

Addendum No. 3

Date: 05-13-2024

Project Name: NECSD – New CTE Building

CSArch Project No. 108-2303

SED Control No. 44-16-00-01-0-053-001

This Addendum No. 3 forms part of the Contract Documents and modifies the original bidding documents dated April 15, 2024. Addendum No. 3 consists of 2 pages, 4 specification sections, and 21 drawings.



REGISTRATION EXPIRATION DATE: 12/31/2026

Architect's Seal

GENERAL INFORMATION

1. RFI Log: RFI questions and answers are included as an attachment to this addendum.

REVISIONS TO THE PROJECT MANUAL

1. **ADD** specification 083326 Overhead Coiling Grilles, attached.
2. **DELETE** specification section 096500. **ADD** revised specification 069500 Resilient Flooring in its entirety, attached.
3. **DELETE** specification section 125713. **ADD** revised specification 125713 Welding Equipment in its entirety, attached.
4. **DELETE** specification section 283100. **ADD** revised specification 283100 Fire Detection and Alarm in its entirety, attached.

REVISIONS TO THE CONTRACT DRAWINGS

1. **DELETE** drawing C141. **ADD** revised drawing C141, attached.
2. **DELETE** drawing C142. **ADD** revised drawing C142, attached.
3. **DELETE** drawing C150. **ADD** revised drawing C150, attached.
4. **DELETE** drawing C151. **ADD** revised drawing C151, attached.
5. **DELETE** drawing C230. **ADD** revised drawing C230, attached.
6. **DELETE** drawing A201. **ADD** revised drawing A201, attached.
7. **DELETE** drawing A202. **ADD** revised drawing A202, attached.
8. **DELETE** drawing A203. **ADD** revised drawing A203, attached.
9. **DELETE** drawing A204. **ADD** revised drawing A204, attached.
10. **DELETE** drawing A205. **ADD** revised drawing A205, attached.
11. **DELETE** drawing A504. **ADD** revised drawing A504, attached.

12. **DELETE** drawing A604. **ADD** revised drawing A604, attached.
13. **DELETE** drawing A611. **ADD** revised drawing A611, attached.
14. **DELETE** drawing A613. **ADD** revised drawing A613, attached.
15. **DELETE** drawing A615. **ADD** revised drawing A615, attached.
16. **DELETE** drawing A902. **ADD** revised drawing A902, attached.
17. **DELETE** drawing AF002. **ADD** revised drawing AF002, attached.
18. **DELETE** drawing AF121. **ADD** revised drawing AF121, attached.
19. **DELETE** drawing P111. **ADD** revised drawing P111, attached.
20. **DELETE** drawing P113. **ADD** revised drawing P113, attached.
21. **DELETE** drawing P123. **ADD** revised drawing P123, attached.

END OF ADDENDUM NO. 2

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|----|----|------------------------------------|--|-----------|------------------------------|---|-----|--------------|--------|--------|
| 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 | There are no MWBE goals for this project. The disclosure of local and MWBE subcontractors and suppliers by the General Contractor with their estimated participation of the contract or purchase order value as a percent of the bid amount is requested. 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 | | | |

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|----|---|-------------------------|--|-----------|------------------------------|--|-----|------------------|----------------|--------|
| 6 | A | Wood Athletic Flooring | <p>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</p> <p>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.</p> <p>Specification, cut sheet, system data sheet, MFMA PUR and DIN certification and substitution request form attached.</p> <p>Thank you for your consideration in this substitution request.</p> | 4/30/2024 | Action Floor Systems | <p>As per Spec Section 012519- Equivalents, article 1.2, E and G;</p> <p>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.</p> | No | | | |
| 7 | G | Instructions to Bidders | <p>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.</p> | 4/30/2024 | Worth Construction Co., Inc. | <p>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.</p> | Yes | | 002113 | Add #2 |
| 8 | G | Instructions to Bidders | <p>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.</p> | 4/30/2024 | Worth Construction Co., Inc. | <p>What is outlined in the Advertisement for Bids is correct. Revision to the Instruction to Bidders has been provided as part of addendum #2.</p> | Yes | | 002113 | Add #2 |
| 9 | C | Sheet Error | <p>Drawing C180 pdf file does not print correctly. Please provide another file.</p> | 4/30/2024 | Worth Construction Co., Inc. | <p>Provided as part of addendum #2</p> | Yes | C180 | | Add #2 |
| 10 | A | Equipment List | <p>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.</p> | 4/30/2024 | Worth Construction Co., Inc. | <p>Provided as part of addendum #3.</p> | Yes | A604, A613, A615 | | Add #3 |
| 11 | A | Door Hardware | <p>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.</p> | 4/30/2024 | Worth Construction Co., Inc. | <p>Provided as part of addendum #2.</p> | Yes | | 083473, 084700 | Add #2 |

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|----|----|------------------------------------|--|-----------|------------------------------|---|-----|--------------|--------|--------|
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| 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 | There are no MWBE goals for this project. The disclosure of local and MWBE subcontractors and suppliers by the General Contractor with their estimated participation of the contract or purchase order value as a percent of the bid amount is requested. 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 | | | |

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| 21 | G | CSArch Plan Room | CS Arch Plan Room website used for Bid documents & Addenda identifies a planholder list, where one name/contact is listed under the company as a main contact. This contact receives email notification of any new posted addenda. Please advise if it's possible to have another contact added to this list, so that they may receive email notification of any new posted addenda. | 5/1/2024 | EW Howell Construction Group | Please reach out to Vincent@revplans.com for support. | No | | | |
| 22 | G | Insurance Requirements | V1 Specifications do not call out a set of specific insurance requirements for the project. Please provide a document for insurance requirements if any are set for this project. | 5/1/2024 | EW Howell Construction Group | Refer to AIA A232 General Conditions, Article 11 for the specific insurance requirements for this project. | No | | | |
| 23 | A | Wood Athletic Flooring | Attached please find the substitution request and product data for your consideration of approval for the above project. Aacer Channel VLP HC flooring by Aacer Sports Flooring is being submitted as an equal to Bio-Channel Star flooring by Robbins Sports Surfaces. The Aacer Channel VLP HC has the same component configuration as the products specified. Approval of Aacers Floor System will not affect the design, schedule, or other trades and local installation and service are available. Please visit www.aacerflooring.com and learn more about our maple floor systems. We appreciate your time and consideration, please feel free to contact me if you have questions or require additional information. | 5/1/2024 | Aacer Sports Flooring | As per Spec Section 012519- Equivalents, article 1.2, E and G; Requests for Architect approval of proposed equivalents prior to the bid date will only be reviewed if the request is submitted directly by the contractor submitting a bid. | No | | | |
| 24 | M | HVAC Controls | SPECIFICATION 012100-1.8-"B.1A" STATES HVAC CONTROLS WILL BE PROVIDED BY OWNER UNDER A SEPARATE CONTRACT AND THE MC-02 CONTRACT IS TO PROVIDE STAND ALONE CONTROLS FOR MECHANICAL SYSTEM. PLEASE ADVISE IF THE OWNER HAS ASSIGNED A HVAC BAS CONTRACTOR AND IF THIS INFORMATION IS AVAILABLE, WE WOULD LIKE TO CONTACT THEM FOR COORDINATION AND RECEIVING A PROPOSAL FOR STAND-ALONE CONTROLS. | 5/1/2024 | Joseph Lombardo Plumbing, Heating & Cooling, Inc. | At this time it is the owners intent to use Day Automation for the HVAC controls. | No | | | |
| 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 | | | |

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| 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, tt 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 | 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 | 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 | 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 | 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 | Revised as part of addendum #3. | Yes | AF002 | 096500 | Add #3 |

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| 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 | 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 | 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 | 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 | 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 | 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 ? | 5/9/2024 | Rizzo Companies EW Howell Construction Group | 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 | 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 | No HMB-1 is required behind casework or millwork | No | | | |

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|----|----|------------|---|----------|---|---|-----|-------|--------|--------|
| 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 | 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 | 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 | 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 | 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 | 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 | 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 | Revised as part of addendum #3. | Yes | | 096500 | Add #3 |

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| 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 | 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 | 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 | Please refer to Specification 011200 GC Summary issued as part of addendum #2 which provides detailed language about BMS and Controls being procured by owner through a State Contract. The district has identified that they prefer to use Day Automation who is currently pricing the project. | No | | | |
| 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 |

SECTION 083326 - OVERHEAD COILING GRILLES

ADDENDUM 3

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. *Overhead coiling metal grilles and operating hardware; electrically operated.*
- B. *Wiring from electric circuit disconnect to operator and to control station.*

1.2 REFERENCE STANDARDS

- A. *ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.*
- B. *ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.*
- C. *ITS (DIR) - Directory of Listed Products; Current Edition.*
- D. *NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2020.*
- E. *NEMA ICS 2 - Industrial Control and Systems Controllers, Contactors and Overload Relays Rated 600 Volts; 2008 (Reaffirmed 2020).*
- F. *UL (DIR) - Online Certifications Directory; Current Edition.*
- G. *UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions.*

1.3 SUBMITTALS

- A. *Product Data: Provide general construction component connections and details, and electrical equipment.*
- B. *Shop Drawings: Indicate pertinent dimensioning, anchorage methods, hardware locations, and installation details.*
- C. *Manufacturer's Installation Instructions: Indicate installation sequences and procedures, adjustment and alignment procedures.*
- D. *Maintenance Data: Indicate lubrication requirements and frequency and periodic adjustments required.*

1.4 QUALITY ASSURANCE

- A. *Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.*
- B. *Installer Qualifications: Company specializing in performing work of type specified and with at least three years documented experience.*
- C. *Products Requiring Electrical Connection: Listed and classified by ITS (DIR), UL (DIR), or testing firm acceptable to authorities having jurisdiction as suitable for purpose specified.*

1.5 WARRANTY

- A. *Manufacturer Warranty: Provide 2-year manufacturer warranty for roller shaft counterbalance assembly. Complete forms in Owner's name and register with manufacturer.*

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. *Overhead Coiling Grilles:*
 - 1. *Overhead Door Corporation; Upward Coiling Security Grilles – Model 670: www.overhaddoor.com/#sle.*

2.2 GRILLES AND COMPONENTS

- A. *Grille: Aluminum; horizontal bar curtain, coiling on overhead counterbalanced shaft.*
 - 1. *Finish: No. 4 - Brushed.*
 - 2. *Mounting: Surface mounted.*
- B. *Curtain: Round horizontal bars connected with vertical links.*
 - 1. *Horizontal bars: 5/16 inch diameter.*
 - 2. *Bar spacing: 2 inch on center.*
 - 3. *Link spacing: 6 inch on center.*
 - 4. *Bar Ends: Provide with nylon runners for quiet operation.*
 - 5. *Bottom Bar: Back-to-back angles with tubular resilient cushion.*
- C. *Guides: Extruded aluminum angles, of profile to retain grille in place with snap-on trim, mounting brackets of same metal.*
- D. *Hood Enclosure and Trim: Sheet metal; completely covering operating mechanisms; internally reinforced to maintain rigidity and shape.*
 - 1. *Material: Galvanized steel.*
 - 2. *Finish: Factory painted, color as selected.*
- E. *Lock Hardware:*
 - 1. *For motor operated units, additional lock or latching mechanisms are not required.*

- F. *Roller Shaft Counterbalance: Steel pipe and helical steel spring system, capable of producing torque sufficient to ensure smooth operation of curtain from any position and capable of holding position at mid-travel; with adjustable spring tension; requiring 25 lb nominal force to operate.*

2.3 MATERIALS

- A. *Aluminum: ASTM B221 (ASTM B221M).*
- B. *Galvanized Steel Bars: Galvanized to minimum coating thickness grade in accordance with ASTM A123/A123M.*
- C. *Galvanized Steel Sheet: ASTM A653/A653M, galvanized to minimum G90/Z275 coating.*

2.4 ELECTRIC OPERATION

- A. *Operator, Controls, Actuators, and Safeties: Comply with UL 325; provide products listed by ITS (DIR), UL (DIR), or testing agency acceptable to authorities having jurisdiction.*
- B. *Electric Operators:*
 - 1. *Mounting: Side mounted.*
 - 2. *Motor Rating: 1/3 hp; continuous duty.*
 - 3. *Motor Voltage: 120 volts, single phase, 60 Hz.*
 - 4. *Motor Controller: NEMA ICS 2, full voltage, reversing magnetic motor starter.*
 - 5. *Controller Enclosure: NEMA 250 Type 1.*
 - 6. *Opening Speed: 12 inches per second.*
 - 7. *Brake: Adjustable friction clutch type, activated by motor controller.*
 - 8. *Manual override in case of power failure.*
- C. *Control Station: Provide standard three button (Open-Close-Stop) momentary-contact control device for each operator complying with UL 325.*
 - 1. *24 volt circuit.*
 - 2. *Surface mounted, at interior door jamb.*
 - 3. *Entrapment Protection Devices: Provide sensing devices and safety mechanisms complying with UL 325.*
 - a. *Primary Device: Provide electric sensing edge as required with momentary-contact control device.*
- D. *Safety Edge: Located at bottom of coiling grill, full width, electro-mechanical sensitized type, wired to stop and reverse grill direction upon striking object, hollow neoprene covered.*

PART 3 EXECUTION

3.1 EXAMINATION

- A. *Verify that adjacent construction is suitable for door installation.*
- B. *Verify that electrical services have been installed and are accessible.*
- C. *Verify that door opening is plumb, header is level, and dimensions are correct.*
- D. *Notify Architect of any unacceptable conditions or varying dimensions.*
- E. *Commencement of installation indicates acceptance of substrate and door opening conditions.*

3.2 *INSTALLATION*

- A. *Install grille unit assembly in accordance with manufacturer's instructions.*
- B. *Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.*
- C. *Securely and rigidly brace components suspended from structure. Secure guides to structural members only.*
- D. *Fit and align assembly including hardware; level and plumb, to provide smooth operation.*
- E. *Coordinate installation of electrical service.*
- F. *Complete wiring from disconnect to unit components.*
- G. *Install enclosure and perimeter trim.*

3.3 *TOLERANCES*

- A. *Maintain dimensional tolerances and alignment with adjacent work.*
- B. *Maximum Variation From Plumb: 1/16 inch.*
- C. *Maximum Variation From Level: 1/16 inch.*
- D. *Longitudinal or Diagonal Warp: Plus or minus 1/8 inch per 10 ft straight edge.*

3.4 *ADJUSTING*

- A. *Adjust grille, hardware and operating assemblies for smooth and noiseless operation.*

3.5 *CLEANING*

- A. *Clean grille and components.*
- B. *Remove labels and visible markings.*

CSArch
Project No. 108-2303.00

Newburgh Enlarged City School District
New CTE Building

END OF SECTION

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SECTION 096500 - RESILIENT FLOORING **BID ADDENDUM 3**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Resilient sheet flooring.
- B. Resilient tile flooring.
- C. Static control resilient tile flooring.
- D. Resilient base.
- E. Resilient stair accessories.
- F. Installation accessories.

1.2 REFERENCE STANDARDS

- A. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source; 2019a, with Editorial Revision (2020).
- B. ASTM F1066 - Standard Specification for Vinyl Composition Floor Tile; 2004 (Reapproved 2018).
- C. ASTM F1344 - Standard Specification for Rubber Floor Tile; 2021a.
- D. ASTM F1700 - Standard Specification for Solid Vinyl Floor Tile; 2020.
- E. ASTM F1861 - Standard Specification for Resilient Wall Base; 2021.
- F. ASTM F1913 - Standard Specification for Vinyl Sheet Floor Covering Without Backing; 2019.
- G. NFPA 253 - Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source; 2023.

1.3 SUBMITTALS

- A. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- B. Shop Drawings: Indicate floor patterns.

- C. Selection Samples: Submit manufacturer's complete set of color samples for Architect's initial selection.
- D. Verification Samples: Full-size units of each color and pattern of floor tile required.
- E. Concrete Subfloor Test Report: Submit a copy of the moisture and alkalinity (pH) test reports.
- F. Installer's Qualification Statement.
- G. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.
- H. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. Extra Flooring Material: 1 carton of each type and color.
 - 2. Extra Wall Base: 1 carton of each type and color.
 - 3. Extra Stair Materials: Quantity equivalent to 5 percent of each type and color.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing specified flooring with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in installing specified flooring with minimum three years documented experience.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Upon receipt, immediately remove any shrink-wrap and check materials for damage and the correct style, color, quantity and run numbers.
- B. Store all materials off of the floor in an acclimatized, weather-tight space.
- C. Maintain temperature in storage area between 55 degrees F and 90 degrees F.
- D. Do not double stack pallets.

1.6 FIELD CONDITIONS

- A. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F.

PART 2 PRODUCTS

2.1 SHEET FLOORING

- A. Vinyl Sheet Flooring - Type HMO-1:
 - 1. Manufacturers:
 - a. Armstrong Flooring; Natralis: www.armstrongflooring.com/#sle.
 - 2. Minimum Requirements: Comply with ASTM F1913.
 - 3. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.
 - 4. Thickness: 0.080 inch nominal.
 - 5. Sheet Width: 72 inch minimum.
 - 6. Seams: Heat welded.
 - 7. Color: As indicated on drawings.
- B. Welding Rod: Solid bead in material compatible with flooring, produced by flooring manufacturer for heat welding seams, and in color matching field color.

2.2 TILE FLOORING

- A. Vinyl Tile - Type LVT-1: Luxury Vinyl Tile.
 - 1. Manufacturers:
 - a. Mannington Commercial; Groove: www.manningtoncommercial.com/#sle.
 - 2. Minimum Requirements: Comply with ASTM F1700, of Class corresponding to type specified.
 - 3. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.
 - 4. Plank Tile Size: ___ by ___ inch.
 - 5. Color: As indicated on drawings.
- B. Rubber Tile - RT-1: Homogeneous, color and pattern throughout thickness.
 - 1. Manufacturers:
 - a. Roppe Corporation; Marbleized: www.roppe.com/#sle.
 - 2. Minimum Requirements: Comply with ASTM F1344, of Class corresponding to type specified.
 - 3. Size: ~~24~~ **20** by ~~24~~ **20** inch nominal.
 - 4. Total Thickness: ~~3.5~~ **3.2** mm.
 - 5. Texture: Hammered.
 - 6. Color: As indicated on drawings.
- C. Static Control Tile - Type SDT-1: Homogeneous; color and pattern throughout thickness.
 - 1. Manufacturers:
 - a. Armstrong Excelon SDT.
 - 2. Minimum Requirements: Vinyl composition tile complying with ASTM F1066, Class 2.
 - 3. Electrical Resistance:

- a. Dissipative Tile: Resistance between 1.0 megohms and 1000 megohms as tested in accordance with ASTM F150.
4. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.
5. Tile Size: 12 by 12 inch.
6. Total Thickness: 0.125 inch.
7. Color: As indicated on drawings.

2.3 STAIR COVERING

- A. Stair Treads: Rubber; full width and depth of stair tread in one piece; tapered thickness.
 1. Manufacturers:
 - a. **Roppe Corporation; Rubber Stair Treads: Marbleized Textured; www.roppe.com/#sle.**
 2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.
 3. Nominal Thickness: 0.1875 inch.
 4. Nosing: Square.
 5. **Striping: 2 inch wide contrasting color Dark Gray strips.**
 6. Color: As indicated on drawings.
- B. **Stair Risers: Full height and width of tread in one piece, matching treads in material and color.**
 1. **Thickness: 0.080 inch.**
- ~~B. Stair Stringers: Full height in one piece and in maximum available lengths, matching treads in material and color.~~
 - ~~2. Nominal Thickness: 0.080 inch.~~

2.4 RESILIENT BASE

- A. Resilient Base: ASTM F1861, Type TS rubber, vulcanized thermoset; style as scheduled.
 1. Manufacturers:
 - a. RB-2: Johnsonite, a Tarkett Company; Vent Cove: www.johnsonite.com/#sle.
 - b. RB-1: Roppe Corporation; Pinnacle Cove Base: www.roppe.com/#sle.
 2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.
 3. Height: 4 inch.
 4. Thickness: 0.125 inch.
 5. Finish: Satin.
 6. Length: Roll.
 7. Color: See materials legend .
 8. Accessories: Premolded external corners and internal corners.

2.5 ACCESSORIES

- A. Subfloor Filler: White premix latex; type recommended by adhesive material manufacturer.
- B. Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.
- C. Moldings, Transition and Edge Strips: Same material as flooring.
- D. Copper Grounding Strips: Type and size as recommended by static control flooring manufacturer.
- E. Floor Polish for Static Control Flooring: Fluid-applied polish, intended to protect electrical properties of flooring, as recommended by static control flooring manufacturer.
- F. Sealer and Wax: Provide protective, liquid floor-polish products recommended by floor tile manufacturer.

PART 3 EXECUTION

3.1 PREPARATION

- A. Prepare floor substrates as recommended by flooring and adhesive manufacturers.
- B. Remove subfloor ridges and bumps. Fill minor low spots, cracks, joints, holes, and other defects with subfloor filler to achieve smooth, flat, hard surface.
- C. Prohibit traffic until filler is fully cured.
- D. Clean substrate.
- E. Apply primer as required to prevent "bleed-through" or interference with adhesion by substances that cannot be removed.

3.2 Installation - General

- A. Starting installation constitutes acceptance of subfloor conditions.
- B. Install in accordance with manufacturer's written instructions.
- C. Adhesive-Applied Installation:
 - 1. Spread only enough adhesive to permit installation of materials before initial set.
 - 2. Place copper grounding strip in conductive adhesive and apply additional adhesive to top side of strip before installing static control flooring. Allow strip to extend beyond flooring in accordance with static control flooring manufacturer's instructions.
 - 3. Fit joints and butt seams tightly.

4. Set flooring in place, press with heavy roller to attain full adhesion.
- D. Where type of floor finish, pattern, or color are different on opposite sides of door, terminate flooring under centerline of door.
- E. Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated.
 1. Resilient Strips: Attach to substrate using adhesive.
- F. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.
- G. At movable partitions, install flooring under partitions without interrupting floor pattern.
- ~~H. Install feature strips and logos where indicated.~~

3.3 Installation - Sheet Flooring

- A. Lay flooring with joints and seams parallel to longer room dimensions, to produce minimum number of seams. Lay out seams to avoid widths less than 1/3 of roll width; match patterns at seams.
- B. Seal seams by heat welding where indicated.

3.4 Installation - Tile Flooring

- A. Mix tile from container to ensure shade variations are consistent when tile is placed, unless otherwise indicated in manufacturer's installation instructions.
- B. Install plank tile with a random offset of at least 6 inches from adjacent rows.

3.5 Installation - Resilient Base

- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.
- B. Miter internal corners. At external corners, use premolded units. At exposed ends, use premolded units.
- C. Install base on solid backing. Bond tightly to wall and floor surfaces.

3.6 Installation - Stair Coverings

- A. Install stair coverings in one piece for full width and depth of tread.
- B. Install stringers configured tightly to stair profile.

- C. Adhere over entire surface. Fit accurately and securely.

3.7 CLEANING AND PROTECTION

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean in accordance with manufacturer's written instructions.
- C. Floor Polish: Remove soil, adhesives, and blemishes from floor tile surface before applying liquid floor polish.
 - 1. Apply one coat.

3.8 PROTECTION

- A. Prohibit traffic on resilient flooring for 48 hours after installation.

END OF SECTION

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SECTION 125713 - WELDING EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes:
 - 1. Welding Booths including accessories.
 - 2. Gas Tank storage accessories.
 - a. Locations: Gas and Metal Stock Storage.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
 - 2. Include furnished specialties and accessories.
- B. Shop Drawings:
 - 1. Include plans, elevations, sections.
 - 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
- C. Product Schedule: Use same designations indicated on Drawings.

1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
 - 1. Ductwork and Electrical connections.
- B. Sample Warranty: For manufacturer's warranty.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Welding Booth Curtains: Two full size units.
- B. Deliver to site and install after building is secure and temperature controlled.

1.7 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of that fail(s) in materials or workmanship within specified warranty period.
 - 1. Warranty Period: one year(s) from date of Substantial Completion.

PART 2 - PRODUCTS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Lincoln Electric Company.

2.2 WELDING BOOTH AND ACCESSORIES

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Lincoln Electric Company; Welding Booth or equal.
- B. Modular booths, 16 gauge steel construction, 6ft x 6ft & 4ft x 6ft side-to-side units. All adjacent booths share dividing panel. Layout per drawings.

- 1. Accessories:
 - a. Steel Welding Table
 - 1. 1/4" thick steel top with mechanical tubing frame and legs. Each leg has provisions for lagging table to floor.
 - 2. Adjustable post and welding fixture
 - 3. Sizes: 47" (4' wide booths), 58" (6' wide booths)
 - b. Welding Booth Curtain Kit
 - 1. Overlapping red-orange strip curtains.
 - 2. Sizes: 50" W x 66" H (4' wide booths), 74" W x 66" H (6' wide booths)
 - c. LED Light Kit
 - 1. LED Light Bars, including mounting hardware, connection cables and on/off switch. (120v / 1-ph)
 - d. Booth Assist Alert System.
 - 1. Control Panel
 - 2. Light Stack. Green indicator = Booth Occupied, Amber Indicator = Student is Welding, Red Indicator = Student Needs Support
 - 3. Weld Sensing PCB
 - e. **Telescoping Extraction Arms** ~~Wall Mounted Fume Extraction System~~
 - 1. **Telescopic extraction arm with counterweight mechanism and a rotatable hood with throttle valve to control airflow at the hood opening.** ~~Wall-mount base unit with MERV 16 filter, mechanized filter cleaning, Telescopic 5-8 ft. counter-weight fume extraction arm, 1 hp fan and manual start/stop control.~~

2. **Sizes:**
 - a) **8" dia. 4-6ft telescopic arm (4' wide welding booth locations), Model #K1655-15**
 - b) **8" dia. 5-8ft telescopic arm (6' wide welding booth locations), Model # K1655-14**
3. **8" Duct to Extraction Arm Connector, Model #K1657-5**
4. **Bracket to Mount Extraction Arm to Booth Header, Model #S23385-244**

- C. Provide all components necessary to complete the assembly and installation.

2.3 WELDING GAS TANK ACCESSORIES

- A. Double Cylinder Brackets, steel, with chains, width 25 inches. Mount per drawings.

2.4 PERFORMANCE REQUIREMENTS

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 1. Flame-Spread Index: 25 or less.
 2. Smoke-Developed Index: 450 or less.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install per manufactures instructions.

3.3 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain units.

END OF SECTION 125713

SECTION 283100 – FIRE DETECTION AND ALARM

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Fire-alarm control panel (FACP).
2. Manual fire alarm pull stations.
3. System smoke detectors.
4. Carbon Monoxide detectors.
5. Heat detectors.
6. Notification appliances.
7. Fire Alarm Annunciator Panel (FAAP).
8. Addressable interface device.
9. Digital alarm communicator transmitter.
10. Network communications.
11. Device Guards.

1.2 DEFINITIONS

- A. EMT: Electrical Metallic Tubing.
- B. FACP: Fire Alarm Control Panel.
- C. HLI: High Level Interface.
- D. NICET: National Institute for Certification in Engineering Technologies.
- E. PC: Personal computer.

1.3 SUBMITTALS

- A. Product Data: For each type of product, including finished options and accessories.

1. Include construction details, material descriptions, dimensions, profiles, and finishes.
2. Include rated capacities, operating characteristics, and electrical characteristics.

B. Shop Drawings: For fire alarm system:

1. Floor plans (minimum 1/8-inch scale) with room names and numbers, showing device locations and interconnecting conduit and wire. Include location of fire/smoke rated or barrier walls.
2. Drawings shall show proposed layout and anchorage of equipment and appurtenances and equipment relationship to other parts of the work, including clearances for maintenance and operation.
3. Scaled detail drawings of FACP and FAAP panel fronts.
4. Wiring diagram for each device. Include connection details to auxiliary equipment.
5. Customize the second sentence of Clause F. to suit project-specific requirements.
6. Riser diagram showing devices, equipment, and interconnecting conduit and wire. Indicate points of connection to other equipment such as, damper actuators, kitchen hood fire protection systems, pre-action fire protection systems, clean agent fire protection systems, elevator machine rooms and shafts, electric door locking hardware, fire door releases, magnetic door holders, and other related devices and equipment.
7. Complete narrative of the sequence of operation.
8. Sequence of operation matrix table including a complete line-by-line listing of fire alarm initiating devices, corresponding device address, and input/output matrix.
9. Voltage drop calculations.
10. Battery sizing calculations.
11. Visual alarm power supply sizing calculations.
12. Power supply calculations for magnetic door holders, and electric door locking hardware.
13. Wire identification schedule.
14. Include statement from manufacturer that all equipment and components have been tested as a system and meet all requirements in this specification and in NFPA 72.All

drawings must be stamped and signed by a Professional Engineer registered in New York State, for approval by the Fire Marshal and NYSED.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For fire-alarm systems and components to include in emergency, operation, and maintenance manuals. Include the following:
1. Comply with the "Records" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
 2. Provide "Fire Alarm and Emergency Communications System Record of Completion Documents" according to the "Completion Documents" Article in the "Documentation" section of the "Fundamentals" chapter in NFPA 72.
 3. Complete wiring diagrams showing connections between all devices and equipment. Each conductor shall be numbered at every junction point with indication of origination and termination points.
 4. Riser diagram.
 5. Device addresses.
 6. Record copy of site-specific software. This software shall also be in an electronic format to allow an alternate Authorized Distributor to add , change , or modify in any way, the existing system data base.
 7. Provide "Inspection and Testing Form" according to the "Inspection, Testing and Maintenance" chapter in NFPA 72, and include the following:
 - a. Equipment tested.
 - b. Frequency of testing of installed components.
 - c. Frequency of inspection of installed components.
 - d. Requirements and recommendations related to results of maintenance.
 - e. Manufacturer's user training manuals.
 8. Manufacturer's required maintenance related to system warranty requirements.
 9. Abbreviated operating instructions for mounting at fire-alarm control unit and each annunciator unit.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Personnel shall be trained and certified by manufacturer for installation of units required for this Project.
- B. Installer Qualifications: Installation shall be by personnel certified by NICET as fire alarm Level III technician.
- C. NFPA Certification: Obtain certification according to NFPA 72 by a UL-listed alarm company.
- D. Manufacturer and equipment supplier shall have a minimum of ten years' prior experience in New York State. Equipment supplier shall have 24-hour parts and labor service available with a maximum 4-hour response time. There shall be a minimum of 2 Independent Authorized Distributors within a 50 mile radius of project. Proprietary equipment shall not be acceptable.

1.6 PROJECT CONDITIONS

- A. Use of Devices during Construction: Protect devices during construction unless devices are placed in service to protect the facility during construction.

1.7 SYSTEM ZONING

- A. Alarm Initiating Devices:
 - 1. Provide a separate, individual zone for each manual pull station, area smoke detector, duct smoke detector, and area heat detector, and water flow switch.
- B. Fire Audible and Visual Alarm Strobes:
 - 1. Each floor of the building (above and below grade) shall be a separate, individual zone.
 - 2. Each stairwell shall be a separate, individual zone.
 - 3. Each exterior area shall be a separate individual zone.
- C. Fire Alarm Control zones:
 - 1. Air Handling Fan systems: Provide one (1) shutdown contact for each air handling fan systems. Contacts shall initiate the shutdown of fan system and closing of dampers on associated floor.

