

TOWN OF GLASTONBURY
GL-2021-05
GLASTONBURY HIGH SCHOOL ATHLETICS FACILITY
ADDENDUM NO. 2
December 10, 2020

Bid Due Date: 12-22-2020 @ 11:00 A.M.

The attention of bidders submitting proposals for the above-referenced project is called to the following Addendum to the contract documents. The items set forth herein, whether of omission, addition, substitution or other change, are all to be included in and form a part of the proposed Contract Documents for the work. Bidders shall acknowledge this Addendum on the **Bid Form (ATTACHMENT 1)**.

A. RFI Questions and Answers:

Question 1: *Please provide a scale for the civil drawings.*

Answer: The scale for the civil drawings has been moved from the top left corner to the lower right corner of the drawings.

Question 2: *Please provide a detail for the typical C.I.P. concrete benches & risers shown on C-3.0*

Answer: Details have been provided on C-6.0

Question 3: *Alternate #4 on the Bid Form requires a price to furnish and install lockers, benches and training room equipment. Please provide appropriate specifications and layouts of the required items and equipment.*

Answer: Refer to drawing A-910 included with this addendum for FF&E layout and specifications.

Question 4: *Detail #8 on drawing A-800 says "See lintel schedule on G-002". There is no lintel schedule on G-002. Please advise.*

Answer: Refer to structural drawings for steel lintel information. The note on Detail #8 on A-800 has been revised to read "Steel lintel, see lintel schedule on structural drawings".

Question 5: *Can dimensions be provided for the new switchback ramp on the Civil drawings?*

Answer: Dimensions have been added to Sheet C3.0

Question 6: *Do the 2-riser steps between the Cast-In-Place concrete benches on drawing C3.0 require railings? Please advise.*

Answer: The steps do not require railings.

Question 7: *The specifications call for the exterior cmu is ground face while the elevations and details in the drawings are showing it to be split face. Please confirm which is to be used.*

Answer: The decorative CMUs shall be split-face finish, not ground face finish. Specification section 042000 has been revised as described below.

Question 8: *Please confirm only granite curbing is to be used and transitions to grass on the south side of the parking lot after the last parking location.*

Answer: All curbing will be monolithic concrete curbing where parking is adjacent to walks. All other parking will not require curbing and will only transition to grass.

Question 9: *There is a specification section 08 33 13 (Coiling Counter Doors) shown in the Table of Contents however there is no specification section in the body. Please clarify if there are any coiling doors required and if so, please provide a specification.*

Answer: Refer to specification section 083313 included with this addendum. The coiling counter door shall be approximately 8'-8" tall x 6'-8" wide and shall be mounted over the security window elevated on detail 5/A-300. Elevations and details shall be included in the next addendum.

Question 10: *What Size is the existing water main and will we be cutting or tapping for the new services?*

Answer: The existing water main is shown as 3" C.I.

Question 11: *What size is the domestic water service?*

Answer: The domestic water service is 3"

Question 12: *What size and material is the drainage piping marked "D"?*

Answer: 12" HDPE

Question 13: *What size is the pipe material used for the roof leaders?*

Answer: 6" PVC

Question 14: *Is the Town going to do the utilities?*

Answer: Refer to the Alternate #3 description in specification section 012300 for what work bidders should price as an alternate. All work not included in Alternate #3 should be included in the base bid.

Question 15: *On the reflected ceiling plan A-201, It looks like the Team Rooms, Storage & Electrical have exposed trusses. Are these exposed trusses to get painted?*

Answer: All exposed trusses are to be painted. Refer to the bid drawings, Reflected Ceiling Plan Keynote #1 on A-201.

Question 16: *Is the Town furnishing the Marker Boards or is the GC responsible?*

Answer: The Town will be furnishing and installing the Marker Boards.

Question 17: *Is there a specific wire mesh for the attic guardrail?*

Answer: Provide PVC coated steel square wire mesh wire cloth with 1.5” or 2” opening.

Question 18: *In reference to Plan AD-101 - Demolition Plan Note # 2 for the Removal of existing Plumbing Fixtures & Bathroom Accessories, and Note #5 For the removal of Lockers and Built In Benches;*

None of the #2 & #5 items listed above are required to be Salvaged, and can be disposed of properly correct?

Answer: The lockers, built in benches, plumbing fixtures and bathroom accessories are not required to be salvaged. All items included in Demolition Notes 2 and 5 can be disposed of.

Question 19: *Please confirm all work shown on Erosion and Sedimentation Controls Plan C1.0 is part of Alternate 3.*

Answer: All work shown on Erosion and Sedimentation Controls Plan C-1.0 is part of the base bid.

Question 20: *Please confirm all work shown on Site Preparation Plan C-2.0 is part of Alternate 3.*

Answer: Utility Demolition and Abandonment within Site Preparation Plan C-2.0 is part of Alternate 3. Remaining items belong to the base bid.

Question 21: *Are the following specifications part of the base bid since they are not listed under Alternate 3 in Specification 012300, 033200 Site Concrete, 323113 Chain Link Fences and Gates, 329000 Planting, 329100 Planting Soil, & 329200 Turf & Grasses.*

Answer: The listed specifications are part of the base bid.

Question 22: *Please confirm that 312319 Dewatering & 312543 Geotextiles should be part of the alternate as they relate directly to excavations and backfilling.*

Answer: 322319 Dewatering & 312543 Geotextiles should be part of Alternate 3.

Question 23: *C-3.0 Note 10 indicates all curbing to be granite. Specification 321623 has not been assigned to Alternate 3. Typically curbing is set while the subgrade is being prepared. Please confirm curbing is to be part of Alternate 3.*

Answer: Curbing is part of the base bid.

Question 24: *Pavement Markings have been assigned to Alternate 3 while 321216 Bituminous Concrete Pavement has not. Please confirm the pavement should also be part of the Alternate.*

Answer: 321216 Bituminous Concrete Pavement should be part of the base bid.

Question 25: *Specification 331900 has not been assigned to Alternate 3. As this work is outside of the building a plumber can not install it, as it requires a different license. Will the town be hiring the local water authority to provide this pipe and connections?*

Answer: 331900 Water Supply System is part of the base bid.

Question 26: *Specification 335100 has not been assigned to Alternate 3. As this work is outside of the building a plumber can not install it as it requires a different license. Will the town be hiring the local gas company to provide this pipe, connections and meters?*

Answer: 331500 Natural Gas Distribution is part of the base bid.

Question 27: *Attachment 1 Bid Form indicates 6 pages, however there are only 5 pages provided in the spec. Please advise.*

Answer: The Bid Form has 5 pages, not 6.

Question 28: *Drawing A-301 shows the Breezeway roof connecting the 2 structures. However, there are no cross sections, details, or structural drawings for this roof section. Please provide.*

Answer: Refer to A-301 and S4.1 included with this addendum for added details, sections, and structural details.

Question 29: *Specification 071113 indicates dampproofing; however A-600 calls for Foundation Waterproofing. Which is correct?*

Answer: Provide dampproofing per specification section 071113. All notes on A-600 and A-601 referring to Foundation Waterproofing have been revised to read "Foundation Dampproofing".

Question 30: *Drawing A-300 indicates Window Types W-1, W-2, and W-3. However, A-802 only has elevation, schedule, and details for W-1. Please provide elevation and details for W-2 and W-3.*

Answer: Drawing A-300 will be issued in the next addendum, with elevations and details for windows W-2 and W-3.

Question 31: *A-201 indicates that the opening for the Attic Stairs is 40" x 52". Per the specified product, the rough opening needs to be 56 ½" long and either 22 ½", 25", or 30" wide, depending on selected model. Please advise*

Answer: Please provide the 56 ½" x 30" wide attic stairs model. Specification section 086000 has been revised to eliminate the other options.

Question 32: *C-3.0 appears to show a gate between the 2 buildings. What is the material of this gate?*

Answer: The gate is black coated vinyl chain link fence. See detail on Sheet C-6.0.

Question 33: *C-2.0 indicates to remove and dispose of the long/triple jump track and sand pit. C-3.0 indicates "relocated long/triple jump". Please advise which drawing is correct. Is this base bid, Alternate 3, or is the owner taking care of this?*

Answer: The long/triple jump will be removed and a new one will be provided as part of the base bid.

Question 34: *Provide details for subgrade materials under brick pavers.*

Answer: See detail on Sheet C-6.1.

Question 35: *C-5.0 the plants and quantities between the plan and the schedule on the plan do not match. Example, right side of the locker building calls for 2 – GI and 6 – EC, the plant schedule has neither GI nor EC. Plants listed on the schedule do not appear on the plan. Please advise.*

Answer: The Planting Plan has been revised. See Sheet C-5.0.

Question 36: *Due to the Holiday season most subcontractors are requesting the bid date be postponed to after the 1st of the year. Many subs take the week of Christmas and New Years off and will not be able to provide pricing on the specified bid date. Please consider pushing the bid date to accommodate the holiday season.*

Answer: The bid date shall remain as stated in the bid schedule.

Question 37: *For the asphalt paving, please provide a detail showing the thickness of pavement. The detail provided as “pavement repair” does not provide adequate information to bid properly.*

Answer: Refer to the detail on C-6.0.

Question 38: *The only detail for the paving is a temporary and permanent “road” patch detail. This seems a little excessive for the parking areas, Is this really the detail we are to follow for the parking lot? If so, which detail are we to use – the temporary or the permanent patch - as there are different amounts of subgrade material for each?*

Answer: Refer to the detail on C6.0.

Question 39: *There is another area shaded shown with parking spaces on the right side of drawing C3.0. Is this area also part of the project?*

Answer: Yes, that is another section of parking added.

Question 40: *There are no details or information for the restoration of the memorial brick pavers. Is the town responsible for the subgrade and restoration of the pavers?*

Answer: Refer to detail on C-6.1 for installation of pavers. Subgrade work as described in Alternate #3 shall be included in the pricing of Alternate #3. Restoration of the pavers shall be included in the base bid.

Question 41: *Please confirm we are to register and use “Negometrix4.com” for bidding this project.*

Answer: Yes, Negometrix is the electronic bid platform the Town is using to receive bids. The link to register was included in the bid documents.

B. Specification Clarifications/ Revisions:

1. SECTION 000110 - TABLE OF CONTENTS

DIVISION 32 – EXTERIOR IMPROVEMENTS

ADDED Section 32 1823.31 Running Track Surfacing-Polyurethane

2. SECTION 012300 – ALTERNATES

2.1 SCHEDULE OF ALTERNATES

REVISED Alternate No. 4 to read as follows:

- D. Alternate No. 4: Furnish and Install lockers, benches, and training room equipment: Furnish and install all lockers and benches as shown **and specified on A-910**. Furnish and install all training room furniture and equipment, including treatment tables, storage cabinets shelving units, hydrocollator and ice machine as shown and specified on **A-910** — ~~and as specified in 11-7900 and 12-5000~~

3. SECTION 042000 – UNIT MASONRY

2.4 CONCRETE MASONRY UNITS

REVISED Paragraph C.3.a to read as follows:

- a. Standard pattern, **split**-face finish

4. SECTION 085653 – SECURITY WINDOWS

REVISED Paragraph 2.2 to read as follows:

2.2 EXTERIOR EXCHANGE SECURITY WINDOWS

- A. **Security Windows: Catalog Number N1EW12K Narrow Inset Frame Exterior Glazed Exchange Window with Speak Thru, 12" Shelf and Deal Tray**
1. **Window Dimensions: 37 inches wide by 48 inches high**
 2. **Speak Thru: N666 6" round speak-thru**
 3. **1 5/16" Level 1 Tempered Insulated Glass Unit**
 5. **12" deep shelf with deal tray**
 6. **Finish: Custom RAL Powder Coat Paint Color as selected by the Architect.**

5. **ADDED** SECTION 083313 – COILING COUNTER DOORS

6. SECTION 086000 – ATTIC STAIRS

2.2 ATTIC LADDERS AND DOORS

DELETED Paragraphs 1.f.1 and 1.f.2

7. **ADDED** SECTION 32 1823.31 – RUNNING TRACK SURFACING-POLYURETHANE

C. Drawing Clarifications/ Revisions:

Item No.	Drawing	Detail	Revision Description
Item #1	G-000	Drawing List	ADDED drawings S4.1 “Connector Roof Alternate” and A-910 “Alternate #4 - Furniture, Fixtures & Equipment Plan”
Item #2	C-2.0		REPLACED drawing C-2.0 with revised drawing dated 12/10/2020
Item #3	C-3.0		REPLACED drawing C-3.0 with revised drawing dated 12/10/2020
Item #4	C-4.0		REPLACED drawing C-4.0 with revised drawing dated 12/10/2020
Item #5	C-5.0		REPLACED drawing C-5.0 with revised drawing dated 12/10/2020
Item #6	S-4.1		ADDED drawing S4.1 “Connector Roof Alternate”
Item #7	A-301		REPLACED drawing A-301 with revised drawing dated 12/10/2020. ADDED reflected ceiling plan, building sections, and details describing Alternate #1 Roof Connector.
Item #8	A-600		REVISED all notes reading “Foundation Waterproofing” to “ Foundation Dampproofing ” to match Dampproofing specification.
Item #9	A-601		REVISED all notes reading “Foundation Waterproofing” to “ Foundation Dampproofing ” to match Dampproofing specification.
Item #10	A-800	8	REVISED note to read “Steel lintel, see lintel schedule on structural drawings.”
Item #11	A-910		ADDED drawing A-910 “Alternate #4 – Furniture Fixtures and Equipment Plans”
Item #12	H-101		REPLACED drawing H-101 with revised drawing dated 12/10/2020
Item #13	EL-101		REPLACED drawing EL-101 with revised drawing dated 12/10/2020
Item #14	EP-101		REPLACED drawing EP-101 with revised drawing dated 12/10/2020
Item #15	EP-101		ADDED Note: Provide (1) 4” underground schedule 40 PVC conduit with pull wire (capped at each end) for future telecomm service from Electrical 17 to existing utility pole (provide new pole riser and standoffs per local utility company standard) terminate conduit at 18” AFF. in Electrical 17.
Item #16	EP-101		ADDED Note: Provided (1) 2” underground schedule 40 PVC conduit with pull wire (capped at each end) for future CCTV system wiring from Electrical 17 to Janitor 05 and terminate conduit 18” AFF. at each location.
Item #17	EP-101		Each conduit installed for future systems shall be provided with permanent marking (at each location), indicating termination location and intended purpose.

END OF ADDENDUM NO. 2

Note: This addendum consists of 39 pages, including the above text.

