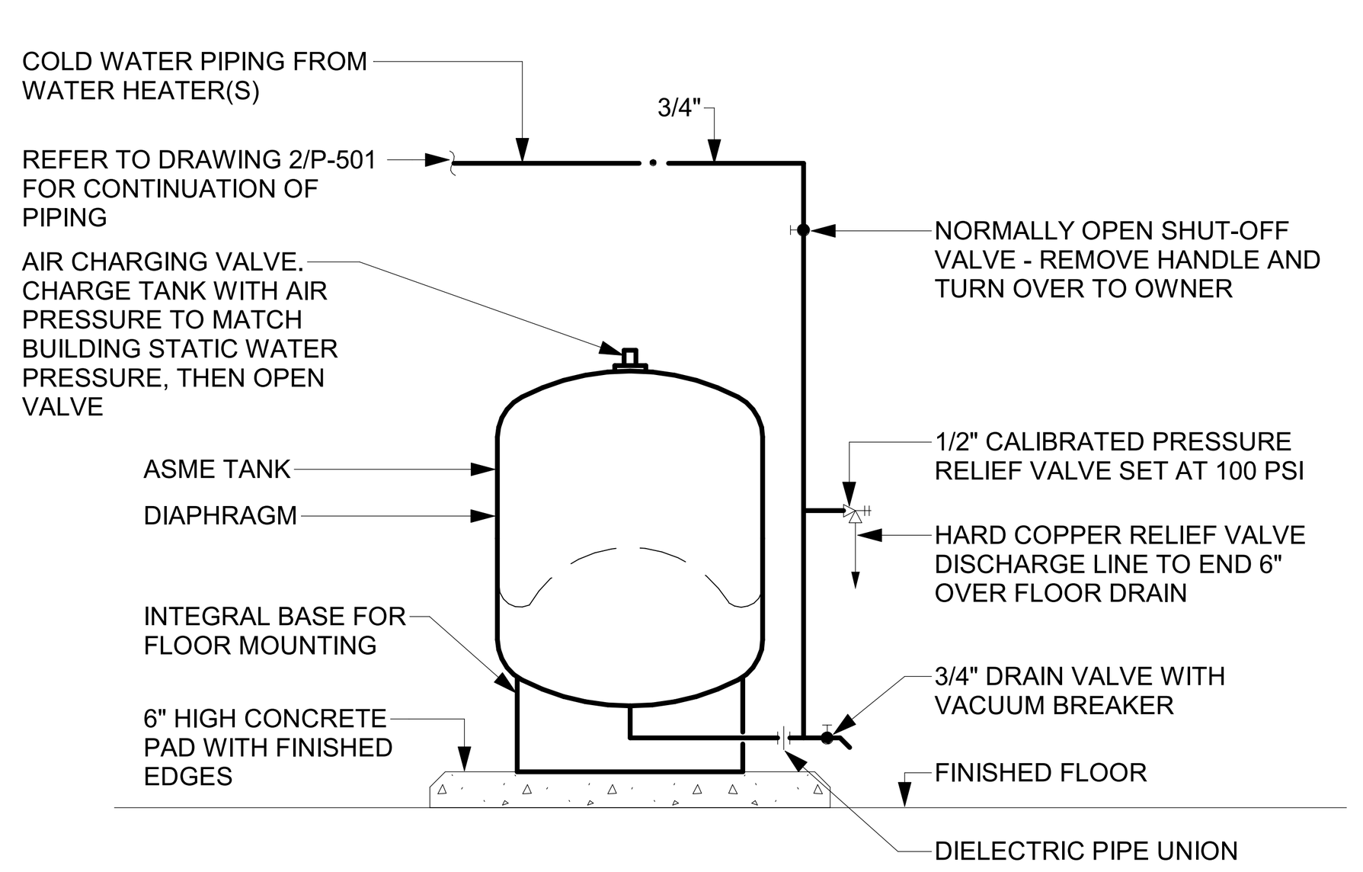
7 DOMESTIC WATER SERVICE ENTRANCE DETAIL
P301 NOT TO SCALE



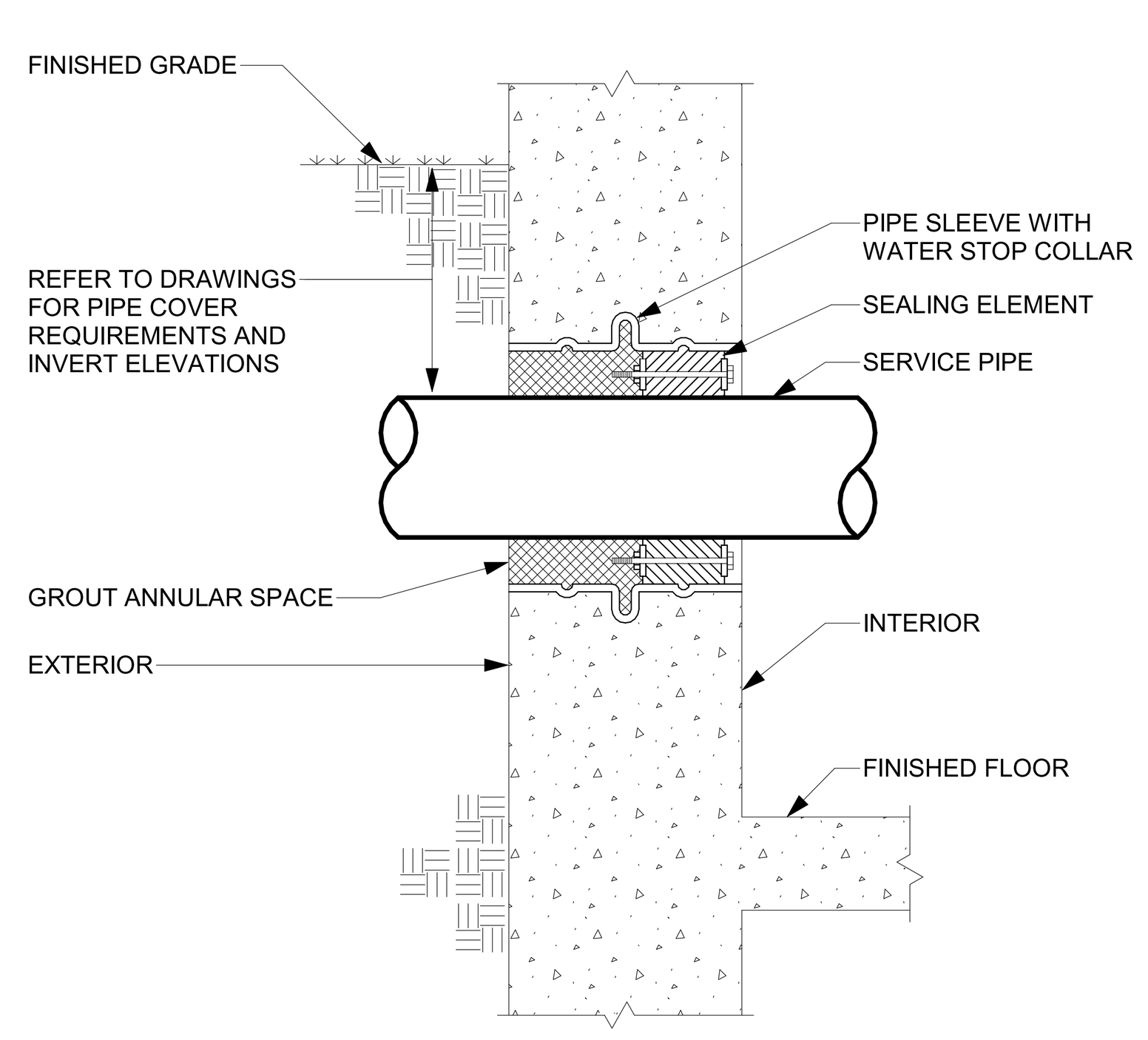
DETAIL NOTES:

A. PROVIDE TRAP GUARD FITTING.
B. SEE ARCHITECTURAL PLANS FOR FLOOR FINISHES AND SLOPES

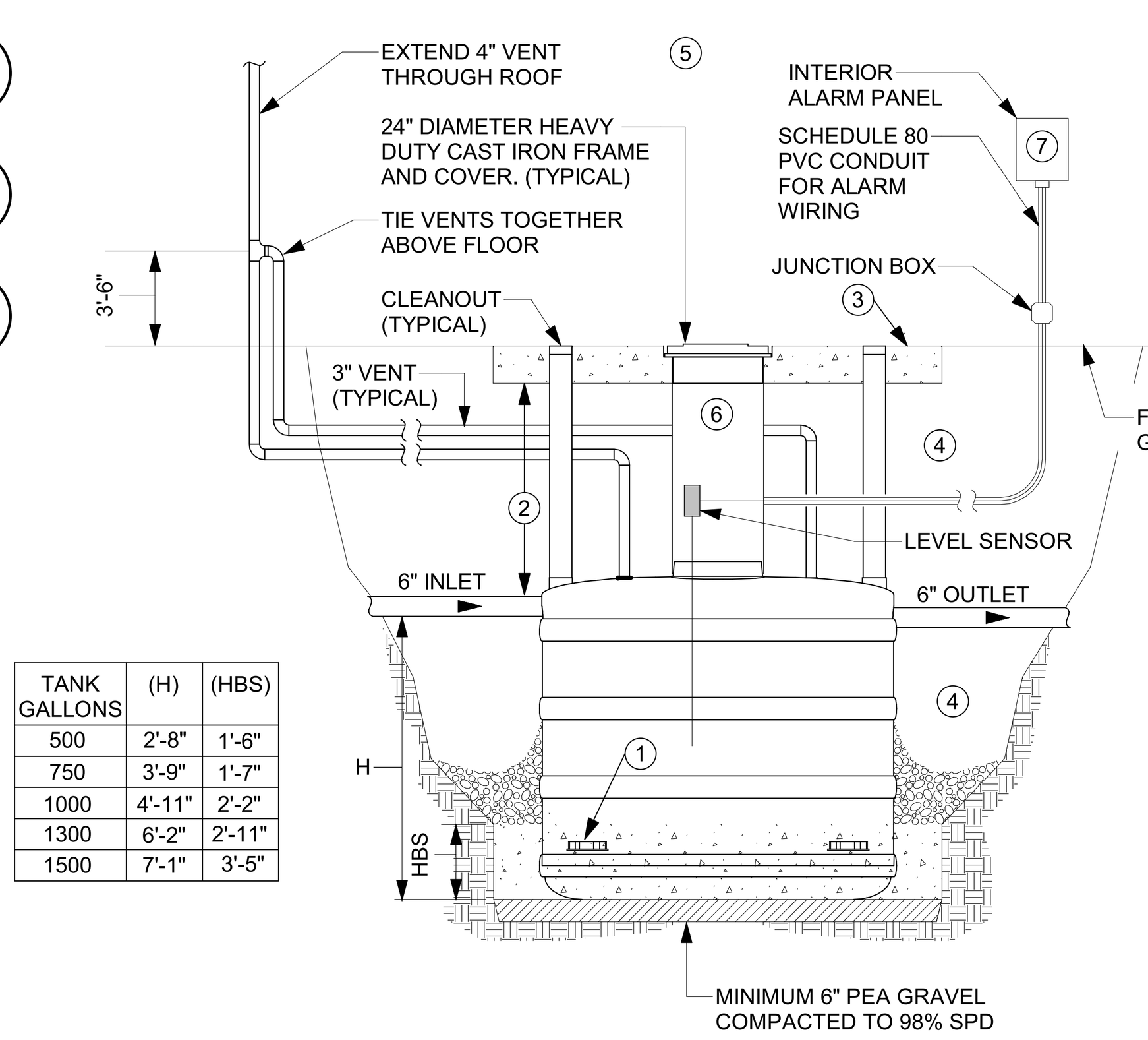
6 ELEVATOR SUMP PUMP DISCHARGE STANDPIPE
P301 NTS



4 THERMAL EXPANSION TANK DETAIL
P301 NOT TO SCALE



3 PIPE THRU NEW EXTERIOR WALL DETAIL
P301 NOT TO SCALE

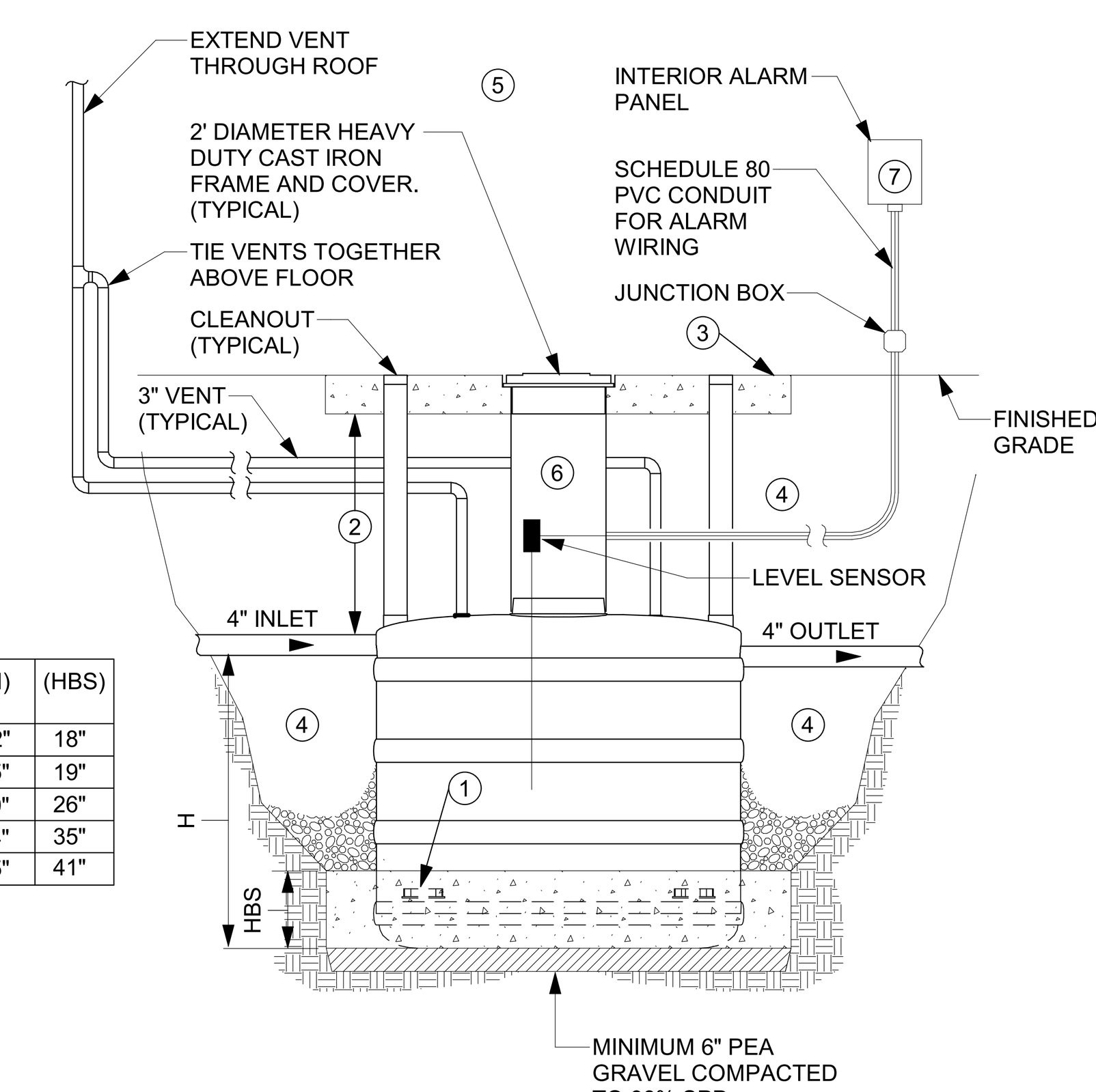


TANK GALLONS	(H)	(HBS)
500	2'-8"	1'-6"
750	3'-9"	1'-7"
1000	4'-11"	2'-2"
1300	6'-2"	2'-11"
1500	7'-1"	3'-5"

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



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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Consultant: M/E ENGINEERING — M/E PROJECT: 233139.00