2. Provide two (2) open/close contact for each floor's/zones's dampers grouped as a function of being in the supply or return air streams.
 3. Provide one (1) recall contact for each elevator control panel to recall elevator to ground floor.
 4. Provide one (1) release control contact for all door lock systems.
- D. Initiating and signaling device wiring circuits/loops/channels shall be loaded to no more than 80 percent (80%) capacity to allow for the installation of future devices.

1.8 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace fire-alarm system equipment and components that fail in materials or workmanship within specified warranty period.
1. Warranty Extent: All equipment and components not covered in the Maintenance Service Agreement.
- B. Warranty Period: Three years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. All new fire detection and alarm system components shall be ~~of the same manufacturer, and must meet all requirements of the contract documents.~~ **procured as part of a state contract. (Addendum 3)**
- B. Acceptable manufacturers **State Contract Manufacturer: (Addendum 3)**
1. Edwards
- C. ~~Products for this project shall be of the latest design that has been in service for at least two (2) years, and no more than 4 years. Obsolete or discontinued models are not acceptable.~~ **(Addendum 3)**

2.2 DESCRIPTION

- A. Fire alarm system infrastructure including conduit, wiring, backboxes, etc. and all associated labor and installation is in the scope of this contract.

- B. Shop drawings and submittal review/approval, testing and programming, project management and closeout documentation shall be by the fire alarm system manufacturer's authorized representative.
- C. Provide a microprocessor-controlled, electrically supervised fire alarm system in accordance with the Contract Documents. Provide detailed system design, all equipment, tools, drawings, labor, materials, accessories, and approvals from governing agencies required to furnish, install, start up, and test a complete operating fire alarm system. Systems shall be provided and placed into operation in accordance with the requirements of the Authority Having Jurisdiction (AHJ).
- D. Labor, materials including conduit and wiring, and accessories not specifically called for in the Contract Documents but required to provide complete, operating, and approved systems, shall be provided within the scope of this contract.
- E. Determine, coordinate, and incorporate the design and construction requirements of the architectural, structural, fire protection and mechanical systems, and auxiliary systems including food service, fire doors and windows, elevators, and other related systems, to fully meet all code requirements.
- F. The fire alarm system manufacturer and Contractor shall provide all required documentation, obtain all required permits and approvals, and shall provide all devices and accessories in the quantities and locations necessary for a fully functional and code-compliant system.
- G. Programming of system shall be based on final room names and numbers, which may not necessarily be the same as those used on the construction documents.
- H. Noncoded, UL-certified addressable system, with multiplexed signal transmission and voice/strobe evacuation.
- I. The Fire Alarm Control Panel (FACP) and Fire Alarm Annunciator Panel (FAAP) shall be connected in a network configuration to become components for a distributed intelligence system.
- J. The fire detection and alarm system shall be the fully addressable type. Each fire alarm initiating device shall be a separate, individual zone. Provide interface modules to connect non-addressable devices to addressable wiring channels.
- K. All components provided shall be listed for use with the selected system.
- L. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.3 SYSTEMS OPERATIONAL DESCRIPTION

- A. Fire alarm signal initiation shall be by one or more of the following devices and systems:
 - 1. Manual pull stations.
 - 2. Heat detectors.
 - 3. Smoke detectors.
 - 4. Duct smoke detectors.
 - 5. Waterflow Switch.
- B. Fire alarm signal shall initiate the following actions:
 - 1. Continuously operate alarm notification appliances, including voice evacuation notices.
 - 2. Identify alarm and specific initiating device at FACP, connected network control panels, off-premises network control panels, and remote annunciators.
 - 3. Indicate device in alarm on the graphic annunciator
 - 4. Transmit an alarm signal to the remote alarm receiving station.
 - 5. Unlock electric door locks in designated egress paths.
 - 6. Release fire and smoke doors held open by magnetic door holders.
 - 7. Activate voice/alarm communication system.
 - 8. Switch heating, ventilating, and air-conditioning equipment controls to fire alarm mode.
 - 9. Close smoke dampers in air ducts of designated air conditioning duct systems.
 - 10. Activate emergency shutoffs for gas and fuel supplies.
 - 11. Record events in the system memory.
- C. Detection of carbon monoxide by a carbon monoxide detector shall:
 - 1. Activate a distinct carbon monoxide alarm at the FACP.
 - a. Carbon monoxide signal shall be a separate and distinct signal from the fire alarm system.

2. Activate distinct local carbon monoxide visual/audible notification appliances for associated carbon monoxide detector in alarm condition.
 3. Activate carbon monoxide detector sounder base (if present).
 4. Send a distinct carbon monoxide detector supervisory signal to central office.
- D. Supervisory signal initiation shall be by one or more of the following devices and actions:
1. Independent fire detection and suppression systems.
 2. User disabling of zones or individual devices.
 3. Loss of communication with any panel on the network.
- E. System trouble signal initiation shall be by one or more of the following devices and actions:
1. Open circuits, shorts, and grounds in designated circuits.
 2. Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.
 3. Loss of communication with any addressable sensor, input module, relay, control module, remote annunciator, or Ethernet module.
 4. Loss of primary power at FACP.
 5. Ground or a single break in internal circuits of FACP.
 6. Abnormal AC voltage at FACP.
 7. Break in standby battery circuitry.
 8. Failure of battery charging.
 9. Abnormal position of any switch at FACP or annunciator.
 10. Voice signal amplifier failure.
- F. System Supervisory Signal Actions:
1. Identify specific device initiating the event at FACP, off-premises network control panels, and remote annunciators.
 2. After a time delay of 200 seconds, transmit a trouble or supervisory signal to the remote alarm receiving station.
 3. Display system status on FAAP.

2.4 FIRE ALARM CONTROL PANEL (FACP)

A. General Requirements for FACP:

1. Field-programmable, microprocessor-based, modular, power-limited design with electronic modules, complying with UL 864.
 - a. System software and programs shall be held in nonvolatile flash, electrically erasable, programmable, read-only memory, retaining the information through failure of primary and secondary power supplies.
 - b. Include a real-time clock for time annotation of events on the event recorder.
 - c. Provide communication between the FACP and remote circuit interface panels, annunciators, and displays.
 - d. The FACP shall be listed for connection to a central station signaling system service.
 - e. Provide nonvolatile memory for system database, logic, and operating system and event history. The system shall require no manual input to initialize in the event of a complete power down condition. The FACP shall provide a minimum 500-event history log.
2. Addressable Initiation Device Circuits: The FACP shall indicate which communication zones have been silenced and shall provide selective silencing of alarm notification appliance by building communication zone.
3. Addressable Control Circuits for Operation of Notification Appliances and Mechanical Equipment: The FACP shall be listed for releasing service.

B. Alphanumeric Display and System Controls: Arranged for interface between human operator at FACP and addressable system components including annunciation and supervision. Display alarm, supervisory, and component status messages and the programming and control menu.

1. Annunciator and Display: Liquid-crystal type, three line(s) of 80 characters, minimum.
2. Keypad: Arranged to permit entry and execution of programming, display, and control commands and to indicate control commands to be entered into the system for control of smoke-detector sensitivity and other parameters.

C. Initiating Device, Notification Appliance, and Signaling Line Circuits:

1. Pathway Class Designations: NFPA 72, Class B.

2. Pathway Survivability: Level 0. Staged evacuation Level 2 or 3.
3. Install no more than 100 addressable devices on each signaling-line circuit.
4. Serial Interfaces:
 - a. One dedicated RS 485 port for remote station operation using point ID DACT.
 - b. One RS 485 port for remote annunciators, Ethernet module, or multi-interface module.
 - c. One USB or RS 232 port for PC configuration.
 - d. One RS 232 port for VESDA HLI connection.
 - e. One RS 232 port for voice evacuation interface.
- D. Smoke Alarm Verification:
 1. Smoke alarm verification shall not be enabled.
- E. Elevator recall:
 1. Elevator recall shall be initiated only by one of the following alarm-initiating devices.
 - a. Elevator lobby detectors except the lobby detector on the designated floor.
 - b. Smoke detector in elevator machine room.
 - c. Waterflow switch activation.
 2. Elevator controller shall be programmed to move the cars to the alternate recall floor if lobby detectors located on the designated recall floors are activated.
 3. Water-flow alarm connected to sprinkler in an elevator shaft and elevator machine room shall shut down elevators associated with the location without time delay.
 - a. Water-flow switch associated with the sprinkler in the elevator pit may have a delay to allow elevators to move to the designated floor.
- F. Notification Appliance Circuit:
 1. Audible appliances shall sound in a three-pulse temporal pattern, as defined in NFPA 72.

2. Where notification appliances provide signals to sleeping areas, the alarm signal shall be a 520-Hz square wave with an intensity 15 dB above the average ambient sound level or 5 dB above the maximum sound level, or at least 75 dBA, whichever is greater, measured at the pillow.
 3. Visual alarm appliances shall flash in synchronization where multiple appliances are in the same field of view, as defined in NFPA 72.
- G. Door Controls:
1. Door hold-open devices that are controlled by smoke detectors at doors in smoke-barrier walls shall be connected to fire alarm system.
- H. Remote Smoke-Detector Sensitivity Adjustment:
1. Controls shall select specific addressable smoke detectors for adjustment, display their current status and sensitivity settings, and change those settings. Allow controls to be used to program repetitive, time-scheduled, and automated changes in sensitivity of specific detector groups. Record sensitivity adjustments and sensitivity-adjustment schedule changes in system memory.
- I. Transmission to Remote Alarm Receiving Station:
1. Automatically transmit alarm, supervisory, and trouble signals to a remote alarm station.
- J. Voice/Alarm Signaling Service: Central emergency communication system with redundant preamplifiers, amplifiers, and tone generators provided as a special module that is part of fire-alarm control unit.
1. Indicate number of alarm channels for automatic, simultaneous transmission of different announcements to different zones or for manual transmission of announcements by use of the central-control microphone. Amplifiers shall comply with UL 1711.
 - a. System shall provide a minimum of 8 digital audio channels)
 - b. Allow the application of, and evacuation signal to, indicated number of zones and, at the same time, allow voice paging to the other zones selectively or in any combination.
 - c. Programmable tone and message sequence selection.
 - d. Standard digitally recorded messages for "Evacuation" and "All Clear."

- e. Generate tones to be sequenced with audio messages of type recommended by NFPA 72 and that are compatible with tone patterns of notification-appliance circuits of fire-alarm control unit.
- 2. Status Annunciator: Indicate the status of various voice/alarm speaker zones and the status of firefighters two-way telephone communications zones.
- 3. preamplifiers, amplifiers, and tone generators shall automatically transfer to backup units, on primary equipment failure.
- 4. Primary Power: 24V DC obtained from 120V AC service and a power supply module. Initiating devices, notification appliances, signaling lines, trouble signals, supervisory signals supervisory and digital alarm communicator transmitters and digital alarm radio transmitters shall be powered by 24V DC source.
- 5. Alarm current draw of entire fire alarm system shall not exceed 80 percent of the power-supply module rating.
- K. Primary Power: 24-V dc obtained from 120-V ac service and a power supply module. Initiating device, notification appliances, signaling lines, trouble signals, supervisor signals, supervisory and digital alarm communicator transmitters and digital alarm radio transmitters shall be powered by 24- V dc source.
- L. Secondary Power: Provide sufficient battery capacity to operate the entire system upon loss of power as required by NFPA 72 Section 10.6.7.2.1. Battery capacity shall be calculated for minimum 24 hours of capacity in nonalarm (standby) mode and then 15 minutes at maximum connected load after that time period for audio voice systems and 24/5 for non audio systems. The on-site emergency power system shall not be used when sizing the battery supply. The system shall automatically transfer to the standby batteries upon power failure. Battery charging and recharging shall be automatic.

2.5 MANUAL FIRE ALARM PULL STATIONS

- A. General Requirements: Comply with UL 38. Boxes shall be finished in red with molded, raised-letter operating instructions in contrasting color; shall show visible indication of operation; and shall be mounted on recessed outlet box. If indicated as surface mounted, provide manufacturer's surface back box.
 - 1. Single-action mechanism, pull-lever type; with integral addressable module arranged to communicate manual-station status (normal, alarm, or trouble) to FACP.
 - 2. Station Reset: Key-operated switch.

2.6 SYSTEM SMOKE DETECTORS

A. General Requirements:

1. Comply with UL 268 and FM approved; operating at 24V DC, nominal, Photoelectric type.
2. Base Mounting: Detector and associated electronic components shall be mounted in a twist-lock module that connects to a fixed base. Provide terminals in the fixed base for connection to building wiring.
3. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
4. Integral Visual-Indicating Light: LED type, indicating detector alarm/power-on status.
5. Thirty (30) mesh insect screen and magnetically activated test.
6. Remote Control: Unless otherwise indicated, detectors shall be digital-addressable type, individually monitored at FACP for calibration, sensitivity, and alarm condition and individually adjustable for sensitivity by FACP.
 - a. Rate-of-rise temperature characteristic of combination smoke- and heat-detection units shall be selectable at FACP for 15 or 20 deg F per minute.
 - b. Multiple levels of detection sensitivity for each sensor.
 - c. Sensitivity levels based on time of day. Photoelectric Smoke Detectors:
7. Detector address shall be accessible from FACP and shall be able to identify the detector's location within the system and its sensitivity setting.
8. An operator at FACP, having the designated access level, shall be able to manually access the following for each detector:
 - a. Primary status.
 - b. Device type.
 - c. Present average value.
 - d. Present sensitivity selected.
 - e. Sensor range (normal, dirty, etc.).

C. Duct Smoke Detectors: Photoelectric type complying with UL 268A, 24V DC.

1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:
 - a. Primary status.
 - b. Device type.
 - c. Present average value.
 - d. Present sensitivity selected.
 - e. Sensor range (normal, dirty, etc.).
3. Weatherproof Duct Housing Enclosure: NEMA 250, Type 4X; NRTL listed for use with the supplied detector for smoke detection in HVAC system ducts.
4. Duct detector and housing shall be calibrated and adjusted for sensitivity at the manufacturer's factor to U.L. standards. Detector and housing shall be self-compensating for the effect of air velocity, temperature, humidity and atmospheric pressure.
5. Each duct detector shall be provide with sampling tubes sized according to duct size, air velocity, and installation conditions.
6. Each duct detector shall be provided with remote alarm LED on a single gang plate, surface or flush mounted.

2.7 CARBON MONOXIDE DETECTORS

- A. General: Carbon monoxide detector listed for connection to fire-alarm system.
 1. Mounting: Adapter plate for outlet box mounting.
 2. Testable by introducing test carbon monoxide into the sensing cell.
 3. Detector shall provide alarm contacts and trouble contacts.
 4. Detector shall send trouble alarm when nearing end-of-life, power supply problems, or internal faults.
 5. Comply with UL 2075.
 6. Locate, mount, and wire according to manufacturer's written instructions.

7. Provide means for addressable connection to fire-alarm system.
8. Detector base shall provide a temporal 4 alarm signal.

2.8 HEAT DETECTORS

- A. General Requirements for Heat Detectors: Comply with UL 521.
 1. Temperature sensors shall test for and communicate the sensitivity range of the device.
- B. Heat Detector, Combination Type: Actuated by either a fixed temperature of 135 deg F or a rate of rise that exceeds 15 deg F per minute unless otherwise indicated.
 1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
 2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to FACP.

2.9 NOTIFICATION APPLIANCES

- A. General Requirements for Notification Appliances: Connected to notification-appliance signal circuits, zoned as indicated, equipped for mounting as indicated, and with screw terminals for system connections.
 1. Combination Devices: Factory-integrated audible and visible devices in a single-mounting assembly, equipped for mounting as indicated, and with screw terminals for system connections.
- B. Horns: Electric-vibrating-polarized type, 24-V dc; with provision for housing the operating mechanism behind a grille. Comply with UL 464. Horns shall produce a sound-pressure level of 90 dBA, measured 10 feet from the horn, using the coded signal prescribed in UL 464 test protocol.
- C. Visible Notification Appliances: Xenon strobe lights complying with UL 1971, with clear or nominal white polycarbonate lens mounted on an aluminum faceplate. The word "FIRE" is engraved in minimum 1 inch high letters on the lens.
 1. Rated Light Output:
 - a. 15/30/75/110 cd, selectable in the field.
 2. Mounting: Wall mounted unless otherwise indicated.

3. For units with guards to prevent physical damage, light output ratings shall be determined with guards in place.
4. Flashing shall be in a temporal pattern, synchronized with other units.
5. Strobe Leads: Factory connected to screw terminals.
6. Mounting Faceplate: Factory finished, red.

D. Voice/Tone Notification Appliances:

1. Speakers shall be capable of providing 520hz.
2. Comply with UL 1480.
3. Speakers for Voice Notification: Locate speakers for voice notification to provide the intelligibility requirements of the "Notification Appliances" and "Emergency Communications Systems" chapters of NFPA 72.
4. Speaker shall be capable of field selection of speaker voltage (25 and 70.7 Vrms) and power settings (1/4 W, 1/2 W, 1 W, 2 W).
 - a. Final settings shall be field adjusted to match the acoustical environment of each speaker.

E. Exit Marking Audible Notification Appliance:

1. Exit marking audible notification appliances shall meet the audibility requirements in NFPA 72.
2. Provide exit marking audible notification appliances at the entrance to all building exits.
3. Provide exit marking audible notification appliances at the entrance to areas of refuge with audible signals distinct from those used for building exit marking.

2.10 FIRE ALARM ANNUNCIATOR PANEL (FAAP)

- A. Graphic Annunciator Panel: Mounted in an aluminum frame with nonglare, minimum 3/16-inch thick, clear acrylic cover over graphic representation of the facility. Detector locations shall be represented by red LED lamps. Normal system operation shall be indicated by a lighted, green LED. Trouble and supervisory alarms shall be represented by an amber LED.
 1. Comply with UL 864.
 2. Shall Operate from 24-V dc power supplied by the FACP.

3. Include built-in voltage regulation, reverse polarity protection, RS 232/422 serial communications, and a lamp test switch.
4. Surface mounted in a NEMA 250, Type 1 cabinet, with key lock and no exposed screws or hinges.
5. Graphic representation of the facility floorplan, and each detector shall be represented by an LED in its actual location. Floorplan shall be at 1/8-inch per foot scale or larger.
6. The LED representing a detector shall flash two times per second while detector is an alarm.

2.11 ADDRESSABLE INTERFACE DEVICE

A. General:

1. Include address-setting means on the module.
2. Store an internal identifying code for control panel use to identify the module type.
3. Listed for controlling HVAC fan motor controllers.
4. Devices shall be flush mounted in finished areas and surface mounted with back box in unfinished areas.

B. Monitor Module (SIGA-CT series): Microelectronic module providing a system address for alarm-initiating devices for wired applications with normally open contacts using NFPA 72A Style B (Class B, Two-Wire) circuit supervision. Module responds to polling signals from FACP/Transponder and shall report alarm initiating/supervisory circuit status changes to it.

C. Control Module (EST SIGA-CRH): Microelectronic module with one (1) individual addressable control relay with double-pole/double-throw (DPDT) contacts rated at two (7.0A) @ 120VAC/28VDC. Module response to control signals from FACP/Transponder.

2.12 DIGITAL ALARM COMMUNICATOR TRANSMITTER

- A. Digital alarm communicator transmitter shall be acceptable to the remote central station and shall comply with UL 632.
- B. Functional Performance: Unit shall receive an alarm, supervisory, or trouble signal from FACP and automatically capture two telephone line(s) and dial a preset number for a remote central station. When contact is made with central station(s), signals shall be

transmitted. If service on either line is interrupted for longer than 45 seconds, transmitter shall initiate a local trouble signal and transmit the signal indicating loss of telephone line to the remote alarm receiving station over the remaining line. Transmitter shall automatically report telephone service restoration to the central station. If service is lost on both telephone lines, transmitter shall initiate the local trouble signal.

- C. Addressable communications circuits from system transponders shall be electrically supervised in accordance with NFPA 72A Style 6 (Class A, four-wire) standards, monitoring for alarm (shorts), trouble (opens), and ground faults. When wired in the Style 6 (Class A, four-wire) configuration, a single open or ground fault shall not prevent the receipt of an alarm condition. Addressable communications circuits shall utilize two (2) cables of two (2) No. 18 AWG twisted conductors from the transponder to the connected addressable devices.
- D. Local functions and display at the digital alarm communicator transmitter shall include the following:
 - 1. Verification that both telephone lines are available.
 - 2. Programming device.
 - 3. LED display.
 - 4. Manual test report function and manual transmission clear indication.
 - 5. Communications failure with the central station or FACP.
- E. Digital data transmission shall include the following:
 - 1. Address of the alarm-initiating device.
 - 2. Address of the supervisory signal.
 - 3. Address of the trouble-initiating device.
 - 4. Loss of ac supply.
 - 5. Loss of power.
 - 6. Low battery.
 - 7. Abnormal test signal.
 - 8. Communication bus failure.
- F. Secondary Power: Integral rechargeable battery and automatic charger.

- G. Self-Test: Conducted automatically every 24 hours with report transmitted to central station.

2.13 NETWORK COMMUNICATIONS

- A. Provide network communications for fire alarm system according to fire alarm manufacturer's written requirements.
- B. Provide network communications pathway per manufacturer's written requirements and requirements in NFPA 72 and NFPA 70.
- C. Provide integration gateway using BACnet for connection to building automation system when required.

2.14 DEVICE GUARDS

- A. Description: Welded wire mesh of size and shape for the device requiring protection.
 - 1. Factory fabricated and furnished by device manufacturer.
 - 2. Finish: Paint of color to match the protected device.
 - 3. Guards must be UL cross listed with devices being used.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions for compliance with requirements for ventilation, temperature, humidity, and other conditions affecting performance of the Work.
 - 1. Verify that manufacturer's written instructions for environmental conditions have been permanently established in spaces where equipment and wiring are installed, before installation begins.
- B. Examine roughing-in for electrical connections to verify actual locations of connections before installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 EQUIPMENT INSTALLATION

- A. Comply with NFPA 72, NFPA 101, and requirements of authorities having jurisdiction for installation and testing of fire alarm equipment. Install all electrical wiring to comply with requirements in NFPA 70 including, but not limited to, Article 760, "Fire Alarm Systems."
 - 1. Devices placed in service before all other trades have completed cleanup shall be replaced.
 - 2. Devices installed but not yet placed in service shall be protected from construction dust, debris, dirt, moisture, and damage according to manufacturer's written storage instructions.
- B. Install wall-mounted equipment, with tops of cabinets not more than 78 inches above the finished floor.
- C. Manual Fire Alarm Pull Stations:
 - 1. Install manual fire alarm pull station in the normal path of egress within 60 inches of the exit doorway.
 - 2. The operable part of manual fire alarm pull station shall be between 42 inches and 48 inches above floor level. All devices shall be mounted at the same height unless otherwise indicated. Smoke or Heat Detector Spacing:
 - 1. Comply with the "Smoke-Sensing Fire Detectors" section in the "Initiating Devices" chapter in NFPA 72, for smoke-detector spacing.
 - 2. Comply with the "Heat-Sensing Fire Detectors" section in the "Initiating Devices" chapter in NFPA 72, for heat-detector spacing.
 - 3. Smooth ceiling spacing shall not exceed 30 feet.
 - 4. Spacing of detectors for irregular areas, for irregular ceiling construction, and for high ceiling areas shall be determined according to Annex A or Annex B in NFPA 72.
 - 5. HVAC: Locate detectors not closer than 36 inches from air-supply diffuser or return-air opening.
 - 6. Lighting Fixtures: Locate detectors not closer than 12 inches from any part of a lighting fixture and not directly above pendant mounted or indirect lighting.
- E. Install a cover on each smoke detector that is not placed in service during construction. Cover shall remain in place except during system testing. Remove cover prior to system turnover.

- F. Remote Status and Alarm Indicators: Install in a visible location near each smoke detector, sprinkler water-flow switch, and valve-tamper switch that is not readily visible from normal viewing position.
- G. Audible Alarm Indicating Devices: Install not less than 6 inches below the ceiling. Install bells and horns on flush-mounted back boxes with the device-operating mechanism concealed behind a grille. Install all devices at the same height unless otherwise indicated.
- H. Visible Alarm-Indicating Devices: Install adjacent to each alarm horn and at least 6 inches below the ceiling. Install all devices at the same height unless otherwise indicated.
- I. Device Location-Indicating Lights: Locate in public space near the device they monitor.

3.3 PATHWAYS

- A. Fire alarm pathway and circuit wiring installation shall comply with NEC Article 760.
- B. Where exposed, all fire alarm circuits shall be installed in dedicated EMT conduit.
- C. Where existing wall devices are being replaced in the same location, install new fire alarm circuit wiring in existing conduit within wall (where available).
- D. Pathways above recessed ceilings and in nonaccessible locations may be plenum-rated cable.
- E. All pathways must be independently supported from the structure above.
- F. Where passing through a wall or floor, provide a metal raceway or rigid nonmetallic conduit sleeve.
- G. All penetrations of rated walls and floors shall be properly fire-stopped.

3.4 IDENTIFICATION

- A. Provide an identification nameplate for each equipment cabinet. Nameplates shall correspond with labeling identified in the submittal drawings. Nameplates must be engraved and secured using rivets or screws. The use of Dymo type labels is unacceptable.
- B. Fire alarm conduit shall be permanently labeled "FIRE ALARM" every 30 feet.
- C. Fire alarm junction boxes shall be painted red.
- D. All initiating and indicating devices shall be labeled with self-adhesive tape with black lettering and identification labeling according to circuit loop and device address/number.

- E. Color code all wiring per recommended standards. Tag all wires in terminal cabinets with tie wrap tags with inked identification.
- F. Install framed instructions in a location visible from FACP.

3.5 GROUNDING

- A. Ground FACP and associated circuits; comply with IEEE 1100. Install a ground wire from main service ground to FACP.
- B. Ground shielded cables at the control panel location only. Insulate shield at device location.

3.6 TESTING

- A. The fire alarm system manufacturer or manufacturer's authorized representative shall test and inspect components, assemblies, and equipment installations, including connections.
- B. Tests shall be witnessed by District (Owner), Engineer of Record, and the Fire Department.
- C. The following tests and inspections shall be performed:
 - 1. Visual Inspection: Conduct visual inspection prior to testing.
 - a. Inspection shall be based on completed record Drawings and system documentation that is required by NFPA 72.
 - b. Comply with the "Visual Inspection Frequencies" table in the "Inspection" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72; retain the "Initial/Reacceptance" column and list only the installed components.
 - 2. System Testing: Comply with the "Test Methods" table in the "Testing" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
 - 3. Test audible appliances for the public operating mode according to manufacturer's written instructions. Perform the test using a portable sound-level meter complying with Type 2 requirements in ANSI S1.4.
 - 4. Test visible appliances for the public operating mode according to manufacturer's written instructions.
 - 5. System manufacturer shall prepare the "Fire Alarm System Record of Completion" in the "Documentation" section of the "Fundamentals" chapter in NFPA 72 and the

"Inspection and Testing Form" in the "Records" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72.

- D. Reacceptance Testing: Perform reacceptance testing to verify the proper operation of added or replaced devices and appliances.
- E. Fire alarm system will be considered defective if it does not pass tests and inspections.

3.7 CLOSEOUT DOCUMENTATION

- A. The fire alarm system manufacturer or manufacturer's authorized representative shall prepare and submit to the Engineer of Record all NFPA 72 required closeout documentation including, but not limited to:
 - 1. System Record of Completion
 - 2. Notification Appliance Power Panel Supplementary Record of Completion
 - 3. System Record of Inspection and Testing
 - 4. Notification Appliance Supplementary Record of Inspection and Testing
 - 5. Initiating Device Supplementary Record of Inspection and Testing
 - 6. Periodic Inspection, Testing and Maintenance Documentation
- B. Record Drawings, to include:
 - 1. Minimum 1/8" scale floorplan drawings indicating all final device types, locations, ratings, settings and addresses
 - 2. Wiring diagram of each device type
 - 3. Riser diagram showing devices, device addresses, equipment, and interconnecting conduit and wire
 - 4. Narrative of sequence of operation
 - 5. Sequence of operation matrix (includes complete line-by-line listing for fire alarm initiating devices, device address and input/output matrix)
 - 6. Voltage drop calculations
 - 7. Battery sizing calculations
 - 8. Visual alarm power supply sizing calculations
 - 9. Power supply calculations for door holders

10. Wire identification schedule

11. Legend

- C. Operation and Maintenance Data: For fire-alarm systems and components to include in emergency, operation, and maintenance manuals.
- D. Operating instructions for mounting at fire-alarm control unit and each annunciator unit.
- E. Warranty documentation.
- F. All closeout documentation shall be signed and sealed by a Registered Professional Engineer in New York State.