SECTION 083313 - COILING COUNTER DOORS

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. Manual Rolling Counter Shutters

1.3 DESIGN REQUIREMENTS

- A. Wind Loading:
 - 1. Supply doors to withstand up to 40 psf design wind load
 - 2. 50 FPS Impact Speed
 - 3. Door to be provided with Florida wind load certification

1.4 ACTION SUBMITTALS

- A. Product Data: For each type and size of coiling counter door and accessory.
 - 1. Include construction details, material descriptions, dimensions of individual components, profiles for slats, and finishes.
- B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.
 - 1. Include plans, elevations, sections, and mounting details.
 - 2. Include details of equipment assemblies, and indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
 - 3. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
 - 4. Show locations of controls, locking devices, and other accessories.
- C. Provide manufacturer ISO 9001:2015 registration
- D. Provide manufacturer's installation instructions

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For coiling counter doors to include in maintenance manuals.

- B. Certificate stating that installed materials comply with this specification.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.
- B. Warranty: Manufacturer's 2-year standard warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain coiling counter doors from single source from single manufacturer.
 - 1. Obtain operators and controls from coiling counter door manufacturer.
- B. Basis-of-Design Product: **Cornell, Model ESC10**, or comparable product meeting the specified requirements by one of the following:
 - 1. Cookson
 - 2. Clopay Building Products

2.2 COUNTER DOOR ASSEMBLY

- A. Counter Door: Rolling counter door formed with curtain of interlocking metal slats.
- B. Operation Cycles: Door components and operators capable of operating for not less than 10,000. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.
- C. Curtain:
 - 1. Door Curtain Material: Galvanized Steel
 - 2. Door Curtain Slat Configuration: Flat profile slats of 1-1/2-inch (38-mm) Galvanized Steel with Finish as Described Below: No. 1F, interlocked flat-faced slats, 1-1/2 inches (38 mm) high by 1/2 inch (13 mm) deep, minimum 22 gauge ASTM A 653, Commercial Quality, galvanized steel with extruded tubular aluminum bottom bar with continuous lift handle and vinyl astragal
- D. Door Finish: Powder Coating System (Color Selected by Architect):
 - 1. ASTM A 653 galvanized base coating treated with dual process rinsing agents in preparation for chemical bonding, gray baked-on base coat and gray baked-on polyester finish coat
 - 2. Zirconium treatment followed by baked-on polyester powder coat, with [color as selected by Architect from manufacturer's standard color range, over 180 colors] minimum 2.5 mils (0.065 mm) cured film thickness; ASTM D-3363 pencil hardness: H or better

E. Endlocks: Fabricate interlocking slat sections with high strength molded nylon endlocks riveted to ends of alternate slats.

F. Guides:

1. Configuration & Finish: Steel. Minimum 12 gauge formed shapes
2. Finish: **Powder Coating System:** Zirconium treatment followed by baked-on polyester powder coat, color as selected by Architect from manufacturer's standard color range; minimum 2.5 mils (0.065 mm) cured film thickness; ASTM D-3363 pencil hardness: H or better

G. Shaft assembly:

1. Counterbalance Shaft Assembly:
 - a. Barrel: Steel pipe capable of supporting curtain load with maximum deflection of 0.03 inches per foot (2.5 mm per meter) of width
 - b. Spring Balance: Oil-tempered, heat treated steel helical torsion spring assembly designed for proper balance of door to ensure that maximum effort to operate will not exceed 25 lbs (110N). Provide wheel for applying and adjusting spring torque.

H. Brackets:

1. Fabricate from reinforced steel plate with bearings at rotating support points to support counterbalance shaft assembly and form end closures.
2. Finish: **Powder Coating System:** Zirconium treatment followed by baked-on polyester powder coat, color as selected by Architect from manufacturer's standard color range; minimum 2.5 mils (0.065 mm) cured film thickness; ASTM D-3363 pencil hardness: H or better

I. Hood:

1. Minimum 24 gauge galvanized steel with reinforced top and bottom edges. Provide minimum 1/4" (6.35 mm) steel intermediate support brackets.
2. Finish: **Powder Coating System:** Zirconium treatment followed by baked-on polyester powder coat, color as selected by Architect from manufacturer's standard color range; minimum 2.5 mils (0.065 mm) cured film thickness; ASTM D-3363 pencil hardness: H or better

J. Locking Devices: Equip door with locking device assembly.

1. Padlockable slide bolt: Padlockable slide bolt on coil side of bottom bar at each jamb extending into slots in guides.

2.3 OPERATION:

A. Manual Door Operator:

1. Manual Pushup with pole/ hook.

2.4 ACCESSORIES:

A. Curtain Accessories: Equip door with pole hook.

PART 3 - EXECUTION

3.1 EXAMINATION

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

3.2 INSTALLATION

- A. Install coiling counter doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Install coiling counter doors, hoods, and operators at the mounting locations indicated for each door.

3.3 STARTUP SERVICE

- A. Engage a factory-authorized service representative to perform startup service.
 - 1. Complete installation and startup checks according to manufacturer's written instructions.
 - 2. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.

3.4 ADJUSTING

- A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.

3.5 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service shall include 12 months' full maintenance by skilled employees of coiling-door Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door operation. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.
 - 1. Perform maintenance, including emergency callback service, during normal working hours.

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3.6 DEMONSTRATION

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

END OF SECTION 083313

SECTION 08 5653 – SECURITY WINDOWS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Ticket Windows

1.2 RELATED SECTIONS

- A. Section 07 6200 – Sheet Metal Flashing and Trim.
- B. Section 07 9200 – Joint Sealants.
- C. Section 08 4113 – Aluminum-Framed Entrances and Storefronts

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data, including materials, components, fabrication, finish, and installation instructions.
- B. Shop Drawings: Submit manufacturer's shop drawings, including plans, elevations, sections, and details, indicating dimensions, tolerances, materials, fabrication, glazing, fasteners, hardware, finish, electrical wiring diagrams, options, and accessories.
- C. Samples: Submit manufacturer's samples of standard finishes.
- E. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Minimum of 10 years successful experience continuously manufacturing security windows.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
- C. Handling: Protect materials and finish from damage during handling and installation.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis of Design Product: C.R. Laurence Architectural Products, www.crlaurence.com

2.2 ~~FLUSH MOUNT~~ **EXTERIOR EXCHANGE SECURITY WINDOWS**

~~A. Modular Security Windows:~~

- ~~1. Window Dimensions: 37 inches wide by 48 inches high
2. Speak Thru: Cat. No. 834 A
3. Half Round Swing Away Cover Plate Cat. No. 720A
4. 1/4" Clear Tempered Glass Window~~

A. Security Windows: Catalog Number N1EW12K Narrow Inset Frame Exterior Glazed Exchange Window with Speak Thru, 12" Shelf and Deal Tray

- 1. Window Dimensions: 37 inches wide by 48 inches high
2. Speak Thru: N666 6" round speak-thru
3. 1 5/16" Level 1 Tempered Insulated Glass Unit
5. 2" thick x 12" deep shelf with deal tray
6. Finish: Custom RAL Powder Coat Paint Color as selected by the Architect.**

2.5 FABRICATION

- A. Assembly: Factory assembled, factory glazed.

2.6 ALUMINUM FINISH

- A. Powder Coat Painted: match Architect's sample

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive security windows. Notify Architect of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.

3.2 PREPARATION

- A. Ensure openings to receive security windows are plumb, level, square, accurately aligned, correctly located, and in tolerance.

3.3 INSTALLATION

- A. Install security windows in accordance with manufacturer's instructions.
B. Install security windows plumb, level, square, true to line, and without warp or rack.

- C. Install security window components weathertight.
 - D. Anchor security windows securely in place to supports. Use attachment methods permitting adjustment for construction tolerances, irregularities, alignment, and expansion and contraction.
 - E. Separate aluminum from other metal surfaces with bituminous coatings or other means approved by Architect.
 - F. Sheet Metal Flashing: Install sheet metal flashing as specified in Section 07620 (07 62 00).
 - G. Joint Sealants: Install joint sealants as specified in Section 07920 (07 92 00).
 - I. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
 - J. Remove and replace damaged components that cannot be successfully repaired as determined by Architect.
- 3.4 ADJUSTING
- A. Adjust movable service panels to be weathertight in closed position.
 - B. Adjust movable service panels and security transaction drawers to function properly and for smooth operation without binding.
- 3.5 CLEANING
- A. Clean security windows promptly after installation in accordance with manufacturer's instructions.
 - B. Remove excess joint sealant in accordance with sealant manufacturer's instructions.
 - C. Do not use harsh cleaning materials or methods that would damage glazing or finish.
- 3.6 PROTECTION
- A. Protect installed security windows to ensure that, except for normal weathering, security windows will be without damage or deterioration at time of substantial completion.

END OF SECTION 08 5653

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SECTION 32 1823 - ALL-WEATHER RUNNING TRACK SURFACING

POLYURETHANE STRUCTURAL SPRAY

PART 1 GENERAL

1.1 SUMMARY

- A. The work under this section includes the installation of a cast in place, durable, permeable, resilient, all-weather track surface consisting of a polyurethane bound rubber base mat and structural spray top coat.
- B. Work of this specification consists of furnishing all the required labor, materials, equipment, parts and supplies necessary for this installation of the synthetic running track surface.
- C. The manufacturer of all installed materials shall be the same as the installer.
- D. The work hereunder shall be done and conform to:
 - 1. American Sports Builders Association Track Construction Manual and Track Construction Guidelines

1.2 REFERENCES

- A. Reference herein to any technical society, organization, group or regulation are made in accordance with the following abbreviations and, unless otherwise noted or specified, all work under this Section shall conform to the latest edition as applicable.
- B. National Asphalt Pavement Association (NAPA)
- C. USA Track & Field (USATF)
- D. National Federation of State High School Associations (NFHS)
- E. National Interscholastic Athletic Administrators Association (NIAAA)
- F. International Association of Athletics Federation (IAAF)
- G. American Sports Builders Association (ASBA)

1.3 JOB CONDITIONS

- A. Weather Limitations
 - 1. The urethane mixture shall not be placed whenever the surface is wet, frozen, or when the temperature is outside the limitations stated by the manufacturer's recommendations for installation. Contractor shall be responsible for submitting the procedure at least one week in advance of any surfacing operations that may result in placement of the all-weather running track urethane surfacing outside of the temperature limitations.

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1.4 BID-SUBMITTALS

- A. Only one each of the following bid submittals are required to the bidding entities at the time of bid:
 - 1. A letter on the Contractor / Sub-contractor's letterhead (whomever shall be supplying and installing the all-weather track surfacing system) shall be submitted, with the bid, confirming their intent to conform to all information presented during the bidding process for the All-Weather Track Surfacing System. Including, but not limited to, the bid Drawings, Specifications, Addendum, and RFI Clarifications.
 - 2. Non-compliance with the bid submittal requirements as specified herein will result in rejection of the bid.

1.5 SUBMITTALS

- A. Manufacturer's product data sheets including installation guidelines for components and system.
- B. Manufacturer's color options for review and selection by the Engineer/Owner.
- C. Three (3) representative samples of the system to be installed with appropriate labeling for identification and color as selected by Engineer/ Owner.
- D. Current material safety data sheets (MSDS) for the liquid components.
- E. Test reports that verify the manufacturer's specifications (data) for the product to be installed.
- F. Documentation that verifies that the synthetic surfacing material does not contain any toxic or hazardous substance, which exceeds limits set forth by the EPA.
- G. The synthetic surfacing material manufacturer shall submit a letter stating that the surfacing contractor is qualified to install its synthetic surface system.
- H. A certificate from the manufacturer of the binders and coatings stating that the materials have been produced specifically for the use in sports surfacing construction.
- I. A complete list of materials intended to be used in the construction of the running track system. All liquid quantities will be prior to dilution.
- J. Provide a letter stating that the surfacing contractor has reviewed the asphalt specification and accepts the specification as correct.
- K. Provide a letter after checking the asphalt accepting it for synthetic surface installation. Should areas be found that do not meet specifications, they shall be repaired or replaced by the asphalt contractor prior to the synthetic surfacing contractor issuing its letter of acceptance.
- L. A test report that the ½" (13 mm) system has been tested to IAAF standards for force reduction and modified vertical deformation. Force reduction shall be 35-50%. Modified vertical deformation shall be 0.6-1.8 mm.
- M. Submit evidence that the synthetic surfacing contractor holds the necessary contractor's license to install synthetic surfacing.
- N. Submit evidence that the material manufacturer is ISO 9001 certified.

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- O. Contractor shall provide written maintenance information on the installed product to be presented to the owner upon completion of the surface. This shall include repair methods and availability of repair materials including cost. Submit 3 copies of the approved Surfacing Care and Maintenance Guide.

1.6 COORDINATION

- A. Contractor shall coordinate with all other trades, especially Site Contractors to ensure approval of asphalt base prior to surfacing application. Any rework shall be done at no cost to the Owner.

1.7 RELATED WORK

- A. When surfacing on new bituminous pavement, the bituminous pavement must meet the specifications and standards set forth by the Engineer. The contractor shall be responsible of performing an elevation survey of the bituminous pavement prior to application of the synthetic track surface. The contractor is to perform a flood test of the bituminous pavement top course prior to application of the synthetic track surface.
- B. The bituminous pavement shall be sufficiently cured and cleaned prior to Work of this section to be performed. The governing guidelines of track construction allow for a maximum longitudinal slope of on tenth of one percent (0.10%) in the running direction. The maximum lateral slope shall not exceed one (1) percent (1.00%)
- C. Grade conformance tests may be required to be performed by the Contractor on both the leveling course and the top course of the bituminous pavement at the Engineer's discretion. The entire surface shall provide positive drainage to the inside edge of the track. The maximum allowable planarity deviation within a pass should be 1/4 inch in 10 feet when measured in any direction. Deficient areas in the leveling course should be corrected as approved by the Engineer. After any corrections, the surface shall not allow water to stand greater than 1/16 inch deep, one (1) hour after rain has ended.
- D. The Contractor shall be responsible to have adjacent grass edged and removed from all areas receiving the synthetic surface. It may be necessary to apply a liquid herbicide such as Roundup to any adjacent edges of track and event areas.

1.8 MATERIAL HANDLING AND STORAGE

- A. Materials should be delivered in manufacturer's container to maintain clean and dry conditions. See manufacturer's guidelines for temperature requirements for the locale of installation.
- B. Store material in accordance with manufacturer's specifications and MSDS.
- C. The contractor shall provide a secure, clean, dry location for storage of materials at temperature as above. Under no circumstances should materials be stored outside unless fully protected from moisture with 10 mil polyethylene barrier and tarpaulin. All materials stored outside shall be inspected by dealer for moisture contamination before application.
- D. Deliver products to the site in original, unopened containers with labels attached.
- E. All surfacing materials shall be non-flammable.