Project Title:
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

#	DATE	DESCRIPTION
3	5/28/2024	BID Addendum #3
1	5/3/2024	BID Addendum #2

Drawn By: MT
Checked By: MT
Proj. #: 44-16-00-01-0-053-001
CSArch Proj. #: 108-2305
Construction Documents: 4/15/2024

Sheet Title: PLUMBING DETAILS

Sheet No. CTE P301

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	550	105	1760	19.65	25	INTEGRAL VFD	480	3	34	–	70	FACTORY PROVIDED	TACO	SKS4013D	
P-B-2	HEATING WATER	INLINE	550	105	1760	19.65	25	INTEGRAL VFD	480	3	34	–	70	FACTORY PROVIDED	TACO	SKS4013D	
P-C-1	GLYCOL	INLINE	270	90	3500	7.79	10	INTEGRAL VFD	480	3	14	–	20	FACTORY PROVIDED	TACO	SKS3006D	
P-C-2	GLYCOL	INLINE	270	90	3500	7.79	10	INTEGRAL VFD	480	3	14	–	20	FACTORY PROVIDED	TACO	SKS3006D	

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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	RSA
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
DS-16	3575	24"/54"-24"/54"	60" ELBOW	397	0.08	12	14	20	30	33	28	24	VAW SYSTEMS	REA
DS-17	4000	42"/42"-30"/42"	84" ELBOW	381	0.1	17	22	33	39	40	41	32	VAW SYSTEMS	REA

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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	4725	WATER	150	120	14.6	315	0.0000015	30% GLYCOL	110	145	14.6	270	0.0000015	26"/45".73"	93	2411	ALFA LAVAL	AQ6T-BFG	

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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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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

STATE OF NEW YORK
ZACHARY ROBERT WILLSON
LICENSED PROFESSIONAL ENGINEER
097797
Expires : 06/30/2025

#	DATE	DESCRIPTION
5	5/29/2024	BID ADDENDUM #5
4	5/28/2024	BID ADDENDUM #4

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Sheet Title

SCHEDULES

Sheet No.

CTE
M902

CONSTRUCTION DOCUMENTS

EQUIPMENT CONNECTION SCHEDULE - SINGLE POINT CONNECTION

TAG	VOLTAGE	PHASE	FLA	MCA	MOCP	POWER SOURCE	CIRCUIT BREAKER	WIRE SIZE	DISCONNECT SWITCH	DISCONNECT SIZE	FA SHUTDOWN
-119H	0	3		27.7	35			40/3G		–	YES W/ DUCT DETECTOR
-B-120	480	3	–	27.7	35			40/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
AC-1	208	1	17.5	–	35	MP1-1	37,39,41	35/3G	FACTORY PROVIDED	–	–
AC-DRYER	120	1	0.7	–	20	MP1-1	18	20/1NG	FACTORY PROVIDED	–	–
B-A-1	480	3	6	7.5	20	MPH1-1	7,9,11	20/3NG	FIELD PROVIDED	BREAKER	–
B-A-2	480	3	6	7.5	20	MPH1-1	8,10,12	20/3NG	FIELD PROVIDED	BREAKER	–
B-A-3	480	3	6	7.5	20	MPH1-1	13,15,17	20/3NG	FIELD PROVIDED	BREAKER	–
CP-A-100	120	1	1.5	–	20	MP1-2	16	20/1NG	FIELD	MMS	–
CP-A-107	120	1	1.5	–	20	MP1-1	22	20/1NG	FIELD	MMS	–
CP-A-108	120	1	1.5	–	20	MP1-1	22	20/1NG	FIELD	MMS	–
CP-A-202	120	1	1.5	–	20	MP2-1	12	20/1NG	FIELD	MMS	–
CP-A-207	120	1	1.5	–	20	MP2-1	12	20/1NG	FIELD	MMS	–
CP-A-216	120	1	1.5	–	20	MP2-1	12	20/1NG	FIELD	MMS	–
CP-A-226	120	1	1.5	–	20	MP2-2	6	20/1NG	FIELD	MMS	–
CP-A-C202	120	1	1.5	–	20	MP2-2	6	20/1NG	FIELD	MMS	–
CU-A-1	480	3	–	42.1	45	MPH2-1	1,3,5	45/3G	FACTORY PROVIDED	–	–
CU-B-1	480	3	–	46.8	50	MPH3-1	13,15,17	50/3G	FACTORY PROVIDED	–	–
CU-C-1	480	3	–	50.4	60	MPH3-3	13,15,17	60/3G	FACTORY PROVIDED	–	–
CU-D-1	480	3	–	42.1	45	MPH3-3	19,21,23	45/3G	FACTORY PROVIDED	–	–
CU-E-1	480	3	–	46.8	50	MPH3-2	13,15,17	50/3G	FACTORY PROVIDED	–	–
CU-F-1	480	3	–	16.6	20	MPH3-1	20,22,24	20/3G	FACTORY PROVIDED	–	–
CU-F-2	480	3	–	16.6	20	MPH3-2	25,27,29	20/3G	FACTORY PROVIDED	–	–
CU-F-3	480	3	–	16.6	20	SBH3-1	7,9,11	20/3G	FACTORY PROVIDED	–	–
CU-F-4	480	3	–	16.6	20	MPH3-3	43,45,47	20/3G	FACTORY PROVIDED	–	–
CU-F-5	480	3	–	16.6	20	SBH3-1	8,10,12	20/3G	FACTORY PROVIDED	–	–
CU-F-7	480	3	–	16.6	20	SBH3-1	13,15,17	20/3G	FACTORY PROVIDED	–	–
CU-F-8	480	3	–	16.6	20	SBH3-1	14,16,18	20/3G	FACTORY PROVIDED	–	–
CU-F-9	480	3	–	16.6	20	MPH3-3	44,46,48	20/3G	FACTORY PROVIDED	–	–
CU-F-10	480	3	–	16.6	20	MPH3-2	20,22,24	20/3G	FACTORY PROVIDED	–	–
CU-G-1	480	3	–	32.5	35	MPH2-1	2,4,6	35/3G	FACTORY PROVIDED	–	–
CU-H-1	480	3	–	32.5	35	MPH3-3	20,22,24	35/3G	FACTORY PROVIDED	–	–
CU-J-1	208	1	–	6.5	15	MP3-1	20,22	15/2NG	FACTORY PROVIDED	–	–
CU-K-1	480	3	–	20.6	25	MPH3-1	19,21,23	25/3G	FACTORY PROVIDED	–	–
CU-K-2	480	3	–	20.6	25	MPH3-2	19,21,23	25/3G	FACTORY PROVIDED	–	–