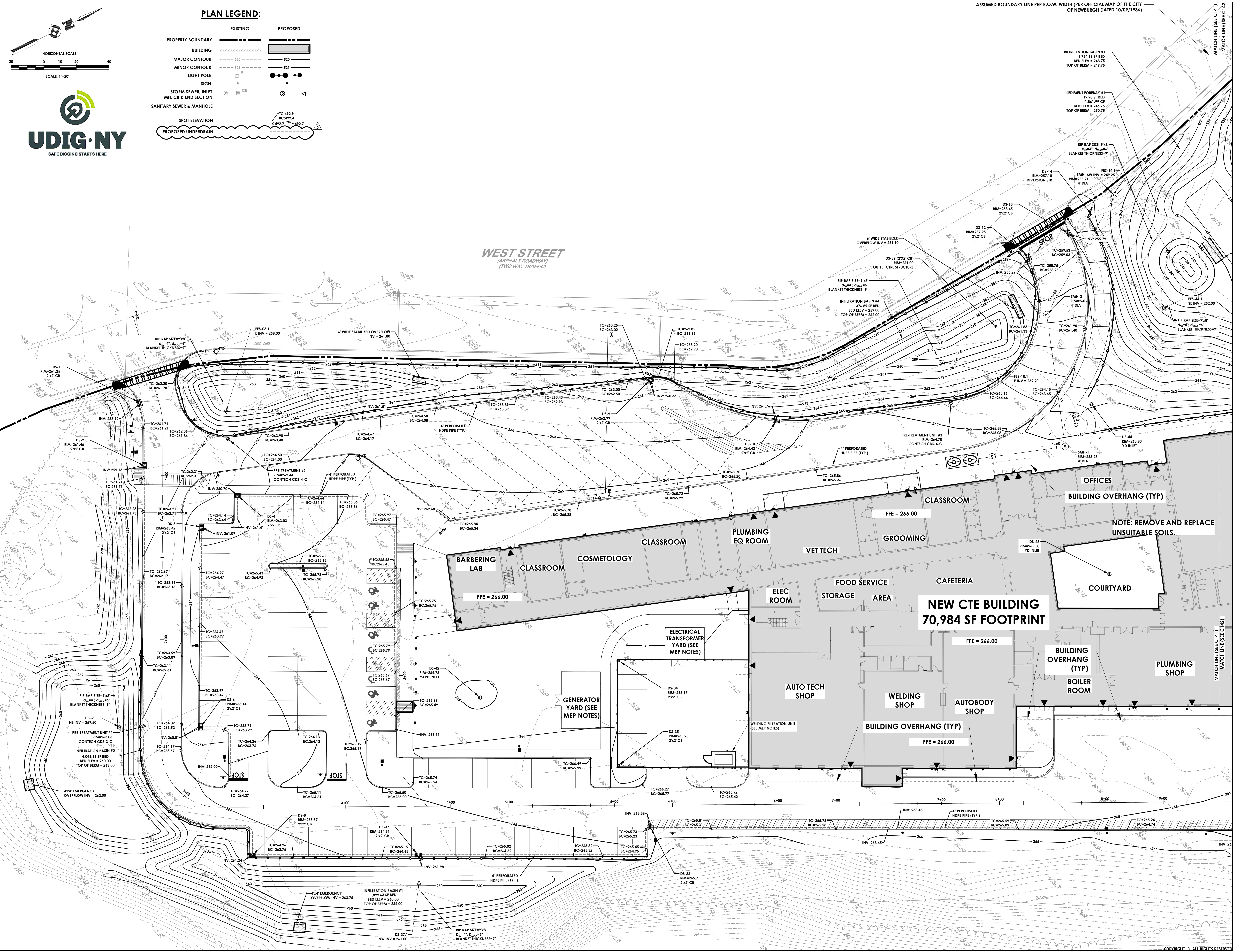
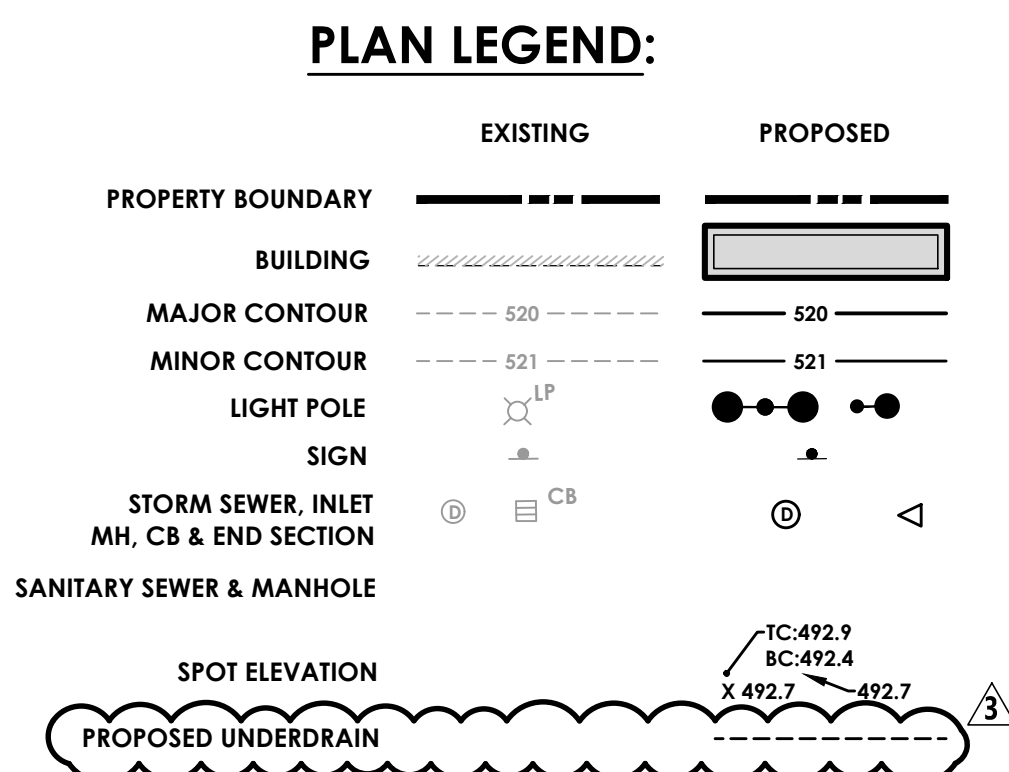
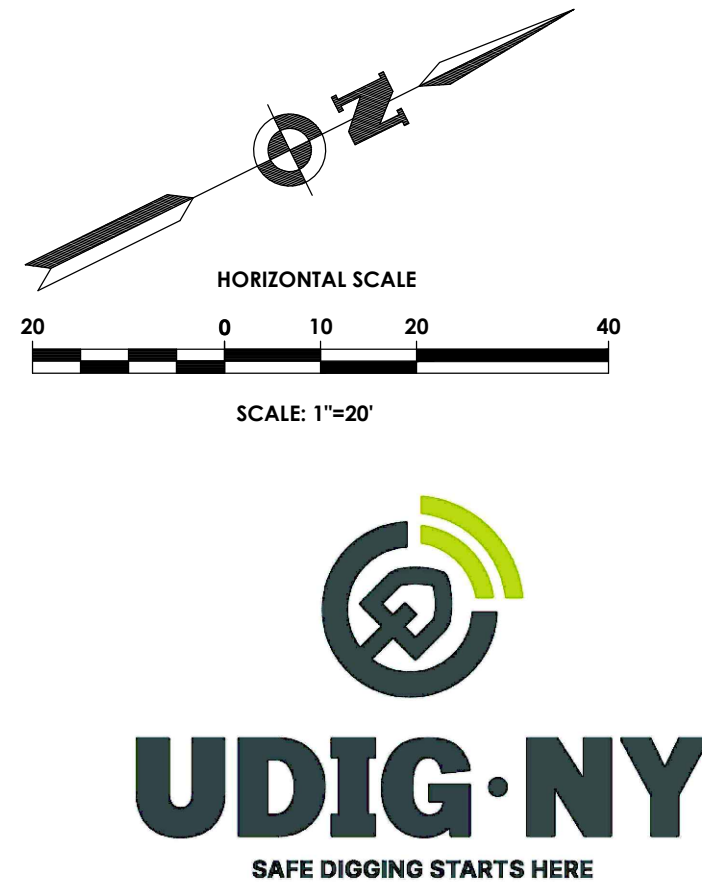
3.8 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service shall include 12 months' full maintenance by skilled employees of manufacturer's designated service organization. Include preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper operation. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.
 - 1. Include visual inspections according to the "Visual Inspection Frequencies" table in the "Testing" paragraph of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
 - 2. Perform tests in the "Test Methods" table in the "Testing" paragraph of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
- B. Perform tests per the "Testing Frequencies" table in the "Testing" paragraph of the "Inspection, Testing and Maintenance" chapter in NFPA 72.

3.9 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain fire alarm system.

END OF SECTION 283100



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PASSERO
engineering architecture

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Project Title

**NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH**

State of New York
Professional Engineer
Christopher J. Lipp
102592

| NO. | DATE | DESCRIPTION |
|-----|-----------|-------------------|
| 1 | 1/11/2024 | REV ASSUMPTION #1 |
| 2 | 5/1/2024 | REV ASSUMPTION #2 |
| 3 | 4/15/2024 | ISSUED FOR BID |

Drawn By: M.D.
Checked By: SK
Proj. #: 44-16-00-01-0-03-00
CSArch Proj. #: 108-2303
Issued for Bid: 4/15/2024

Sheet Title

**GRADING
PLAN**

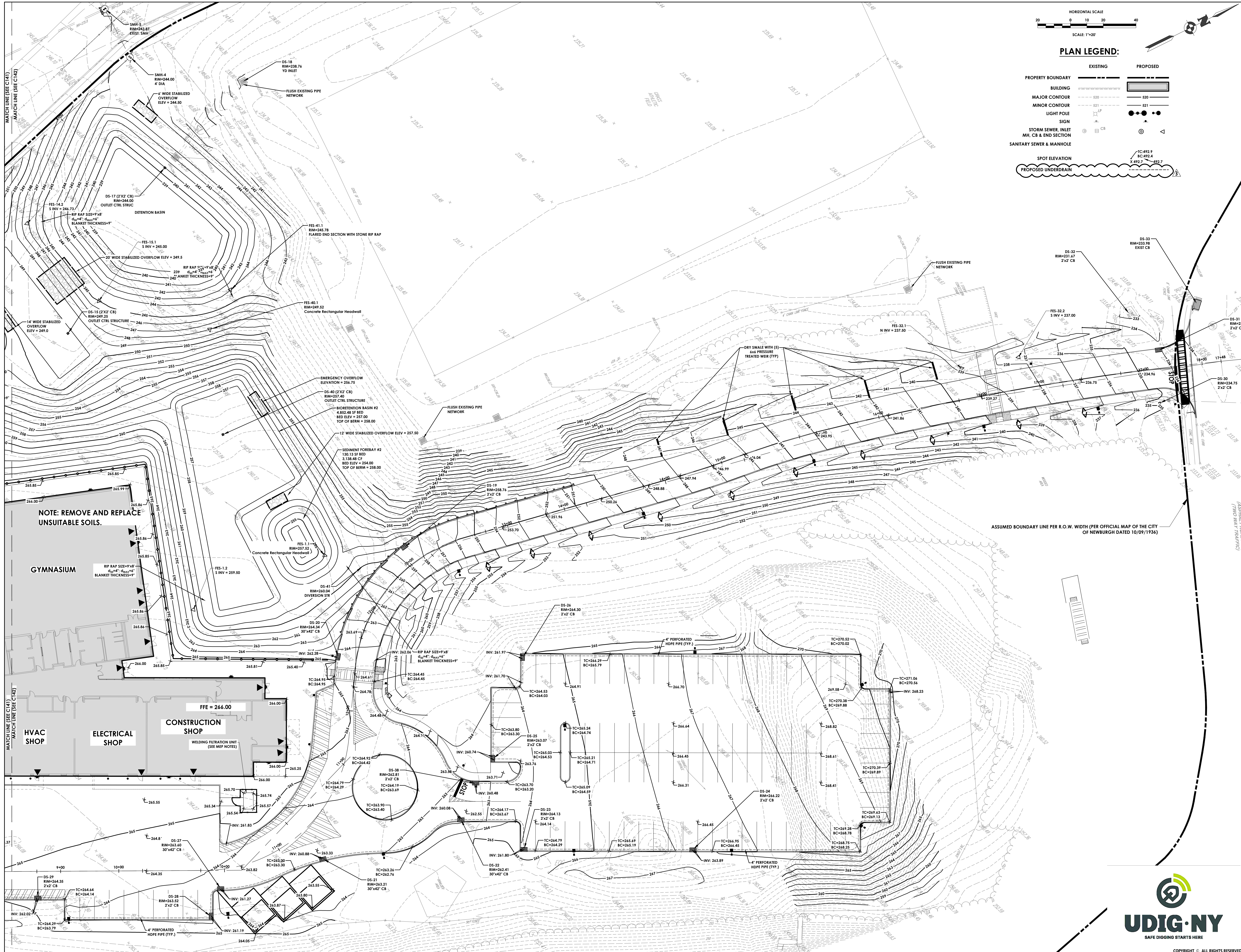
Sheet No.

**CTE
C141**

CONSTRUCTION DOCUMENTS

Y:\PROJECTS-NEW\2022\2022A70\2022A70\0003 - CTE BUILDINGS\01 - CAD-BIM-MODELS\CIVIL\C141 - GRADING.DWG 5/1/2024 12:24 AM Patrick Mitchell

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**NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH**



| NO. | DATE | DESCRIPTION |
|-----|-----------|-------------------|
| 1 | 1/11/2024 | REV ASSUMPTION #1 |
| 2 | 5/10/2024 | REV ASSUMPTION #2 |
| 3 | | |

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|-----------------|---------------------|
| Drawn By: | M.P. |
| Checked By: | SK |
| Proj. #: | 44-16-00-01-0-03-00 |
| CSArch Proj. #: | 108-203 |
| Issued for Bid: | 4/15/2024 |

**GRADING
PLAN**

**CTE
C142**





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 DISSENTION C828-B6 ENTITLED PRACTICE FOR LOW-PRESSURE AIR TEST OF VENTRIRED CLAY LINES. THE TEST SHALL BE CONDUCTED VISUALLY INSPECTED AND TESTED FOR LEAKAGE BY EXPLORATION AND CIRCUMFERENCE OF THE EXPOSED SEWER. THE TEST SHALL BE CONDUCTED IN THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION - TECHNICAL INFORMATION PAMPHLET (TIP) NO. 15 (LATEST VERSION).
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 BAR OR MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO THE INSIDE DIAMETER OF THE PIPE. THE DEFLECTION SHALL BE MEASURED USING A DEFLECTOR.
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 JAILING 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 MAIN 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 SUBSITIE 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.**
THE SITE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRICAL, CABLE, TELEPHONE AND ANY OTHER UTILITIES NOT SPECIFICALLY SHOWN ON THE PLANS SET WITH THE MECHANICAL/ELECTRICAL/PLUMBING PLAN SET AND THE APPROPRIATE AGENCY. PASSERO ASSOCIATES ASSUMES NO RESPONSIBILITY FOR THE DESIGN OR PERFORMANCE OF UTILITIES NOT SPECIFICALLY SHOWN WITHIN THIS PLAN SET.
3. **PRIOR TO THE START OF UTILITY INSTALLATION THE SITE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY AND COORDINATE WITH EXISTING UTILITIES SHOWN ON THE PLANS AND REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER. THE SITE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH UTILITY INSTALLATION BY THE OWNER'S ONSITE REPRESENTATIVE UPON COMPLETION OF EXISTING UTILITY VERIFICATION.**
4. **UTILITY CROSSINGS THE SITE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF EXISTING UTILITIES AT ALL PROPOSED CROSSINGS AND NOTIFY THE OWNERS ONSITE REPRESENTATIVE OF ANY CONFLICTS PRIOR TO UTILITY INSTALLATION. THE SITE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH INSTALLATION UPON UTILITY VERIFICATION COMPLETION.**
5. **FLUSH EXISTING STORM SEWER THE SITE CONTRACTOR SHALL FLUSH THE EXISTING STORM SEWER PRIOR TO PROJECT COMPLETION FOR REVIEW.**
6. **LATERALS ALL STORM, SANITARY, WATER ETC. LATERALS SHALL BE CONSTRUCTED TO 5' FROM THE FACE OF THE BUILDING, VERTICAL AND HORIZONTAL LOCATION SHALL BE COORDINATED WITH THE PLUMBING/MEP SITE CONTRACTORS.**

STANDARD WATER MAIN EXTENSION NOTES:

WATER DISTRIBUTION SYSTEM MAY NOT BE PLACED INTO SERVICE UNTIL AN APPROVAL OF COMPLETED WORKS IS ISSUED BY THE ULSTER COUNTY DEPARTMENT OF HEALTH.

OR WATER MAINS AND APPURTENANCES TO BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND SPECIFICATIONS OF THE ULSTER COUNTY DEPARTMENT OF HEALTH:

MATERIALS

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.

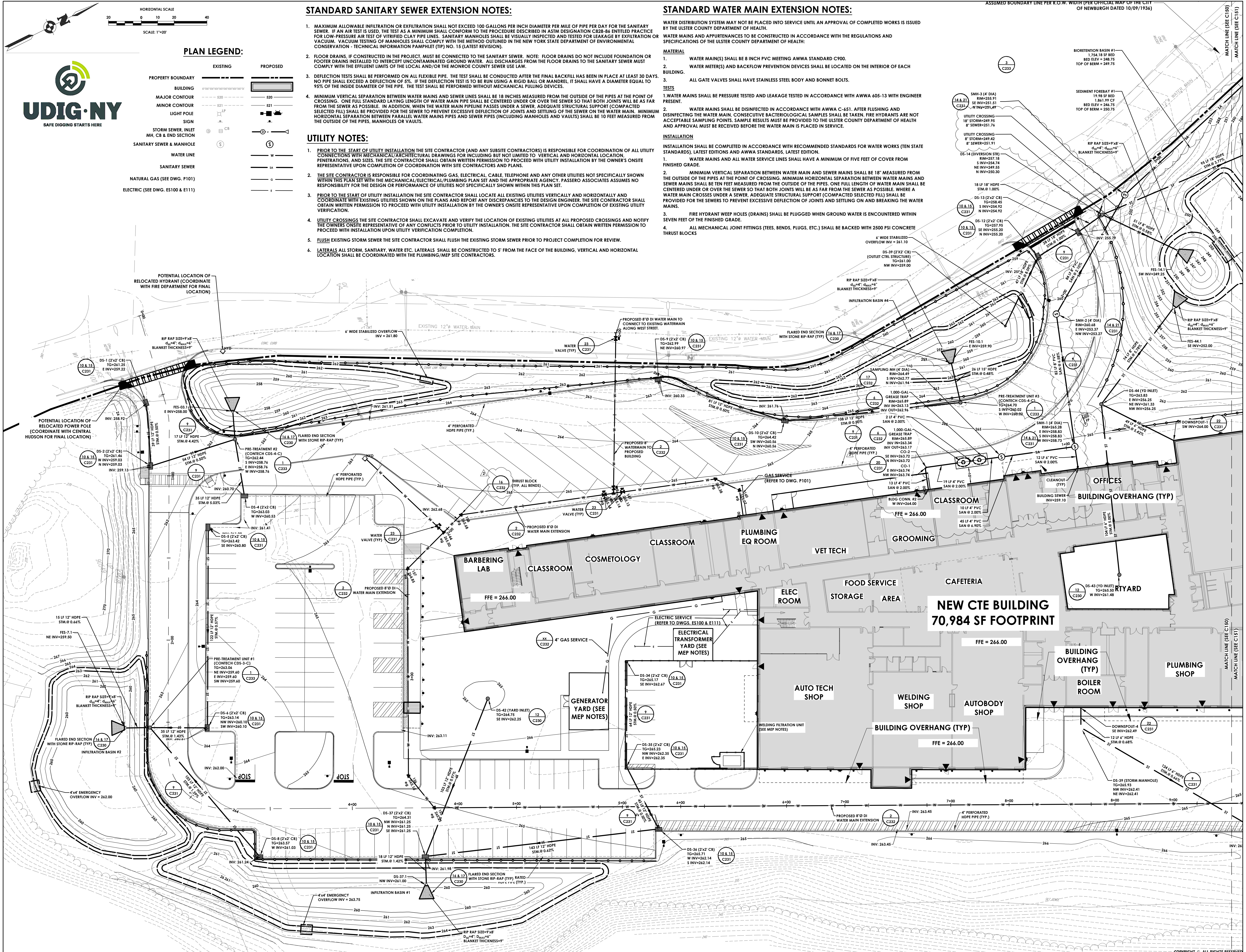
TESTS

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 COVERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHERE A WATER MAIN CANNOT PASS UNDER OR OVER 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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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH



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| 1 | 5/13/2024 | BID ADDENDUM #1 |
| 2 | 5/3/2024 | BID ADDENDUM #2 |
|  | DATE | DESCRIPTION |

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| Drawn By: | MP |
| Checked By: | SK |
| Proj. #: | 44-16-00-01-0-053-0 |
| CSArch Proj. #: | 108-238 |
| Issued for Bid: | 4/15/2024 |

Sheet Title

UTILITY PLAN

Sheet No.

CTE
C150

CONSTRUCTION DOCUMENTS:

NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING
CTE NEWBURGH

Project Title



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| 1 | 5/13/2024 | BID ADDENDUM #3 |
| 2 | 5/3/2024 | BID ADDENDUM #2 |
| 3 | DATE | DESCRIPTION |

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| Drawn By: | MP |
| Checked By: | SK |
| Proj. #: | 44-16-00-01-0-053-00 |
| CSArch Proj. #: | 108-2303 |
| Issued For Bid: | 4/15/2024 |

Sheet Title

UTILITY PLAN

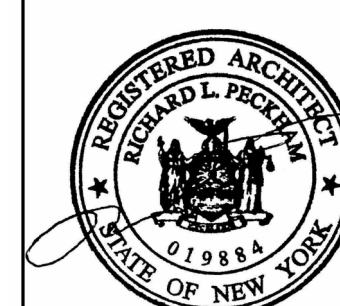
Sheet No.

CTE
C151

CONSTRUCTION DOCUMENTS


NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title



REGISTRATION EXPIRATION DATE: 12/31

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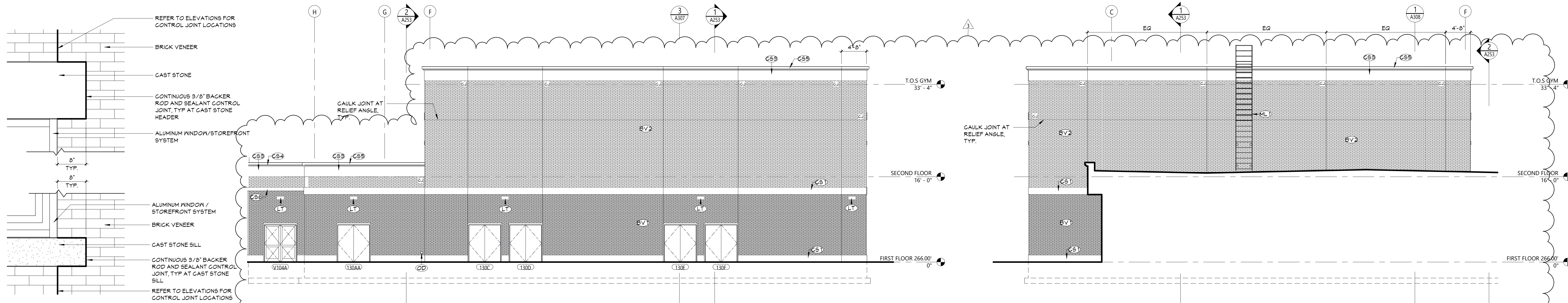
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| Checked By: | |
| Proj. #: | 44-16-00-01-0-0 |
| CSArch Proj. #: | 10 |
| Issued for Bid: | 4/1 |

Sheet Title

EXTERIOR
ELEVATIONS

Sheet No. CTE
A201

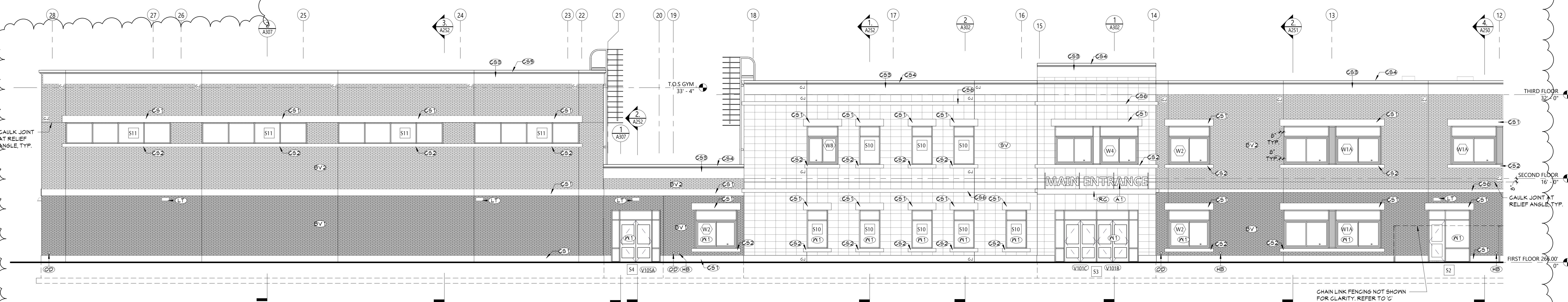
CONSTRUCTION DOCUMENTS



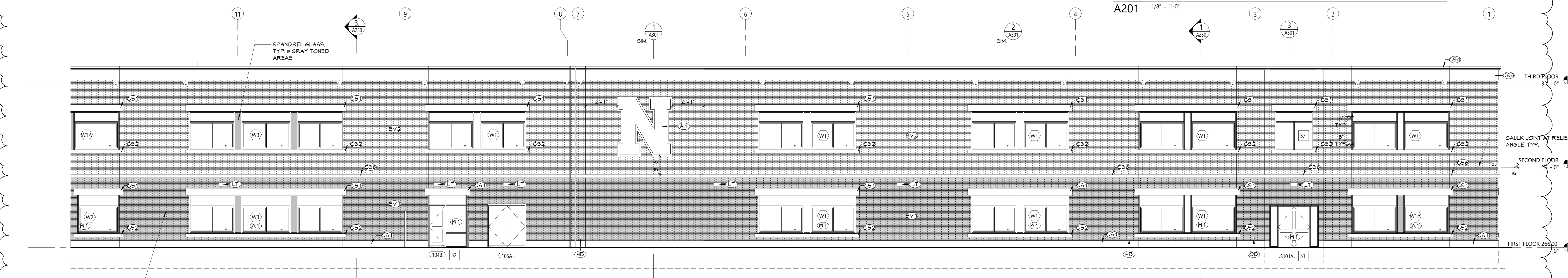
5 TYPICAL CJ DETAIL @ OPENING
A201 1" = 1'-0"

4 PARTIAL ELEVATION - NORTH FACADE - GYM

3 PARTIAL ELEVATION - SOUTH FACADE - GYM



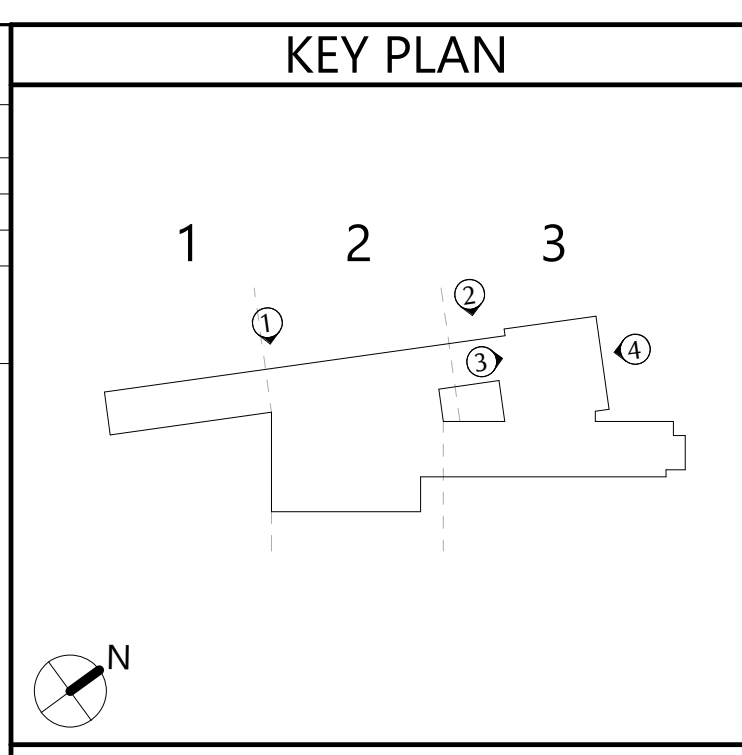
2 PARTIAL ELEVATION - WEST FACADE - AREA 2
A201 1/8" = 1'-0"