1.9 QUALITY ASSURANCE

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- A. The contractor shall record the batch number of each product used on the site and maintain it throughout the warranty period.
- B. The contractor shall provide the Engineer, an estimate of the volume of each liquid product and the weight of the rubber granule to be used on site.
- C. The manufacturer's representative will be available to help resolve material issues.
- D. Provide, as a part of the Warranty, documents stating that the materials applied conform to the manufacturer's specifications and that the material will not separate from the asphalt or concrete base, blister, bubble, fade, crack or wear excessively during the life of the warranty.
- E. The materials will not foam, thus causing air bubbles and reduce the life expectancy of the surface.
- F. The synthetic surfacing contractor and owner will annually walk and inspect the synthetic surface during the life of the warranty. Issues will be documented in writing to the Owner. The Owner will review items with the Engineer. Warranty issues will be repaired and for non-warranty items a method for correction will be presented.
- G. Track system shall be subject to successfully tested independently by an accredited IAAF testing house to the requirements of the IAAF Performance Specifications for Synthetic Surface Athletics Tracks (Outdoor) dated January 1990.
- H. The synthetic surfacing contractor shall maintain a clean and orderly job site. All excess materials shall be removed from the construction area and properly disposed of. Scrap shall be removed in the same manner.

1.10 GUARANTEE

- A. The Contractor shall be required to guarantee all labor, materials, workmanship and services for the Synthetic Surface and Markings.
- B. This guarantee shall remain in force for a period of not less than FIVE (5) YEARS from the date of written acceptance of the work.
- C. Any defects caused by delaminating, peeling, normal abrasion or raveling that is not in original conformance with the testing specifications shall be repaired or replaced at no cost to the Owner during this guarantee period.
- D. This Contractor shall be required to submit the following documents in regard to the guarantee:
 1. Letter from the manufacturer(s) of all materials attesting to the guarantee length and limits. This must be signed by an officer of the organization.
 2. Maintenance Instruction Guide for the Contract Surfaces, signed by an officer of the surface company and notarized.
 3. Letter of Guarantee from the Installation Contractor for the above time period, signed by an officer of the Company and notarized.
 4. These documents shall be submitted to the Owner prior to final payment. The installer and the materials manufacturer shall supply a warranty covering labor and materials respectively. The warranty period shall be for five (5) years.

1.11 INSTALLER QUALIFICATIONS

- A. Installers shall be regularly engaged in the construction and surfacing of running tracks.
- B. Installer shall be an authorized applicator of the specified system.
 - 1. Installers of this product are to provide a list of at least 10 installations that are a minimum of 5 years old that contain the same products, and use the same method of installation. Include:
 - a. Project Name
 - b. Address
 - c. Owners Representatives Name
 - d. Owners Representatives Email
 - e. Owners Representatives Phone
 - 2. Completed projects are to have been installed under the same company name and ownership that is presently bidding.
- C. Installer shall be a builder member of the ASBA.
- D. The installer's installing foreman must have at least 8 years experience installing the specified type of synthetic track surface system.

1.12 MANUFACTURER QUALIFICATION

- A. System manufacturer shall certify that the materials provided are manufactured specifically for construction and surfacing of running tracks.
- B. System manufacturer shall be continuously engaged in the business of track surfacing materials for at least 10 years.
- C. System manufacturer of this product are to provide a list of at least 20 installations that are minimum of 3 years old that contain the same products, and use the same method of installation.
 - 1. Include:
 - a. Project Name
 - b. Address
 - c. Owners Representatives Name
 - d. Owners Representatives Email
 - e. Owners Representatives Phone
 - 2. Completed projects are to have been installed under the same company name and ownership that is presently bidding.
- D. System manufacturer shall have a designated representative available for site inspection.

2.1 GENERAL

- A. The synthetic surfacing shall be a 13 mm thick, permeable, structural spray system, with a paved in place rubber granule and polyurethane binder base layer. Two coats of a mixture of colored polyurethane and EPDM rubber granules are structurally sprayed onto the base to form a textured finish.
- B. The synthetic track surface system shall have a smooth finish and may be applied for both indoor and outdoor use.
- C. The structural spray applied polyurethane and rubber blended coating shall be resilient and allow moisture to pass through the surface. It shall have a textured finish for outdoor applications.
- D. The product shall meet the following minimum physical properties:
 - 1. Top Color: Green (Final color to be approved by Engineer based on manufactures)

E. Performance Standards

	<u>Test Results</u>	<u>DIN Standard</u>
Thickness (DIN):		min. 13 mm
Force Reduction (IAAF):		35-50%
Modified Vertical Deformation (IAAF):		0.6 mm – 2.5 mm
Permeability:		min 0.01 cm/s
Friction (wet) (IAAF):		> 0.5
Friction (dry) (DIN):		<1.1
Tensile Strength (IAAF):		≥ 0.4 MPa
Elongation (IAAF):		>40%
Spike Resistance (DIN)		Class 1

- F. Product substitution: If other than the product specified, the contractor shall submit at least 7 days prior to the bid date a complete type written list of proposed substitutions with sufficient data, drawings, samples and literature to demonstrate that the proposed substitution is of equal quality and utility to that originally specified. Information must include a QUV test of at least 1,000 hours and IAAF test information for the system to be installed
- G. Any materials used must be an emulsion/water based product. Any products which require solvents such as MEK, Butyl Cellusolve or Acetone for clean up or mixing are not acceptable.
- H. Materials must have a VOC less than 150g/lit. for binder products. Top coats shall have a VOC of less than 100g/lit. measured by EPA method 24.
- I. Materials may not have a flash point of less than 200°F.
- J. All Materials shall have documented independent test results by an accredited IAAF testing house to the requirements of the IAAF Performance Specifications for Synthetic Surface Athletics Tracks (Outdoor) dated January 1990.

A. Rubber – Polyurethane Track Basemat (SBR)

1. The polyurethane track base mat rubber shall be specifically graded rubber granules with a controlled gradation between 1.0mm to 3.00mm.
 - a. Dust and rubber particulate smaller than a No. 200 sieve size shall not exceed 1 percent of the total rubber.
 - b. The rubber shall be black SBR

B. Rubber – Structural Spray Top Coat (EPDM)

1. EPDM colored virgin rubber granules that are processed and graded to 0.5 – 1.5 mm in size unless otherwise specified. The rubber shall contain a minimum of 20% EPDM and be approved by the resin manufacturer. The specific density shall be 1.60 +/- 0.08 and Shore A hardness of 60.

C. Primer

1. The synthetic track surface primer shall be polyurethane based and compatible with asphalt and synthetic track surfacing materials.
2. When installing over a concrete pavement special developed concrete primer, manufactured by the same manufacturer of the other materials, shall be applied.

D. Binder

1. The synthetic track surface binding agent shall be a single component; MDI based moisture cure polyurethane binder. The binder shall not have a free TDI monomer level above 0.2% and must be solvent free.
 - a. The polyurethane binder shall be 100 percent solids.
 - b. The polyurethane binder shall be compatible with SBR and EPDM rubber granules.
2. All polyurethane binder shall be manufactured by the installation company and to be delivered in new unopened containers, clearly labeled by the manufacturer.

E. Structural Spray Coating

1. The spray coating shall be a MDI-based single-component, moisture cured, 100% solids, and pigmented polyurethane, specifically formulated for compatibility with EPDM granules.
 - a. The coating shall be the color specified by the Engineer.
 - b. Pigment intergraded in the field shall not be allowed.

F. Aliphatic Spray Coat

1. Shall be a two component varnish with high quality UV resistance.

3.1 GENERAL

- A. The bituminous pavement should be sufficiently cured and cleaned in order for work to progress
- B. The entire surface shall be swept, power blown, or high pressure washed to remove all dirt, oil, grease, or any other foreign matter. The surface shall be free from any loose material.
- C. All work shall be performed by manufacturer's technicians and comply with the manufacturer's guidelines for the complete placement and installation of the base layer, the sealing and surface layers.
- D. During surface installation and striping all sprinkler systems shall be shut off, or controlled so that no water falls on the track or event surfaces.
- E. All materials shall be installed in strict compliance with the manufacturer's specifications and instructions.
- F. The Contractor shall be responsible to have the entire track area, and other pertinent areas such as football field, concessions, etc., closed and secured of all activities 24 hours per day through the curing and completion of the synthetic track surface.

3.2 WEATHER LIMITATIONS

- A. Ambient and surface temperatures must be 50°F and rising.
- B. Installation should not be conducted during rainfall or when rainfall is imminent.
- C. Do not apply when surface temperature is in excess of 140°F.
- D. Apply the synthetic surfacing material only during favorable weather conditions. Work is to proceed only when adequate curing can be guaranteed by the manufacturer and installer.

3.3 SURFACE PREPARATION

- A. New asphalt shall be allowed to cure for a minimum of 28 days prior to the application of any surfacing materials.
- B. All concrete work is to cure for a minimum of 45 days. No curing agents are to be used. Any concrete flat work such as run ups etc. will be checked as in 3.3D.
- C. The surface must be thoroughly cleaned of all loose dirt and debris. Any oil spills (hydraulic, diesel, motor oil, etc.) must be completely removed, either by chipping out or removing and replacing with new, keyed in asphalt.
- D. Prior to the application of resilient surface materials, the entire asphalt base surface shall be checked for planarity, surface tolerance, and flooded and checked for depressions or irregularities in the asphalt. Any puddle area covering a nickel shall or vary +/- ¼ inch when measured with a 10-foot straightedge in any direction shall be marked and repaired with Patch Binder, according to manufacturer's specifications and approved by the Engineer. After patching, the asphalt surface shall not vary allow water to stand greater than 1/16 inch, one (1) hour after a flood test has been pre-formed. Slopes shall meet the guidelines of the ASBA and NFHS.
- E. It should be the responsibility of the contractor to flood the surface.

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1. If, after 40 minutes of drying time, there are birdbaths evident, it shall be the responsibility of the landscape architect, in conjunction with the surfacing contractor, to determine the method of correction. No cold tar patching, skin patching or sand mix patching will be acceptable.
2. Any oil spills (hydraulic, diesel, motor oil, etc.) must be completely removed and replaced with either polyurethane or new, keyed in asphalt. The minimum curing time for the asphalt base repair is 28 days. It shall be the responsibility of the surfacing contractor to determine if the asphalt substrate has cured sufficiently prior to the application of the polyurethane surfacing system.
3. It shall be the responsibility of the general contractor to determine if the asphalt substrate meets all design specifications, i.e. cross slopes, planarity and specific project criteria. After all the above conditions are met, the synthetic surfacing contractor must, in writing, accept the planarity of the asphalt receiving base, before work can commence.

3.4 RESILIENT SURFACE INSTALLATION

A. Primer

1. The entire area to be surfaced shall receive an application of polyurethane primer applied uniformly at a rate between 0.20-0.30 lb. per sq. yd. A minimum cure time of 30 minutes is required before application of the base mat materials.
2. Only the area to be covered within the working day should be primed to ensure a good bond to the base. Concrete base may require additional coating based on absorption rate of applied primer.

B. Polyurethane Track Basemat

1. The mixing ratio of rubber to binder shall not be less than 100 parts rubber to 20 part binder as determined by the weight of the products. The materials shall be prepared in a mechanical mixer until a homogenous mix is obtained.
2. The mixed materials making up the synthetic track surface shall be applied by a mechanically operated finishing machine, which shall have an electrically heated screed, to an approximate depth of 11 - 12 mm using approximately 17.33 lbs/sy of mixed material.
3. The cured edge of each joint shall be primed with the synthetic track surface binding agent prior to the laying of the adjacent base mat. All joint work shall be troweled flush with the adjacent mat.
4. Trowel work: All seams shall be troweled smooth within the pot life of the material. All edges shall be straight and rounded by turning the trowel. All cold dry seams shall be cut straight at an inward angle and primed prior to commencing with subsequent work.

C. Structural Spray Top Coat (two applications)

1. The polyurethane track base mat shall be cleaned and prepared prior to the installation of the structural spray top coat in accordance with the manufacturer's specifications and instructions.

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2. According to the manufacturer's specifications, the specified quantity of colored EPDM granules shall be mixed thoroughly with the specified quantity of the one component polyurethane of the structural spray material.
3. Structural Spray Coat (two applications) – is spray applied with air and volume controlled spray equipment. Care is to be taken so as to provide an even surface without streaking..
4. A second coat of material over the first is applied in the opposite direction. The total rate of each coat of spray shall range from 3.5 to 4.0 lbs. per square yard.

3.5 MARKING AND MEASUREMENTS

- A. Wait 48 hours after surface completion before applying line marking.
- B. Experienced personal specializing in all-weather running track striping shall accomplish all striping.

3.6 PROTECTION

- A. During construction the installer is responsible for limiting access of non-construction personnel to the site.
- B. The installation contractor shall coordinate any irrigation of fields with the owner.
- C. The installer shall protect curbs, fences and other structures from overspray.

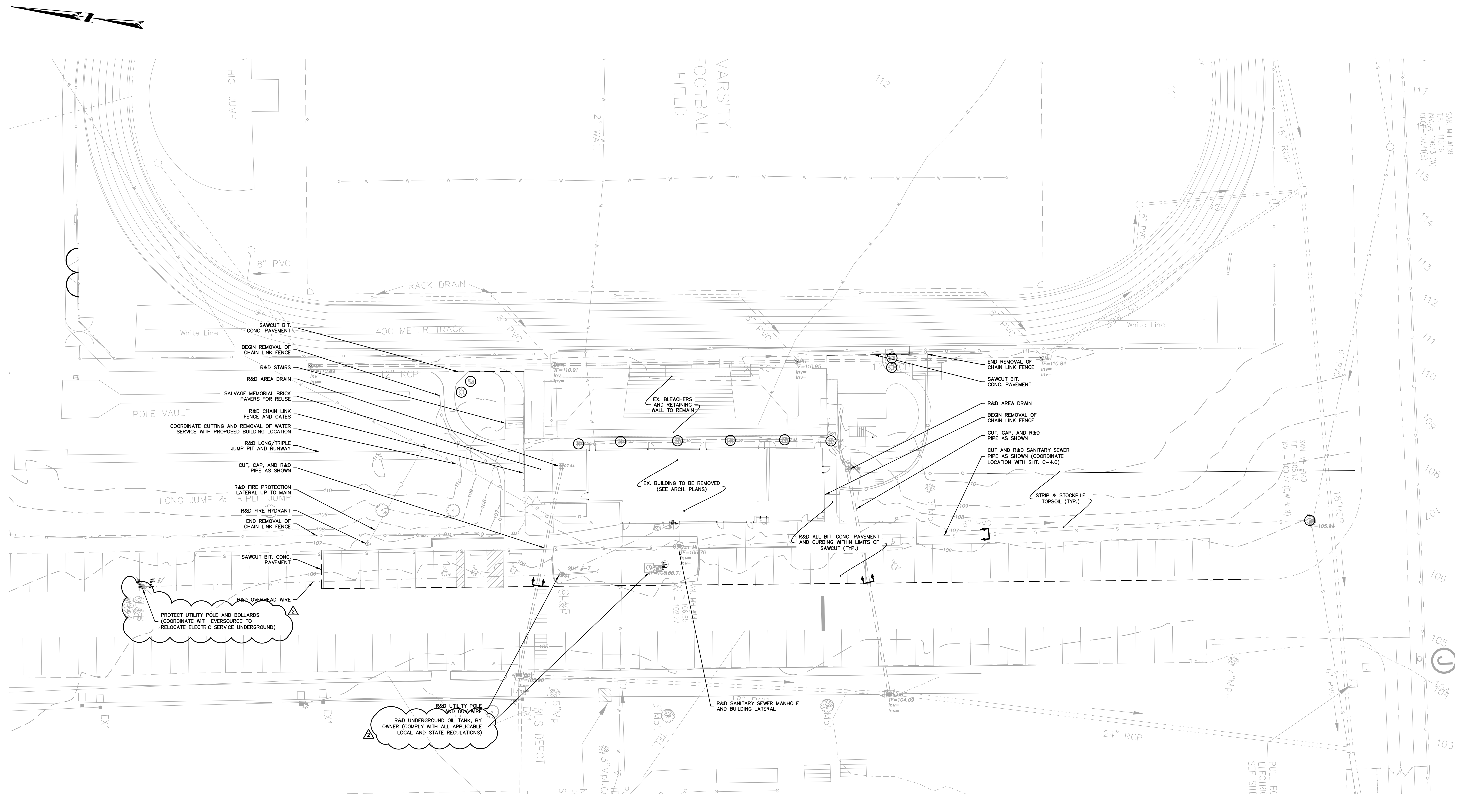
3.7 QUALITY ASSURANCE

- A. Track system shall subject to successfully tested independently an accredited IAAF testing house to the requirements of the IAAF Performance Specifications for Synthetic Surface Athletics Tracks (Outdoor) dated January 1990

3.8 CLEAN UP

- A. Remove all containers, surplus and debris and dispose of in accordance with local, state and Federal regulation.
- B. Remove all spills and overruns.
- C. Leave site in a clean and orderly condition on a daily basis.
- D. Upon completion of all work, remove all containers, surplus materials, and installation debris. Leave area of work in clean orderly condition.