CUH-A-T101	120	1	3.7	–	20	MP1-1	2	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T102	120	1	3.7	–	20	MP1-1	2	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T103	120	1	3.7	–	20	MP1-1	6	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T106	120	1	3.7	–	20	MP1-2	10	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T107	120	1	3.7	–	20	MP1-2	10	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T201	120	1	3.7	–	20	MP2-1	2	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T202	120	1	3.7	–	20	MP2-1	2	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T203	120	1	3.7	–	20	MP2-1	2	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T205	120	1	3.7	–	20	MP2-2	2	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T206	120	1	3.7	–	20	MP2-2	2	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T302	120	1	3.7	–	20	MP3-1	4	20/1NG	FACTORY PROVIDED	–	–
CUH-A-T303	120	1	3.7	–	20	MP3-1	4	20/1NG	FACTORY PROVIDED	–	–
CUH-A-V102	120	1	3.7	–	20	MP1-1	4	20/1NG	FACTORY PROVIDED	–	–
CUH-A-V104	120	1	3.7	–	20	MP1-2	8	20/1NG	FACTORY PROVIDED	–	–
CUH-A-V105	120	1	3.7	–	20	MP1-2	4	20/1NG	FACTORY PROVIDED	–	–
CUH-B-122	120	1	7.4	–	20	MP1-2	2	20/1NG	FACTORY PROVIDED	–	–
CUH-B-S101	120	1	7.4	–	20	MP1-1	4	20/1NG	FACTORY PROVIDED	–	–
CUH-B-S102	120	1	7.4	–	20	MP1-1	6	20/1NG	FACTORY PROVIDED	–	–
CUH-B-S104	120	1	7.4	–	20	MP1-2	8	20/1NG	FACTORY PROVIDED	–	–
CUH-C-103	120	1	7.4	–	20	MP1-1	8	20/1NG	FACTORY PROVIDED	–	–
CUH-C-131	120	1	7.4	–	20	MP1-2	6	20/1NG	FACTORY PROVIDED	–	–
CUH-C-134	120	1	7.4	–	20	MP1-2	6	20/1NG	FACTORY PROVIDED	–	–
CUH-C-V101	120	1	7.4	–	20	MP1-2	4	20/1NG	FACTORY PROVIDED	–	–
CUH-C-V103	120	1	7.4	–	20	MP1-2	2	20/1NG	FACTORY PROVIDED	–	–
ERU-A-1.1	480	3	70	76.3	100	MPH3-2	1,3,5	100/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
ERU-B-1.2	480	3	36.1	42.3	60	MPH3-2	8,10,12	60/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
ERU-C-2.1	480	3	61.2	67.4	90	MPH3-2	2,4,6	100/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
ERU-D-2.2	480	3	47.2	53.4	70	MPH3-2	7,9,11	80/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
ERU-E-2.3	480	3	61.2	67.4	90	MPH3-3	7,9,11	100/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
ERU-F-3.3	480	3	49.6	58.6	90	MPH3-3	8,10,12	100/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
ERU-G-117	480	3	74	80.2	100	MPH3-1	1,3,5	100/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
ERV-A	208	1	1.73	3.9	15	MP3-1	24,26	15/2NG	FACTORY PROVIDED	–	–
ERV-B	208	1	3.4	7.7	15	MP3-1	28,30	15/2NG	FACTORY PROVIDED	–	–
F-A-206.1	480	3	7.2	9	15	MPH3-2	31,33,35	15/3G	FACTORY PROVIDED	–	–
F-B-206.2	480	3	3.2	4	15	MPH3-1	31,33,35	15/3G	FACTORY PROVIDED	–	–
F-C-206.3	480	3	3.2	4	15	MPH3-1	31,33,35	15/3G	FACTORY PROVIDED	–	–
F-D-206.4	480	3	1.8	2.2	15	MPH3-1	31,33,35	15/3G	FACTORY PROVIDED	–	–
F-E-206.5	480	3	1.8	2.2	15	MPH3-2	32,34,36	15/3G	FACTORY PROVIDED	–	–
F-F-206.6	480	3	3.2	4	15	MPH3-2	32,34,36	15/3G	FACTORY PROVIDED	–	–
F-G-206.7	480	3	3.2	4	15	MPH3-2	32,34,36	15/3G	FACTORY PROVIDED	–	–
F-H-117	480	3	4.8	–	15	MPH3-2	37,39,41	15/3G	FIELD PROVIDED	30A	–
F-I	115	1	6.6	8.2	15	MP2-1	4	15/1NG	FACTORY PROVIDED	–	–
F-J	115	1	10	12.5	20	MP3-1	2	20/1NG	FACTORY PROVIDED	–	–
F-K-115A	115	1	2.8	3.5	15	MP2-1	6	15/1NG	FACTORY PROVIDED	–	–
F-L	115	1	3.8	4.8	15	MP3-1	14	15/1NG	FACTORY PROVIDED	–	–
F-M	115	1	2.8	3.5	15	MP3-1	18	15/1NG	FACTORY PROVIDED	–	–
F-N	115	1	3.8	4.8	15	MP3-1	18	15/1NG	FACTORY PROVIDED	–	–
F-O	115	1	3.8	4.8	15	MP3-1	16	15/1NG	FACTORY PROVIDED	–	–
F-P	115	1	3.8	4.8	15	MP3-1	16	15/1NG	FACTORY PROVIDED	–	–
F-Q	115	1	3.8	4.8	15	MP2-1	6	15/1NG	FACTORY PROVIDED	–	–
F-R-108	120	1	1.5	1.9	15	MP1-1	20	15/1NG	FACTORY PROVIDED	–	–
GMS-A-222	120	1	–	9.0	20	MP2-2	4	20/1NG	FACTORY PROVIDED	–	–
GWH-1	120	1	5.0	–	20	MP1-2	12	20/1NG	FIELD	30A	–
GWH-2	120	1	5.0	–	20	MP1-1	10	20/1NG	FIELD	30A	–
GWH-3A	120	1	5.0	–	20	MP1-1	12	20/1NG	FIELD	30A	–
GWH-3B	120	1	5.0	–	20	MP1-1	14	20/1NG	FIELD	30A	–
GWH-4	120	1	5.0	–	20	MP1-1	16	20/1NG	FIELD	30A	–
ISU-CA-100A	208	1	–	0.3	15	MP1-2	1,3	20/2NG	FIELD	MMS	–
ISU-CA-100C	208	1	–	0.3	15	MP1-2	1,3	20/2NG	FIELD	MMS	–
ISU-CA-100D	208	1	–	0.3	15	MP1-2	1,3	20/2NG	FIELD	MMS	–
ISU-CA-100F	208	1	–	0.3	15	MP1-2	1,3	20/2NG	FIELD	MMS	–
ISU-CA-100H	208	1	–	0.3	15	MP1-2	1,3	20/2NG	FIELD	MMS	–
ISU-CA-100I	208	1	–	0.3	15	MP1-2	1,3	20/2NG	FIELD	MMS	–
ISU-CA-100J	208	1	–	0.3	15	MP1-2	1,3	20/2NG	FIELD	MMS	–