1 PARTIAL ELEVATION - WEST FACADE - AREA 1
A201 1/8" = 1'-0"

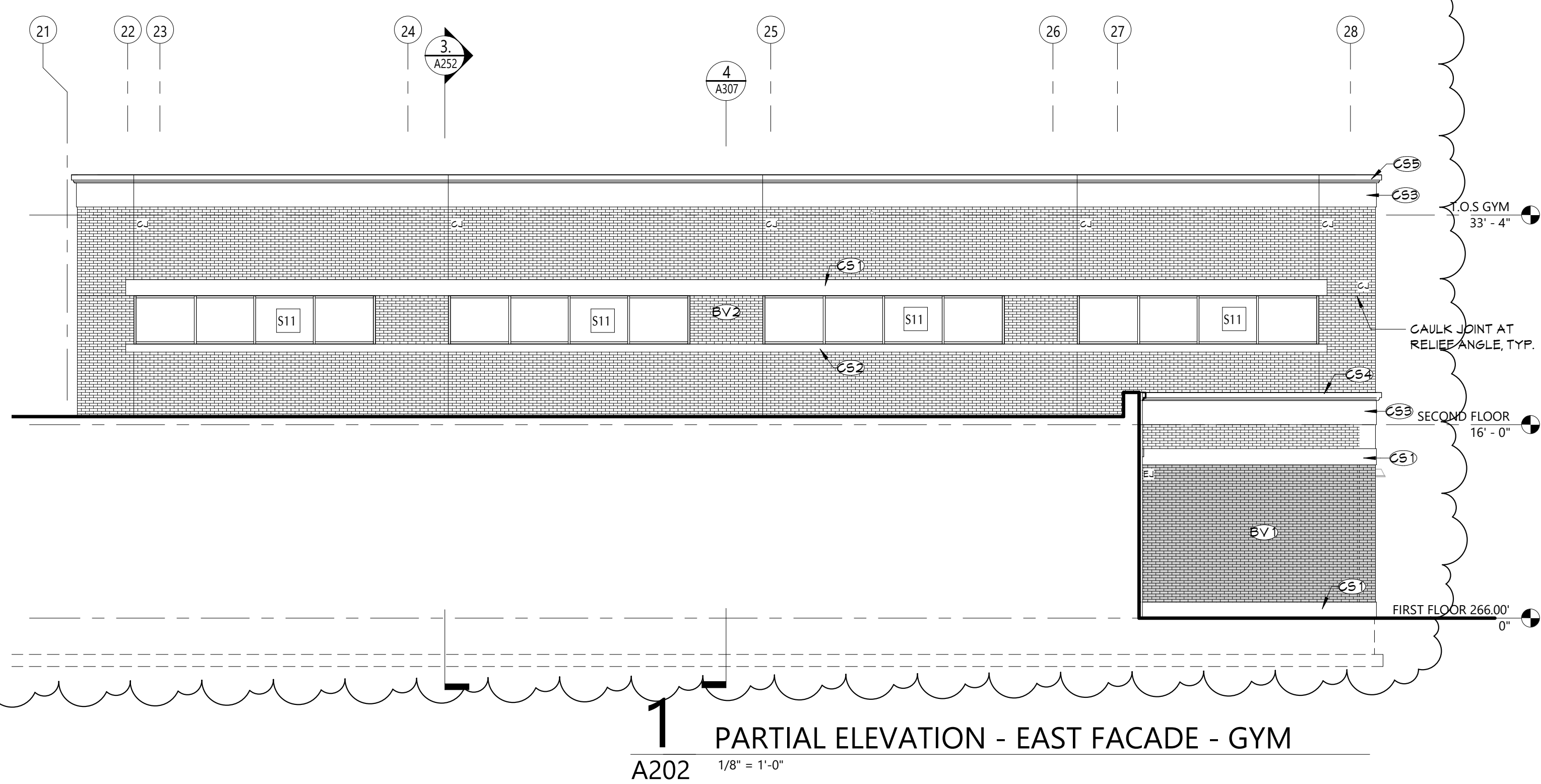
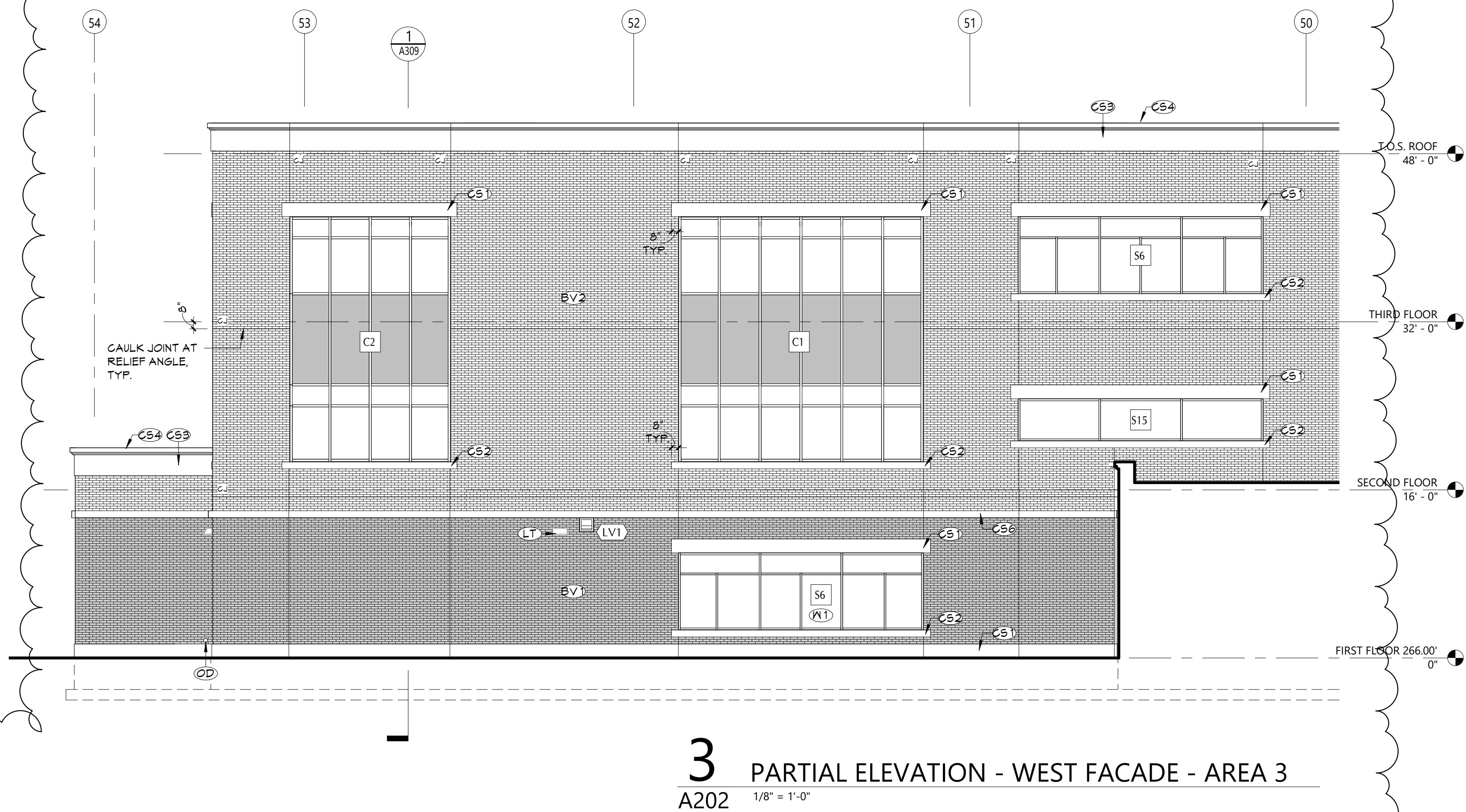
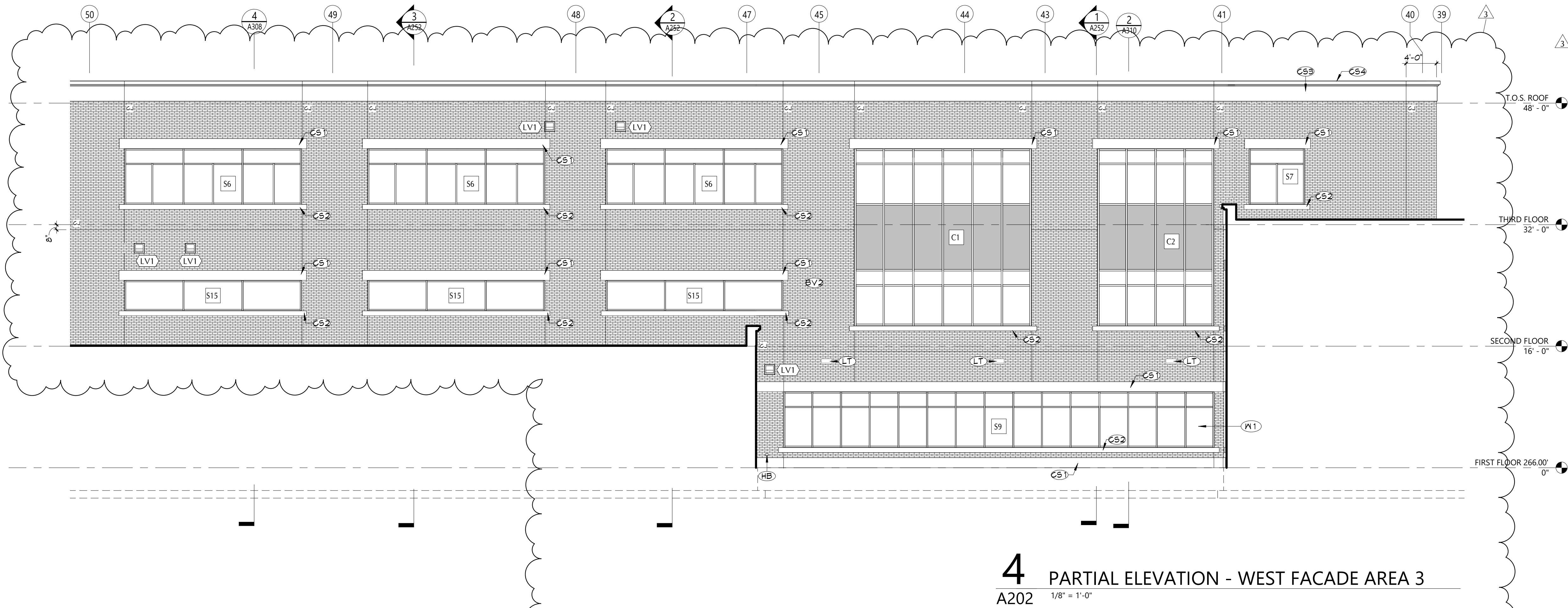
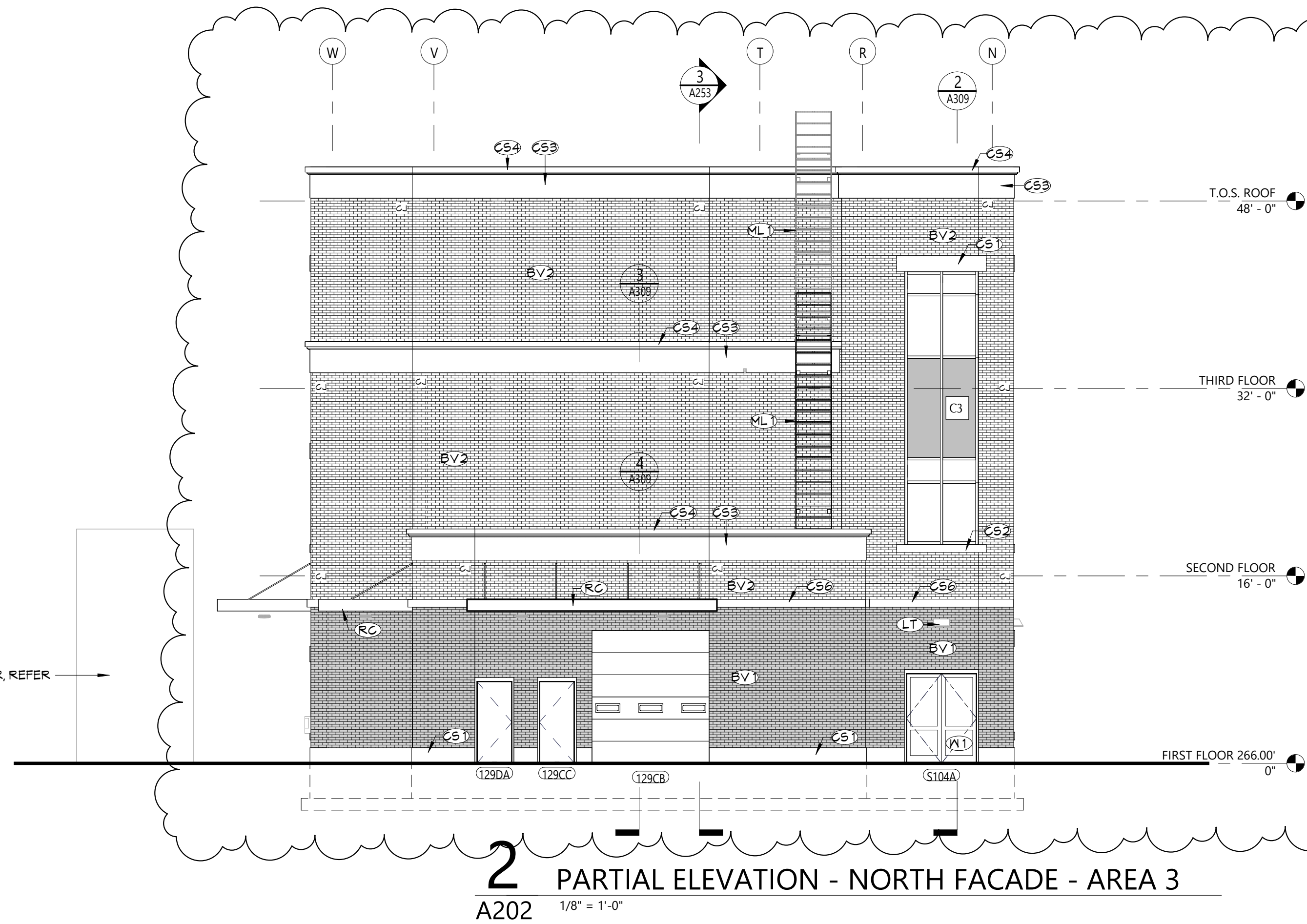
| KEYNOTES | |
|----------|---|
| # | DESCRIPTION |
| A1 | EXTERIOR SIGNAGE, TALL BY OWNER, PROVIDE MOOD BLOCKING IN MBLD CONSTRUCTION AS REQUIRED FOR SIGNAGE MOUNTING. |
| BV1 | BRICK VENEER, TYPE-1 |
| BV2 | BRICK VENEER, TYPE-2 |
| CS1 | CAST STONE PROFILE #1 |
| CS2 | CAST STONE PROFILE #2 |
| CS3 | CAST STONE PROFILE #3 |
| CS4 | CAST STONE PROFILE #4 |
| CS5 | CAST STONE PROFILE #5 |
| CS6 | CAST STONE PROFILE #6 |
| HE | HOUSE BY REFER TO PLUMBING DRAWINGS |
| LT | LIGHT FIXTURE, REFER TO ELECTRICAL DRAWING |
| ML1 | METAL ROOF LASTER, WITH GAGE |
| OD | STORM DRAIN OUTLET, REFER TO PLUMBING DRAWINGS |

| | # | DESCRIPTION |
|----|---|---|
| RC | | MANUFACTURED CANOPY |
| SV | | STONE VENEER |
| X1 | | ALL EXTERIOR GLAZING ON THE FIRST FLOOR TO BE SECURITY GLAZING; REFER TO A900 SHEETS FOR DETAILS. |
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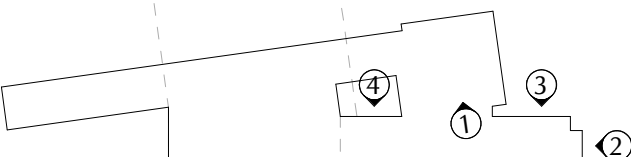


Autodesk Docs/NECSD - New CTE Bldg/08-2303 NECSD CTE - ARCH-01

DUST COLLECTOR, REFER
TO M DRAWINGS



| KEYNOTES | |
|----------|---|
| # | DESCRIPTION |
| BV1 | BRICK VENEER, TYPE-1 |
| BV2 | BRICK VENEER, TYPE-2 |
| CS1 | CAST STONE PROFILE #1 |
| CS2 | CAST STONE PROFILE #2 |
| CS3 | CAST STONE PROFILE #3 |
| CS4 | CAST STONE PROFILE #4 |
| CS5 | CAST STONE PROFILE #5 |
| CS6 | CAST STONE PROFILE #6 |
| HB | HOUSE BIRD, REFER TO PLUMBING DRAWINGS |
| LT | LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS |
| ML1 | METAL ROOF LADDER WITH GAGE |
| OD | STORM DRAIN OUTLET, REFER TO PLUMBING DRAWINGS |
| RG | MANUFACTURED CANOPY |
| W1 | ALL EXTERIOR GLAZING ON THE FIRST FLOOR TO BE SECURITY GLAZING, REFER TO A400 SHEETS FOR DETAILS. |

| KEY PLAN | | |
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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING

Project Title

REGISTERED ARCHITECT
STATE OF NEW YORK
REGISTRATION EXPIRATION DATE: 12/31/2026

| REV | DATE | BY | DESCRIPTION |
|-----|------|----|----------------|
| 1 | | | ED Addendum #1 |

Drawn By:
Checked By:
Proj. #: 44-16-00-81-0-053-001
CSArch Proj. #: 108-2303
Issued for Bid: 4/15/2024

Sheet Title

EXTERIOR ELEVATIONS

Sheet No.
CTE
A202

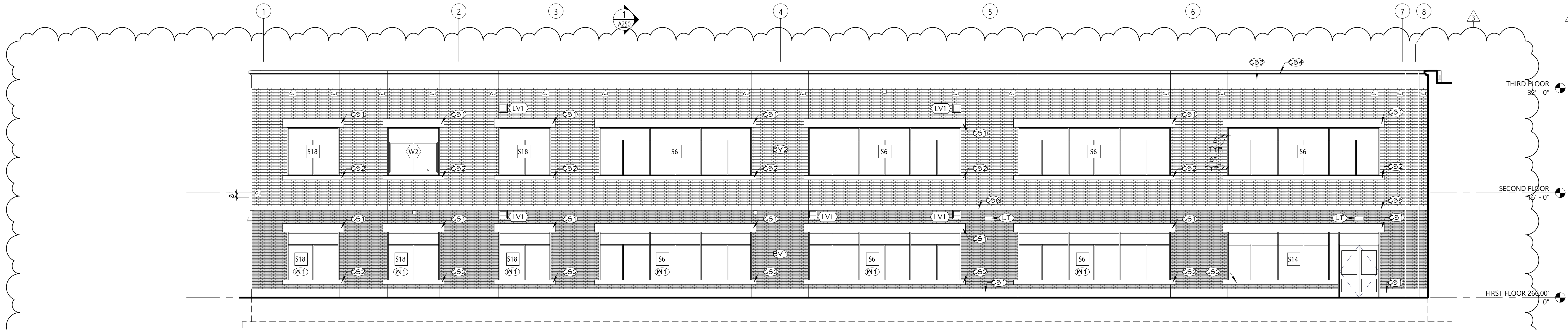
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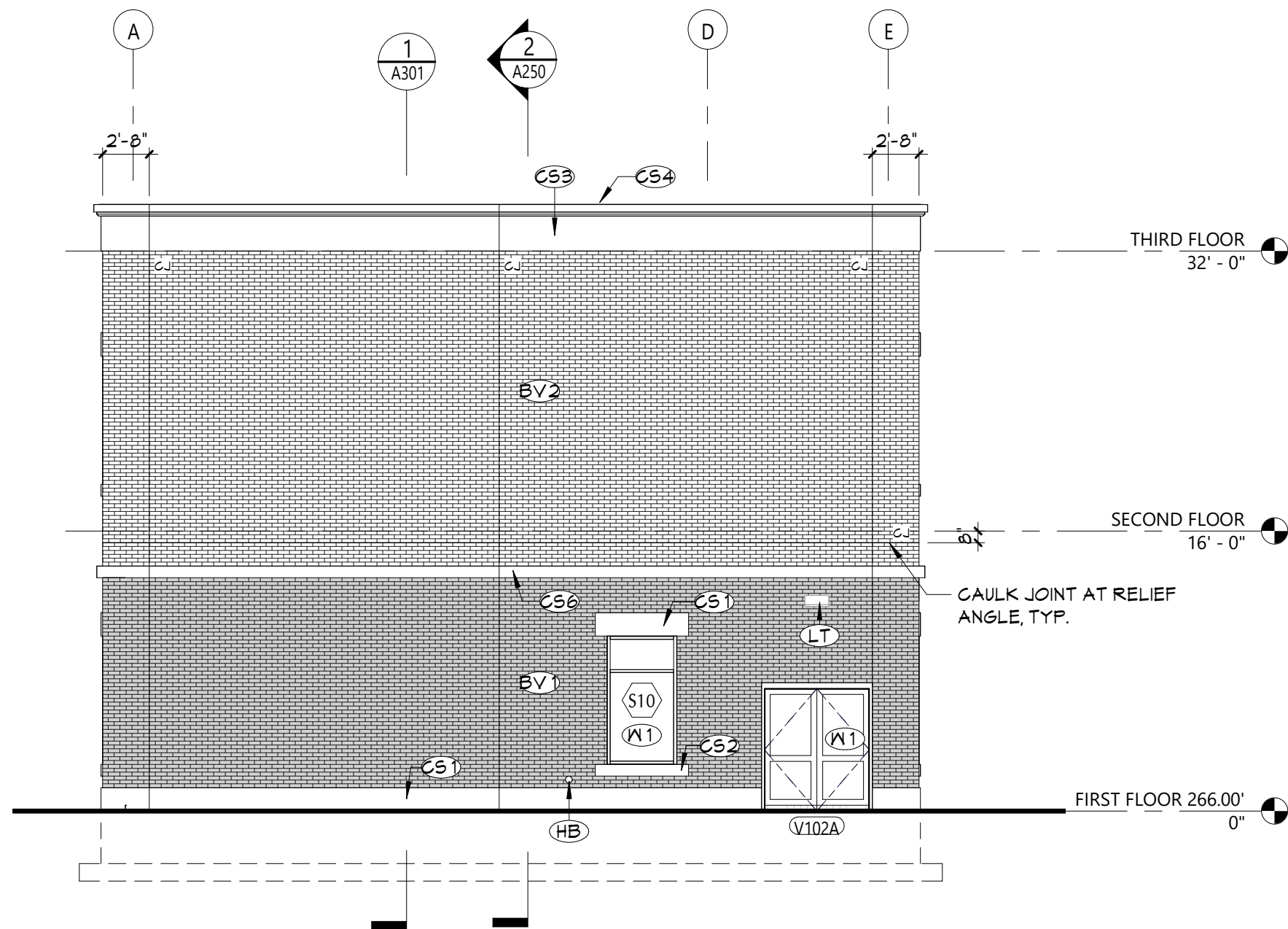
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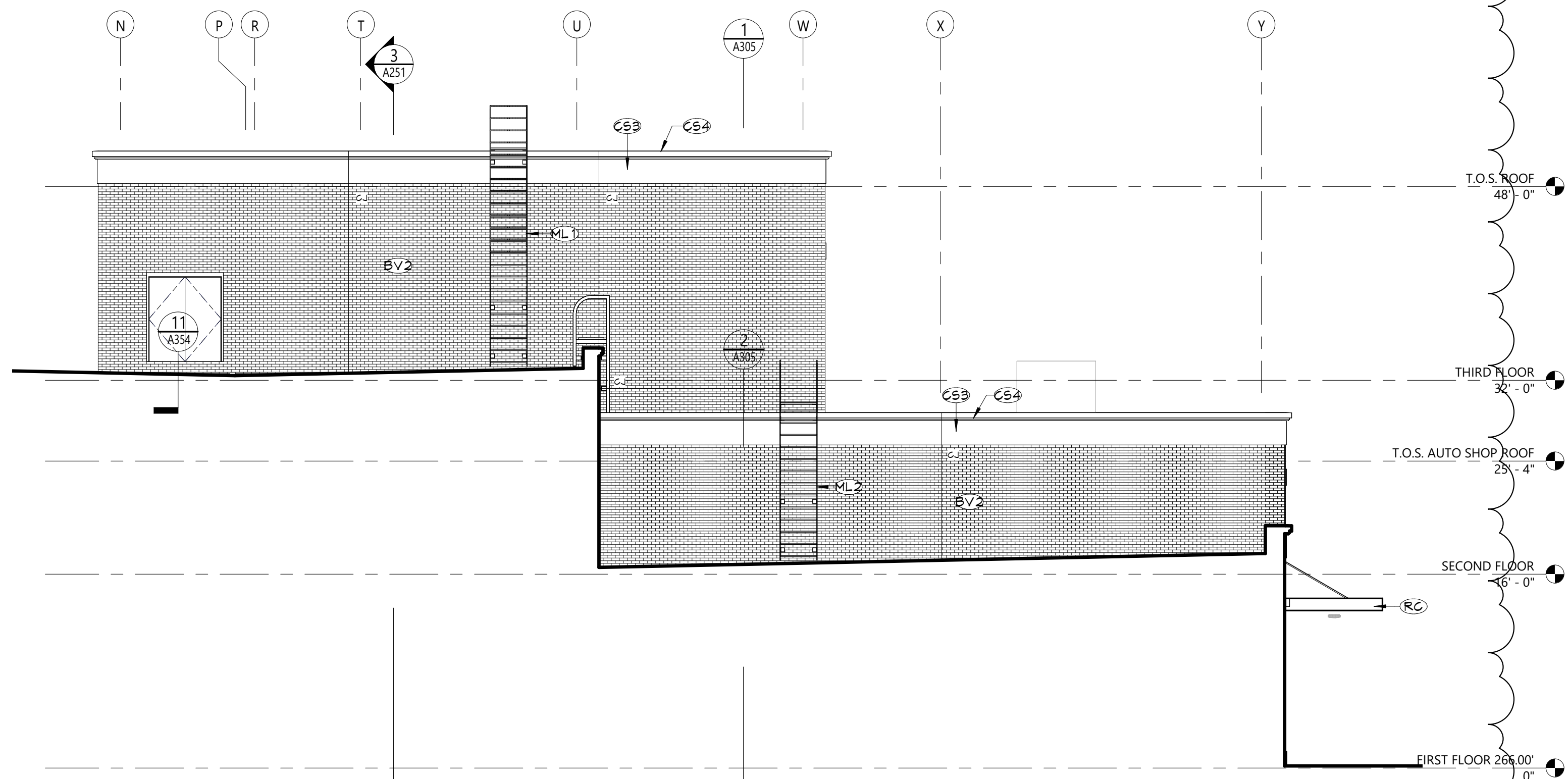




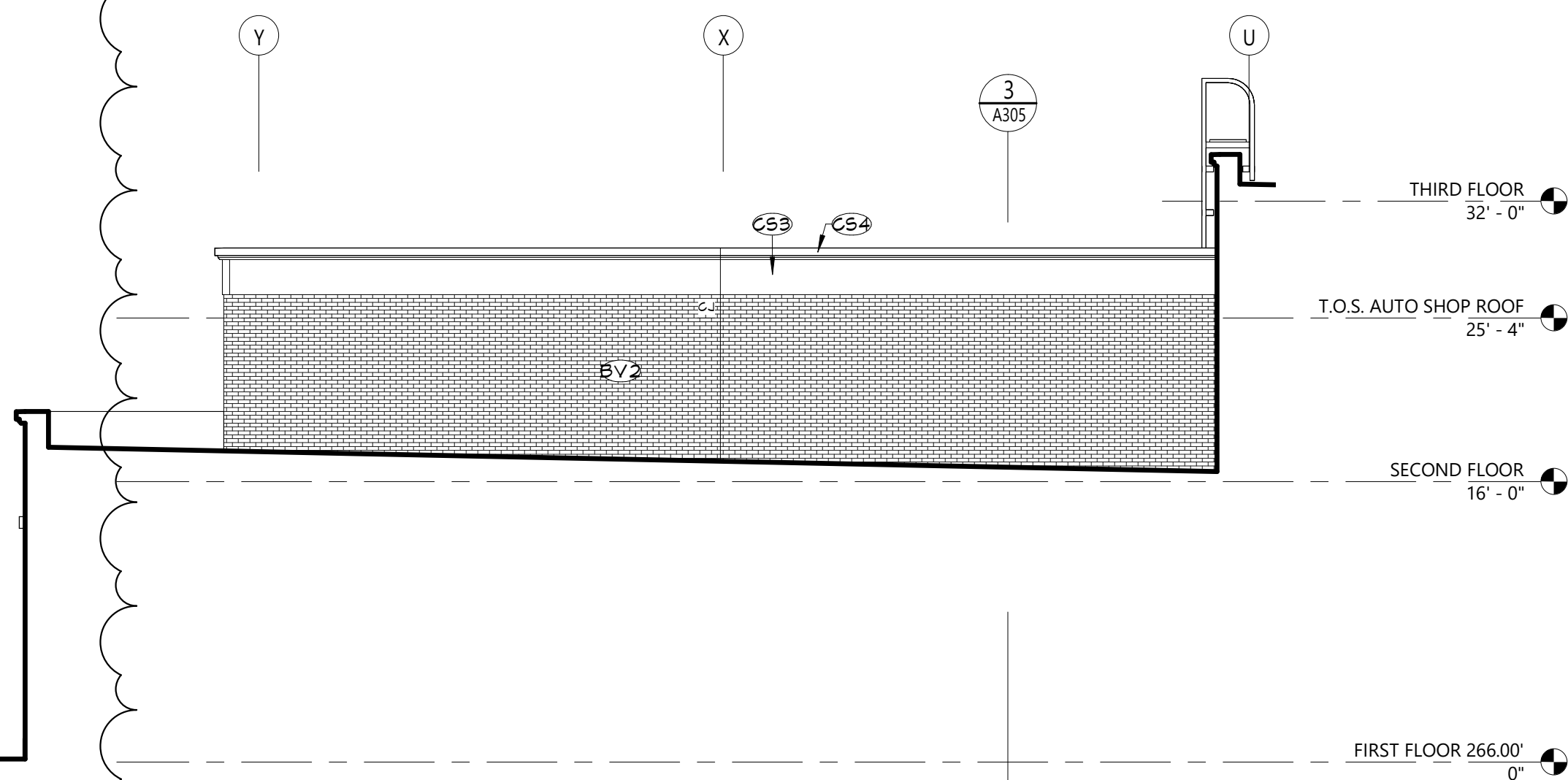
5 PARTIAL ELEVATION - EAST FACADE - AREA 1
A204 1/8" = 1'-0"



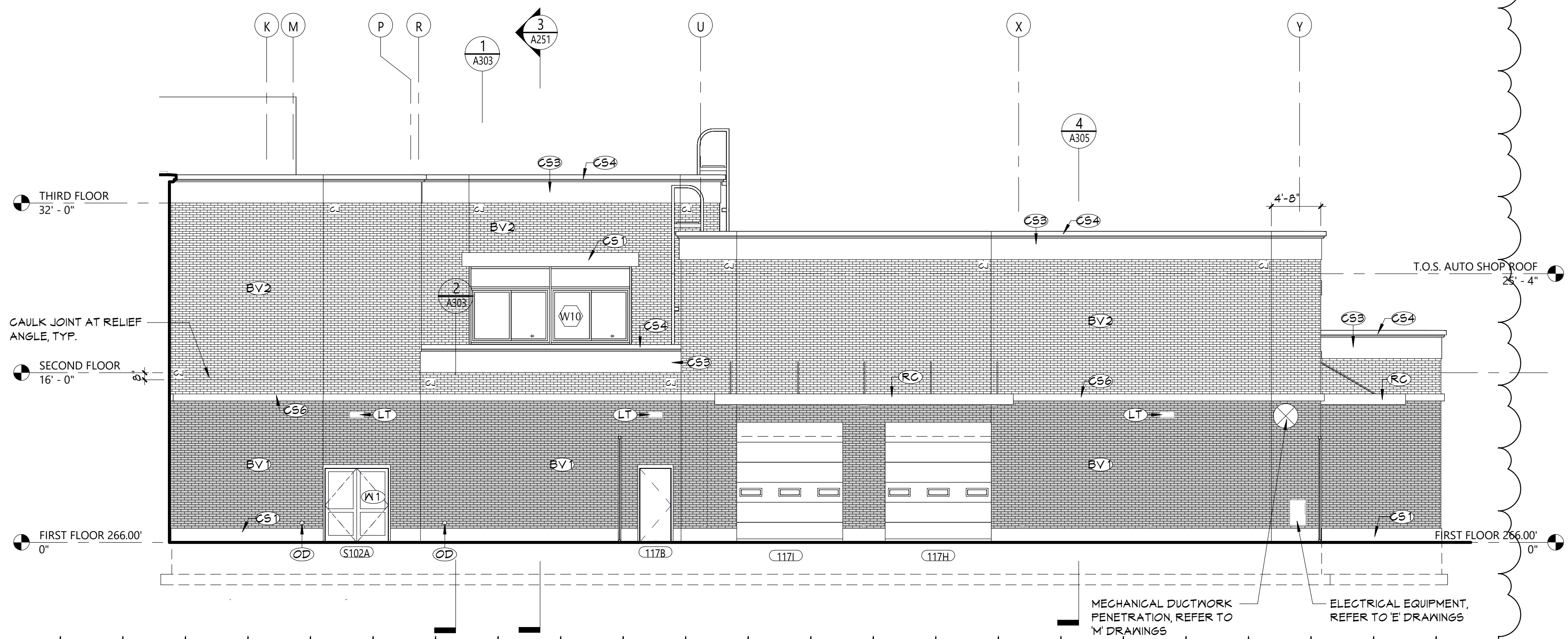
4 PARTIAL ELEVATION - SOUTH FACADE - AREA 1
A204 1/8" = 1'-0"



3 PARTIAL ELEVATION - SOUTH FACADE - AREA 2
A204 1/8" = 1'-0"



2 PARTIAL ELEVATION - NORTH FACADE - AREA 2
A204 1/8" = 1'-0"



1 PARTIAL ELEVATION - SOUTH FACADE - AREA 2
A204 1/8" = 1'-0"


| KEYNOTES | |
|----------|---|
| # | DESCRIPTION |
| BV.1 | BRICK VENEER, TYPE-1 |
| BV.2 | BRICK VENEER, TYPE-2 |
| CS.1 | CAST STONE PROFILE #1 |
| CS.2 | CAST STONE PROFILE #2 |
| CS.3 | CAST STONE PROFILE #3 |
| CS.4 | CAST STONE PROFILE #4 |
| CS.5 | CAST STONE PROFILE #5 |
| CS.6 | CAST STONE PROFILE #6 |
| HB | HOSE BIB, REFER TO PLUMBING DRAWINGS |
| LF | LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS |
| ML.1 | METAL ROOF LADDER WITH GAGE |
| ML.2 | METAL ROOF LADDER |
| OD | STORM DRAIN OUTLET, REFER TO PLUMBING DRAWINGS |
| RC | MANUFACTURED CANOPY |
| W1 | ALL EXTERIOR GLAZING ON THE FIRST FLOOR TO BE SECURITY GLAZING, REFER TO A400 SHEETS FOR DETAILS. |

| KEY PLAN | | |
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Consultant

Project Title



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

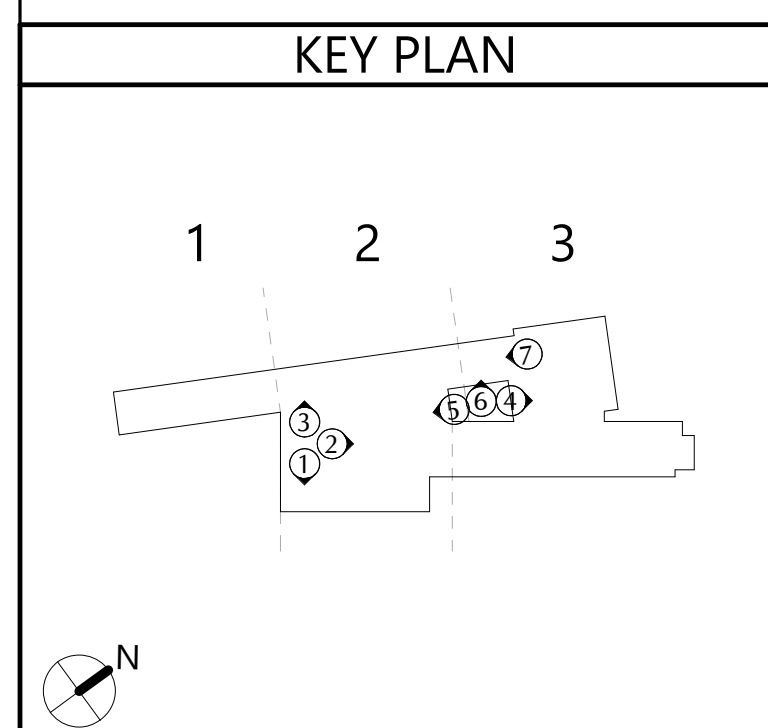
Sheet Title

EXTERIOR
ELEVATIONS

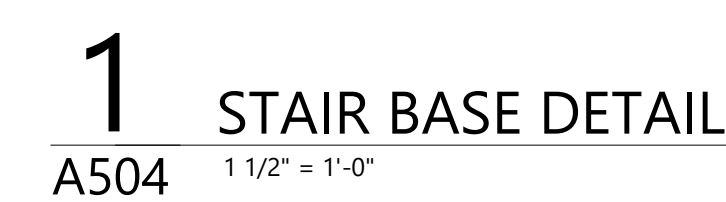
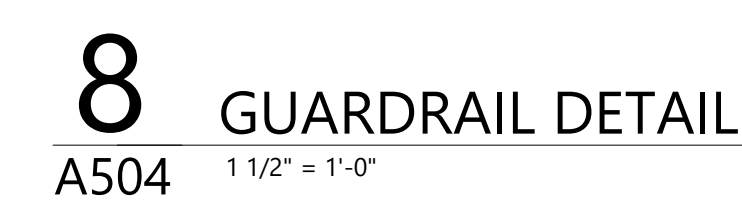
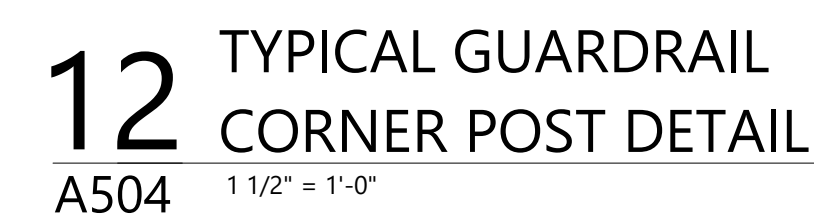
Sheet No.