END OF SECTION



NOTES

- CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (1-800-922-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION AND INVERTS AS REQUIRED.
- NOTIFY THE ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS, FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
- THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- IMPLEMENTING WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH RULES, LAWS, AND REGULATIONS PERTAINING TO CONSTRUCTION SAFETY AND/OR THE POTENTIAL AND/OR ACTUAL RISK OF EXPOSURE TO SITE-SPECIFIC PHYSICAL OR CHEMICAL HAZARDS IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
- THE SCHOOL FACILITY WILL BE OCCUPIED AND IN USE DURING THE COURSE OF THE WORK. PROVIDE SAFETY BARRIERS, INCLUDING BUT NOT LIMITED TO, FENCING, BARRICADES, AND SIGNAGE AS REQUIRED TO PREVENT UNAUTHORIZED ENTRY TO THE WORK AREA AT ALL TIMES.
- ALL CONSTRUCTION FENCING AND WARNING SIGNS SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION. INSTALL CONSTRUCTION FENCING AT THE LIMIT OF WORK.
- PRIOR TO THE TERMINATION, ABANDONMENT, OR REMOVAL OF ANY UTILITY, VERIFY THAT APPLICABLE NOTIFICATIONS HAVE BEEN MADE TO THE UTILITY OWNER/OPERATOR AND THAT THE UTILITY HAS BEEN PROPERLY TERMINATED, CAPPED, OR PLUGGED AS REQUIRED.
- PROTECT ALL IMPROVEMENTS NOT INCLUDED IN THE SCOPE OF SITE DEMOLITION. ANY IMPROVEMENT WHICH IS DAMAGED SHALL BE REPAIRED OR REPLACED IN-KIND TO THE OWNER'S SATISFACTION.
- UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE RESTORED WITH SIX (6) INCHES OF LOAM, SEEDED, FERTILIZED, AND MULCHED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED.

Revisions		
1	Addendum 2	12/10/20

Issue Record		
	Issued for Bid	11/20/20

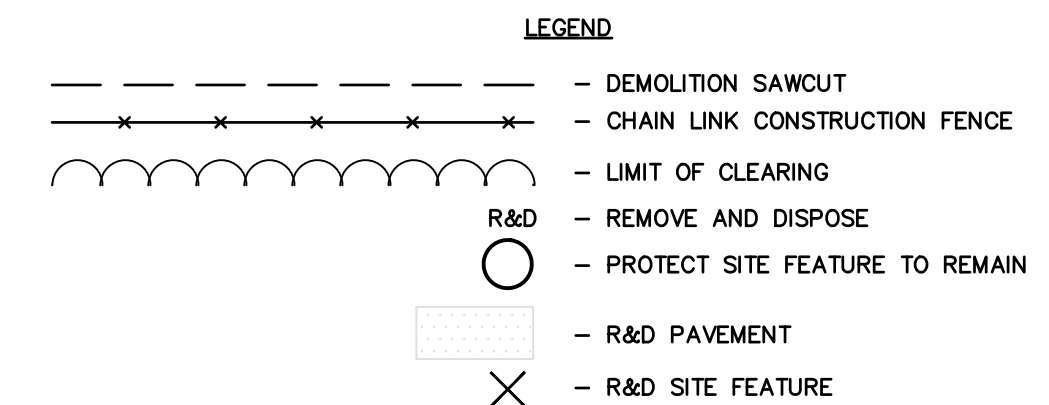
Drawing Information		
Date	11/18/20	
Job Number	GL-2021-05	
Scale	As indicated	
Drawn	MS	
Checked	RN	

Drawing Name

**SITE
PREPARATION
PLAN**

Drawing Number

C-2.0



**Glastonbury High School
Athletics Facility**

Issued for Bid

330 Hubbard Street
Glastonbury, CT 06033
GL-2021-05

Project Team

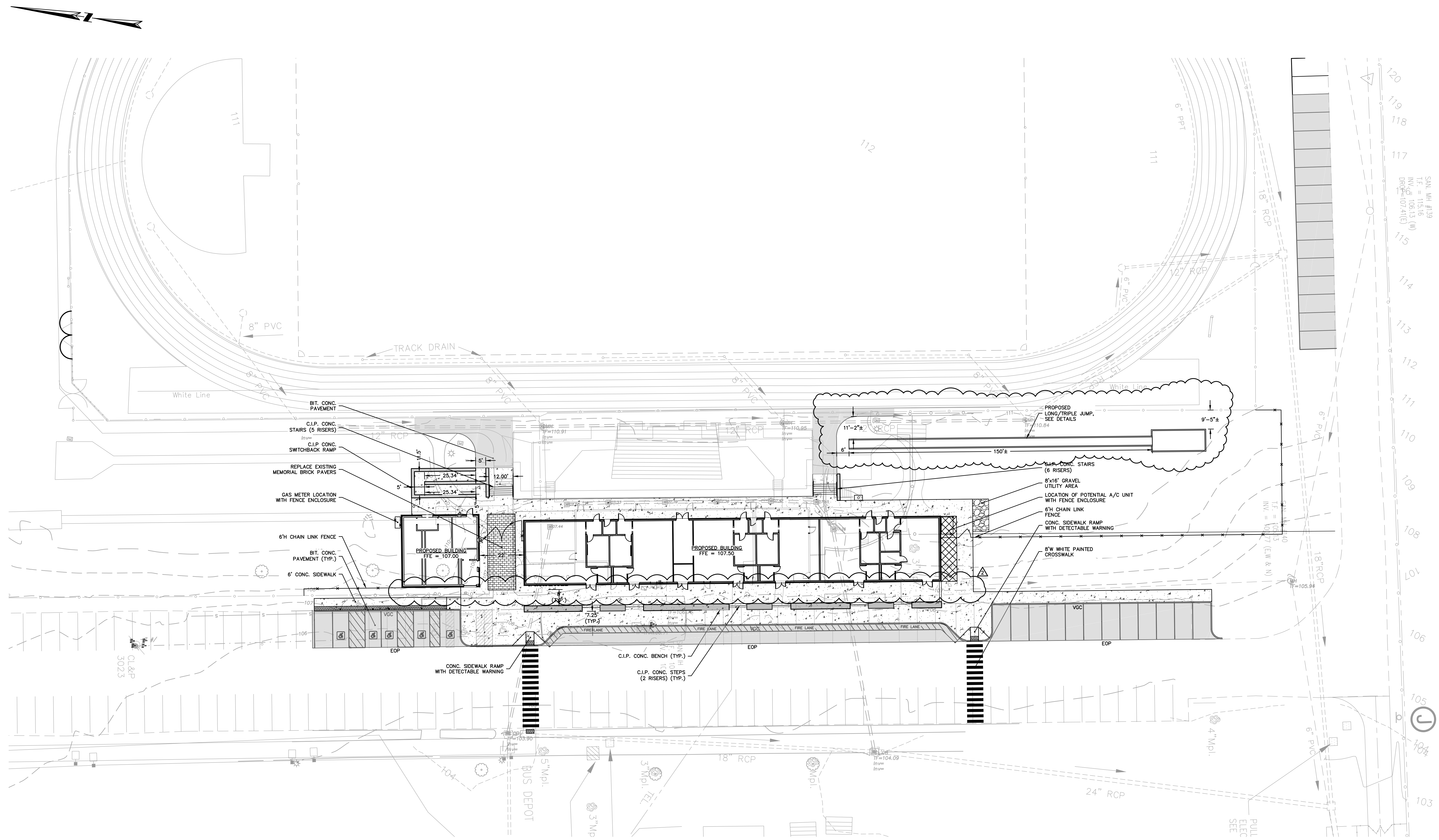
Civil Engineer



655 Winding Brook Drive
Glastonbury, Connecticut 06033
860.652.8227

MEP Engineer

Structural Engineer



NOTES

1. NOTIFY 'CALL BEFORE YOU DIG' (1-800-922-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION AND INVERTS AS REQUIRED.
3. NOTIFY THE ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
4. THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS, FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
5. THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
6. IMPLEMENTING WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH RULES, LAWS, AND REGULATIONS PERTAINING TO CONSTRUCTION SAFETY AND/OR THE POTENTIAL AND/OR ACTUAL RISK OF EXPOSURE TO SITE-SPECIFIC PHYSICAL OR CHEMICAL HAZARDS IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
7. THIS DRAWING IS INTENDED TO DEPICT THE LOCATION, LAYOUT, AND MATERIALS OF CONSTRUCTION AND IS INTENDED TO BE USED IN CONJUNCTION WITH THE DETAILS AND APPLICABLE SPECIFICATION SECTIONS.
8. ENGAGE A CONNECTICUT-LICENSED LAND SURVEYOR TO PERFORM LAND-SURVEYING SERVICES REQUIRED, INCLUDING, BUT NOT LIMITED TO VERIFICATION AND LAYOUT OF PROPOSED IMPROVEMENTS, DIMENSIONS, AND ELEVATIONS. REPORT DISCREPANCIES TO THE ENGINEER.
9. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE RESTORED WITH SIX (6) INCHES OF LOAM, SEEDED, FERTILIZED, AND MULCHED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED. BLEND RESTORED AREAS INTO ADJACENT UNDISTURBED AREAS.
10. THE CROSS-SLOPE OF ANY SIDEWALK, WALKWAY, OR OTHER PEDESTRIAN SURFACE SHALL NOT BE STEEPER THAN 1:48 (2%).
11. ACCESSIBLE ROUTES SHALL COMPLY WITH CONNECTICUT BUILDING CODE. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5%). THE CROSS SLOPE OF A WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48 (2%).
12. RAMPS SHALL COMPLY WITH CT BUILDING CODE, REF. 2012 IBC SECTION 1010 AND ICC/ANSI A117.1 2009 CHAPTER 4, SECTION 405.
13. CONSTRUCTION JOINTS: REINFORCEMENT SHALL NOT CONTINUE THROUGH CONSTRUCTION JOINTS.
14. PRIOR TO INITIATION OF CONCRETE FLATWORK, SUBMIT PROPOSED CONSTRUCTION JOINT PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL. COORDINATE SUCH PLAN WITH THE JOINT PATTERNS DEPICTED ON THE DRAWINGS.
15. UNLESS OTHERWISE SPECIFIED, MISCELLANEOUS CONCRETE PADS SHALL BE CONSTRUCTED PER SIDEWALK DETAIL.
16. ALL NON-ACCESSIBLE PARKING SPACES ARE 9' X 18'. VERIFY OVERALL LAYOUT DIMENSIONS BASED ON THESE DIMENSIONS AND THE NUMBER OF SPACES INDICATED. FIELD-ADJUST OVERALL LAYOUT DIMENSION IN CONCERT WITH THE ENGINEER IF REQUIRED.
17. DIMENSIONS INDICATED ARE TO FACE OF CURB, PAVEMENT EDGE, EDGE OR CENTERLINE OF IMPROVEMENT, OR AS OTHERWISE NOTED.
18. PROVIDE FOR THE LAYOUT AND STAKING/MARKING OF THE PROPOSED LOCATION OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING FURNISHINGS. OBTAIN ENGINEER'S APPROVAL OF THE LAYOUT PRIOR TO PROCEEDING WITH THE WORK.
19. UNLESS OTHERWISE INDICATED, LINES ARE PARALLEL OR PERPENDICULAR TO LINE FROM WHICH THEY ARE MEASURED.