EQUIPMENT CONNECTION SCHEDULE - SINGLE POINT CONNECTION

TAG	VOLTAGE	PHASE	FLA	MCA	MOCP	POWER SOURCE	CIRCUIT BREAKER	WIRE SIZE	DISCONNECT SWITCH	DISCONNECT SIZE	FA SHUTDOWN
ISU-CA-204	208	1	–	0.3	15	MP2-1	5,7	20/2NG	FIELD	MMS	–
ISU-CA-212	208	1	–	0.3	15	MP2-1	9,11	20/2NG	FIELD	MMS	–
ISU-CA-221B	208	1	–	0.3	15	MP2-2	5,7	20/2NG	FIELD	MMS	–
ISU-CA-233A	208	1	–	0.3	15	MP2-2	5,7	20/2NG	FIELD	MMS	–
ISU-CA-233B	208	1	–	0.3	15	MP2-2	5,7	20/2NG	FIELD	MMS	–
ISU-CA-233C	208	1	–	0.3	15	MP2-2	5,7	20/2NG	FIELD	MMS	–
ISU-CA-233D	208	1	–	0.3	15	MP2-2	5,7	20/2NG	FIELD	MMS	–
ISU-CA-233E	208	1	–	0.3	15	MP2-2	5,7	20/2NG	FIELD	MMS	–
ISU-CB-100B	208	1	–	0.3	15	MP1-2	1,3	20/2NG	FIELD	MMS	–
ISU-CB-111	208	1	–	0.3	15	MP1-1	1,3	20/2NG	FIELD	MMS	–
ISU-CC-100	208	1	–	0.4	15	MP1-2	1,3	20/2NG	FIELD	MMS	–
ISU-CC-101	208	1	–	0.4	15	MP1-1	5,7	20/2NG	FIELD	MMS	–
ISU-CF-102	208	1	–	0.7	15	MP1-1	5,7	20/2NG	FIELD	MMS	–
ISU-CF-103	208	1	–	0.7	15	MP1-1	5,7	20/2NG	FIELD	MMS	–
ISU-CF-107	208	1	–	0.7	15	MP1-1	1,3	20/2NG	FIELD	MMS	–
ISU-CF-109	208	1	–	0.7	15	MP1-1	1,3	20/2NG	FIELD	MMS	–
ISU-CF-110A	208	1	–	0.7	15	MP1-1	1,3	20/2NG	FIELD	MMS	–
ISU-CF-205	208	1	–	0.7	15	MP2-1	5,7	20/2NG	FIELD	MMS	–
ISU-CF-207	208	1	–	0.7	15	MP2-1	5,7	20/2NG	FIELD	MMS	–
ISU-CF-208	208	1	–	0.7	15	MP2-1	5,7	20/2NG	FIELD	MMS	–
ISU-CF-209	208	1	–	0.7	15	MP2-1	5,7	20/2NG	FIELD	MMS	–
ISU-CF-302	208	1	–	0.7	15	MP3-1	9,11	20/2NG	FIELD	MMS	–
ISU-CG-201	208	1	–	1.3	15	MP2-1	1,3	20/2NG	FIELD	MMS	–
ISU-CG-202.1	208	1	–	1.3	15	MP2-1	1,3	20/2NG	FIELD	MMS	–
ISU-CG-202.2	208	1	–	1.3	15	MP2-1	1,3	20/2NG	FIELD	MMS	–
ISU-CG-215	208	1	–	1.3	15	MP2-1	9,11	20/2NG	FIELD	MMS	–
ISU-CG-216	208	1	–	1.3	15	MP2-1	9,11	20/2NG	FIELD	MMS	–
ISU-CH-108	208	1	–	1.5	15	MP1-1	1,3	20/2NG	FIELD	MMS	–
ISU-CH-223	208	1	–	1.5	15	MP2-1	1,3	20/2NG	FIELD	MMS	–
ISU-CH-305	208	1	–	1.5	15	MP3-1	9,11	20/2NG	FIELD	MMS	–
ISU-CI-104	208	1	–	1.8	15	MP1-1	5,7	20/2NG	FIELD	MMS	–
ISU-CI-210	208	1	–	1.8	15	MP2-1	5,7	20/2NG	FIELD	MMS	–
ISU-CI-217	208	1	–	1.8	15	MP2-1	9,11	20/2NG	FIELD	MMS	–
ISU-CI-218	208	1	–	1.8	15	MP2-1	9,11	20/2NG	FIELD	MMS	–
ISU-CI-219	208	1	–	1.8	15	MP2-1	9,11	20/2NG	FIELD	MMS	–
ISU-CI-220	208	1	–	1.8	15	MP2-1	9,11	20/2NG	FIELD	MMS	–
ISU-CI-221	208	1	–	1.8	15	MP2-2	5,7	20/2NG	FIELD	MMS	–
ISU-CI-224	208	1	–	1.8	15	MP2-2	1,3	20/2NG	FIELD	MMS	–
ISU-CI-226	208	1	–	1.8	15	MP2-2	1,3	20/2NG	FIELD	MMS	–
ISU-CI-229	208	1	–	1.8	15	MP2-2	1,3	20/2NG	FIELD	MMS	–
ISU-CI-230	208	1	–	1.8	15	MP2-2	1,3	20/2NG	FIELD	MMS	–
ISU-CI-231	208	1	–	1.8	15	MP2-2	1,3	20/2NG	FIELD	MMS	–
ISU-CI-232	208	1	–	1.8	15	MP2-2	1,3	20/2NG	FIELD	MMS	–
ISU-CI-306	208	1	–	1.8	15	MP3-1	9,11	20/2NG	FIELD	MMS	–
ISU-CI-308	208	1	–	1.8	15	MP3-1	9,11	20/2NG	FIELD	MMS	–
ISU-CI-311	208	1	–	1.8	15	MP3-1	9,11	20/2NG	FIELD	MMS	–
ISU-CI-314	208	1	–	1.8	15	MP3-1	9,11	20/2NG	FIELD	MMS	–
ISU-CI-N231	208	1	–	1.8	15	MP2-2	1,3	20/2NG	FIELD	MMS	–
ISU-CI-N232	208	1	–	1.8	15	MP2-2	1,3	20/2NG	FIELD	MMS	–
ISU-HC-314B	208	1	–	4.9	15	MP3-1	19,21	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C101A	208	1	–	6.5	15	MP1-2	13,15	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C101B	208	1	–	6.5	15	MP1-2	17,19	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C101C	208	1	–	6.5	15	MP2-2	13,15	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C102A	208	1	–	6.5	15	MP1-1	13,15	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C102B	208	1	–	6.5	15	MP1-1	17,19	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C103	208	1	–	6.5	15	MP1-2	21,23	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C201A	208	1	–	6.5	15	MP2-1	13,15	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C201B	208	1	–	6.5	15	MP2-1	17,19	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C202A	208	1	–	6.5	15	MP2-1	21,23	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C204A	208	1	–	6.5	15	MP2-2	17,19	15/2NG	FACTORY PROVIDED	–	–
ISU-HG-C204B	208	1	–	6.5	15	MP2-2	21,23	15/2NG	FACTORY PROVIDED	–	–
ISU-HH-C301A	208	1	–	8.6	15	MP3-1	23,25	15/2NG	FACTORY PROVIDED	–	–
ISU-HH-C301B	208	1	–	8.6	15	MP3-1	27,29	15/2NG	FACTORY PROVIDED	–	–
MAU-A-119.1	480	3	–	7.2	15	MPH3-1	25,27,29	20/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
MAU-A-119.2	480	3	–	7.2	15	MPH3-2	26,28,30	20/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
MAU-C-129	480	3	–	7.2	15	MPH3-3	49,51,53	20/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
MAU-D-206.1	480	3	–	6.2	15	MPH3-1	26,28,30	20/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
MAU-E-206.2	480	3	–	17.7	30	MPH3-2	14,16,18	30/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
P-A-1	480	3	4.8	–	15	MPH1-1	25,27,29	15/3G	FACTORY PROVIDED	–	–
P-A-2	480	3	4.8	–	15	MPH1-1	26,28,30	15/3G	FACTORY PROVIDED	–	–
P-A-3	480	3	4.8	–	15	MPH1-1	31,33,35	15/3G	FACTORY PROVIDED	–	–
P-B-1	480	3	34	–	70	MPH1-1	1,3,5	80/3G	FACTORY PROVIDED	–	–
P-B-2	480	3	34	–	70	MPH1-1	2,4,6	80/3G	FACTORY PROVIDED	–	–
P-C-1	480	3	14	–	20	MPH1-1	14,16,18	20/3G	FACTORY PROVIDED	–	–
P-C-2	480	3	14	–	20	MPH1-1	19,21,23	20/3G	FACTORY PROVIDED	–	–
PP-1	120	1	1.4	–	20	MP1-2	12	20/1NG	FACTORY PROVIDED	–	–
PP-2	120	1	1.4	–	20	MP1-1	10	20/1NG	FACTORY PROVIDED	–	–
PP-3A	120	1	1.4	–	20	MP1-1	12	20/1NG	FACTORY PROVIDED	–	–
PP-3B	120	1	1.4	–	20	MP1-1	14	20/1NG	FACTORY PROVIDED	–	–
RTU-A-124	480	3	20.8	24	35	MPH3-1	14,16,18	40/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
RTU-A-125	480	3	20.8	24	35	MPH3-3	25,27,29	40/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
RTU-A-128	480	3	20.8	24	35	MPH3-3	26,28,30	40/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
RTU-B-129	480	3	36.6	42.9	60	MPH3-3	14,16,18	60/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
RTU-C-119	480	3	36.6	42.9	60	MPH3-1	8,10,12	60/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
RTU-D-120	480	3	58.4	64.7	90	MPH3-1	2,4,6	100/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
RTU-E-130.1	480	3	75.8	82	100	MPH3-3	1,3,5	100/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
RTU-E-130.2	480	3	75.8	82	100	MPH3-3	2,4,6	100/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
RTU-F-206	480	3	58.4	64.7	90	MPH3-1	7,9,11	100/3G	FACTORY PROVIDED	–	YES W/ DUCT DETECTOR
UH-119F	115	1	.53	–	20	LP1-WS	31	20/1NG	FACTORY PROVIDED	–	–
UH-129C	115	1	.53	–	20	MP1-2	8	20/1NG	FACTORY PROVIDED	–	–
UH-129D	115	1	.53	–	20	MP1-2	8	20/1NG	FACTORY PROVIDED	–	–
UH-A-105	115	1	.53	–	20	MP1-1	8	20/1NG	FACTORY PROVIDED	–	–
UH-A-106	115	1	.53	–	20	MP1-1	2	20/1NG	FACTORY PROVIDED	–	–
UH-A-123	115	1	.53	–	20	MP1-2	10	20/1NG	FACTORY PROVIDED	–	–
UH-A-130A	115	1	.53	–	20	MP1-2	8	20/1NG	FACTORY PROVIDED	–	–
UH-A-203	115	1	.53	–	20	MP2-1	2	20/1NG	FACTORY PROVIDED	–	–
UH-A-V108	115	1	.53	–	20	MP2-2	2	20/1NG	FACTORY PROVIDED	–	–
WFU-A-1	480	3	52.0	–	125	DPH1-1	19,21,23	125/3G	FIELD PROVIDED	–	YES W/ DUCT DETECTOR