CTE
A205

CONSTRUCTION DOCUMENTS



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GENERAL NOTES

1. ALL CASEWORK SHALL HAVE PLASTIC LAMINATE (PLAIN) 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.

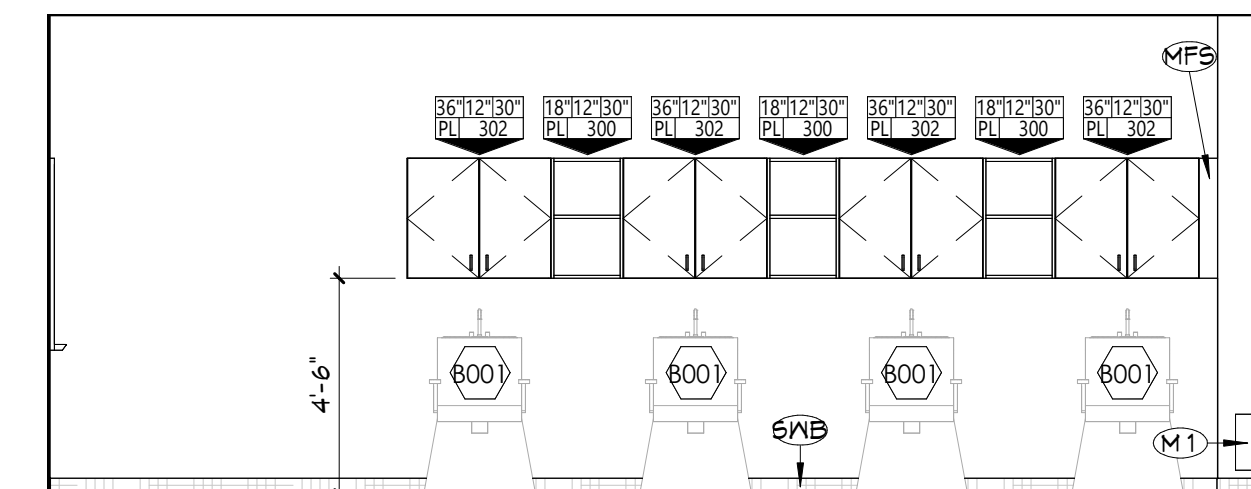
CASEWORK NOTES

- WIDTH OF CASEWORK
HEIGHT OF CASEWORK
DEPTH OF CASEWORK
- ANY 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

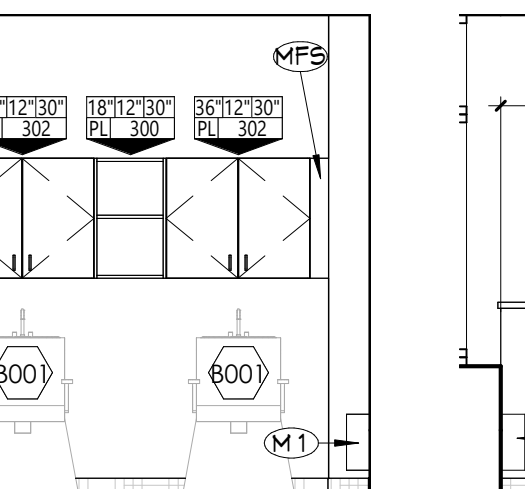
KEYNOTES

| # | DESCRIPTION |
|-----|---|
| 6WB | 6" WHITEBOARD |
| BS | PLAIN BACKSPLASH, 4" HIGH UNO |
| CB1 | COUNTER SUPPORT BRACKET |
| CTP | PLAIN COUNTERTOP |
| DM | DISPLAY MONITOR (OWNER FURNISHED, CONTRACTOR INSTALLED) |
| EXM | EXAM CURTAIN |
| FEP | FINISHED END PANEL |
| LK2 | TWO-TIER METAL LOCKER |
| M1 | MECHANICAL EQUIPMENT, REFER TO MECHANICAL DRAWINGS |
| MFS | MATCHING FILLER STRIP |
| PD | PAPER TOWEL DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED) |
| SD | SOAP DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED) |
| SK6 | NURSING LAB SINK, REFER TO PLUMBING DRAWINGS |
| SK9 | LAY-IN SINK WITH EYEWASH, REFER TO PLUMBING DRAWINGS |
| SMB | SCHEDULED WALL BASE |
| SNC | SOLID SURFACE WALL CAP |

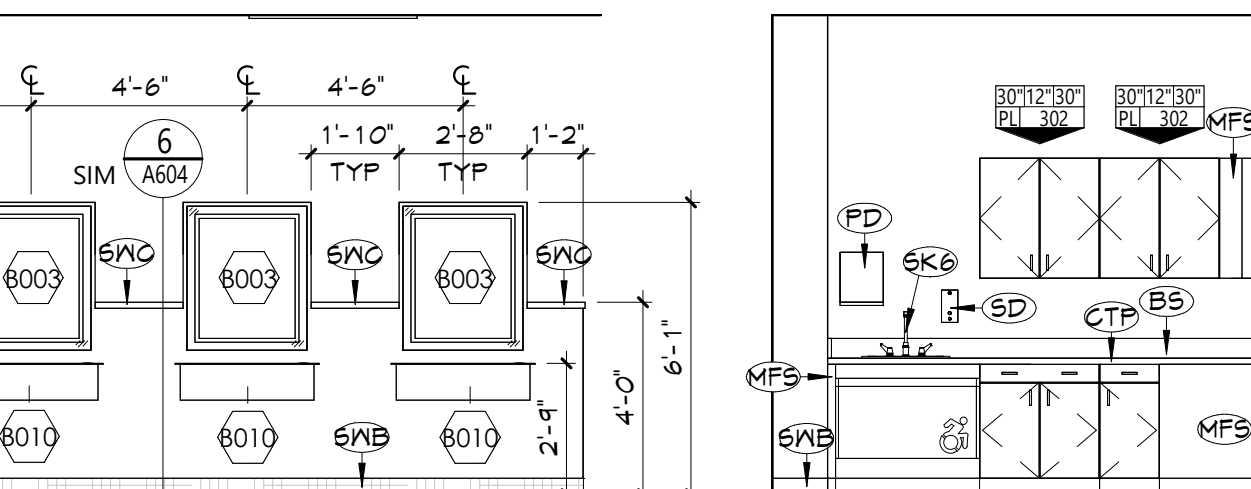
15 INTERIOR ELEVATION
DISPENSING - EAST
A604 1/4" = 1'-0"



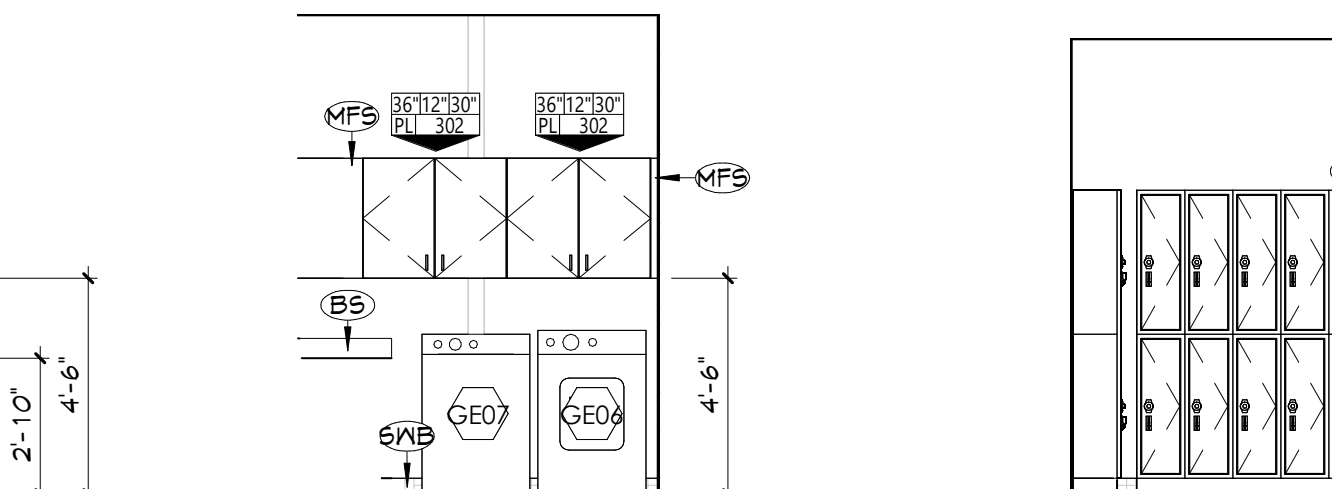
14 INTERIOR ELEVATION
DISPENSING - NORTH
A604 1/4" = 1'-0"



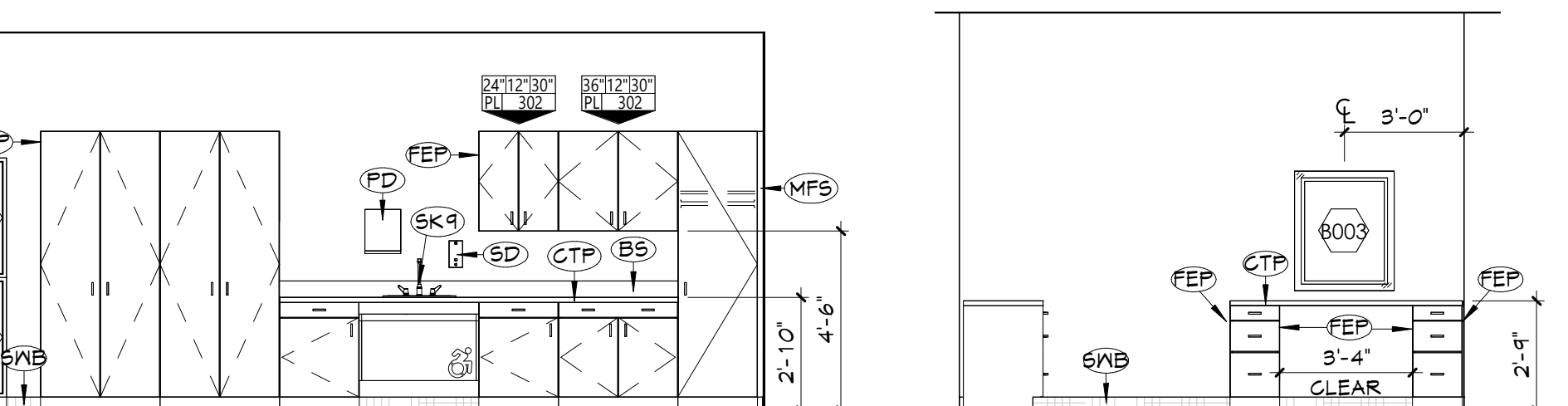
12 INTERIOR ELEVATION
BARBERING - NORTH
A604 1/4" = 1'-0"



8 INTERIOR ELEVATION
COSMETOLOGY - WEST
A604 1/4" = 1'-0"



5 INTERIOR ELEVATION
COSMETOLOGY - EAST
A604 1/4" = 1'-0"



13 INTERIOR ELEVATION
BARBERING - SOUTH
A604 1/4" = 1'-0"

| EQUIPMENT SCHEDULE - BARBERING | | | | | | | | | |
|--------------------------------|----------|-------------------|-------------------------------|---------------|---------------|-------|------------|-------|------------|
| EQUIPMENT # | QUANTITY | DESCRIPTION | MANUFACTURER | MODEL | MOUNTING | POWER | HORSEPOWER | WATER | INSTALLED |
| B001 | 4 | HAIR WASH STATION | AGS BEAUTY | DT-001 | FLOOR | - | - | YES | CONTRACTOR |
| B003 | 12 | MIRROR | PIBBS | PIB-9440 | WALL | 110V | - | - | CONTRACTOR |
| B009 | 12 | STYLING CHAIR | CHRIS STYLING CHAIR - SY-1801 | FREE STANDING | - | - | - | - | CONTRACTOR |
| B010 | 12 | STYLING STATION | WINADO (HGI-G10000063) 3 | WALL | - | - | - | - | CONTRACTOR |
| GE06 | 1 | DRYER | MAYTAG COMMERCIAL | MDE20MN8ZW | FREE STANDING | 240V | 1/3 HP | - | CONTRACTOR |
| GE07 | 1 | WASHING MACHINE | MAYTAG COMMERCIAL | MAT20MNAWW | FREE STANDING | 120V | 1/2 HP | YES | CONTRACTOR |

11 INTERIOR ELEVATION
BARBERING - NORTH
A604 1/4" = 1'-0"

| EQUIPMENT SCHEDULE - BARBERING | | | | | | | | | |
|--------------------------------|----------|-------------------|-------------------------------|---------------|---------------|-------|------------|-------|------------|
| EQUIPMENT # | QUANTITY | DESCRIPTION | MANUFACTURER | MODEL | MOUNTING | POWER | HORSEPOWER | WATER | INSTALLED |
| B001 | 4 | HAIR WASH STATION | AGS BEAUTY | DT-001 | FLOOR | - | - | YES | CONTRACTOR |
| B003 | 12 | MIRROR | PIBBS | PIB-9440 | WALL | 110V | - | - | CONTRACTOR |
| B009 | 12 | STYLING CHAIR | CHRIS STYLING CHAIR - SY-1801 | FREE STANDING | - | - | - | - | CONTRACTOR |
| B010 | 12 | STYLING STATION | WINADO (HGI-G10000063) 3 | WALL | - | - | - | - | CONTRACTOR |
| GE06 | 1 | DRYER | MAYTAG COMMERCIAL | MDE20MN8ZW | FREE STANDING | 240V | 1/3 HP | - | CONTRACTOR |
| GE07 | 1 | WASHING MACHINE | MAYTAG COMMERCIAL | MAT20MNAWW | FREE STANDING | 120V | 1/2 HP | YES | CONTRACTOR |

10 INTERIOR ELEVATION
DISPENSING - EAST
A604 1/4" = 1'-0"

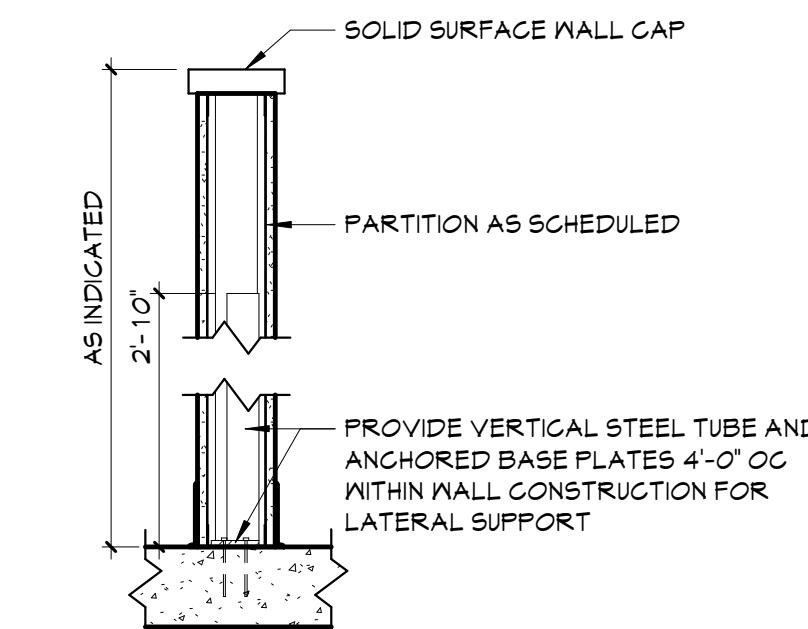
| EQUIPMENT SCHEDULE - COSMETOLOGY | | | | | | | | | |
|----------------------------------|----------|-------------------|-------------------------------|--------------------------|---------------|-------|------------|-------|------------|
| EQUIPMENT # | QUANTITY | DESCRIPTION | MANUFACTURER | MODEL | MOUNTING | POWER | HORSEPOWER | WATER | INSTALLED |
| B002 | 2 | PEDICURE STATION | J & A | JA-CLEGS | FLOOR | 110V | - | YES | CONTRACTOR |
| B003 | 25 | MIRROR | PIBBS | PIB-9440 | WALL | 110V | - | - | CONTRACTOR |
| B005 | 1 | WAXING TABLE | OAKWORKS | OW-CLINICIANPRIM-ELHY-ST | FREE STANDING | 120V | - | - | CONTRACTOR |
| B006 | 1 | FACIAL TABLE | OAKWORKS | OW-CLINICIANPRIM-ELHY-ST | FREE STANDING | 120V | - | - | CONTRACTOR |
| B007 | 4 | MANICURE STATION | J & A | JA-KM-N104 | FREE STANDING | - | - | - | CONTRACTOR |
| B008 | 4 | HAIR WASH STATION | BARBERPUB | 6154-9070 | FLOOR | - | - | YES | CONTRACTOR |
| B009 | 25 | STYLING CHAIR | CHRIS STYLING CHAIR - SY-1801 | FREE STANDING | - | - | - | - | CONTRACTOR |
| B010 | 24 | STYLING STATION | WINADO (HGI-G10000063) 3 | WALL | - | - | - | - | CONTRACTOR |
| GE06 | 1 | DRYER | MAYTAG COMMERCIAL | MDE20MN8ZW | FREE STANDING | 240V | 1/3 HP | - | CONTRACTOR |
| GE07 | 1 | WASHING MACHINE | MAYTAG COMMERCIAL | MAT20MNAWW | FREE STANDING | 120V | 1/2 HP | YES | CONTRACTOR |

9 INTERIOR ELEVATION
DISPENSING - SOUTH
A604 1/4" = 1'-0"

| EQUIPMENT SCHEDULE - COSMETOLOGY | | | | | | | | | |
|----------------------------------|----------|-------------------|-------------------------------|--------------------------|---------------|-------|------------|-------|------------|
| EQUIPMENT # | QUANTITY | DESCRIPTION | MANUFACTURER | MODEL | MOUNTING | POWER | HORSEPOWER | WATER | INSTALLED |
| B002 | 2 | PEDICURE STATION | J & A | JA-CLEGS | FLOOR | 110V | - | YES | CONTRACTOR |
| B003 | 25 | MIRROR | PIBBS | PIB-9440 | WALL | 110V | - | - | CONTRACTOR |
| B005 | 1 | WAXING TABLE | OAKWORKS | OW-CLINICIANPRIM-ELHY-ST | FREE STANDING | 120V | - | - | CONTRACTOR |
| B006 | 1 | FACIAL TABLE | OAKWORKS | OW-CLINICIANPRIM-ELHY-ST | FREE STANDING | 120V | - | - | CONTRACTOR |
| B007 | 4 | MANICURE STATION | J & A | JA-KM-N104 | FREE STANDING | - | - | - | CONTRACTOR |
| B008 | 4 | HAIR WASH STATION | BARBERPUB | 6154-9070 | FLOOR | - | - | YES | CONTRACTOR |
| B009 | 25 | STYLING CHAIR | CHRIS STYLING CHAIR - SY-1801 | FREE STANDING | - | - | - | - | CONTRACTOR |
| B010 | 24 | STYLING STATION | WINADO (HGI-G10000063) 3 | WALL | - | - | - | - | CONTRACTOR |
| GE06 | 1 | DRYER | MAYTAG COMMERCIAL | MDE20MN8ZW | FREE STANDING | 240V | 1/3 HP | - | CONTRACTOR |
| GE07 | 1 | WASHING MACHINE | MAYTAG COMMERCIAL | MAT20MNAWW | FREE STANDING | 120V | 1/2 HP | YES | CONTRACTOR |

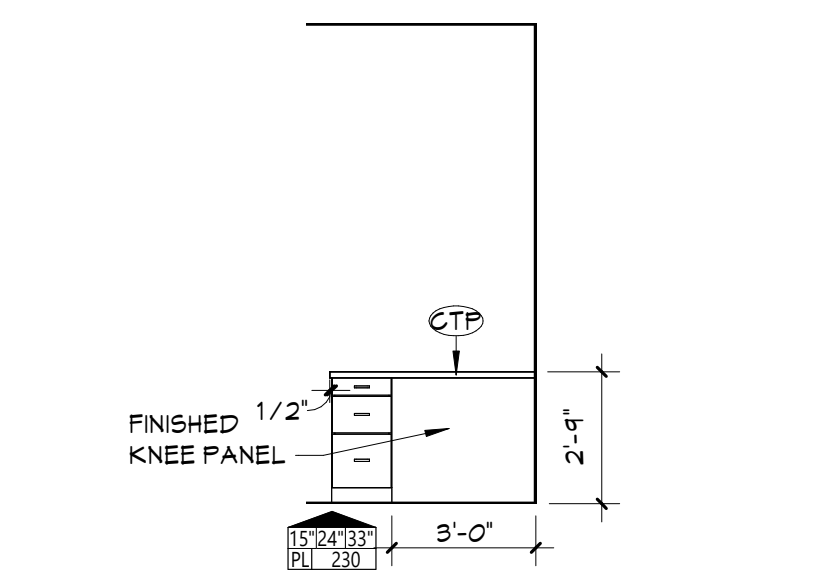
7 INTERIOR ELEVATION
COSMETOLOGY - SOUTH
A604 1/4" = 1'-0"

| EQUIPMENT SCHEDULE - COSMETOLOGY | | | | | | | | | |
|----------------------------------|----------|-------------------|-------------------------------|--------------------------|---------------|-------|------------|-------|------------|
| EQUIPMENT # | QUANTITY | DESCRIPTION | MANUFACTURER | MODEL | MOUNTING | POWER | HORSEPOWER | WATER | INSTALLED |
| B002 | 2 | PEDICURE STATION | J & A | JA-CLEGS | FLOOR | 110V | - | YES | CONTRACTOR |
| B003 | 25 | MIRROR | PIBBS | PIB-9440 | WALL | 110V | - | - | CONTRACTOR |
| B005 | 1 | WAXING TABLE | OAKWORKS | OW-CLINICIANPRIM-ELHY-ST | FREE STANDING | 120V | - | - | CONTRACTOR |
| B006 | 1 | FACIAL TABLE | OAKWORKS | OW-CLINICIANPRIM-ELHY-ST | FREE STANDING | 120V | - | - | CONTRACTOR |
| B007 | 4 | MANICURE STATION | J & A | JA-KM-N104 | FREE STANDING | - | - | - | CONTRACTOR |
| B008 | 4 | HAIR WASH STATION | BARBERPUB | 6154-9070 | FLOOR | - | - | YES | CONTRACTOR |
| B009 | 25 | STYLING CHAIR | CHRIS STYLING CHAIR - SY-1801 | FREE STANDING | - | - | - | - | CONTRACTOR |
| B010 | 24 | STYLING STATION | WINADO (HGI-G10000063) 3 | WALL | - | - | - | - | CONTRACTOR |
| GE06 | 1 | DRYER | MAYTAG COMMERCIAL | MDE20MN8ZW | FREE STANDING | 240V | 1/3 HP | - | CONTRACTOR |
| GE07 | 1 | WASHING MACHINE | MAYTAG COMMERCIAL | MAT20MNAWW | FREE STANDING | 120V | 1/2 HP | YES | CONTRACTOR |

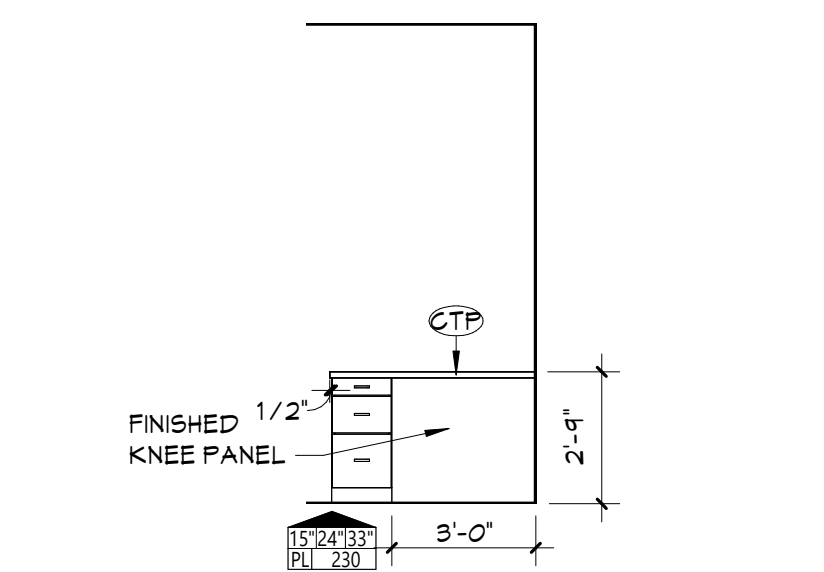


6 SECTION DETAIL AT
PARTIAL HEIGHT WALL
A604 1" = 1'-0"

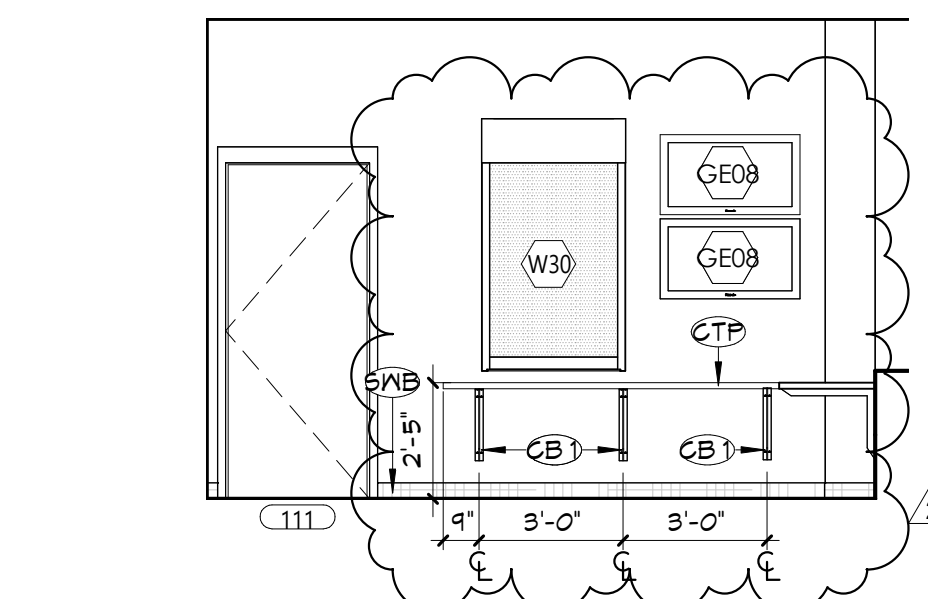
4 INTERIOR ELEVATION
COSMETOLOGY - SOUTH
A604 1/4" = 1'-0"



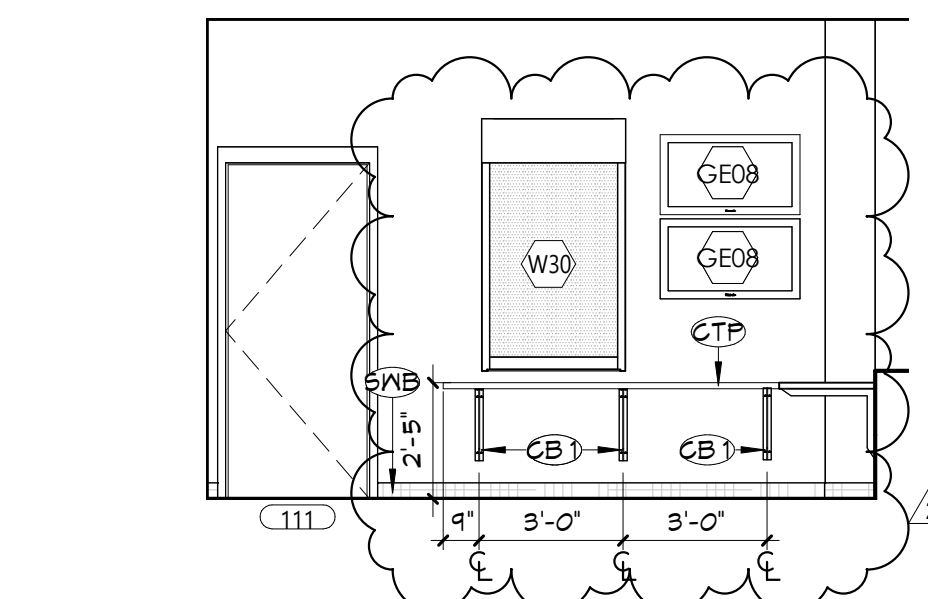
3 INTERIOR ELEVATION
COSMETOLOGY - EAST
A604 1/4" = 1'-0"