LEGEND

	- PROPOSED CURBING
	- CHAIN LINK FENCE
	- BITUMINOUS CONCRETE
	- CONCRETE
	- VERTICAL GRANITE CURB
	- MONOLITHIC CONCRETE CURB
	- CONCRETE CURB
	- EDGE OF PAVEMENT
	- CURVE RADIUS
	- CURB LENGTH
	- DETECTABLE WARNING
	- EX. MEMORIAL BRICK PAVERS
	- CONCRETE PAVEMENT
	- BITUMINOUS CONCRETE PAVEMENT
	- LAWN
	- PLANTED AREA
	- GRAVEL
	- RETAINING WALL
	- BUILT IN BENCH
	- PROPOSED SIGN
	- PROPOSED PARKING SPACES
	- ACCESSIBLE PARKING SPACE

Revisions		
1	Addendum 2	12/10/20

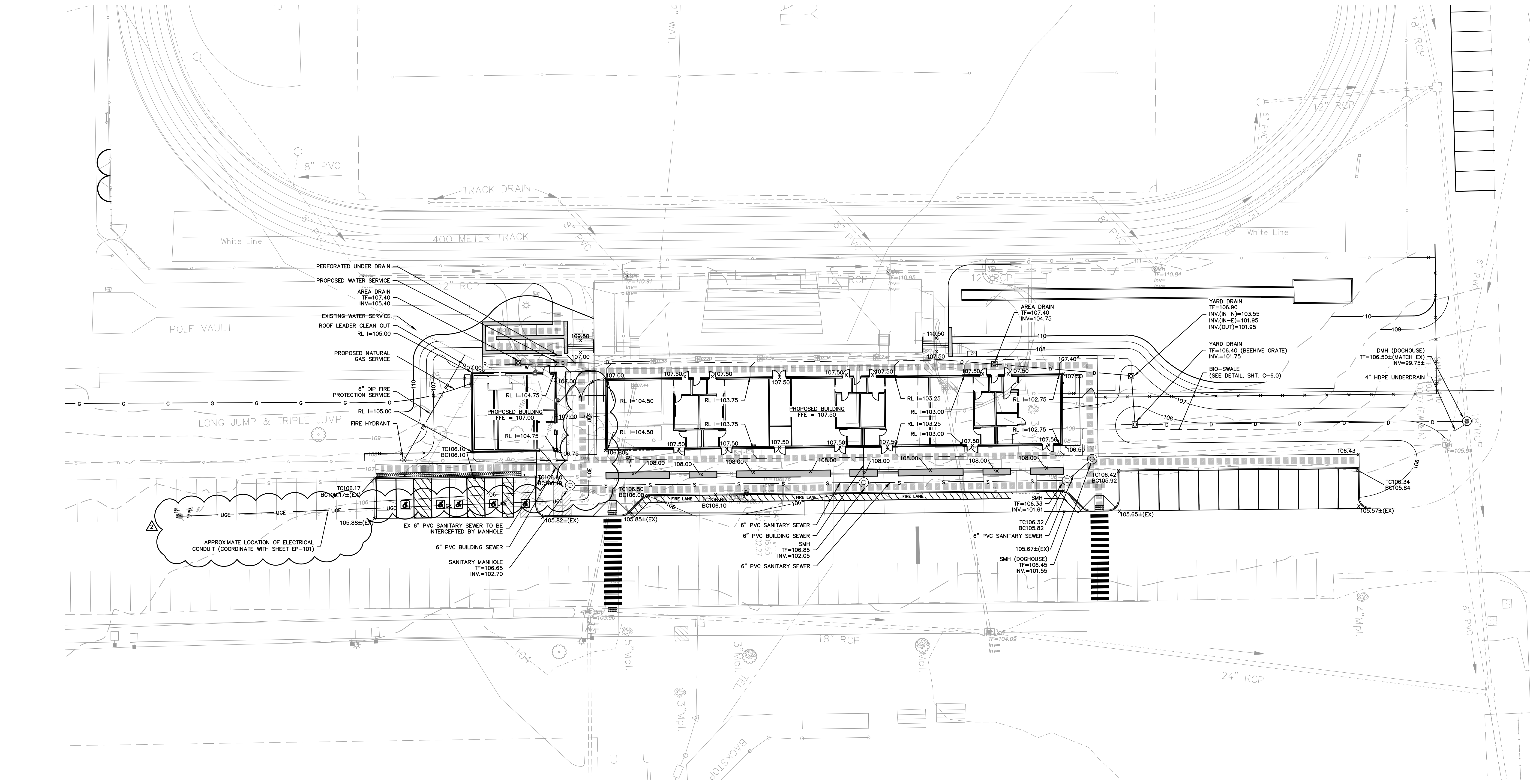
Issue Record		
	Issued for Bid	11/20/20

Drawing Information		
Date	11/18/20	
Job Number	GL-2021-05	
Scale	As indicated	
Drawn	MS	
Checked	RN	

Drawing Name	
SITE LAYOUT & MATERIALS PLAN	

Drawing Number	
C-3.0	





NOTES:

- CONTRACTOR SHALL NOTIFY 'CALL BEFORE YOU DIG' (1-800-322-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFICATION OF THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION AND INVERTS AS REQUIRED.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS, FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE, BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
- THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK. DO NOT PROCEED WITH ANY ADJUSTMENT OR FIELD MODIFICATION UNTIL APPROVED BY THE ENGINEER. ENSURE COMPLIANCE WITH CONNECTICUT BUILDING CODE FOR ALL NEW CONSTRUCTION.
- ENGAGE A CONNECTICUT-LICENSED LAND SURVEYOR TO PERFORM LAND-SURVEYING SERVICES REQUIRED, INCLUDING, BUT NOT LIMITED TO VERIFICATION AND LAYOUT OF PROPOSED IMPROVEMENTS, DIMENSIONS, AND ELEVATIONS. REPORT DISCREPANCIES TO THE ENGINEER.
- UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE RESTORED WITH SIX (6) INCHES OF LOAM, SEED, FERTILIZED, AND MULCHED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED. BLEND RESTORED AREAS INTO ADJACENT UNDISTURBED AREAS.
- PROPOSED GRADES INDICATE DESIGN INTENT. VERIFY ELEVATIONS AND MAKE ADJUSTMENTS TO MEET FIELD CONDITIONS. DO NOT PROCEED WITH ANY ADJUSTMENT OR FIELD MODIFICATION UNTIL APPROVED BY THE ENGINEER.
- VERIFY ALL GRADES AND SLOPES PRIOR TO CONCRETE PLACEMENT. REPORT DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- COMPLY WITH CONNECTICUT BUILDING CODE FOR ALL SITE CONSTRUCTION, INCLUDING HANDICAPPED ACCESSIBILITY.
- THE CROSS-SLOPE OF ANY SIDEWALK, WALKWAY, OR OTHER PEDESTRIAN SURFACE SHALL NOT BE STEEPER THAN 1:48 (2%).
- ACCESSIBLE ROUTES SHALL COMPLY WITH CONNECTICUT BUILDING CODE. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5%). THE CROSS SLOPE OF A WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48 (2%). GRADING CONTOURS AND SPOT GRADES INDICATE DESIGN INTENT. CONFIRM THE GRADE AND SLOPE OF NEW WORK BASED ON ACTUAL FIELD CONDITIONS BEFORE PROCEEDING WITH INSTALLATION. BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.
- RAMPS SHALL COMPLY WITH CT BUILDING CODE, REF. 2012 IBC SECTION 1010 AND ICC/ANSI A117.1 2009 CHAPTER 4, SECTION 405 AND 406. GRADING CONTOURS AND SPOT GRADES INDICATE DESIGN INTENT. CONFIRM THE GRADE AND SLOPE OF NEW WORK BASED ON ACTUAL FIELD CONDITIONS BEFORE PROCEEDING WITH INSTALLATION. BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.
- DETECTABLE WARNINGS SHALL BE A MINIMUM OF 24-INCHES IN DEPTH. AT CURB RAMPS, DETECTABLE WARNING SHALL EXTEND THE FULL WIDTH OF THE RAMP AND BE INSTALLED 6-INCHES FROM THE CURB LINE AT THE RAMP BASE.

- GRADE TRANSITION BETWEEN TOPOGRAPHIC LINES AND SPOT GRADES SHALL BE UNIFORM UNLESS OTHERWISE INDICATED.
- UNLESS OTHERWISE INDICATED, BLEND TRANSITIONS IN ELEVATION BETWEEN NEW WORK AND AREAS TO REMAIN AT A MAXIMUM SLOPE OF 1:20 AND RESTORE WITH SIX (6) INCHES OF LOAM AND SEED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED. COORDINATE WITH ENGINEER IF DIMENSIONAL CONSTRAINTS REQUIRE STEEPER SLOPES.
- ALL CATCH BASINS AND SHALLOW DROP INLETS SET AGAINST CURBS SHALL BE CONDOT TYPE 'C'. ALL OTHERS SHALL BE CONDOT TYPE 'C-L'.
- THE TOPS, RIMS, FRAMES, GRATES, AND COVERS (AS APPLICABLE) OF ALL UTILITY STRUCTURES THAT ARE TO REMAIN SHALL BE ADJUSTED TO MATCH FINAL GRADE IN A FLUSH CONDITION. ALL NEW UTILITY STRUCTURES SHALL BE INSTALLED WITH TOPS, RIMS, FRAMES, GRATES, AND COVERS (AS APPLICABLE) TO FINAL GRADE IN A FLUSH CONDITION.
- AT THE CONCLUSION OF THE WORK, CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT MATERIAL FROM ALL PORTIONS OF THE STORM DRAINAGE SYSTEM INCLUDING NEW WORK AND EXISTING WORK THAT REMAINS OR IS INCORPORATED INTO THE NEW SYSTEM.
- PERFORM EXPLORATORY EXCAVATIONS AS REQUIRED TO VERIFY THE AS-BUILT LOCATION OF EXISTING SUBSURFACE UTILITIES WHERE CROSSINGS OR OTHER POTENTIAL CONFLICTS ARE PRESENT.
- ALL UNDERGROUND TELECOMMUNICATIONS AND ELECTRIC CONDUITS SHALL BE ENCASED IN CONCRETE EXCEPT BRANCH DISTRIBUTION FOR LIGHTING. WORK CONCRETE TO REMOVE ALL TRAPPED AIR AND INSURE EACH CONDUIT IS COMPLETELY SURROUNDED BY A MINIMUM 2" OF CONCRETE. ALLOW CONCRETE TO CURE FOR AT LEAST ONE HOUR BEFORE BACKFILLING.
- FOR TELECOMMUNICATIONS AND ELECTRIC, WARNING TAPE SHALL BE INSTALLED 12-INCHES BELOW GRADE.
- SEAL ALL CONDUIT ENDS WITH BLANK DUCT PLUGS. SECURE PULL ROPE TO DUCT PLUG.
- ALL WORK ASSOCIATED WITH FIRE PROTECTION AND DOMESTIC WATER SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE LOCAL WATER UTILITY.
- ALL WORK ASSOCIATED WITH ELECTRICAL SERVICE SHALL CONFORM TO THE STANDARDS OF EVERSOURCE. IF THERE ARE ANY CONFLICTS BETWEEN THE REQUIREMENTS INDICATED HEREON AND EVERSOURCE STANDARDS, EVERSOURCE STANDARDS SHALL PREVAIL.
- ALL WORK ASSOCIATED WITH TELECOMMUNICATIONS SHALL CONFORM TO THE STANDARDS OF THE LOCAL PROVIDER.
- INSTALL CONDUIT, PULL ROPE, CAPS, WARNING TAPE, AND TRACER WIRE PER APPLICABLE SPECIFICATIONS, STANDARDS, AND CODES.
- ALTHOUGH NOT SHOWN ON THE DRAWINGS, PROVIDE FOR THE INSTALLATION OF ALL JOINTS, COUPLINGS, RESTRAINTS, BENDS, ANGLES, AND OTHER APPURTENANCES TO ACHIEVE A COMPLETE, FUNCTIONAL WATER SUPPLY SYSTEM.

LEGEND

- FP — FP — FIRE PROTECTION PIPE
- W — W — DOMESTIC WATER PIPE
- G — G — NATURAL GAS PIPE
- S — S — SANITARY SEWER PIPE
- — — — — ROOF LEADER
- — — — — TOPOGRAPHY: MAJOR INTERVAL
- — — — — TOPOGRAPHY: MINOR INTERVAL
- — — — — TOPOGRAPHY: SPOT ELEVATION
- D — D — STORM DRAINAGE PIPE
- — — — — 36" ACCESSIBLE ROUTE
- — — — — 1.5% MAX. X-SLOPE, 4.5% MAX. LONG. SLOPE
- ⊙ — — — — — DRAINAGE MANHOLE (DMH)
- ⊠ — — — — — TYPE "C" CATCH BASIN (CB)
- ⊡ — — — — — TYPE "C-L" CATCH BASIN (CBL)
- ⊙ — — — — — YARD DRAIN (YD), AREA DRAIN (AD)
- ⊙ — — — — — SANITARY MANHOLE (SMH)
- ⊙ — — — — — FIRE HYDRANT

Revisions		
1	Addendum 2	12/10/20

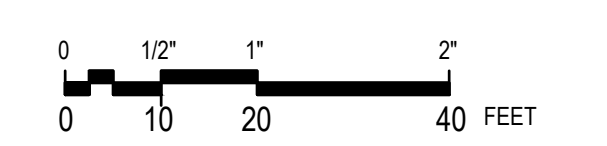
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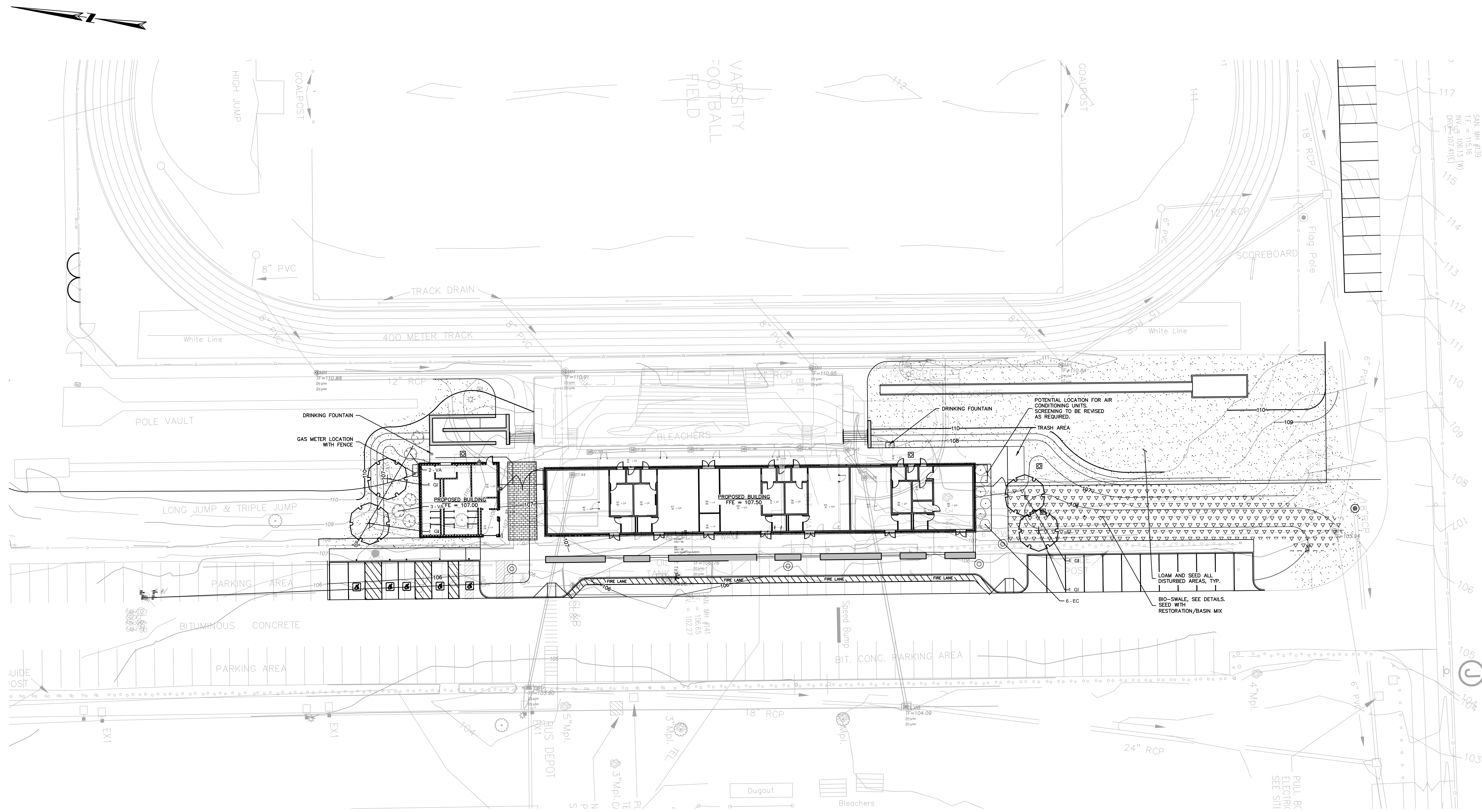
Drawing Information		
Date	11/18/20	
Job Number	GL-2021-05	
Scale	As indicated	
Drawn	MS	
Checked	RN	
Drawing Name		