KITCHEN & CULINARY SCHEDULE

TAG	DESCRIPTION	VOLTAGE	PHASE	AMPS	NEMA	DIRECT	POWER SOURCE	CIRCUIT BREAKER	CONDUIT & WIRING
K100	MILK COOLER	120	1	7.6	5-15R	–	KP1-1	2	20/1NG
K100	MILK COOLER	120	1	7.6	5-15R	–	KP1-1	4	20/1NG
K101	HOT FOOD STATION	208	1	9.9	L14-20R	–	KP1-1	31,33	20/2NG
K101	HOT FOOD STATION	208	1	9.9	L14-20R	–	KP1-1	32,34	20/2NG
K103	UTILITY COUNTER	120	1	20.0	5-20R	–	KP1-1	7	20/1NG
K103	UTILITY COUNTER	120	1	20.0	5-20R	–	KP1-1	6	20/1NG
K104	COLD FOOD STATION	120	1	7.8	5-15R	–	KP1-1	9	20/1NG
K104	COLD FOOD STATION	120	1	7.8	5-15R	–	KP1-1	8	20/1NG
K106	UTILITY COUNTER	120	1	20.0	5-20R	–	KP1-1	10	20/1NG
K106	UTILITY COUNTER	120	1	20.0	5-20R	–	KP1-1	11	20/1NG
K109	CASHIER STATION	120	1	20.0	5-20R	–	KP1-1	13	20/1NG
K109	CASHIER STATION	120	1	20.0	5-20R	–	KP1-1	12	20/1NG
K112	ROLL-THRU REFRIGERATOR	120	1	10.3	5-15R	–	KP1-1	14	20/1NG
K113	ROLL-THRU HEATED CABINET	208	1	7.2	–	X	KP1-1	35,37	20/2NG
K115	ROLL-IN HEATED CABINET	208	1	7.2	–	X	KP1-1	36,38	20/2NG
K116	ROLL-IN HEATED CABINET	208	1	13.9	–	X	KP1-1	39,41	20/2NG
K117	ROLL-IN REFRIGERATOR	120	1	9.4	5-15R	–	KP1-1	15	20/1NG
K117	ROLL-IN REFRIGERATOR	120	1	9.4	5-15R	–	KP1-1	16	20/1NG
K120	VENTLESS COMBI OVEN	208	3	124.0	–	X	DPL1-1	8,10,12	175/3G
K120	VENTLESS COMBI OVEN	208	3	124.0	–	X	DPL1-1	13,15,17	175/3G
K120	VENTLESS COMBI OVEN	208	3	124.0	–	X	DPL1-1	14,16,18	175/3G
K120	VENTLESS COMBI OVEN	208	3	124.0	–	X	DPL1-1	19,21,23	175/3G
K120.1	CONDENSATE HOOD	120	1	1.6	5-15R	–	KP1-1	17	20/1NG
K120.1	CONDENSATE HOOD	120	1	1.6	5-15R	–	KP1-1	17	20/1NG
K121	HAND SINK	120	1	1.0	5-15R	–	KP1-1	19	20/1NG
K123	WORK TABLE	120	1	30.0	–	X	KP1-1	5	30/1NG
K123	WORK TABLE	120	1	30.0	–	X	KP1-1	3	30/1NG
K123	WORK TABLE	120	1	30.0	–	X	KP1-1	1	30/1NG
K124	REACH-IN FREEZER	120	1	9.4	5-15R	–	KP1-1	18	20/1NG
K200	WALK-IN COOLER/FREEZER	120	1	15.0	–	X	SB2-1	10	20/1NG
K200	WALK-IN COOLER/FREEZER	120	1	15.0	–	X	SB2-1	8	20/1NG
K200.1	AIR CURTAIN	120	1	15.0	–	X	SB2-1	14	20/1NG
K200.1	AIR CURTAIN	120	1	15.0	–	X	SB2-1	12	20/1NG
K201	WALK-IN COOLER EVAPORATOR COIL	208	1	4.4	–	X	SB2-1	11,13	20/2NG
K203	WALK-IN FREEZER EVAPORATOR COIL	208	1	13.7	–	X	SB2-1	15,17	20/2NG
K203.1	FREEZER DRAIN LINE HEATER	120	1	11.9	–	X	SB2-1	16	20/2NG
K205	REFRIGERATOR RACK SYSTEM	208	3	41.7	–	X	SB2-1	1,3,5	60/3G
K215	WASHING MACHINE	120	1	15.0	5-20R	–	KP2-2	1	20/1NG
K215.1	DRYER MACHINE	208	1	22.0	6-30R	–	KP2-2	38,40	30/2NG
K301	TEACHER'S REFREGERATED STATION	120	1	3.4	5-15R	–	KP2-2	2	20/1NG
K402	DISHWASHER	208	3	26.9	–	X	KP2-1	19,21,23	35/3G
K402.1	INTERNAL BOOSTER HEATER	208	3	25.6	–	X	KP2-1	14,16,18	35/3G
K408	HAND SINK	120	1	1.0	5-15R	–	KP2-2	3	20/1NG
K411	PROOFING CABINET	120	1	13.8	5-20R	–	KP2-2	4	20/1NG
K412	EXHAUST HOOD	120	1	15.0	–	X	KP2-2	5	20/1NG
K413	FIRE SUPPRESSION SYSTEM	120	1	20.0	–	X	KP2-2	6	20/1NG
K414	CONVECTION OVEN	208	3	38.0	–	X	KP2-1	2,4,6	50/3G
K414	CONVECTION OVEN	208	3	38.0	–	X	KP2-1	7,9,11	50/3G
K415	COMBI OVEN	208	3	30.0	–	X	KP2-1	8,10,12	40/3G
K415	COMBI OVEN	208	3	30.0	–	X	KP2-1	13,15,17	40/3G
K417	HAND SINK	120	1	1.0	5-15R	–	KP2-2	3	20/1NG
K417	HAND SINK	120	1	1.0	5-15R	–	KP2-2	3	20/1NG
K417	HAND SINK	120	1	1.0	5-15R	–	KP2-2	3	20/1NG
K418	MIXER	208	3	7.0	L15-20R	–	KP2-1	20,22,24	20/3G
K424	SLICER	120	1	2.0	5-15R	–	KP2-2	7	20/1NG
K427.1	UTILITY WALL SYSTEM	120	1	60.0	–	X	KP2-2	35	60/1NG
K428.1	UTILITY WALL SYSTEM	120	1	60.0	–	X	KP2-2	37	60/1NG
K429	EXHAUST HOOD	120	1	15.0	–	X	KP2-2	9	20/1NG
K429	EXHAUST HOOD	120	1	15.0	–	X	KP2-2	8	20/1NG
K429.1	FIRE SUPPRESSION SYSTEM	120	1	20.0	–	X	LS1-1	11	20/1NG
K429.1	FIRE SUPPRESSION SYSTEM	120	1	20.0	–	X	LS1-1	10	20/1NG
K432.1	UTILITY WALL SYSTEM	120	1	60.0	–	X	KP2-2	39	60/1NG
K432.1	UTILITY WALL SYSTEM	120	1	60.0	–	X	KP2-2	41	60/1NG
K433	EXHAUST HOOD	120	1	15.0	–	X	KP2-2	10	20/1NG
K433	EXHAUST HOOD	120	1	15.0	–	X	KP2-2	11	20/1NG
K433	EXHAUST HOOD	120	1	15.0	–	X	KP2-2	12	20/1NG
K433	EXHAUST HOOD	120	1	15.0	–	X	KP2-2	13	20/1NG
K433.1	FIRE SUPPRESSION SYSTEM	120	1	20.0	–	X	LS1-1	15	20/1NG
K433.1	FIRE SUPPRESSION SYSTEM	120	1	20.0	–	X	LS1-1	14	20/1NG
K433.1	FIRE SUPPRESSION SYSTEM	120	1	20.0	–	X	LS1-1	13	20/1NG
K433.1	FIRE SUPPRESSION SYSTEM	120	1	20.0	–	X	LS1-1	12	20/1NG
K436	EXHAUST HOOD	120	1	15.0	–	X	KP2-2	14	20/1NG
K437	UTILITY WALL SYSTEM	208	3	200.0	–	X	KP2-1	1,3,5	200/3G
K438	FIRE SUPPRESSION SYSTEM	120	1	20.0	–	X	LS1-1	16	20/1NG
K451	ICE MACHINE	120	1	11.9	5-15R	–	KP2-2	19	20/1NG
K453	ROLL-IN REFRIGERATOR	120	1	9.4	5-15R	–	KP2-2	15	20/1NG
K453	ROLL-IN REFRIGERATOR	120	1	9.4	5-15R	–	KP2-2	17	20/1NG
K456	MIXER	120	1	6.0	5-15R	–	KP2-2	16	20/1NG
K456	MIXER	120	1	6.0	5-15R	–	KP2-2	18	20/1NG