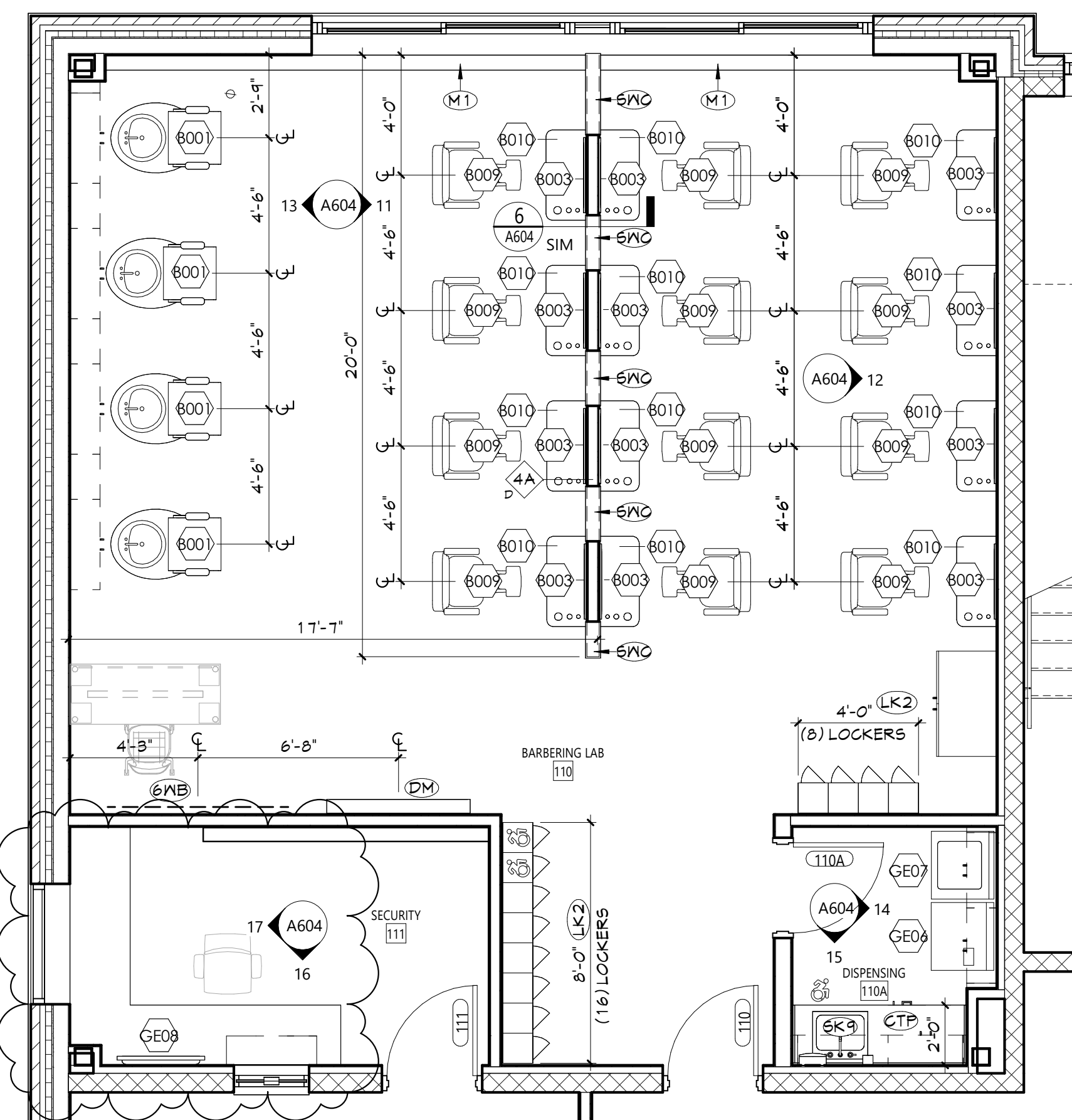
17 INTERIOR ELEVATION
SECURITY - SOUTH
A604 1/4" = 1'-0"



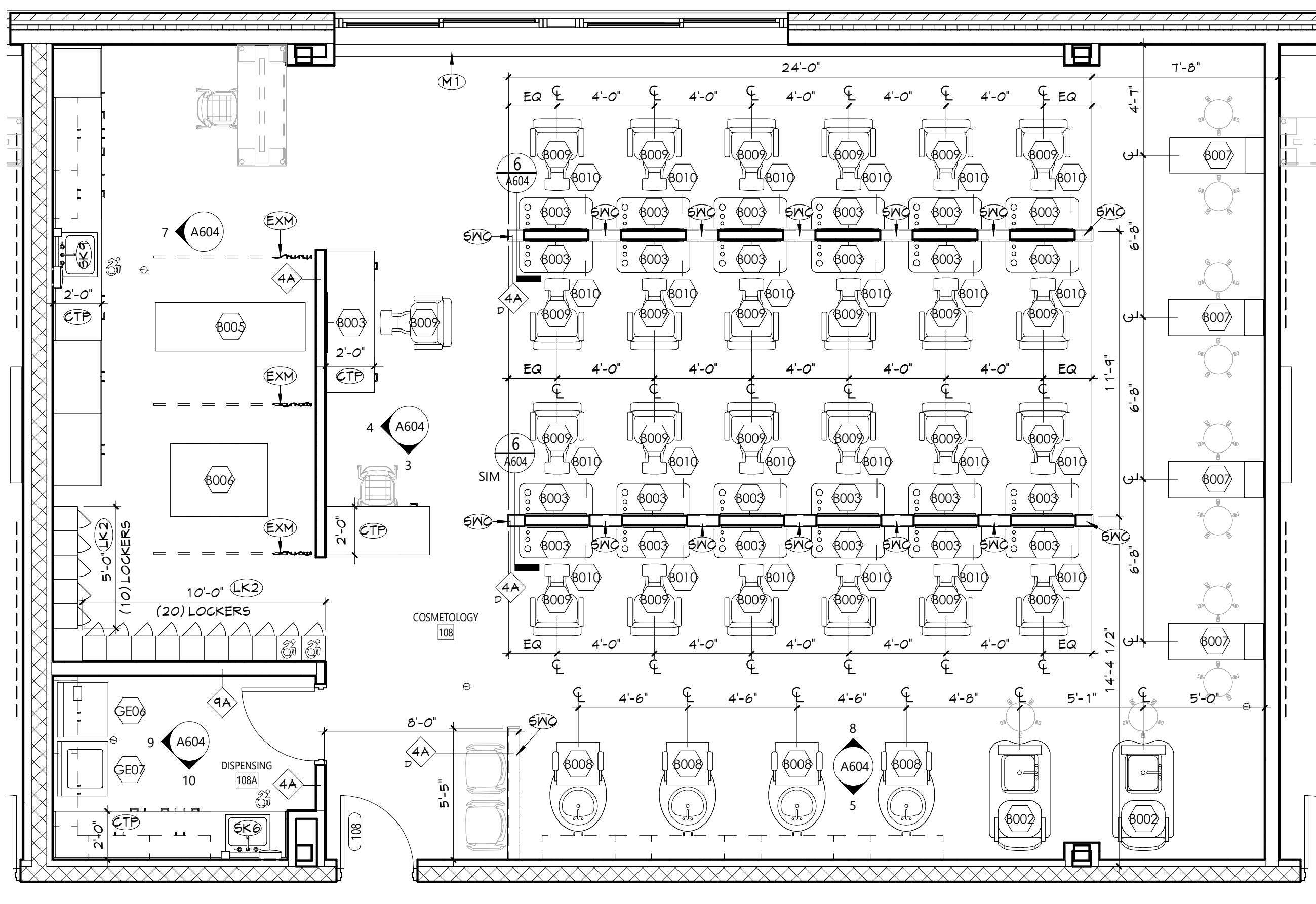
16 INTERIOR ELEVATION
SECURITY - EAST
A604 1/4" = 1'-0"



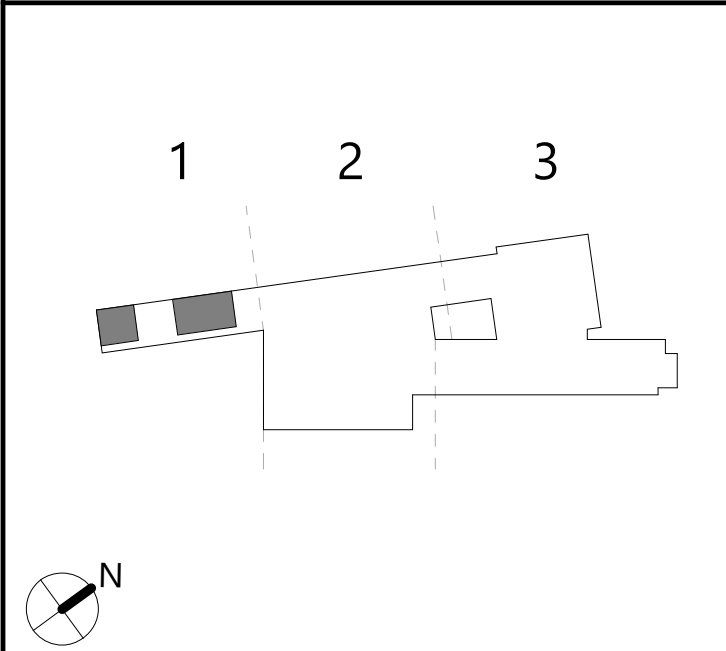
2 ENLARGED FLOOR PLAN - BARBERING
A604 1/4" = 1'-0"

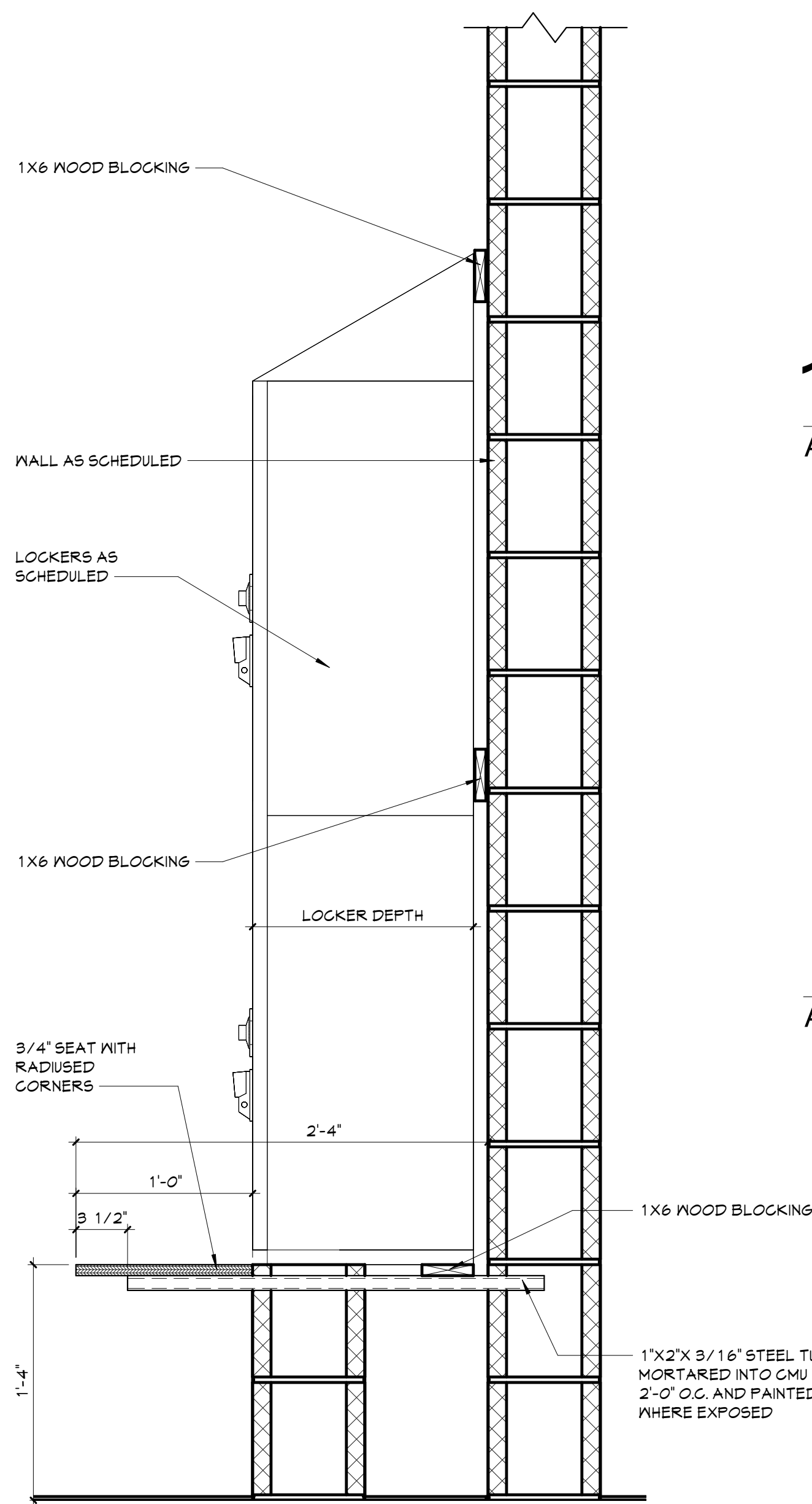


1 ENLARGED FLOOR PLAN - COSMETOLOGY
A604 1/4" = 1'-0"

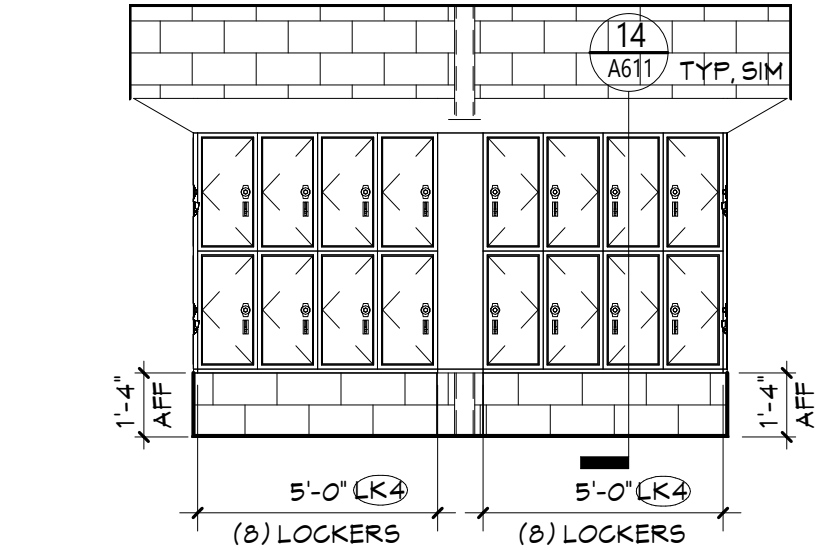


KEY PLAN

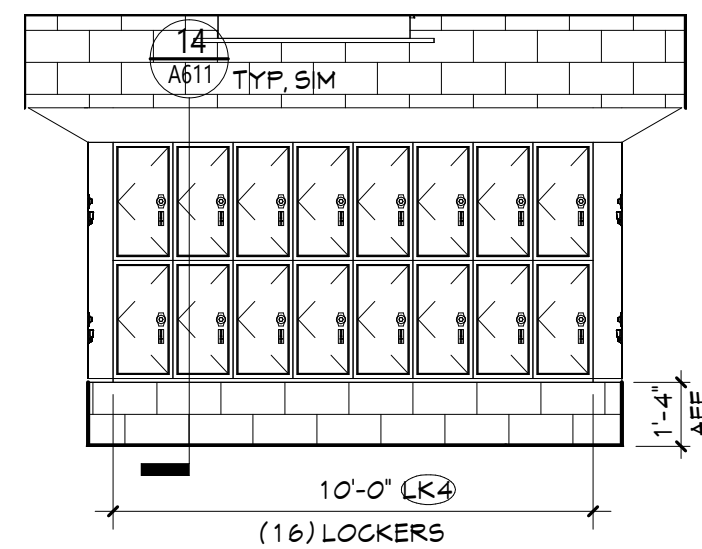




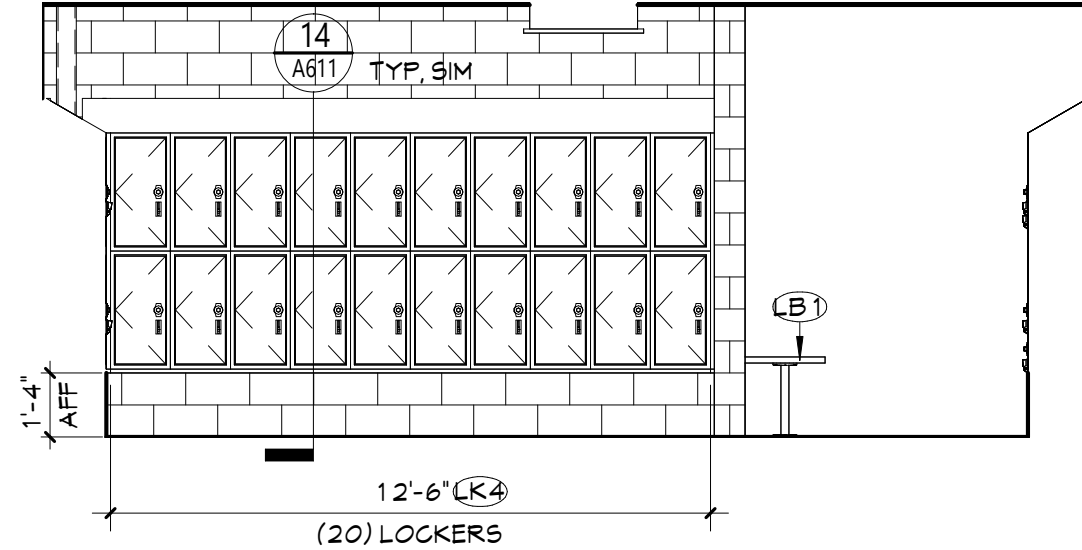
14 TYPICAL LOCKER BENCH SECTION
A611 1 1/2" = 1'-0"



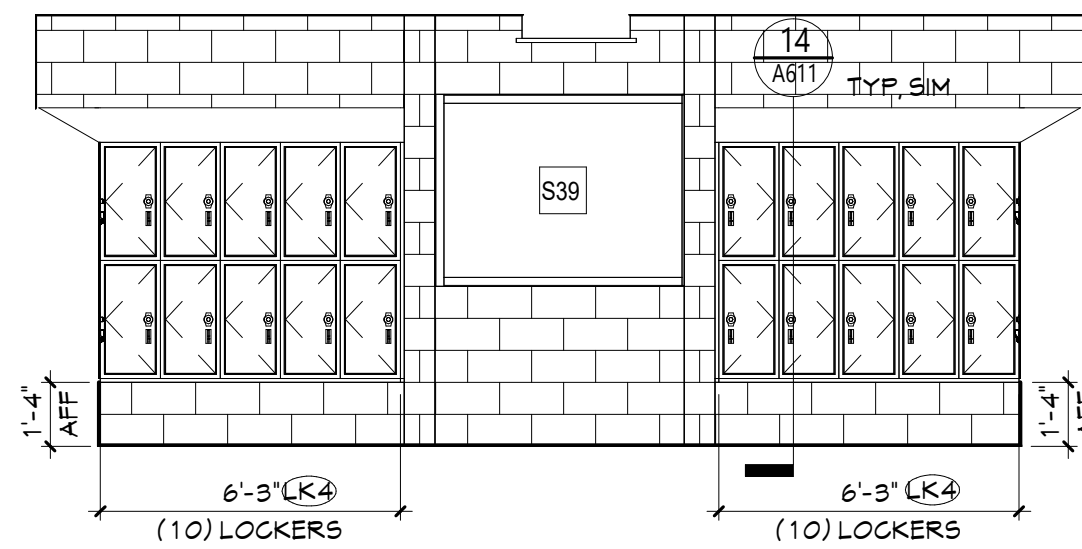
13 134 - EAST ELEV
A611 1/4" = 1'-0"



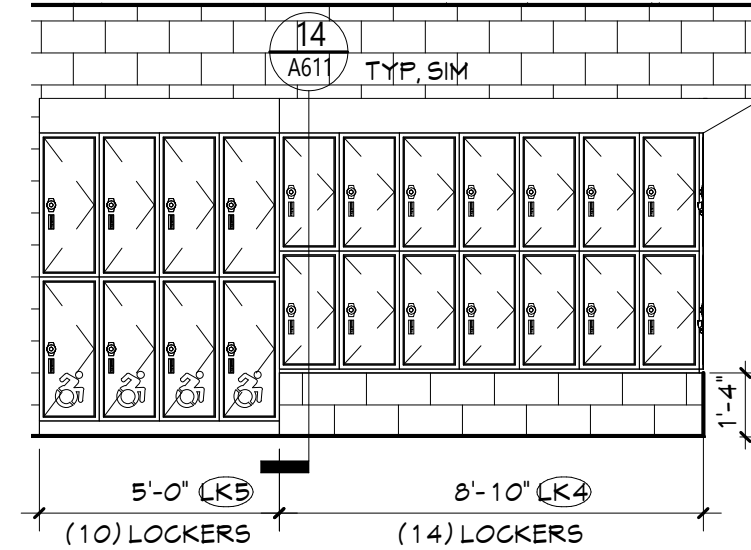
9 131 - EAST ELEV
A611 1/4" = 1'-0"



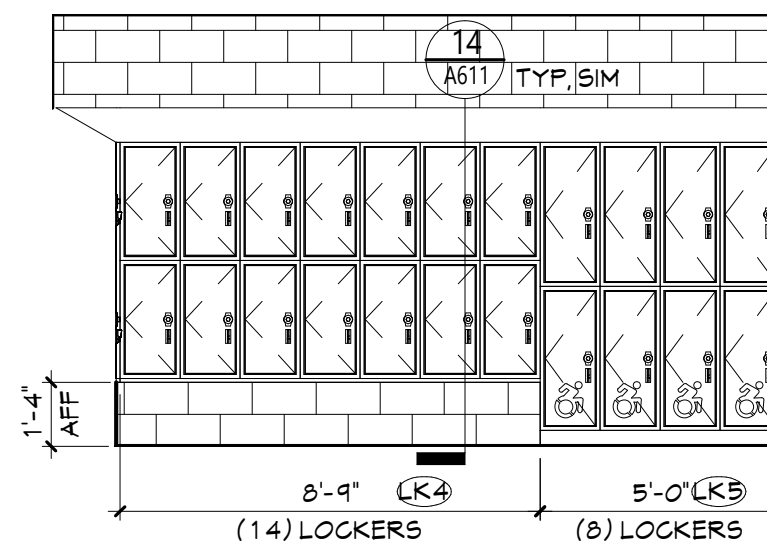
12 134 - SOUTH ELEV
A611 1/4" = 1'-0"



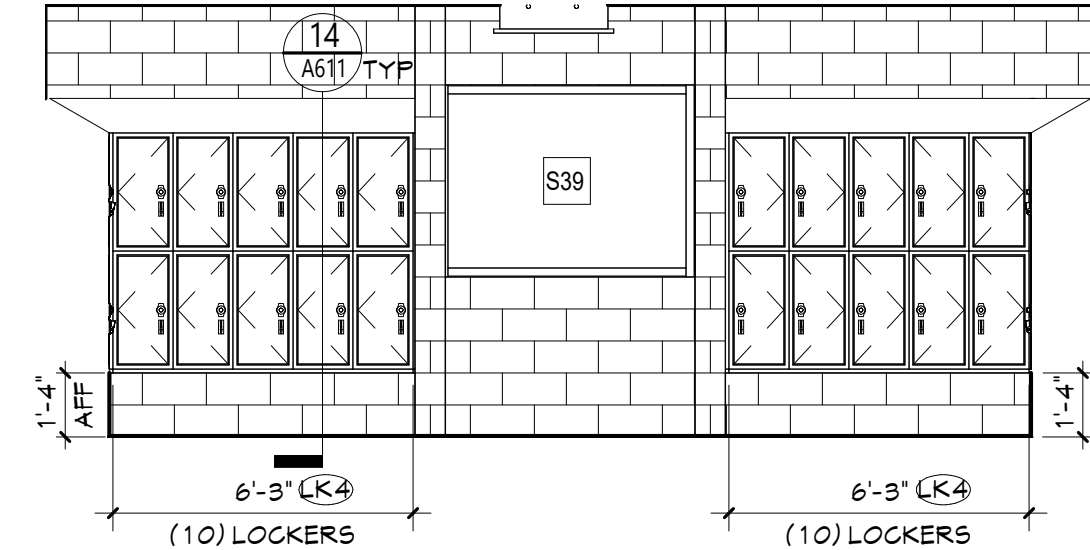
8 131 - SOUTH ELEV
A611 1/4" = 1'-0"



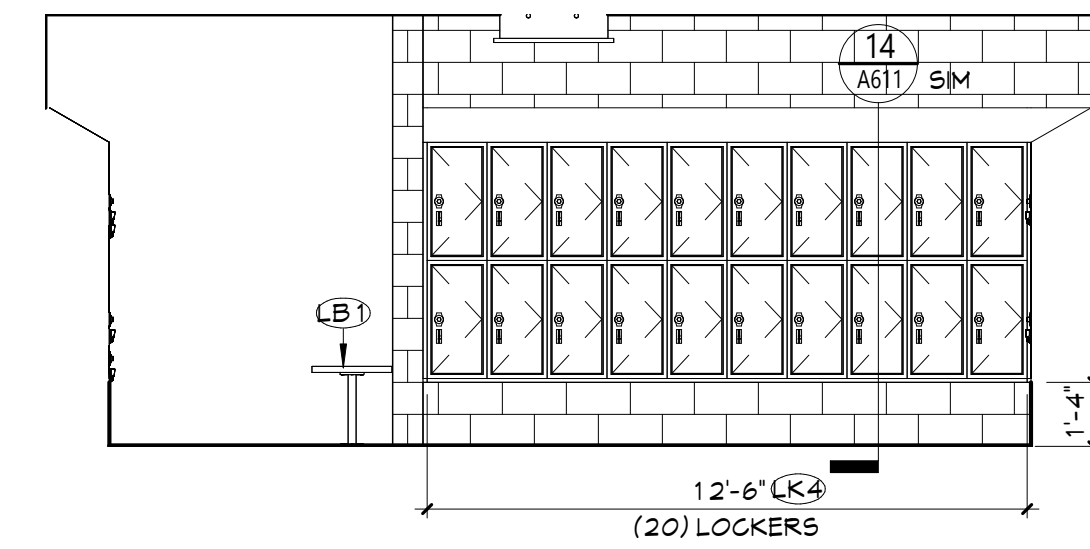
11 134 - WEST ELEV
A611 1/4" = 1'-0"



7 131 - WEST ELEV
A611 1/4" = 1'-0"



10 134 - NORTH ELEV
A611 1/4" = 1'-0"



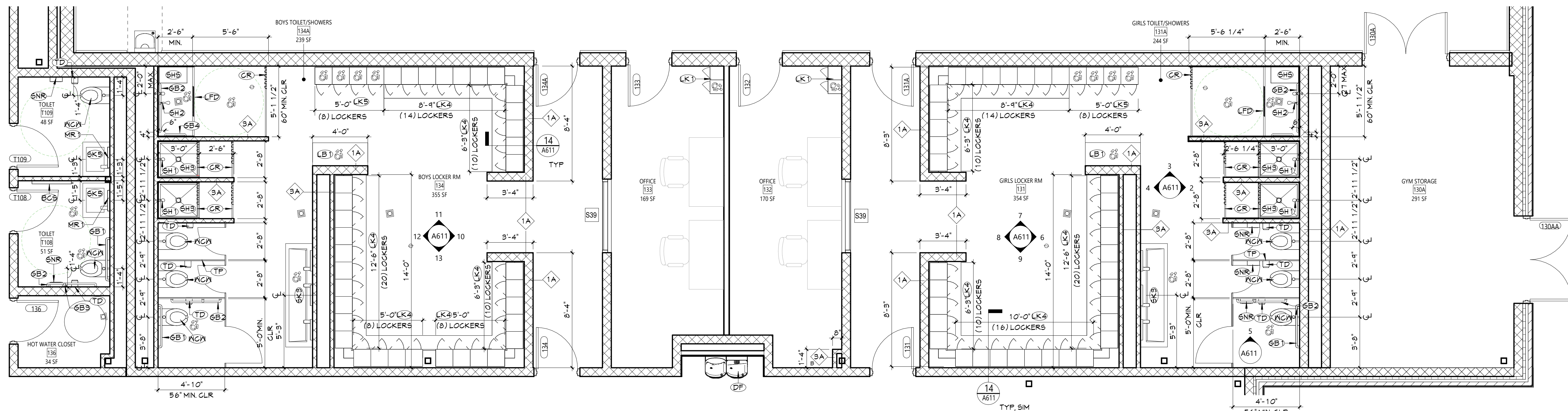
6 131 - NORTH ELEV
A611 1/4" = 1'-0"

5 131A - ADA STALL ELEV (134A SIM)
A611 1/4" = 1'-0"

4 131A - SOUTH ELEV (134A NORTH SIM)
A611 1/4" = 1'-0"

3 131A - WEST ELEV (134A WEST SIM)
A611 1/4" = 1'-0"

2 131A - NORTH ELEV (134A SOUTH SIM)
A611 1/4" = 1'-0"



1 ENLARGED FLOOR PLAN - LOCKER ROOMS
A611 1/4" = 1'-0"

GENERAL NOTES

- ALL CASEWORK SHALL HAVE PLASTIC LAMINATE (PLAM) COUNTERTOPS AND 4" BACK SPLASHES, UNO.
- INSTALL MATCHING FILLER PANELS AS REQUIRED FOR FINAL FIT/FINISH.
- PROVIDE BLOCKING IN ALL ADJACENT WALLS AS REQUIRED TO INSTALL ALL CASEWORK.
- PROVIDE FINISHED END PANEL AT ALL EXPOSED FACES OF CASEWORK.
- PROVIDE WALL BASE AS SCHEDULED ON ALL EXPOSED TOE KICK SPACES AND EXPOSED END PANELS.
- ALL FURNITURE SHOWN AS HALFTONE IS NOT IN CONTRACT.