**SITE GRADING,
DRAINAGE, &
UTILITY PLAN**

Drawing Number

C-4.0





NOTES:

1. THE CONTRACTOR SHALL CLEARLY MARK LIMITS OF CLEARING AND LIMITS OF TREE REMOVAL. SELECTIVE PRUNING AND THINNING FOR REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO ANY CLEARING OPERATIONS. ALL TREE WORK SHALL BE EXECUTED BY A LICENSED ARBORIST.
2. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT EXISTING VEGETATION THAT IS DESIGNATED, "TO REMAIN".
3. ALL TREES TO BE SAVED SHALL BE PROTECTED. SEE SPECIFICATION FOR TREE PROTECTION REQUIREMENTS.
4. EXISTING ON SITE TOPSOIL MAY BE REUSED UPON APPROVAL BY THE LANDSCAPE ARCHITECT. EXISTING TOPSOIL SHALL BE TESTED AND AMENDED FOR NUTRIENTS, ORGANIC MATTER, pH, AND SOIL TEXTURE. - SEE SPECIFICATIONS.
5. REMOVE ALL ROCKS AND DEBRIS FROM SOIL SURFACE AND GRADE TO AN EVEN SURFACE. - SEE SPECIFICATIONS.
6. COMPLETE QUANTITIES OF PLANTS FOR EACH AREA TO BE AVAILABLE ON SITE AT THE TIME OF PLANTING FOR FIELD LAYOUT BY OWNERS REPRESENTATIVE. NO PARTIAL LAYOUT AND PLANTING OF AREAS WILL BE ACCEPTABLE.
7. ALL PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. - SEE SPECIFICATION FOR DETAILED REQUIREMENTS.
8. ANY PROPOSED SUBSTITUTIONS OF PLANT MATERIAL SHALL BE MADE WITH MATERIAL EQUIVALENT TO THE DESIRED MATERIAL IN OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE. NO SUBSTITUTION OF PLANT SPECIES OR VARIETIES WILL BE ACCEPTABLE WITHOUT LANDSCAPE ARCHITECT'S WRITTEN APPROVAL.
9. OWNERS REPRESENTATIVE TO APPROVE PLANT MATERIAL PRIOR TO DELIVERY TO SITE AND AGAIN AT THE PROJECT SITE PRIOR TO PLANTING.
10. VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND REPORT ANY CONFLICTS TO THE OWNER OR HIS REPRESENTATIVE.
11. NO PLANTING SHALL OCCUR PRIOR TO ACCEPTANCE OF FINAL GRADING.
12. INSTALL PLANTS WITH ROOT FLARES FLUSH WITH GRADE. IMMEDIATELY REPLANT PLANTS WHICH SETTLE OUT OF PLUMB OR BELOW FINISH GRADE.
13. SEE SPECIFICATIONS FOR PLANTING MAINTENANCE AND GUARANTEE REQUIREMENTS.
14. THE LANDSCAPE ARCHITECT OR ENGINEER RESERVES THE RIGHT TO ADJUST FINAL GRADES IN THE FIELD TO SAVE EXISTING VEGETATION.
15. PLANT QUANTITIES NOTED IN THE PLANT SCHEDULE ARE APPROXIMATE AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING AND INSTALLATION OF ALL PLANT MATERIALS NOTED ON THE PLANTING PLAN.
16. CAUTION SHALL BE USED NOT TO EXTEND MULCH LAYER ABOVE SOIL LEVEL AT TRUNKS/SYSTEMS OF INSTALLED PLANT MATERIAL.
17. PROVIDE FOUR (4) FOOT DIAMETER MULCH CIRCLE AROUND ALL INDIVIDUAL TREE PLANTINGS AND CONTINUOUS MULCH BED AROUND SHRUB, PERENNIAL AND GROUNDCOVER PLANTINGS, UNLESS OTHERWISE NOTED. DO NOT MOUND SOIL OR MULCH AT TRUNKS.
18. ALL PLANTING SHALL BE DONE UNDER FULL SUPERVISION OF CERTIFIED ARBORIST, NURSERYMAN, OR LICENSED LANDSCAPE ARCHITECT.
19. LOOSE OR CRACKED ROOTBALLS SHALL BE REJECTED.

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	COUNT	CAL
GI	4	GLEITSIA TRICANTIOSA / THORNLESS HONEYLOCUST	B & B	3.5\"/>

EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES

THE EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES CONTAINS A SELECTION OF NATIVE GRASSES AND WILDFLOWERS DESIGNED TO COLONIZE GENERALLY MOIST, RECENTLY DISTURBED SITES WHERE QUICK GROWTH OF VEGETATION IS DESIRED TO STABILIZE THE SOIL SURFACE. IT IS AN APPROPRIATE SEED MIX FOR ECOLOGICALLY SENSITIVE RESTORATIONS THAT REQUIRE STABILIZATION AS WELL AS LONG-TERM ESTABLISHMENT OF NATIVE VEGETATION.

THIS MIX IS PARTICULARLY APPROPRIATE FOR DETENTION BASINS THAT DO NOT HOLD STANDING WATER. MANY OF THE PLANTS IN THIS MIX CAN TOLERATE INFREQUENT INUNDATION, BUT NOT CONSTANT FLOODING. THE MIX MAY BE APPLIED BY HAND, BY MECHANICAL SPREADER, OR BY HYDRO-SEEDER AFTER SOWING, LIGHTLY RAKE, ROLL OR CLIPPACK TO INSURE GOOD SEED TO SOIL CONTACT. BEST RESULTS ARE OBTAINED WITH A SPRING OR LATE SUMMER SEEDING. LATE FALL AND WINTER DORMANT SEEDING REQUIRES AN INCREASE IN THE APPLICATION RATE. A LIGHT MULCHING OF CLEAN, WEED-FREE STRAW IS RECOMMENDED.

1. APPLICATION RATE: 35 LBS/ACRE | 1250 SQ FT/LB
2. SPECIES:
 - RIVERBANK WILD RYE (ELYMUS RIPARIUS), CREEPING RED FESCUE (FESTUCA RUBRA), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), SWITCH GRASS (PANICUM VIRGATUM), UPLAND BENTGRASS (AGROSTIS PERENNANS), NODDING BUR MARIGOLD (BIODENS CERNUA), HOLLOW-STEM JOE-PYE WEEED (EUPATORIUM FISTULOSUM/ETROCIUM FISTULOSUM), NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE), BONESET (EUPATORIUM PERFORIATUM), BLUE VERVAIN (VERBENA HASTATA), SOFT RUSH (JUNCUS EFFLUSUS), WOOL GRASS (SCIRPUS CYPERINUS).

Revisions

NO.	DESCRIPTION	DATE
1	Addendum 2	12/10/20

Issue Record

NO.	DESCRIPTION	DATE
	Issued for Bid	11/20/20

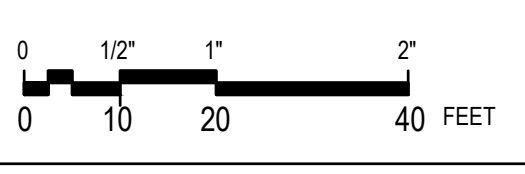
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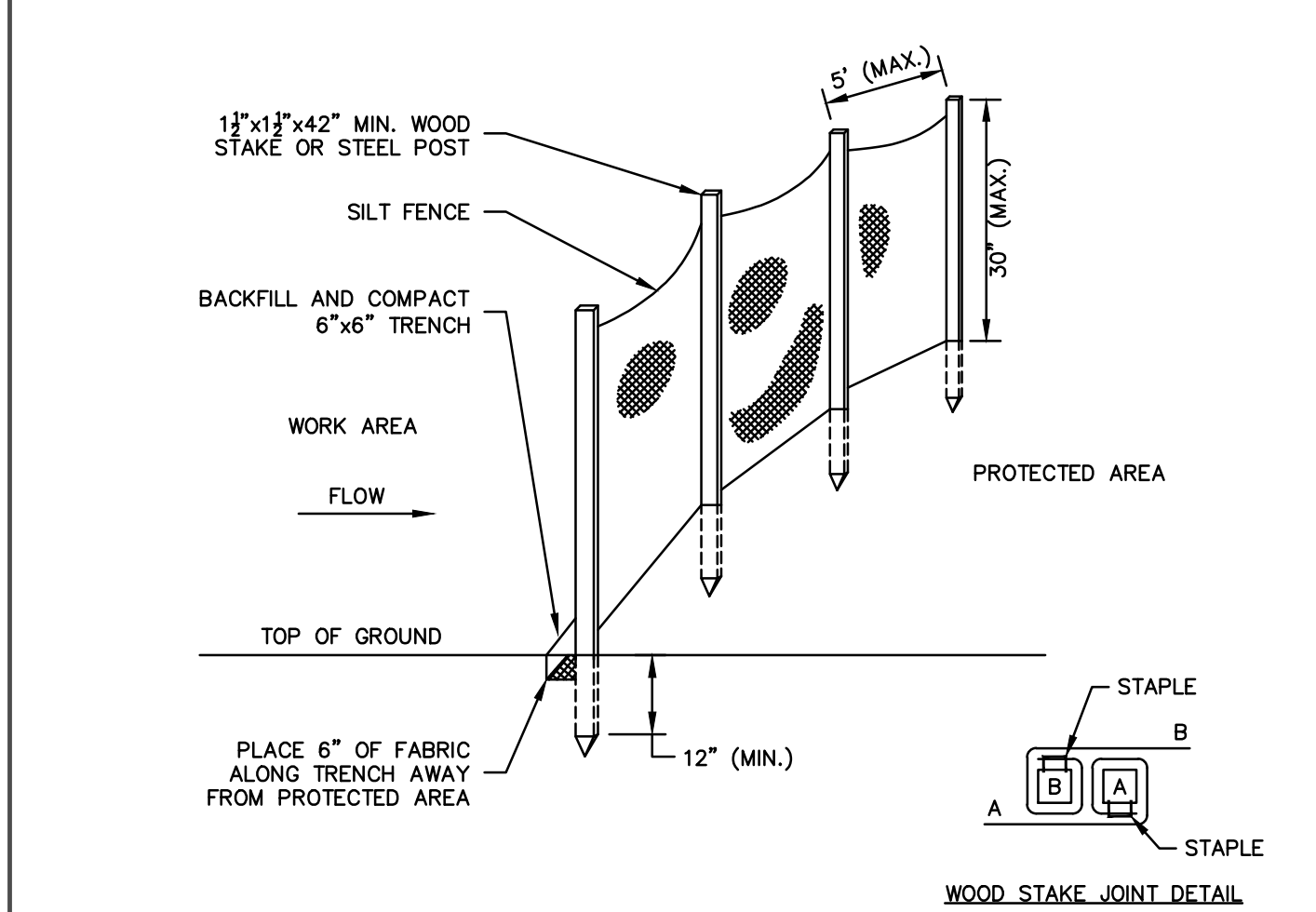
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Job Number	GL-2021-05
Scale	As indicated
Drawn	MS
Checked	RN