KITCHEN SCHEDULE NOTES:
1. FOR EACH DIRECT CONNECTION UNIT, PROVIDE LOCAL DISCONNECT WITHIN SITE OF UNIT. COORDINATE LOCATION IN-FIELD WITH ARCHITECT.
2. COORDINATE ALL BACKBOX MOUNTING HEIGHTS WITH FOOD SERVICE DRAWINGS PRIOR TO INSTALLATION.

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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
5	5/29/2024	BID ADDENDUM #5
4	5/20/2024	BID ADDENDUM #4

Drawn By: NAR
Checked By: JRB
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Sheet Title
SCHEDULES

Sheet No.
CTE E901

CONSTRUCTION DOCUMENTS

Branch Panel: LPH1-2

Location: ELEC. RM 126 | **Volts:** 480/277 Wye | **A.I.C. Rating:** 14,000
Supply From: DPH1-2 | **Phases:** 3 | **Mains Type:** 100 A MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 100

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	LIGHTING - GYMNASIUM	20	1	1176 VA	1651 VA					1	20	LIGHTING - CONST. & ELEC. SHOPS	2
3	LIGHTING - GYMNASIUM	20	1			1176 VA	1090.8 VA			1	20	LIGHTING - PLUMBING & HVAC SHOPS	4
5	LIGHTING - LOCKER, BATH, BOILER	20	1					1140 VA	2102.8 VA	1	20	LIGHTING - FRONT OFFICES	6
7	LIGHTING - CORR., ELEC.	20	1	2246.8 VA	0 VA					1	20	SPARE	8
9	SITE LIGHTING - POLES	20	1			944 VA	0 VA			1	20	SPARE	10
11	SITE LIGHTING - BUILDING MOUNTED	20	1					203 VA	0 VA	1	20	SPARE	12
13	SPACE	--	1	--	--					1	--	SPACE	14
15	SPACE	--	1			--	--			1	--	SPACE	16
17	SPACE	--	1					--	--	1	--	SPACE	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:		5074 VA		3211 VA		3446 VA					
		Total Amps:		18.4		11.6		12.6					

Notes:

Branch Panel: LP1-HS2

Location: HVAC SHOP 125 | **Volts:** 120/240 Single | **A.I.C. Rating:** 14,000
Supply From: LP1-HS1 | **Phases:** 1 | **Mains Type:** 60 A MCB
Mounting: SURFACE | **Wires:** 3 | **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-HS1

Location: HVAC SHOP 125 | **Volts:** 120/240 Single | **A.I.C. Rating:** 14,000
Supply From: T25 - LP1-HS1 | **Phases:** 1 | **Mains Type:** 150 A MCB
Mounting: SURFACE | **Wires:** 3 | **Mains Rating:** 150

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	RECEPT. - HVAC SHOP 125	20	1	540 VA	180 VA			1	20	RECEPT. - MONITOR	2
3	RECEPT. - WATER COOLER	20	1			260 VA	360 VA	1	20	RECEPT. - HVAC SHOP 125	4
5	CORD REEL - HVAC SHOP 125	20	1	720 VA	720 VA			1	20	CORD REEL - HVAC SHOP 125	6
7	CORD REEL - HVAC SHOP 125	20	1			720 VA	720 VA	1	20	CORD REEL - HVAC SHOP 125	8
9	H006 - SOLDERING FUME EXTRACTOR	20	1	60 VA	2160 VA			1	25	H008 - DRILL PRESS	10
11	OVERHEAD DOOR	20	1			864 VA	864 VA	1	20	OVERHEAD DOOR	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	SPACE	--	1	--	0 VA			2	60	LP1-HS2	22
23	SPACE	--	1			--	0 VA	--	--	--	24
		Total Load:		4380 VA		3788 VA					
		Total Amps:		36.5		31.6					

Notes:

Branch Panel: LP1-PS2

Location: PLUMBING SHOP 124 | **Volts:** 120/240 Single | **A.I.C. Rating:** 14,000
Supply From: LP1-PS1 | **Phases:** 1 | **Mains Type:** 60 A MCB
Mounting: SURFACE | **Wires:** 3 | **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-PS1

Location: PLUMBING SHOP 124 | **Volts:** 120/240 Single | **A.I.C. Rating:** 14,000
Supply From: T25 - LP1-PS1 | **Phases:** 1 | **Mains Type:** 150 A MCB
Mounting: SURFACE | **Wires:** 3 | **Mains Rating:** 150

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	RECEPT. - PLUMBING SHOP 124	20	1	900 VA	180 VA			1	20	RECEPT. - MONITOR	2
3	RECEPT. - WATER COOLER	20	1			260 VA	360 VA	1	20	RECEPT. - PLUMBING SHOP 124	4
5	CORD REEL - PLUMBING SHOP 124	20	1	720 VA	720 VA			1	20	CORD REEL - PLUMBING SHOP 124	6
7	CORD REEL - PLUMBING SHOP 124	20	1			720 VA	720 VA	1	20	CORD REEL - PLUMBING SHOP 124	8
9	CORD REEL - PLUMBING SHOP 124	20	1	720 VA	864 VA			1	20	OVERHEAD DOOR	10
11	SPARE	20	1			0 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	SPACE	--	1	--	0 VA			2	60	LP1-PS2	22
23	SPACE	--	1			--	0 VA	--	--	--	24
		Total Load:		4104 VA		2060 VA					
		Total Amps:		34.2		17.2					

Notes:

Branch Panel: MPH1-1

Location: BOILER RM 123 | **Volts:** 480/277 Wye | **A.I.C. Rating:** 14,000
Supply From: DPH1-1 | **Phases:** 3 | **Mains Type:** 225 A MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	P-B-1	70	3	9422.4 VA	9422.4 VA					3	70	P-B-2	2
3	--	--	--			9422.4 VA	9422.4 VA			--	--	--	4
5	--	--	--					9422.4 VA	9422.4 VA	--	--	--	6
7	*** B-A-1	20	3	1662.8 VA	1662.8 VA					3	20	*** B-A-2	8
9	--	--	--			1662.8 VA	1662.8 VA			--	--	--	10
11	--	--	--					1662.8 VA	1662.8 VA	--	--	--	12
13	*** B-A-3	20	3	1662.8 VA	3879.8 VA					3	20	P-C-1	14
15	--	--	--			1662.8 VA	3879.8 VA			--	--	--	16
17	--	--	--					1662.8 VA	3879.8 VA	--	--	--	18
19	P-C-2	20	3	3879.8 VA	0 VA					3	20	SPARE	20
21	--	--	--			3879.8 VA	0 VA			--	--	--	22
23	--	--	--					3879.8 VA	0 VA	--	--	--	24
25	P-A-1	15	3	1330.2 VA	1330.2 VA					3	15	P-A-2	26
27	--	--	--			1330.2 VA	1330.2 VA			--	--	--	28
29	--	--	--					1330.2 VA	1330.2 VA	--	--	--	30
31	P-A-3	15	3	1330.2 VA	0 VA					3	15	SPARE	32
33	--	--	--			1330.2 VA	0 VA			--	--	--	34
35	--	--	--					1330.2 VA	0 VA	--	--	--	36
37	SPACE	--	1	--	--					1	--	SPACE	38
39	SPACE	--	1			--	--			1	--	SPACE	40
41	SPACE	--	1					--	--	1	--	SPACE	42
		Total Load:		35583 VA		35583 VA		35583 VA					
		Total Amps:		128.5		128.5		128.5					

Notes:
*** SHUNT TRIP BREAKER. COORDINATE WIRING WITH LOCAL EPO BUTTON FOR SHUTDOWN OF EQUIPMENT IN THE EVENT OF ACTIVATION.