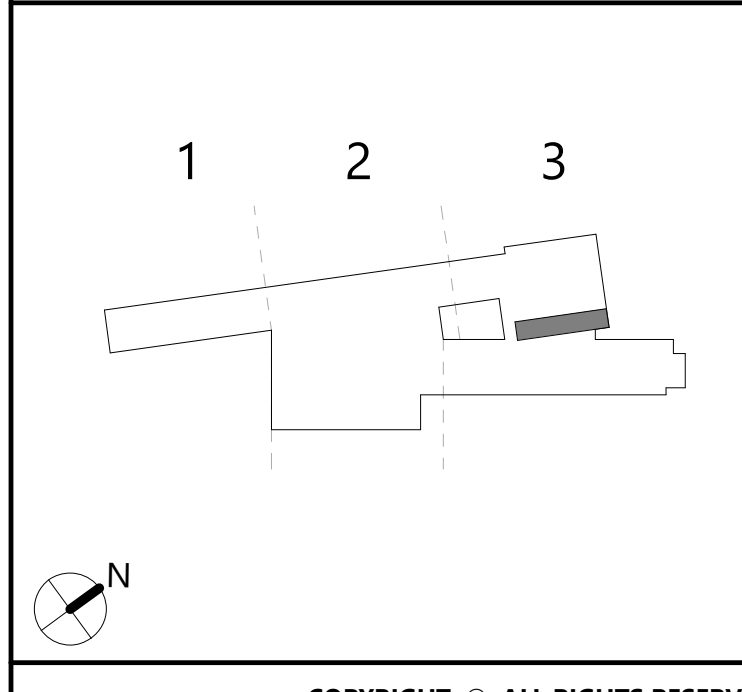
CASEWORK NOTES

- WIDTH OF CASEWORK
HEIGHT OF CASEWORK
DEPTH OF CASEWORK
- ANY 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 |
|-----|--|
| BCS | BABY CHANGING STATION |
| CR | CURTAIN ROD |
| CAT | CERAMIC WALL TILE, REFER TO 'AF' DRAWINGS |
| DF | DRINKING FOUNTAIN WITH BOTTLE FILLER, REFER TO PLUMBING DRAWINGS |
| GB1 | 36" GRAB BAR |
| GB2 | 42" GRAB BAR |
| GB3 | 18" VERTICAL GRAB BAR |
| GB4 | 18" GRAB BAR |
| LB1 | ADA LOCKER ROOM BENCH |
| LFD | LINEAR FLOOR DRAIN, REFER TO PLUMBING DRAWINGS |
| LK1 | SINGLE-TIER METAL LOCKER |
| LK4 | TWO-TIER METAL LOCKER - BOTTOM LOCKER 1'-8" AFF. |
| LK5 | TWO-TIER METAL LOCKER |
| MR1 | 18"x30" CHANNEL FRAMED GLASS MIRROR |
| SH1 | SHOWER HEAD, REFER TO PLUMBING DRAWINGS |
| SH2 | ADA SHOWER HEAD AND ACCESSORIES, REFER TO PLUMBING DRAWINGS |
| SH3 | SHOWER BASE, REFER TO PLUMBING DRAWINGS |
| SH5 | ADA SHOWER SEAT |
| SK3 | THREE STATION LAVATORY, REFER TO PLUMBING DRAWINGS |
| SK5 | SINGLE STATION LAVATORY, REFER TO PLUMBING DRAWINGS |
| SND | SANITARY NAPKIN AND TAMPON DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED) |
| SNR | SANITARY NAPKIN WASTE RECEPTACLE |
| TD | TOILET PAPER DISPENSER (OWNER FURNISHED, CONTRACTOR INSTALLED) |
| TP | TOILET PARTITION |
| WCM | WATER CLOSET, WALL MOUNTED, REFER TO PLUMBING DRAWINGS |

KEY PLAN

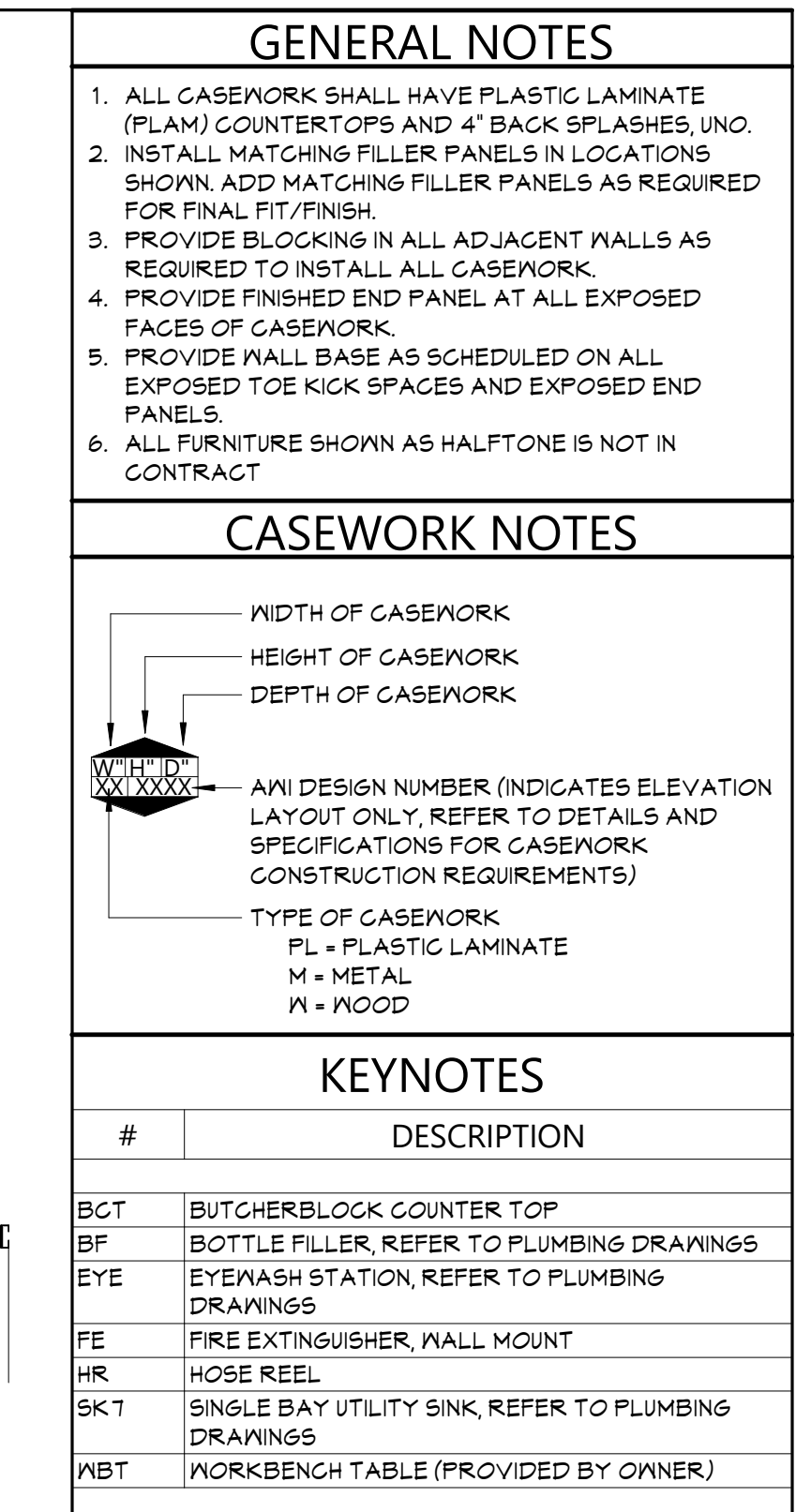


PROVIDE THE ACCOMPANYING ACCESSORIES FOR THE FOLLOWING EQUIPMENT LISTED BELOW

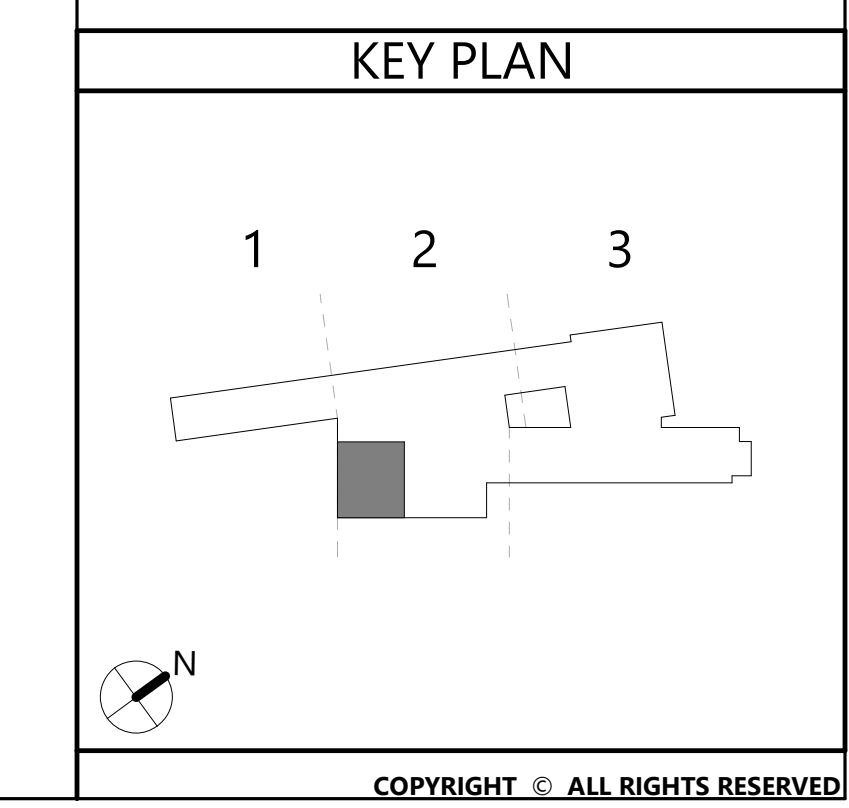
A012 - MILL/DRILL MACHINE
SUPPORT WITH CABINET AND DRAWER, 30201035

A019 - HEAD UNIT
MINI-JAN LARGE PREMIUM CONSOLE, MA440E SERIES

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

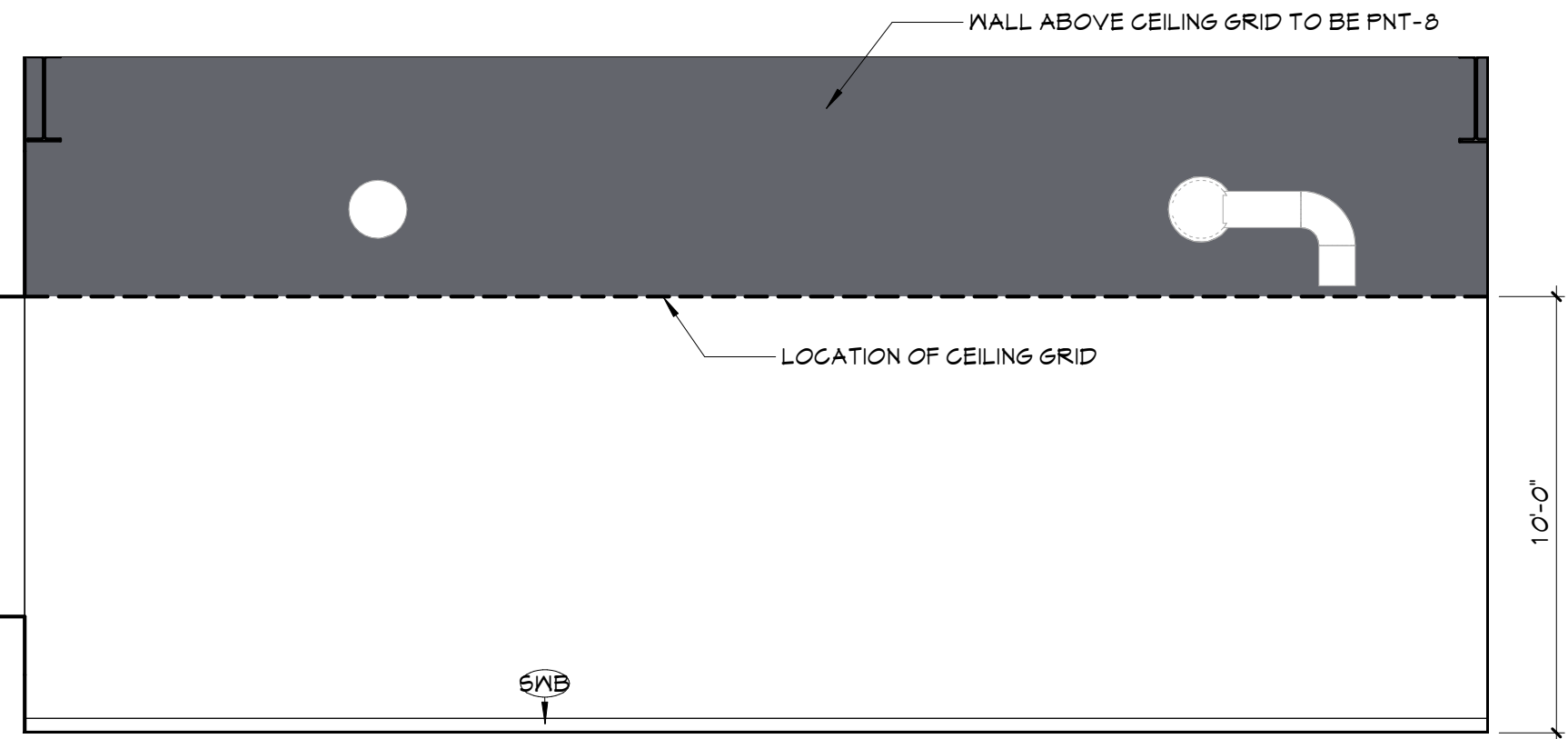
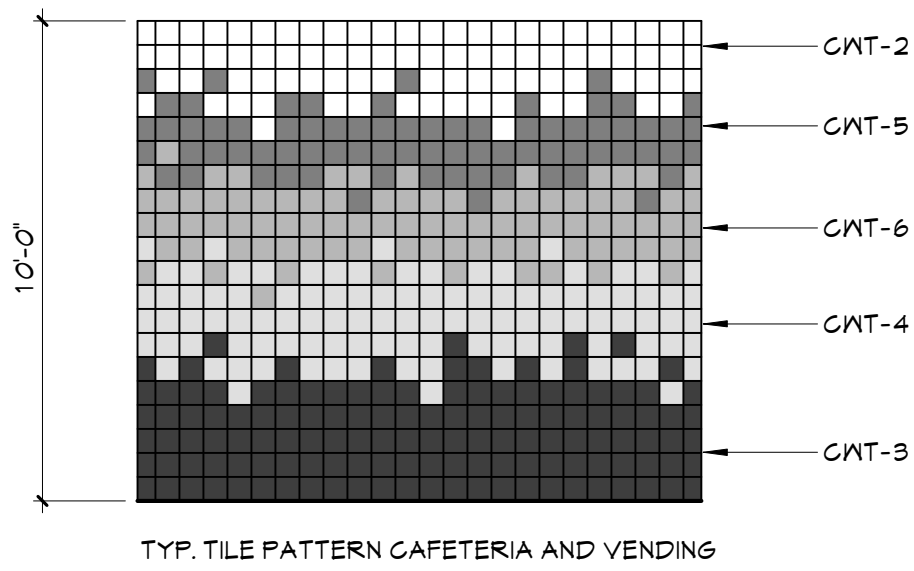


1 ENLARGED FLOOR PLAN - AUTO TECH SHOP
A613 1/4" = 1'-0"



| DOOR SCHEDULE - FIRST FLOOR | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|----------|------|----------------|-------|---------------------|-----------|-------|----------|--------|------|----------|--------|-------------|-------------|-------------|-------------|---------|----------|---------------|----------------|---------|-------|-------|-------------|
| DOOR NUMBER | QUANTITY | DOOR | | FRAME | | | | | | | | | | | | | | | | | | | | DOOR NUMBER |
| | | FROM | TO | WIDTH | HEIGHT | THICKNESS | TYPE | MATERIAL | FINISH | TYPE | MATERIAL | FINISH | HEAD DETAIL | JAMB DETAIL | SILL DETAIL | LABEL (MIN) | GLAZING | HARDWARE | MAG HOLD-OPEN | ACCESS CONTROL | REMARKS | | | |
| 100 | | V101 | WEST VEST | 100 | FRONT OFFICE | 3'-0" | 8'-0" | 1 3/4" | DG | AL | FF | S31 | AL | FF | 1/A921 | 1/A921 | 7/A901 | - | G5 | 26.0 | - | - | - | 100 |
| 100A | 1 | 100 | FRONT OFFICE | 100A | SECURITY | 3'-0" | 7'-0" | 1 3/4" | G | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 11.0 | - | - | - | 100A |
| 100A.1 | | 100A | SECURITY | V101 | WEST VEST | 2'-6" | 4'-0" | 2" | OH3 | - | - | - | - | - | 11/A912 | - | 10/A912 | 20 | - | 42.0 | - | - | 3 | 100A.1 |
| 100B | 1 | 100 | FRONT OFFICE | 100B | MEETING ROOM | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 11.0 | - | - | - | 100B |
| 100C | 1 | 100 | FRONT OFFICE | 100C | OFFICE | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 11.0 | - | - | - | 100C |
| 100D | 1 | 100 | FRONT OFFICE | 100D | OFFICE | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 11.0 | - | - | - | 100D |
| 100E | 1 | 100 | FRONT OFFICE | 100E | VAULT | 3'-0" | 7'-0" | 1 3/4" | F | HM | PT | 2 | HM | PT | 5/A901 | 1/A901 | 7/A901 | - | - | 27.0 | - | - | - | 100E |
| 100F | 1 | 100M | PASSAGE | 100F | OFFICE | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 6/A901 | - | - | 11.0 | - | - | - | 100F |
| 100G | 1 | 100M | PASSAGE | 100G | TOILET | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 6/A901 | - | - | 14.0 | - | - | - | 100G |
| 100H | 1 | 100M | PASSAGE | 100H | OFFICE | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 11.0 | - | - | - | 100H |
| 100I | 1 | 100 | FRONT OFFICE | 100I | WORK BASED LEARNING | 3'-0" | 7'-0" | 1 3/4" | N | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 11.0 | - | - | - | 100I |
| 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 | 1 | 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 | - | - | - | 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 | 104A | STORAGE | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 9.0 | - | - | - | 104A |
| 104B | 1 | 104 | VET TECH | 104B | DOG RUN | 3'-0" | 8'-0" | 1 3/4" | DG | AL | FF | S2 | AL | FF | 1/A922 | 1/A922 | 8/A351 | - | G7 | 30.0 | - | - | - | 104B |
| 105 | PR | C101 | CORRIDOR | 105 | PLUMBING EQ RM | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 3 | HM | PT | 5/A901 | 1/A901 | 7/A901 | - | - | 21.0 | - | - | - | 105 |
| 105A | PR | 105 | PLUMBING EQ RM | 105A | EXTERIOR | 3'-6" | 8'-0" | 1 3/4" | F | FRP | FF | 4 | AL | FF | 13/A352 | 6/A352 | 8/A351 | - | - | 32.0 | - | - | - | 105A |
| 106 | PR | C102 | CORRIDOR | 106 | CUSTODIAL SUPPLY RM | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 3 | HM | PT | 5/A901 | 1/A901 | 7/A901 | - | - | 21.0 | - | - | - | 106 |
| 107 | 1 | C102 | CORRIDOR | 107 | CLASSROOM | 3'-0" | 7'-0" | 1 3/4" | N | WD | FF | 2 | HM | PT | 5/A901 | 1/A901 | 7/A901 | - | G5 | 6.0 | - | - | - | 107 |
| 108 | 1 | C102 | CORRIDOR | 108 | COSMETOLOGY | 3'-0" | 7'-0" | 1 3/4" | N | WD | FF | 2 | HM | PT | 5/A901 | 1/A901 | 7/A901 | - | G5 | 5.0 | - | - | - | 108 |
| 108A | 1 | 108 | COSMETOLOGY | 108A | DISPENSING | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 24.0 | - | - | - | 108A |
| 109 | 1 | C102 | CORRIDOR | 109 | CLASSROOM | 3'-0" | 7'-0" | 1 3/4" | N | WD | FF | 2 | HM | PT | 5/A901 | 1/A901 | 7/A901 | - | G5 | 5.0 | - | - | - | 109 |
| 110 | 1 | C102 | CORRIDOR | 110 | BARBERING LAB | 3'-0" | 7'-0" | 1 3/4" | N | WD | FF | 2 | HM | PT | 5/A901 | 1/A901 | 7/A901 | - | G5 | 6.0 | - | - | - | 110 |
| 110A | 1 | 110 | BARBERING LAB | 110A | DISPENSING | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 24.0 | - | - | - | 110A |
| 111 | 1 | V102 | SOUTH VEST | 111 | SECURITY | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 2 | HM | PT | 5/A901 | 1/A901 | 7/A901 | - | - | 5.0 | - | - | - | 111 |
| 111.1 | 1 | 111 | SECURITY | V102 | SOUTH VEST | 2'-6" | 4'-0" | 2" | OH3 | - | - | - | - | - | 11/A912 | 10/A912 | 20 | - | 42.0 | - | - | 3 | 111.1 | |
| 112 | PR | C101 | CORRIDOR | 112 | ELEC RM | 3'-0" | 7'-0" | 1 3/4" | F | WD | PT | 4 | HM | PT | 4/A901 | 2/A901 | 7/A901 | 60 | - | 40.0 | - | - | - | 112 |
| 115 | 1 | C101 | CORRIDOR | 115 | FOOD SERV. AREA | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 5.0 | - | - | - | 115 |
| 115A | 1 | C101 | CORRIDOR | 115A | FOOD SERV. STORAGE | 3'-4" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 18.0 | - | - | - | 115A |
| 115B | 1 | C101 | CORRIDOR | 115 | FOOD SERV. AREA | 3'-0" | 7'-0" | 1 3/4" | F | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | - | 5.0 | - | - | - | 115B |
| 115C | 1 | 116 | CAFETERIA | 115 | FOOD SERV. AREA | 20'-0" | 9'-6" | 2" | OH4 | - | - | - | - | - | 2/A355 | 6/A255 | - | - | 42.0 | - | - | 4 / 6 | 115C | |
| 116 | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 3'-0" | 7'-0" | 1 3/4" | G | WD | FF | 5 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | G3 | 1.0 | - | - | - | 116 |
| 116A | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 8'-0" | 9'-8" | 2" | OH3 | - | - | - | - | - | 4/A355 | 9/A355 | 5/A355 | 20 | - | 42.0 | - | - | 3 | 116A |
| 116B | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 8'-0" | 9'-8" | 2" | OH3 | - | - | - | - | - | 4/A355 | 9/A355 | 5/A355 | 20 | - | 42.0 | - | - | 3 | 116B |
| 116C | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 3'-0" | 7'-0" | 1 3/4" | G | WD | FF | 5 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | G3 | 1.0 | - | - | - | 116C |
| 116D | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 8'-0" | 9'-8" | 2" | OH3 | - | - | - | - | - | 4/A355 | 8/A355 | 5/A355 | 20 | - | 42.0 | - | - | 3 | 116D |
| 116E | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 3'-0" | 7'-0" | 1 3/4" | G | WD | FF | 2 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | G3 | 1.0 | - | - | - | 116E |
| 116F | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 3'-0" | 7'-0" | 1 3/4" | G | WD | FF | 1 | HM | PT | 4/A901 | 2/A901 | 7/A901 | - | G3 | 1.0 | - | - | - | 116F |
| 116G | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 8'-0" | 9'-8" | 2" | OH3 | - | - | - | - | - | 4/A355 | 8/A355 | 5/A355 | 20 | - | 42.0 | - | - | 3 | 116G |
| 116H | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 10'-0" | 5'-2" | 2" | OH3 | - | - | - | - | - | 4/A355 | 7/A355 | 3/A355 | 20 | - | 42.0 | - | - | 3 | 116H |
| 116I | 1 | C101 | CORRIDOR | 116 | CAFETERIA | 10'-0" | 5'-2" | 2" | OH3 | - | - | - | - | - | 4/A355 | 7/A355 | 3/A355 | 20 | - | 42.0 | - | - | 3 | 116I |
| 116J | 1 | C101 | CORRIDOR | 116 | | | | | | | | | | | | | | | | | | | | |

| MATERIALS LEGEND | | | | | |
|------------------------------|-------------------------|--------------------------------------|--------------------------|-------------------|---|
| 0 | MANUFACTURER | MODEL | COLOR #/NAME | SIZE | NOTE |
| CERAMIC FLOOR TILE | | | | | |
| CFT-1 | DALTILE | CALGARY | ARMOR CG43 | 12" x 24" | TYP. FLOOR |
| CFT-2 | DALTILE | KEYSTONES | DK21 WHEAT BLEND | 1" x 1" | LOCKER ROOM SHOWERS |
| CERAMIC WALL TILE | | | | | |
| CWT-1 | DALTILE | COLOR WHEEL LINEAR | X714 MATTE DESERT GRAY | 4" X 12" | TYP. WALL TILE |
| CWT-2 | MOSA | COLORS | 16900 ACCENT WHITE | 6" X 6" | ACCENT TILE @ CAFETERIA |
| CWT-3 | MOSA | COLORS | 20910 MAZARINE BLUE | 6" X 6" | ACCENT TILE @ DISPLAY CASES, CAFETERIA, VENDING |
| CWT-4 | MOSA | COLORS | 17990 BLUE CURACAO | 6" X 6" | ACCENT TILE FL 1 |
| CWT-5 | MOSA | COLORS | 17940 FLAME ORANGE | 6" X 6" | ACCENT TILE FL 3 |
| CWT-6 | MOSA | COLORS | 19990 JADE GREEN | 6" X 6" | ACCENT TILE FL 2 |
| CWT-7 | DALTILE | COLOR WHEEL LINEAR | K189 NAVY | 4" X 12" | ACCENT WALL TILE @ SINGLE USE TOILETS |
| EPOXY BASE | | | | | |
| EB-1 | STONHARD | STONCLAD | CHARCOAL | 4" | BARBERING AND COSMETOLOGY |
| EPOXY FLOOR | | | | | |
| EPF-1 | STONHARD | STONCLAD | CHARCOAL | | BARBERING AND COSMETOLOGY |
| HOMOGENEOUS COVE BASE | | | | | |
| HMB-1 | ARMSTRONG FLOORING | NATRALIS | 70004 SPRAY FOAM | 4" | NURSING LAB, VET & GROOMING |
| HOMOGENEOUS SHEET | | | | | |
| HMO-1 | ARMSTRONG FLOORING | NATRALIS | 70004 SPRAY FOAM | 6' | NURSING LAB, HEALTH, VET & GROOMING |
| LUXURY VINYL TILE | | | | | |
| LVT-1 | MANNINGTON | GROOVE | C141 MISTY MOUNTAIN | 6" X 36" | TYP. FLOOR CLASSROOMS, STAFF SPACES |
| METAL TRIM | | | | | |
| MT-1 | SCHLUTER SYSTEMS | DILEX-AHK | | | AT ALL WALL TILE LOCATIONS |
| MT-2 | SCHLUTER SYSTEMS | DILEX-AHKA | | | AT ALL CMU LOCATIONS IN TOILET ROOMS |
| PAINT | | | | | |
| PNT-1 | SHERWIN WILLIAMS | EG-SHELL | SW 7650 ELLIE GRAY | | TYP. WALL PAINT |
| PNT-2 | SHERWIN WILLIAMS | EG-SHELL | SW 6495 GREAT FALLS | | ACCENT WALL PAINT FL 1 |
| PNT-3 | SHERWIN WILLIAMS | EG-SHELL | SW 6634 COPPER HARBOR | | ACCENT WALL PAINT FL 3 |
| PNT-4 | SHERWIN WILLIAMS | EG-SHELL | SW 9178 IN THE NAVY | | ACCENT WALL PAINT FL 1, GUIDANCE |
| PNT-5 | SHERWIN WILLIAMS | EG-SHELL | SW 9041 PARISIAN PATINA | | ACCENT WALL PAINT FL 2 |
| PNT-6 | SHERWIN WILLIAMS | SEMI-GLOSS | SW 9178 IN THE NAVY | | HM DOOR PAINT |
| PNT-8 | SHERWIN WILLIAMS | FLAT | SW 7068 GRIZZLE GRAY | | TYP. OPEN CEILING AND BELOW STRUCTURAL |
| PNT-7 | SHERWIN WILLIAMS | FLAT | SW 7005 PURE WHITE | | TYP. GYPSUM CEILING |
| PNT-9 | SHERWIN WILLIAMS | PRO INDUSTRIAL WATER BASED CATALYZED | SW 9178 IN THE NAVY | | LOCKER ROOM, TOILETS, CAFETERIA FLOOR |
| PNT-10 | SHERWIN WILLIAMS | PRO INDUSTRIAL WATER BASED CATALYZED | SW 7650 ELLIE GRAY | | CUSTODIAL, PLUMBING, CULINARY, LOCKER & GYM |
| PNT-11 | SHERWIN WILLIAMS | FLAT | SW 6495 GREAT FALLS | | ACCENT CEILING PAINT FL 1 |
| PNT-12 | SHERWIN WILLIAMS | FLAT | SW 9041 PARISIAN PATINA | | ACCENT CEILING PAINT FL 2 |
| PNT-13 | SHERWIN WILLIAMS | FLAT | SW 6634 COPPER HARBOR | | ACCENT CEILING PAINT FL 3 |
| PNT-14 | SHERWIN WILLIAMS | FLAT | SW 9178 IN THE NAVY | | CAFETERIA CEILING AND FLOOR STRIPING |
| PNT-15 | SHERWIN WILLIAMS | PRO INDUSTRIAL WATER BASED CATALYZED | SW 6911 CONFIDENT YELLOW | | SHOP FLOOR |
| PLASTIC LAMINATE | | | | | |
| PLAM-1 | WILSONART | STANDARD LAMINATE | 7990 MISSION MAPLE | | CASEWORK, BASE AND UPPERS |
| PLAM-2 | WILSONART | STANDARD LAMINATE | 5034 HANDSPUN DOVE | | COUNTERTOPS |
| PLAM-3 | WILSONART | STANDARD LAMINATE | D379-60 INDIGO | | RECEPTION IN MAIN OFFICE |
| PLAM-4 | WILSONART | STANDARD LAMINATE | D315-60 PLATINUM | | RECEPTION IN HEALTH OFFICE |
| POLISHED CONCRETE | | | | | |
| PCON-1 | | | | | TYP. FLOOR |
| PCON-2 | | | | | PLUMBING, ELECTRIC, CUSTODIAL |
| PCON-3 | | | | | AUTOBODY |
| PRIVACY CURTAIN | | | | | |
| PC-1 | ARCCOM | AQUIFER-X | CARIBBEAN # 6 | | NURSING LAB |
| PC-2 | ARCHITEX | RX 6016 | BASSWOOD | | HEALTH OFFICE, COSMETOLOGY, VET TECH/GROOMING |
| QUARRY TILE | | | | | |
| QT-1 | AMERICAN OLEAN | QUARRY NATURALS | 0N46 SHADOW GRAY | 6" X 6" | KITCHEN AND CULINARY |
| RUBBER BASE | | | | | |
| RB-1 | ROPPE | PINNACLE COVE BASE- STANDARD TOE | 139 DEEP NAVY | 4" | TYP. BASE |
| RB-2 | JOHNSONITE | VENT COVE | VCO 40 BLACK | | GYMNASIUM |
| RUBBER FLOOR | | | | | |
| RT-1 | ROPPE | MARBLEIZED- TEXTURED | M139 DEEP NAVY | 20" X 20" X 3.2MM | INTERMEDIATE LANDING |
| RUBBER STAIR TREAD AND RISER | | | | | |
| RST-1 | ROPPE | MARBLEIZED- TEXTURED | M139 DEEP NAVY | | STAIR TREAD AND RISER |
| SOLID SURFACE | | | | | |
| SS-1 | DUPONT | CORIAN | LAGUNA TERRAZZO | | MAIN OFFICE/ CAFETERIA/ GUIDANCE |
| SS-2 | DUPONT | CORIAN | DOVE | | HEALTH OFFICE/ NURSING/ SILL @ CORRIDORS/ CAFETERIA |
| STATIC DISSIPATIVE TILE | | | | | |
| SDT-1 | ARMSTRONG | EXCELON SDT | 51957 RIDGE | 12" X 12" | IDF, SERVER ROOMS |
| WOOD ATHLETIC FLOORING | | | | | |
| WD-1 | ROBBINS SPORTS SURFACES | BIO--CHANNEL STAR | | | GYM |



1 INTERIOR ELEVATION - GENERAL CLASSROOM
AF002 1/4" = 1'-0"

DISCLAIMER NOTE

MANUFACTURER'S NAMES AND FINISH INFORMATION ARE INDICATED AS REFERENCED TO THE ARCHITECT'S BASIS-OF-DESIGN SELECTIONS AND HAVE BEEN DETERMINED PRIOR TO BID. THE CONTRACTOR AND OWNER ARE HEREBY NOTIFIED THAT FINISHES INSTALLED IN THE WORK ARE SUBJECT TO CHANGE IN RESPONSE TO SUBMITTALS, CONFIRMED SELECTIONS, PRODUCT AVAILABILITY AND THE SUBSEQUENT COORDINATION OF FINISHES BY ARCHITECT AND MAY DIFFER FROM PRODUCTS LISTED

ABBREVIATIONS

| | |
|---------|-------------------------------------|
| ACMU | ARCHITECTURAL CONCRETE MASONRY UNIT |
| ACT | ACOUSTICAL CEILING TILE |
| APG | ACOUSTICAL PANEL CEILING |
| BBT | BIO-BASED TILE |
| BRK | BRICK |
| CFT | CERAMIC FLOOR TILE |
| CMU | CONCRETE MASONRY UNIT |
| CONC | CONCRETE |
| CRT | CARPET |
| CTB | CERAMIC TILE BASE |
| CMT | CERAMIC MALL TILE |
| EPF | EPOXY FLOOR |
| ETR | EXISTING TO REMAIN |
| EXP | EXPOSED |
| EXT | EXISTING |
| FACT/FF | FACTORY FINISH |
| GWB | GYPSUM WALL BOARD |
| HMB | HOMOGENEOUS COVE BASE |
| HMO | HOMOGENEOUS SHEET |
| LMC | LINEAR METAL CEILING |
| LVT | LUXURY VINYL TILE |
| MSS | MUSIC STORAGE SYSTEM |
| MT | METAL BASE |
| MXP | METAL MALL PANEL |
| PCON | POLISHED CONCRETE |
| PLAM | PLASTIC LAMINATE |
| PLAS | PLASTER |
| PNT | PAINT |
| RAP | RESILIENT ATHLETIC FLOORING |
| RB | RUBBER BASE |
| RF | RESINOUS FLOORING |
| RST | RUBBER STAIR TREAD / LANDING |
| RT | RUBBER TILE FLOORING |
| SCON | SEALED CONCRETE |
| SS | SOLID SURFACE |
| SDT | STATIC DISSIPATIVE TILE |
| STF | SYNTHETIC TURF FLOORING |
| STL | STEEL |
| TERR | TERRAZZO |
| TP | TOILET PARTITIONS |
| TYP | TYPICAL |
| VCT | VINYL COMPOSITION TILE |
| VCTAS | VINYL COMPOSITION TILE ANTI-STATIC |
| VNC | VINYL MALLCOVERING |
| WAF | WOOD ATHLETIC FLOORING |
| WD | WOOD |
| WOM | WALK-OFF MAT |

GENERAL FINISH NOTES

- ALL EXPOSED SURFACES OF NEW PARTITIONS ARE TO BE PAINTED.
- ALL ELECTRIC, MECHANICAL COMPONENTS AND TELEPHONE PANELS EXPOSED IN A ROOM TO MATCH MALL COLOR.
- ALL NEW GWB CEILINGS, FASCIAS, AND SOFFITS TO BE PAINTED PNT-7, UNO.
- ALL EXPOSED CEILING STRUCTURE, DECK, DUCTWORK, CONDUIT AND PIPING TO BE PAINTED PNT-8, UNO.
- ALL STEEL COLUMNS IN AREAS OF WORK ARE TO BE PAINTED PNT-1.
- ALL EXPOSED STEEL ASSOCIATED WITH STAIRS TO BE PAINTED PNT-6, INCLUDING STRINGERS, CHANNELS, COLUMNS, PLATES, TUBES, GUARDRAILS, POSTS, UNDERSIDES OF FLOORS, LANDINGS, DECKS, AND STAIR FANS WITH THE EXCEPTION OF STAINLESS STEEL & FF, UNO.
- NEW HM DOORS, DOOR FRAMES AND WINDOW FRAMES AND ETR CORRIDOR DOOR & WINDOW FRAMES AS SCHEDULED ON A900 SERIES DRAWINGS, PNT-6.
- ALL EXPOSED GROUND FACE CMU LOCATIONS TO RECEIVE GRAFFITI COATINGS, TYPICAL FOR INTERIOR LOCATIONS.
- ALL GYPSUM WALLS LOCATED IN CORRIDORS TO RECEIVE CMT-1, UNO.