PLANTING PLAN

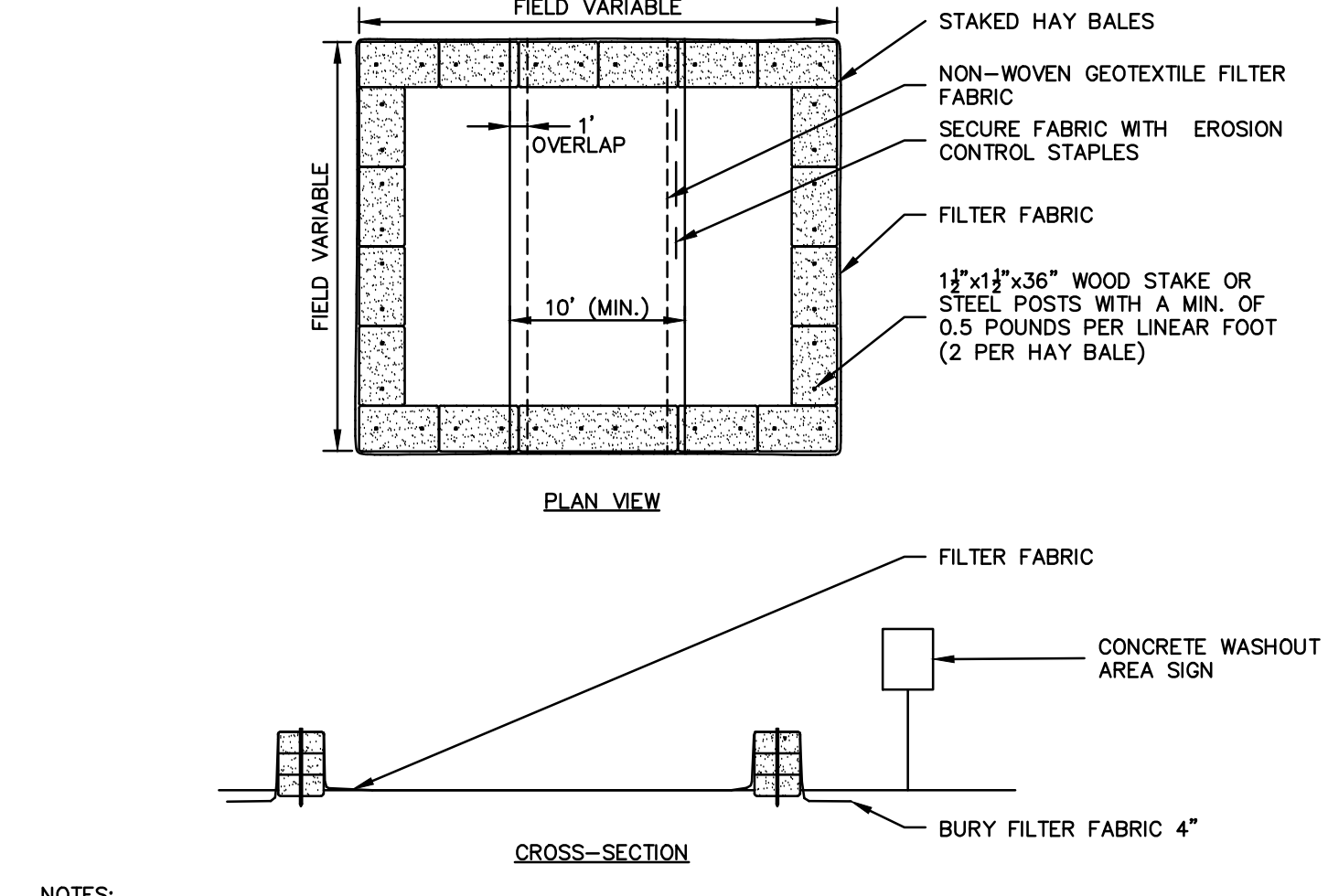
Drawing Number

C-5.0

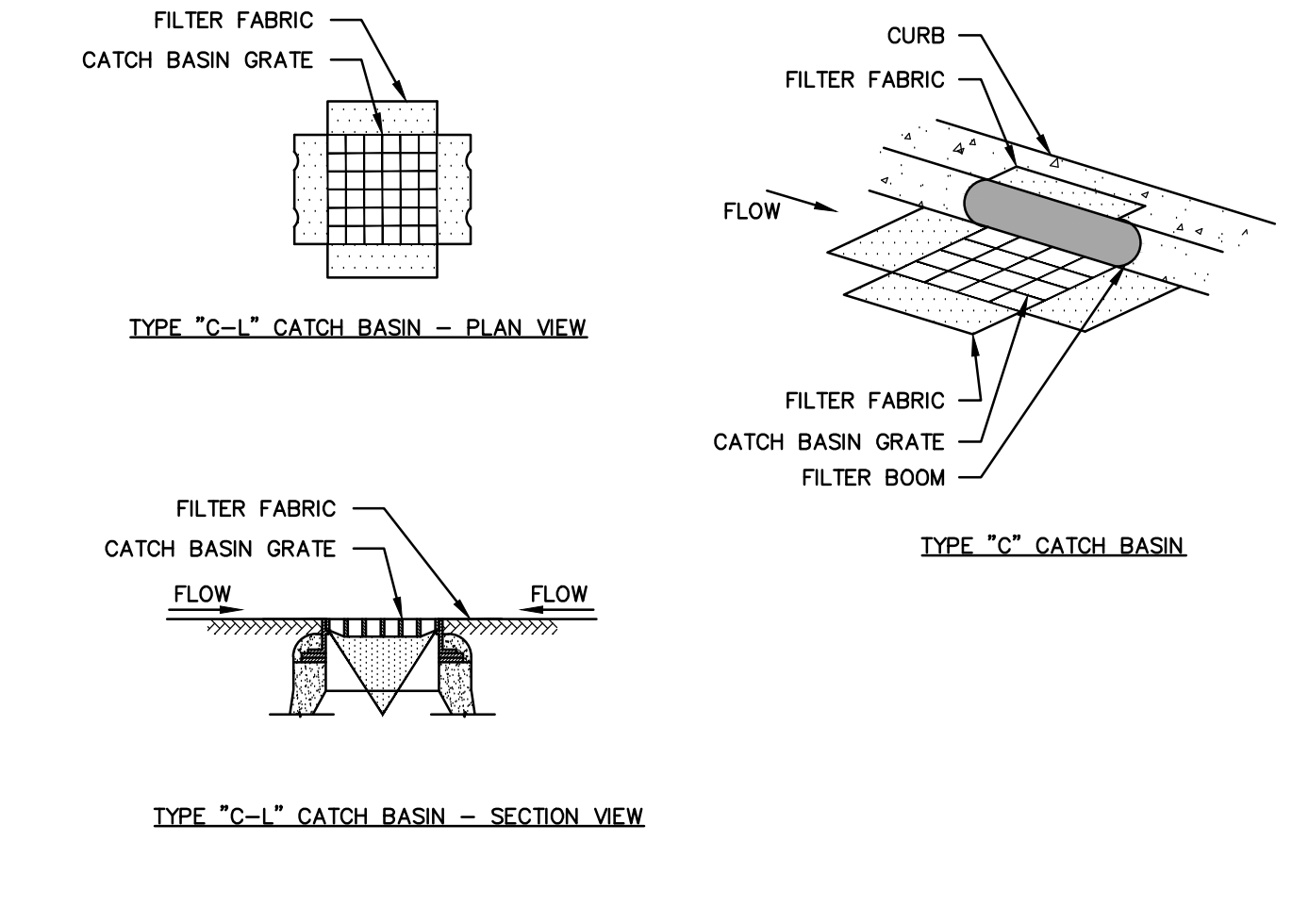




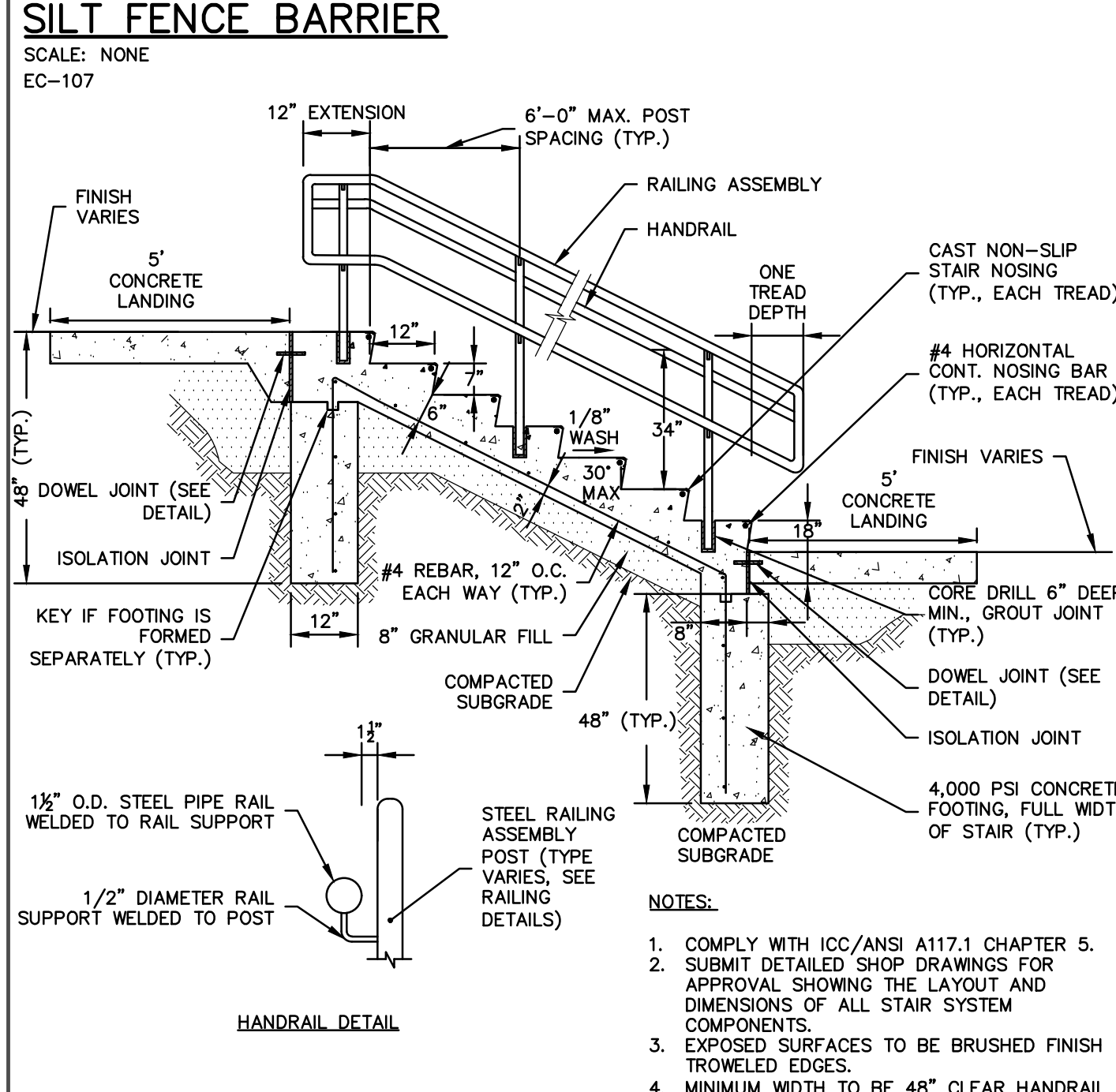
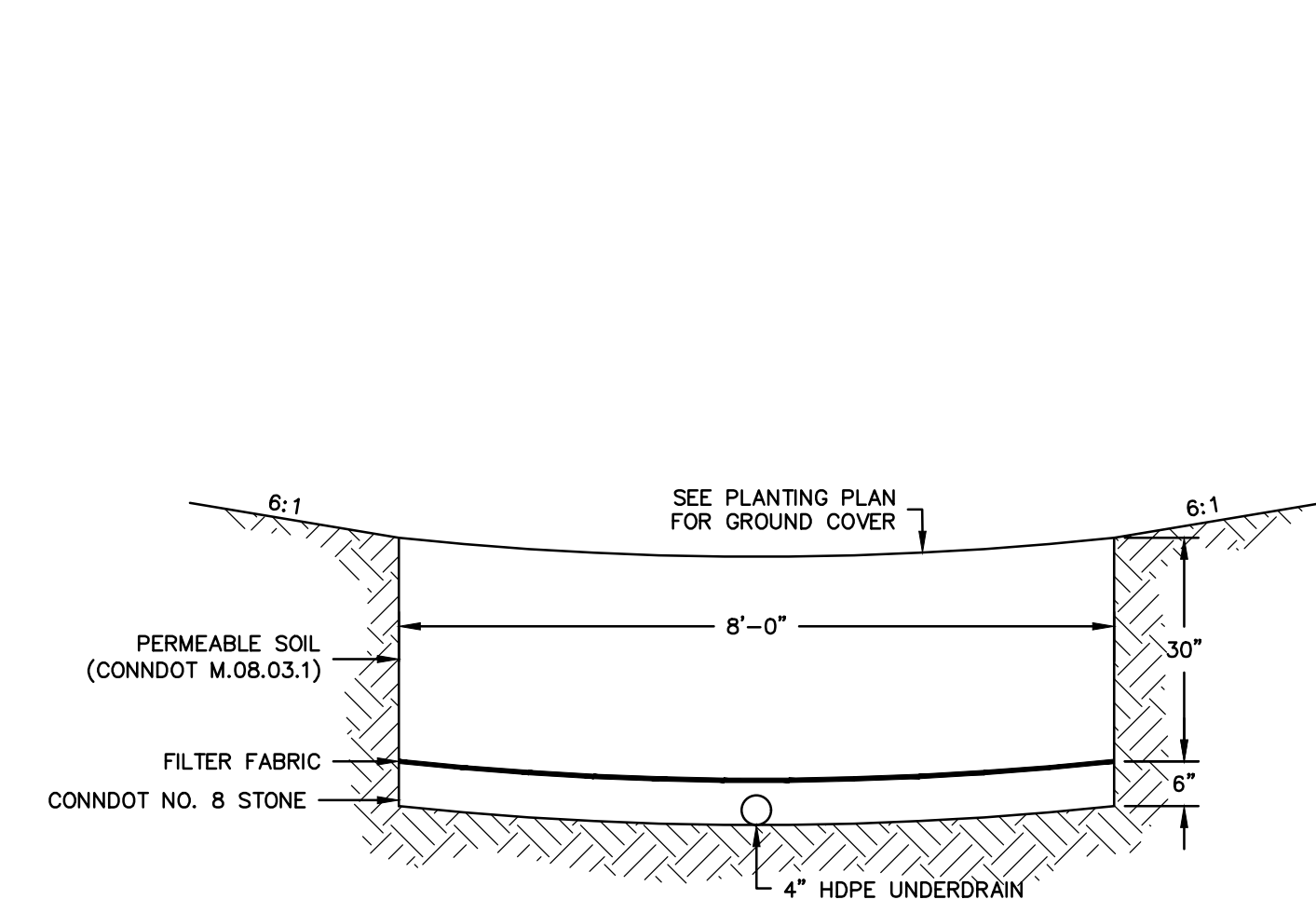
GENERAL NOTES:
1. FOR SLOPE & SWALE INSTALLATIONS, EXTEND FENCE ON SLOPE SUCH THAT BOTTOM ENDS OF FENCE WILL BE HIGHER THAN THE TOP OF THE LOWEST PORTION OF FENCE.
2. FOR FENCE INSTALLED ON LEVEL TERRAIN INSTALL WING SECTIONS PERPENDICULAR TO MAIN BARRIER AT 50'-100' INTERVALS.