Branch Panel: LP1-WS

Location: WELDING SHOP 119 | **Volts:** 120/240 Single | **A.I.C. Rating:** 14,000
Supply From: T50 - LP1-WS | **Phases:** 1 | **Mains Type:** 300 A MCB
Mounting: SURFACE | **Wires:** 3 | **Mains Rating:** 300

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	A039A - TIG WELDER	50	2	3450 VA	1440 VA			2	20	A045 - VERTICAL BAND SAW	2
3	--	--	--			3450 VA	1440 VA	--	--	--	4
5	A030 - MIG WELDER	40	2	2587.5 VA	2587.5 VA			2	40	A030 - MIG WELDER	6
7	--	--	--			2587.5 VA	2587.5 VA	--	--	--	8
9	A030 - MIG WELDER	40	2	2587.5 VA	2400 VA			2	30	A051 - HYDRAULIC IRONWORKER	10
11	--	--	--			2587.5 VA	2400 VA	--	--	--	12
13	A034 - DRILL PRESS	20	1	1680 VA	1680 VA			1	20	A034 - DRILL PRESS	14
15	A040 & A040A - WELDER HOOD (MISC.)	20	1			1080 VA	720 VA	1	20	A040 & A040A - WELDER HOOD (MISC.)	16
17	A040 & A040A - WELDER HOOD (MISC.)	20	1	540 VA	1260 VA			1	20	A040A & A044 - WELDER HOOD (MISC.)	18
19	A046 - MANUAL COLD SAW	20	1			1200 VA	1320 VA	1	20	A048 - GRINDER W/ BELT SANDER	20
21	A048 - GRINDER W/ BELT SANDER	20	1	1320 VA	1920 VA			1	20	A050 - HORIZONTAL BANDSAW	22
23	WELDING FILTRATION CONTROL PANEL	20	1			5 VA	720 VA	1	20	CORD REEL - WELDING SHOP 119	24
25	CORD REEL - WELDING SHOP 119	20	1	720 VA	720 VA			1	20	CORD REEL - WELDING SHOP 119	26
27	RECEPT. - WELDING SHOP 119	20	1			1080 VA	260 VA	1	20	RECEPT. - WATER COOLER	28
29	OVERHEAD DOOR	20	1	864 VA	0 VA			1	20	SPARE	30
31	UH-119F	20	1			63.6 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	SPARE	20	1	0 VA	0 VA			1	20	SPARE	38
39	SPARE	20	1			0 VA	0 VA	1	20	SPARE	40
		Total Load:		25757 VA		21501 VA					
		Total Amps:		214.6		179.2					

Notes:

Branch Panel: LPH1-WS

Location: WELDING SHOP 119 | **Volts:** 480/277 Wye | **A.I.C. Rating:** 14,000
Supply From: DPH1-1 | **Phases:** 3 | **Mains Type:** 225 A MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	A030A - MIG WELDER	40	2	6000 VA	6000 VA					2	40	A030A - MIG WELDER	2
3	--	--	--			6000 VA	6000 VA			--	--	--	4
5	A030B - MIG WELDER	40	2					6480 VA	6480 VA	2	40	A030B - MIG WELDER	6
7	--	--	--	6480 VA	6480 VA					--	--	--	8
9	A030B - MIG WELDER	40	2			6480 VA	6480 VA			2	40	A030B - MIG WELDER	10
11	--	--	--					6480 VA	6480 VA	--	--	--	12
13	A039 - TIG WELDER	70	2	11280 VA	0 VA					2	20	SPARE	14
15	--	--	--			11280 VA	0 VA			--	--	--	16
17	A039 - TIG WELDER	70	2					11280 VA	0 VA	2	20	SPARE	18
19	--	--	--	11280 VA	0 VA					--	--	--	20
21	A039 - TIG WELDER	70	2			11280 VA	0 VA			2	20	SPARE	22
23	--	--	--					11280 VA	0 VA	--	--	--	24
25	A042 - PLASMA CUTTER	30	3	4988.3 VA	5265.4 VA					3	35	A055 - STICK-TIG WELDER	26
27	--	--	--			4988.3 VA	5265.4 VA			--	--	--	28
29	--	--	--					4988.3 VA	5265.4 VA	--	--	--	30
31	A055 - STICK-TIG WELDER	35	3	5265.4 VA	5265.4 VA					3	35	A055 - STICK-TIG WELDER	32
33	--	--	--			5265.4 VA	5265.4 VA			--	--	--	34
35	--	--	--					5265.4 VA	5265.4 VA	--	--	--	36
37	A055 - STICK-TIG WELDER	35	3	5265.4 VA	5265.4 VA					3	35	A055 - STICK-TIG WELDER	38
39	--	--	--			5265.4 VA	5265.4 VA			--	--	--	40
41	--	--	--					5265.4 VA	5265.4 VA	--	--	--	42
43	A055 - STICK-TIG WELDER	35	3	5265.4 VA	5265.4 VA					3	35	A055 - STICK-TIG WELDER	44
45	--	--	--			5265.4 VA	5265.4 VA			--	--	--	46
47	--	--	--					5265.4 VA	5265.4 VA	--	--	--	48
49	A049 - GRINDING TABLE	20	3	1496.5 VA	1496.5 VA					3	20	A049 - GRINDING TABLE	50
51	--	--	--			1496.5 VA	1496.5 VA			--	--	--	52
53	--	--	--					1496.5 VA	1496.5 VA	--	--	--	54
		Total Load:		92359 VA		92359 VA		93319 VA					
		Total Amps:		333.4		333.4		336.9					

Notes:

Branch Panel: LP1-AS2

Location: AUTOBODY SHOP 120 | **Volts:** 120/240 Single | **A.I.C. Rating:** 14,000
Supply From: T37.5 - LP1-AS2 | **Phases:** 1 | **Mains Type:** 200 A MCB
Mounting: SURFACE | **Wires:** 3 | **Mains Rating:** 200

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	A021 - POST LIFT	40	2	3600 VA	2587.5 VA			2	30	A030 - MIG WELDER	2
3	--	--	--			3600 VA	2587.5 VA	--	--	--	4
5	A030 - MIG WELDER	30	2	2587.5 VA	720 VA			2	20	A014 - TIRE CHANGER	6
7	--	--	--			2587.5 VA	720 VA	--	--	--	8
9	A015 - WHEEL BALANCER	20	2	1200 VA	0 VA			2	20	SPARE	10
11	--	--	--			1200 VA	0 VA	--	--	--	12
13	SPARE	20	2	0 VA	0 VA			2	20	SPARE	14
15	--	--	--			0 VA	0 VA	--	--	--	16
17	A020 - BENCH GRINDER W/ STAND	20	1	1440 VA	1440 VA			1	20	A020 - BENCH GRINDER W/ STAND	18
19	A034 - DRILL PRESS	20	1			1680 VA	1080 VA	1	20	RECEPT. - AUTOBODY SHOP 120	20
21	RECEPT. - AUTOBODY SHOP 120	20	1	900 VA	864 VA			1	20	OVERHEAD DOOR	22
23	OVERHEAD DOOR	20	1			864 VA	260 VA	1	20	RECEPT. - WATER COOLER	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	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:		15339 VA		14579 VA					
		Total Amps:		127.8		121.5					

Notes:

LPH1-2	LP1-HS2	LP1-HS1
LP1-PS2	LP1-PS1	MPH1-1
LP1-WS	LPH1-WS	LP1-AS2

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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
1	5/28/2024	BID ADDENUM #5

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