FINISH KEYS

| | |
|--------------|-----------------------|
| Room Name | 101 |
| Wall Finish | Finish Tag |
| Base Finish | |
| Floor Finish | |
| PNT-8 | ACCENT PAINT LOCATION |
| PCON-1 | |
| EPF-1 | |
| RT-1 | |
| LVT-1 | |
| SDT-1 | |
| CFT-1 | |
| CFT-2 | |
| HMO-1 | |
| QT-1 | |
| WD-1 | |



1 PARTIAL SECOND FLOOR PLAN - AREA 1
AF121 1/8" = 1'-0"

1. REFER TO SHEET 6001 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 A101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

| # | DESCRIPTION |
|---|-------------|
|---|-------------|

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| | |
|--------|-------------------------------------|
| AGU | ARCHITECTURAL CONCRETE MASONRY UNIT |
| AGT | ACOUSTICAL GELING TILE |
| AFG | ARCHITECTURAL FLOOR GELING |
| BBT | BIO-BASED TILE |
| BRK | BRICK |
| CFT | CERAMIC FLOOR TILE |
| CMU | CONCRETE MASONRY UNIT |
| CNGC | CONCRETE |
| CPT | CARPET |
| CTB | CERAMIC TILE BASE |
| CNT | CERAMIC WALL TILE |
| EFP | EPOXY FLOOR |
| EXT | EXTENDING TO REMAIN |
| EXP | EXPOSED |
| EXST | EXISTING |
| FA/FF | FACTORY FINISH |
| GB | Gypsum BOARD |
| HMB | HOMOGENEOUS COVE BASE |
| HMO | HOMOGENEOUS SHEET |
| LMG | LINEAR METAL CEILING |
| LVY | LUXURY VINYL TILE |
| MSV | MUSIC STORAGE SYSTEM |
| MT | METAL BASE |
| MNP | METAL WALL PANEL |
| PGCNG | POLISHED CONCRETE |
| PLAM | PLASTIC LAMINATE |
| FLM | FLASTER |
| PNT | PAINT |
| RAF | RESILIENT ATHLETIC FLOORING |
| RBR | RUBBER BASE |
| RF | REINFORCED FLOORING |
| RST | RUBBER STAIR TREAD / LANDING |
| RST | RUBBER TILE FLOORING |
| SGN | SEALED CONCRETE |
| SF | SOLID SURFACE |
| STF | STATIC DISSIPATIVE TILE |
| STL | SYNTHETIC TURF FLOORING |
| STL | STEEL |
| TKR | TERRAZZO |
| TP | TOILET PARTITION |
| TP | TYPICAL |
| VCVT | VENT COMPOSITION TILE |
| VCVTAS | VINYL COMPOSITION TILE ANTI-STATIC |
| VYNG | VINYL WALLCOVERING |
| NOD | NOOD ATHLETIC FLOORING |
| NOD | NOD |
| NOM | NALK-OFF MAT |

1. ALL EXPOSED SURFACES OF NEW PARTITIONS ARE TO BE PAINTED.
2. ALL ELECTRIC, MECHANICAL COMPONENTS AND TELEPHONE PANELS EXPOSED IN A ROOM TO MATCH WALL COLOR.
3. ALL NEW GNB CEILINGS, FASCIAS, AND SOFFITS TO BE PAINTED PNT-1, UNO.
4. ALL EXPOSED CEILING STRUCTURE, DECK, DUCTWORK, CONDUIT AND PIPING TO BE PAINTED PNT-3, UNO.
5. ALL STEEL COLUMN IN AREAS OF WORK ARE TO BE PAINTED PNT-1.
6. ALL EXPOSED STEEL ASSOCIATED WITH STAIRS TO BE PAINTED PNT-6, INCLUDING STRINGERS, CHANNELS, COLLARS, PLATES, TUBES, GUARDRAILS, POSTS, HANDRAILS, FLOORS, LANDINGS, DECKS, AND STAIR PANS WITH THE EXCEPTION OF STAINLESS STEEL, FF, UNO.
7. NEW HM DOORS, DOOR FRAMES AND WINDOW FRAMES AND ETR CORRIDOR DOOR AND WINDOW FRAMES ARE SCHEDULED ON A400 SERIES DRAWINGS PNT-6.
8. ALL EXPOSED DRYWALL FACE AND LOCATIONS TO RECEIVE GRAFT COATINGS, TYPICAL FOR INTERIOR LOCATIONS.
9. ALL GYPSUM WALLS LOCATED IN CORRIDORS TO RECEIVE CANT, UNO.

| Room Name | |
|--|--------------|
| 101 | |
| Wall Finish | * Finish Tag |
| Base Finish | |
| Floor Finish | |
| <div> <div>PNT-8</div> <div>ACCENT PAINT LOCATION</div> </div> | |
| <div> <div>PGON-1</div> <div></div> </div> | |
| <div> <div>EPF-1</div> <div></div> </div> | |
| <div> <div>RT-1</div> <div></div> </div> | |
| <div> <div>LVT-1</div> <div></div> </div> | |
| <div> <div>SDT-1</div> <div></div> </div> | |
| <div> <div>CFT-1</div> <div></div> </div> | |
| <div> <div>CFT-2</div> <div></div> </div> | |
| <div> <div>HMO-1</div> <div></div> </div> | |
| <div> <div>GT-1</div> <div></div> </div> | |
| <div> <div>MD-1</div> <div></div> </div> | |

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| 3 | 5/13/2024 | BID Addendum #3 |
|  | DATE | DESCRIPTION |

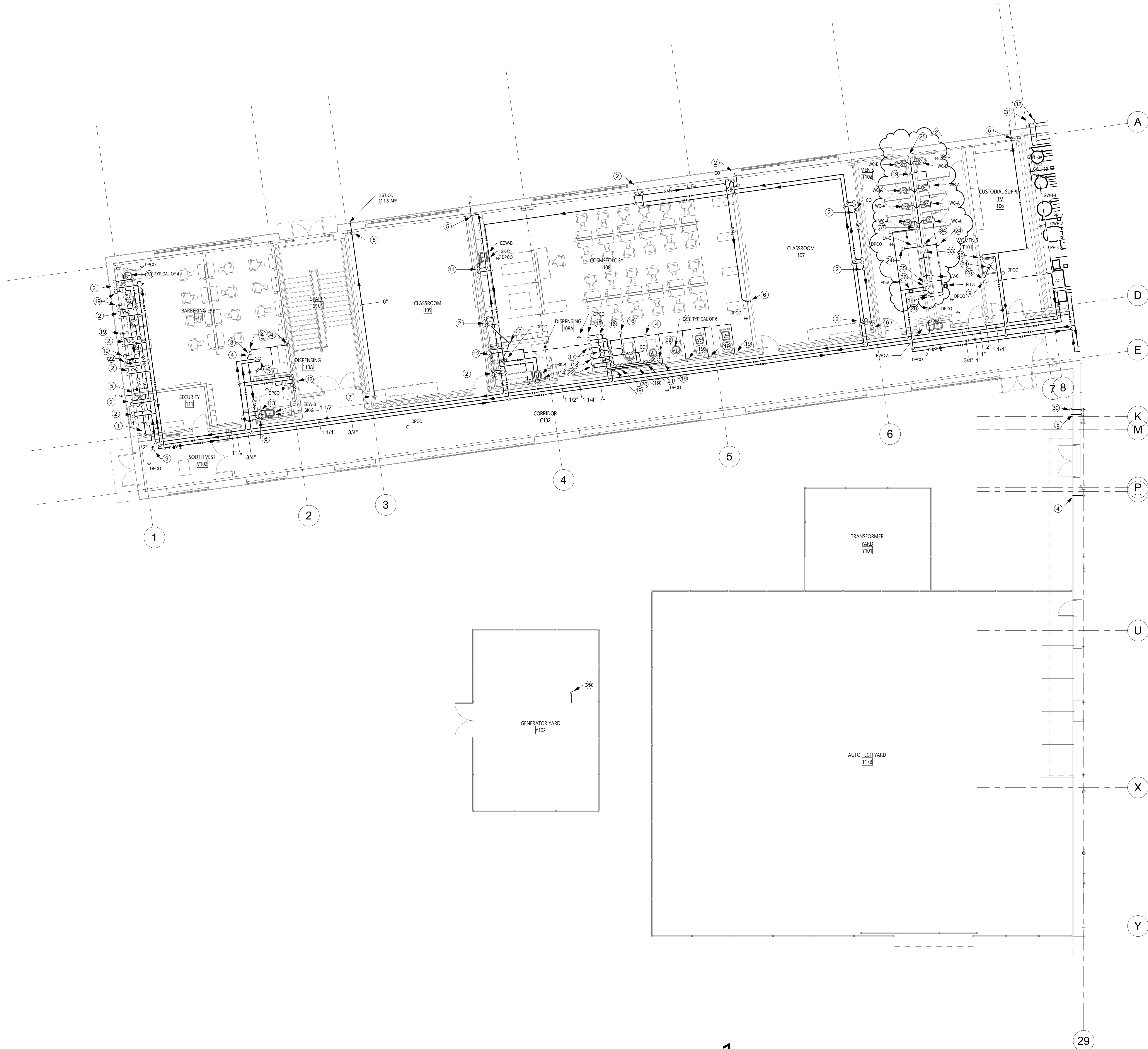
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| Drawn By: | AS |
| Checked By: | |
| Proj. #: | 44-16-00-01-0-053-001 |
| CSArch Proj. #: | 108-2303 |
| Issued for Bid: | 4/15/2024 |

Sheet Title

PARTIAL
SECOND
FLOOR FINISH
PLAN - AREA 1

Sheet No.

CTE
AF121

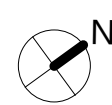
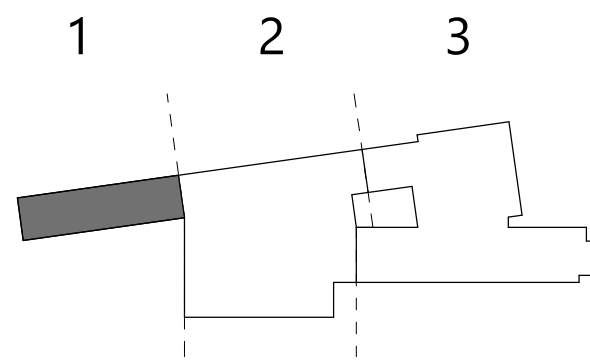


1
FIRST FLOOR - AREA 1 - PLUMBING PLAN
1/8" = 1'-0"

P111 DRAWING NOTES

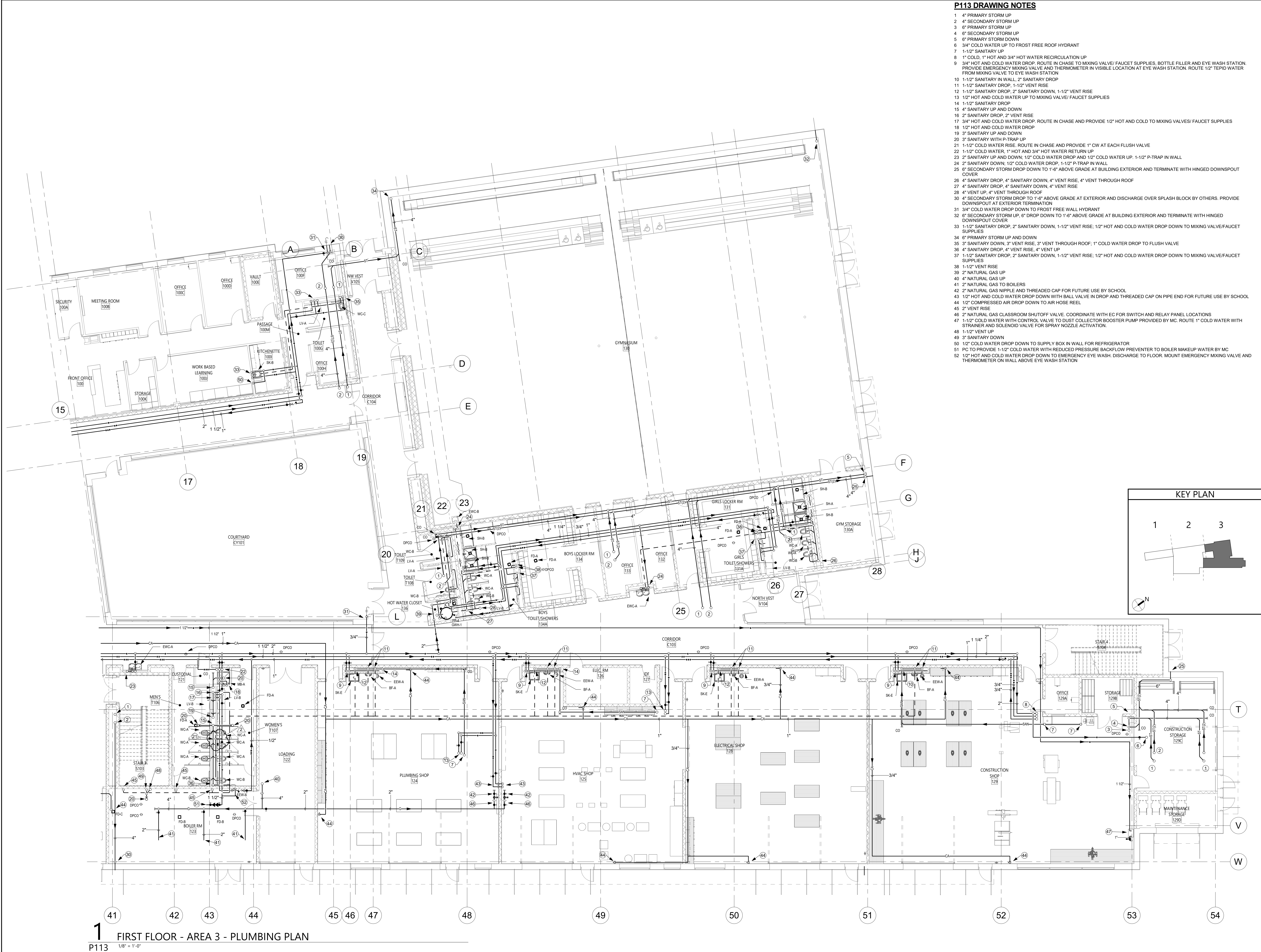
- 4" SANITARY DOWN
- 1-1/2" SANITARY UP, 1/2" HOT AND COLD WATER UP TO MIXING VALVE/ FAUCET SUPPLIES
- 2" SANITARY UP
- 2" VENT UP
- 3/4" COLD WATER DROP DOWN TO FROST FREE WALL HYDRANT
- 2" SANITARY DOWN
- 6" SECONDARY STORM UP
- 6" SECONDARY STORM DROP TO 1'-6" ABOVE GRADE AT EXTERIOR AND DISCHARGE OVER SPLASH BLOCK BY OTHERS. PROVIDE DOWNSPOUT AT EXTERIOR TERMINATION
- 2" VENT UP
- 1/2" HOT AND COLD WATER RISE TO MIXING VALVE/ FAUCET SUPPLIES
- 1-1/2" SANITARY UP, 2" SANITARY DOWN, 1/2" HOT AND COLD WATER DROP AND UP TO MIXING VALVE/ FAUCET SUPPLIES
- 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
- 1/2" HOT AND COLD WATER DROP TO MIXING VALVE/ FAUCET SUPPLIES
- 1-1/2" SANITARY DROP, 2" DOWN, 1-1/2" VENT RISE, 1/2" HOT AND COLD WATER DROP TO MIXING VALVE/ FAUCET SUPPLIES
- 1/2" HOT AND COLD WATER UP TO SHOWER MIXING VALVE
- 2" WITH P-TRAP UP TO FLOOR DRAIN
- 1-1/2" VENT UP
- 3" SANITARY DOWN
- 2" VENT RISE
- 1-1/2" SANITARY UP, 1/2" HOT AND COLD WATER UP TO MIXING VALVE/ FAUCET SUPPLIES
- 3" SANITARY UP, 1" COLD WATER UP TO FLUSH VALVE
- 1" HOT AND COLD WATER DROP DOWN TO UNDERSLAB FOR SALON CHAIRS
- 2" SANITARY DOWN IN FLOOR WITH P-TRAP, 1/2" HOT AND COLD WATER RISE, PROVIDE HAIR TRAP SIMILAR TO STRIEM SIDEKICK POINT OF USE SIDE ACCESS SOLIDS INTERCEPTOR IN SALON CHAIR DRAIN PIPING
- 3" SANITARY WITH P-TRAP UP
- 3" SANITARY DOWN, 3" VENT UP
- 1/2" HOT AND COLD WATER DROP AND UP
- 6" PRIMARY STORM UP AND DOWN
- 4" NATURAL GAS TO GENERATOR
- 4" NATURAL GAS DROP DOWN TO UNDERGROUND TO SUPPLY GENERATOR
- NATURAL GAS SHUTOFF VALVE FOR GENERATOR
- NATURAL GAS SHUTOFF VALVE FOR BUILDING
- 3" SANITARY UP AND DOWN
- 4" SANITARY UP AND DOWN
- 2" SANITARY DROP, 2" VENT RISE
- 3/4" HOT AND COLD WATER DROP AND RISE, ROUTE IN CHASE AND PROVIDE 1/2" HOT AND COLD TO MIXING VALVES/ FAUCET SUPPLIES
- 1-1/2" COLD WATER DROP AND RISE, ROUTE IN CHASE AND PROVIDE 1" CW AT EACH FLUSH VALVE

KEY PLAN



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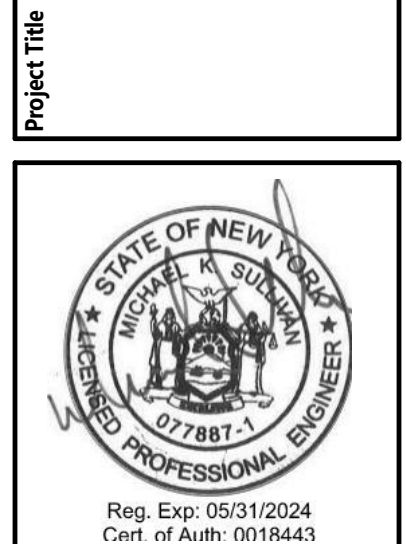


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845.581.3179 www.csarch.com

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NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING



| DATE | DESCRIPTION | BY | APP |
|-----------------------------------|-----------------|----|-----|
| 5/11/2024 | BID Addendum #3 | | |
| Drawn By: MT | | | |
| Checked By: MT | | | |
| Proj. #: 44-16-00-81-0-053-001 | | | |
| CSArch Proj. #: 108-2303 | | | |
| Construction Documents: 4/15/2024 | | | |

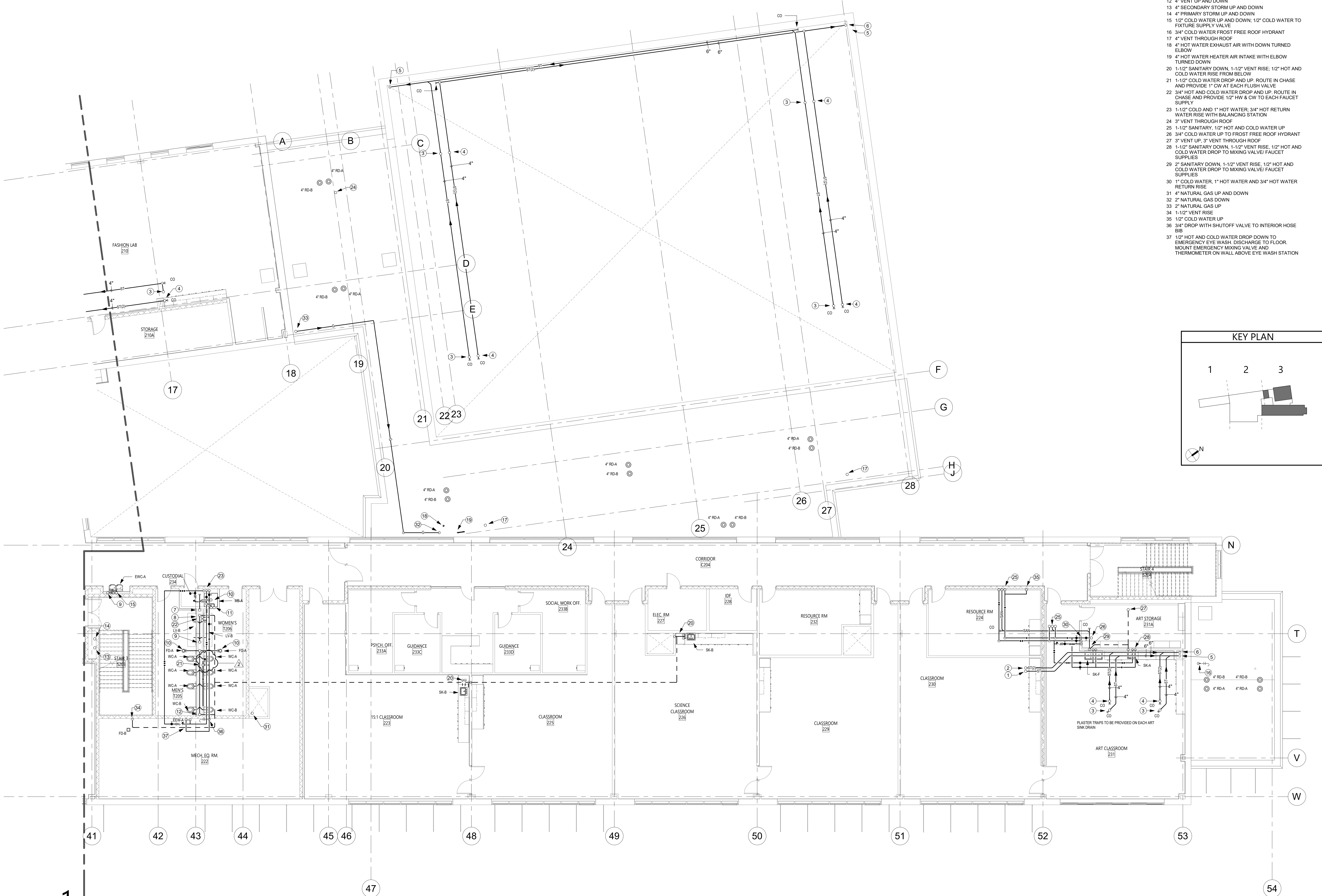
Sheet Title
PARTIAL FIRST
FLOOR PLAN -
AREA 3 -
PLUMBING

Sheet No.
CTE
P113

CONSTRUCTION DOCUMENTS

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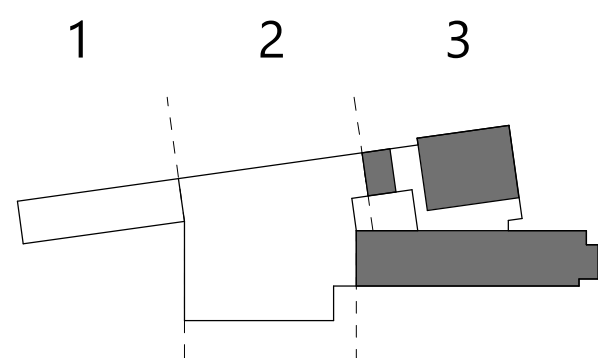
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P123 DRAWING NOTES

- 6" PRIMARY STORM UP
- 6" SECONDARY STORM UP
- 4" PRIMARY STORM UP
- 4" SECONDARY STORM UP
- 6" PRIMARY STORM DOWN
- 6" SECONDARY STORM DOWN
- 4" SANITARY UP AND DOWN
- 2" SANITARY DROP, 2" VENT RISE
- 2" SANITARY UP AND DOWN
- 3" SANITARY WITH P-TRAP UP
- 1/2" HOT AND COLD WATER DROP AND UP
- 4" VENT UP AND DOWN
- 4" SECONDARY STORM UP AND DOWN
- 4" PRIMARY STORM UP AND DOWN
- 1/2" COLD WATER UP AND DOWN; 1/2" COLD WATER TO FIXTURE SUPPLY VALVE
- 3/4" COLD WATER FROST FREE ROOF HYDRANT
- 4" VENT THROUGH ROOF
- 4" HOT WATER EXHAUST AIR WITH DOWN TURNED ELBOW
- 4" HOT WATER HEATER AIR INTAKE WITH ELBOW TURNED DOWN
- 1-1/2" SANITARY DOWN, 1-1/2" VENT RISE; 1/2" HOT AND COLD WATER RISE FROM BELOW
- 1-1/2" COLD WATER DROP AND UP, ROUTE IN CHASE AND PROVIDE 1" CW AT EACH FLUSH VALVE
- 3/4" HOT AND COLD WATER DROP AND UP, ROUTE IN CHASE AND PROVIDE 1/2" HW & CW TO EACH FAUCET SUPPLY
- 1-1/2" COLD AND 1" HOT WATER; 3/4" HOT RETURN WATER RISE WITH BALANCING STATION
- 3" VENT THROUGH ROOF
- 1-1/2" SANITARY, 1/2" HOT AND COLD WATER UP
- 3/4" COLD WATER UP TO FROST FREE ROOF HYDRANT
- 3" VENT UP, 3" VENT THROUGH ROOF
- 1-1/2" SANITARY DOWN, 1-1/2" VENT RISE, 1/2" HOT AND COLD WATER DROP TO MIXING VALVE/ FAUCET SUPPLIES
- 2" SANITARY DOWN, 1-1/2" VENT RISE, 1/2" HOT AND COLD WATER DROP TO MIXING VALVE/ FAUCET SUPPLIES
- 1" COLD WATER, 1" HOT WATER AND 3/4" HOT WATER RETURN RISE
- 4" NATURAL GAS UP AND DOWN
- 2" NATURAL GAS DOWN
- 3" NATURAL GAS UP
- 1-1/2" VENT RISE
- 1/2" COLD WATER UP
- 3/4" DROP WITH SHUTOFF VALVE TO INTERIOR HOSE BIB
- 1/2" HOT AND COLD WATER DROP DOWN TO EMERGENCY EYE WASH, DISCHARGE TO FLOOR. MOUNT EMERGENCY MIXING VALVE AND THERMOMETER ON WALL ABOVE EYE WASH STATION

KEY PLAN



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**NEWBURGH ENLARGED CITY SCHOOL DISTRICT
NEW CTE BUILDING**

Project Title



| DATE | DESCRIPTION |
|--------------|-------------------|
| 2. 5/11/2024 | RED Annotation #1 |
| 1. 4/15/2024 | |

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|-------------------------|-----------------------|
| Drawn By: | MT |
| Checked By: | MT |
| Proj. #: | 44-16-00-81-0-053-001 |
| CSArch Proj. #: | 108-2303 |
| Construction Documents: | 4/15/2024 |

SHEET TITLE
PARTIAL
SECOND
FLOOR PLAN -
AREA 3 -
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