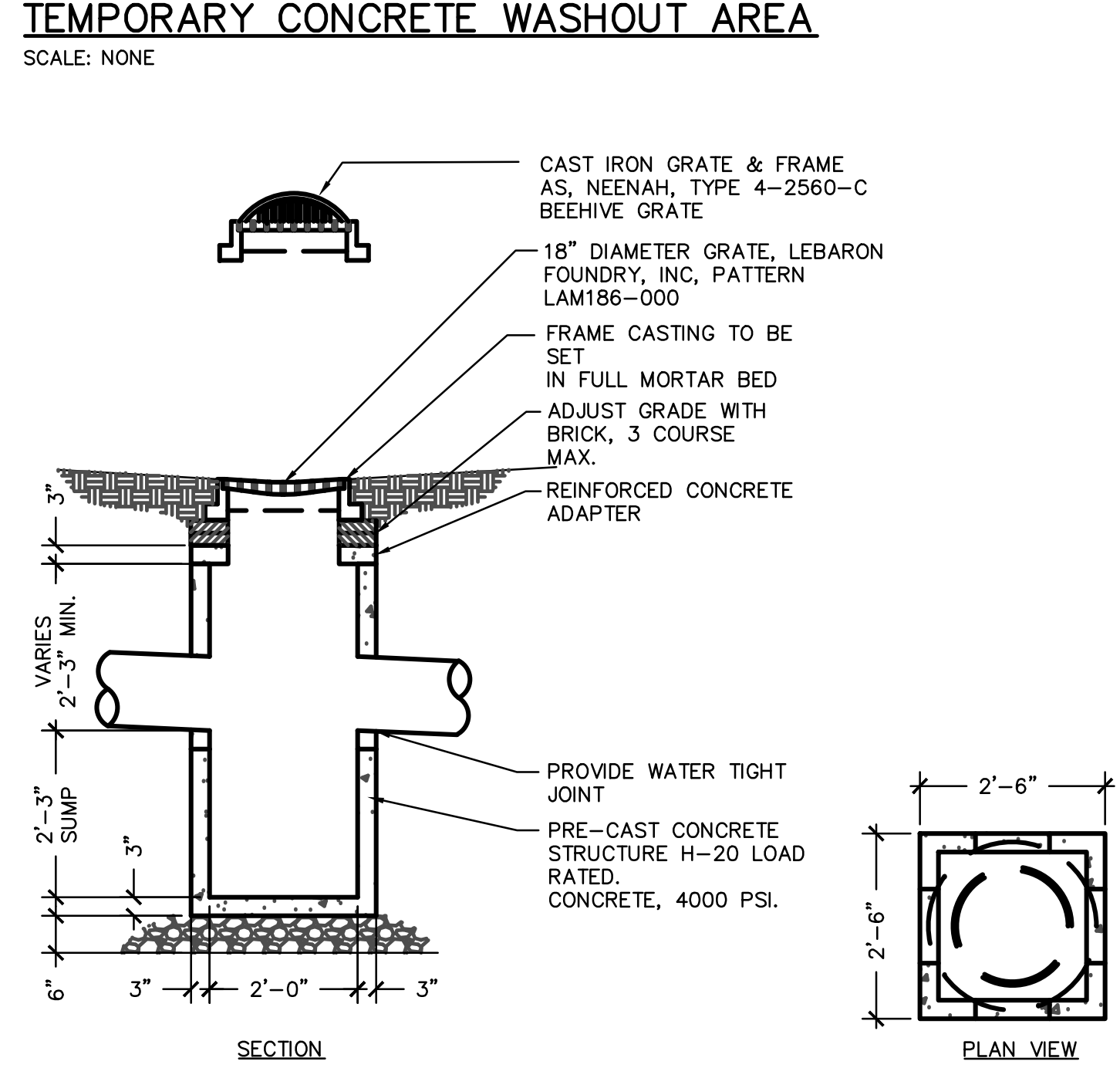
NOTES:
1. CONSTRUCT WASHOUT AREA LARGE ENOUGH TO ENSURE MATERIALS WILL BE CONTAINED WHERE WASTE CONCRETE CAN SOLIDIFY IN PLACE AND EXCESS WATER CAN SAFELY EVAPORATE.
2. WASHOUT AREA SHALL BE LARGE ENOUGH TO RETAIN ALL LIQUID AND WASTE CONCRETE MATERIALS FROM WASHOUT OPERATION.
3. WEEKLY INSPECTIONS OF WASHOUT AREAS SHALL BE CONDUCTED TO ASSESS THE HOLDING CAPACITY AND FUNCTIONALITY OF THE WASHOUT AREA.



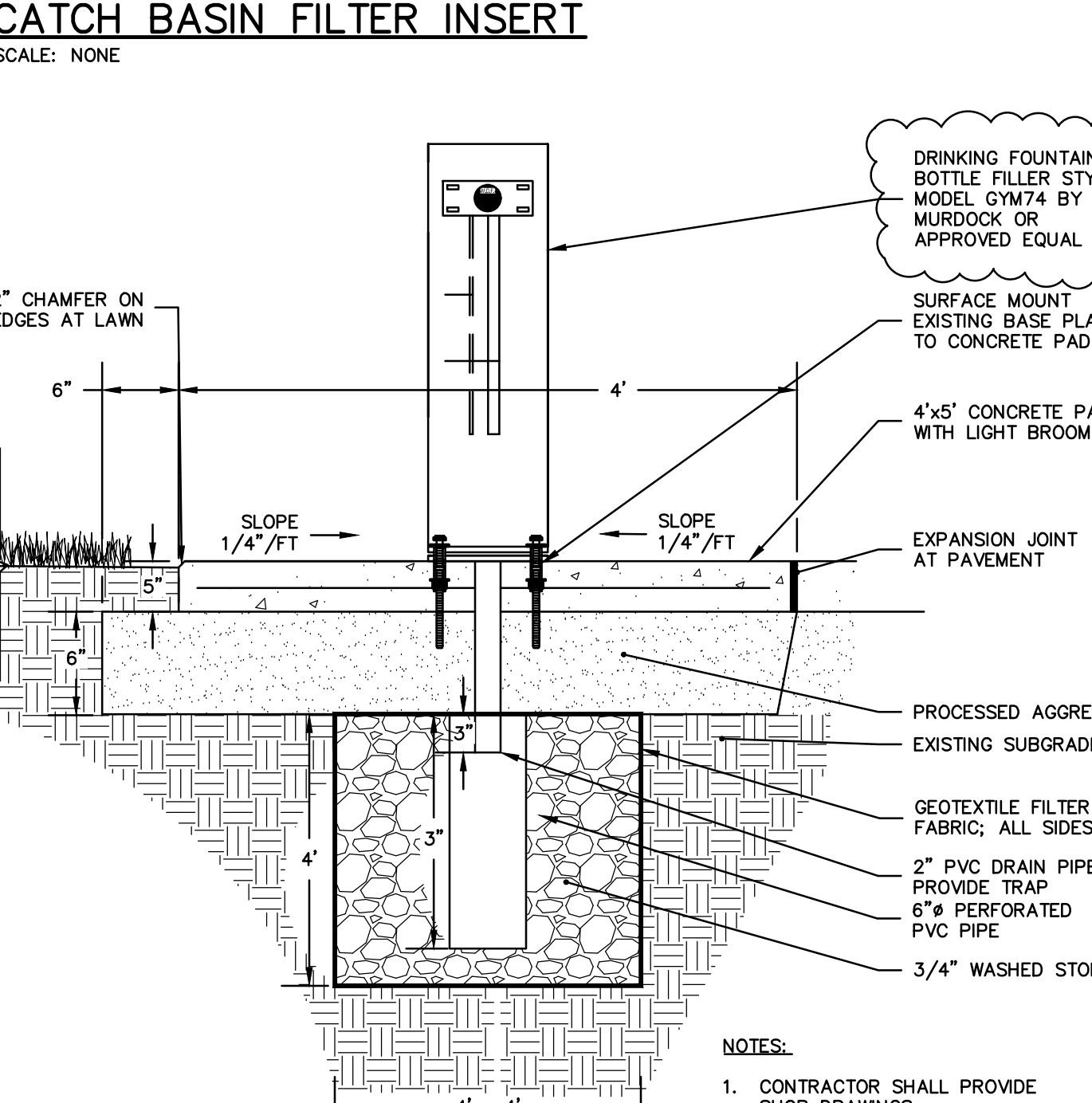
GENERAL NOTES:
1. PROVIDE INLET PROTECTION TO ALL EXISTING CATCH BASINS IN THE VICINITY OF CONSTRUCTION. PROTECT NEW CATCH BASINS AS THEY ARE CONSTRUCTED.
2. GRATE TO BE PLACED OVER FILTER FABRIC.



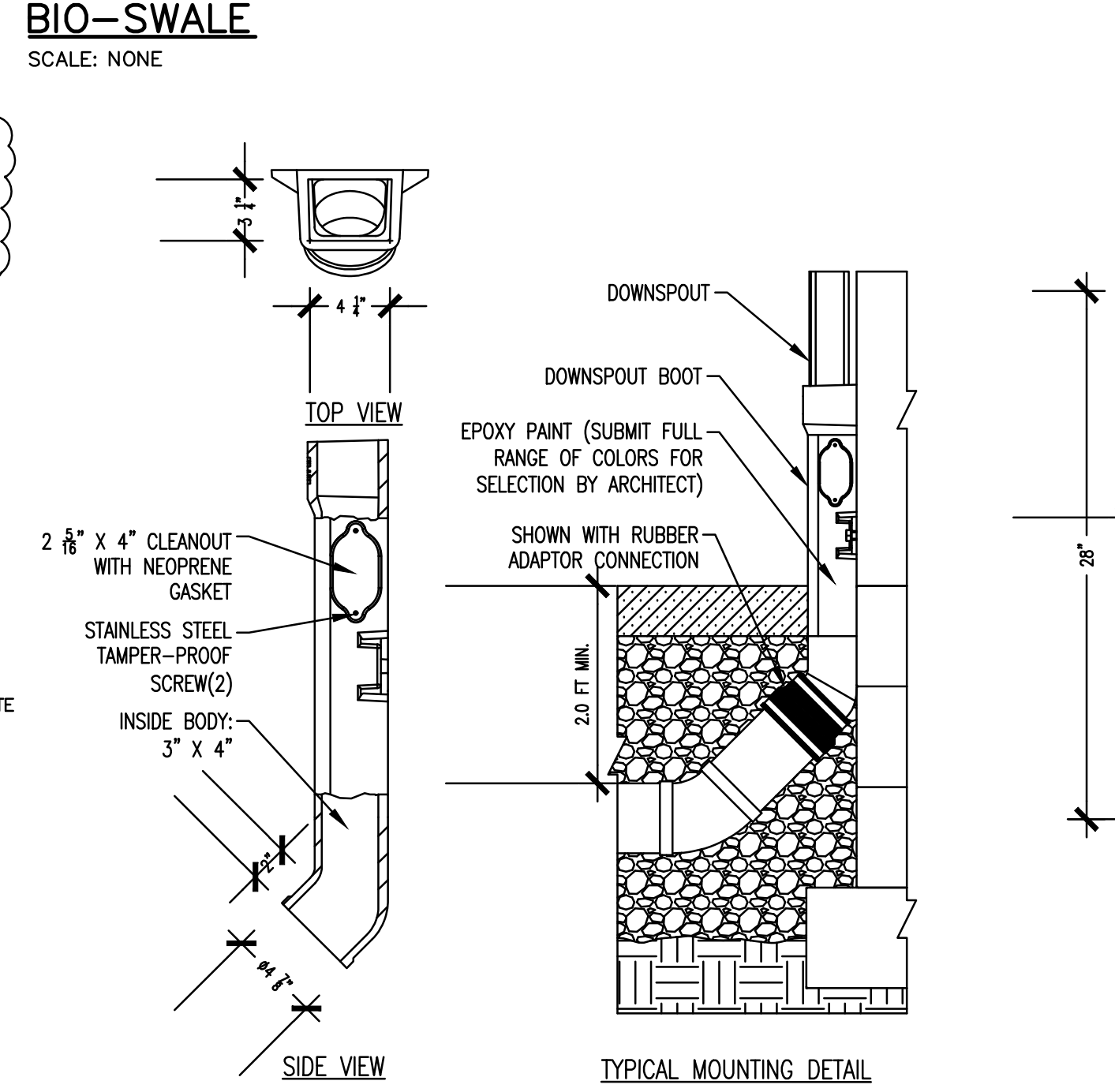
NOTES:
1. COMPLY WITH ICC/ANSI A117.1 CHAPTER 5.
2. SUBMIT DETAILED SHOP DRAWINGS FOR APPROVAL, SHOWING THE LAYOUT AND DIMENSIONS OF ALL STAIR SYSTEM COMPONENTS.
3. EXPOSED SURFACES TO BE BRUSHED FINISH TROWELED EDGES.
4. MINIMUM WIDTH TO BE 48\"/>



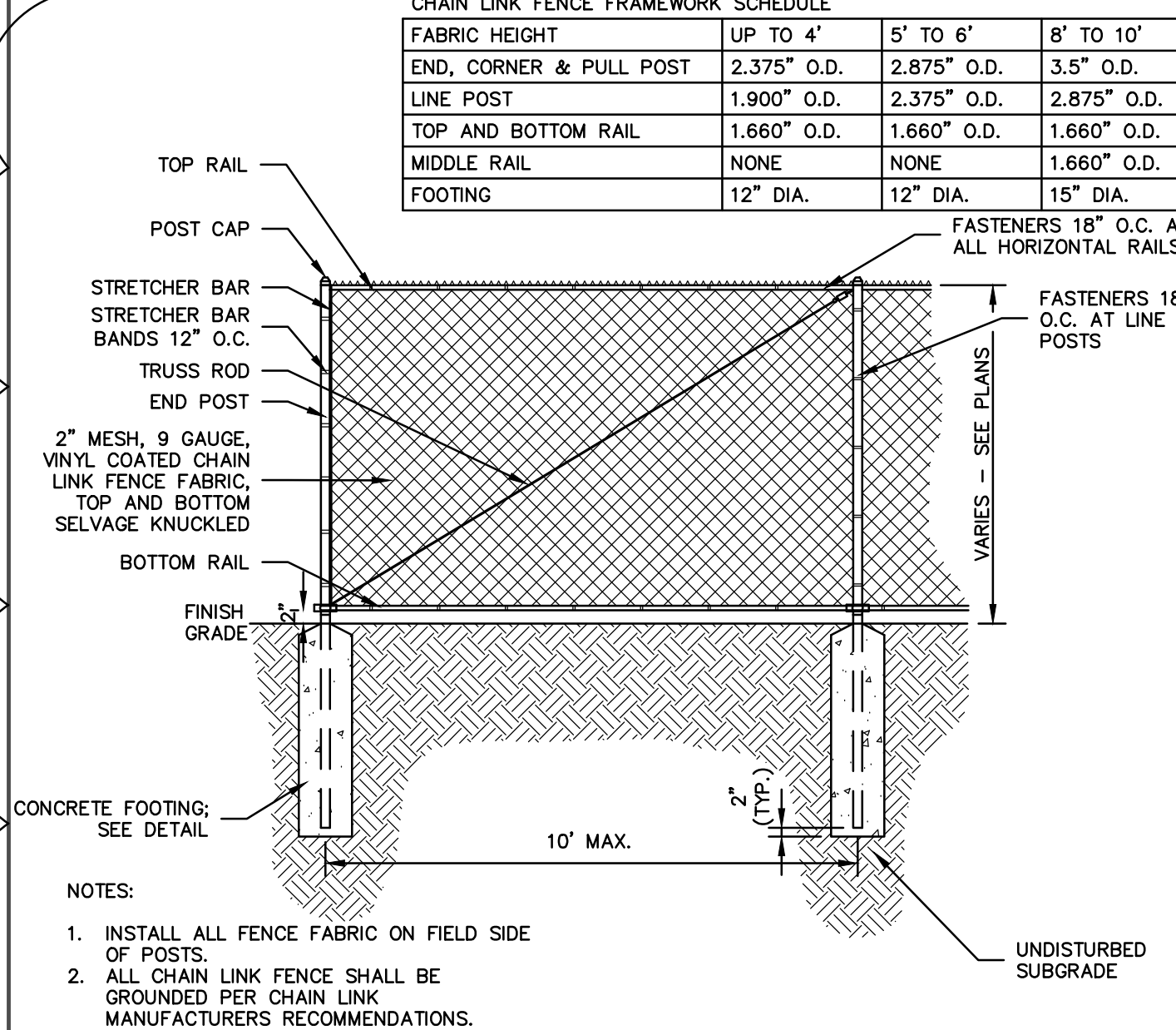
NOTES:
1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS.
2. INSTALL PER MANUFACTURER'S INSTRUCTIONS.



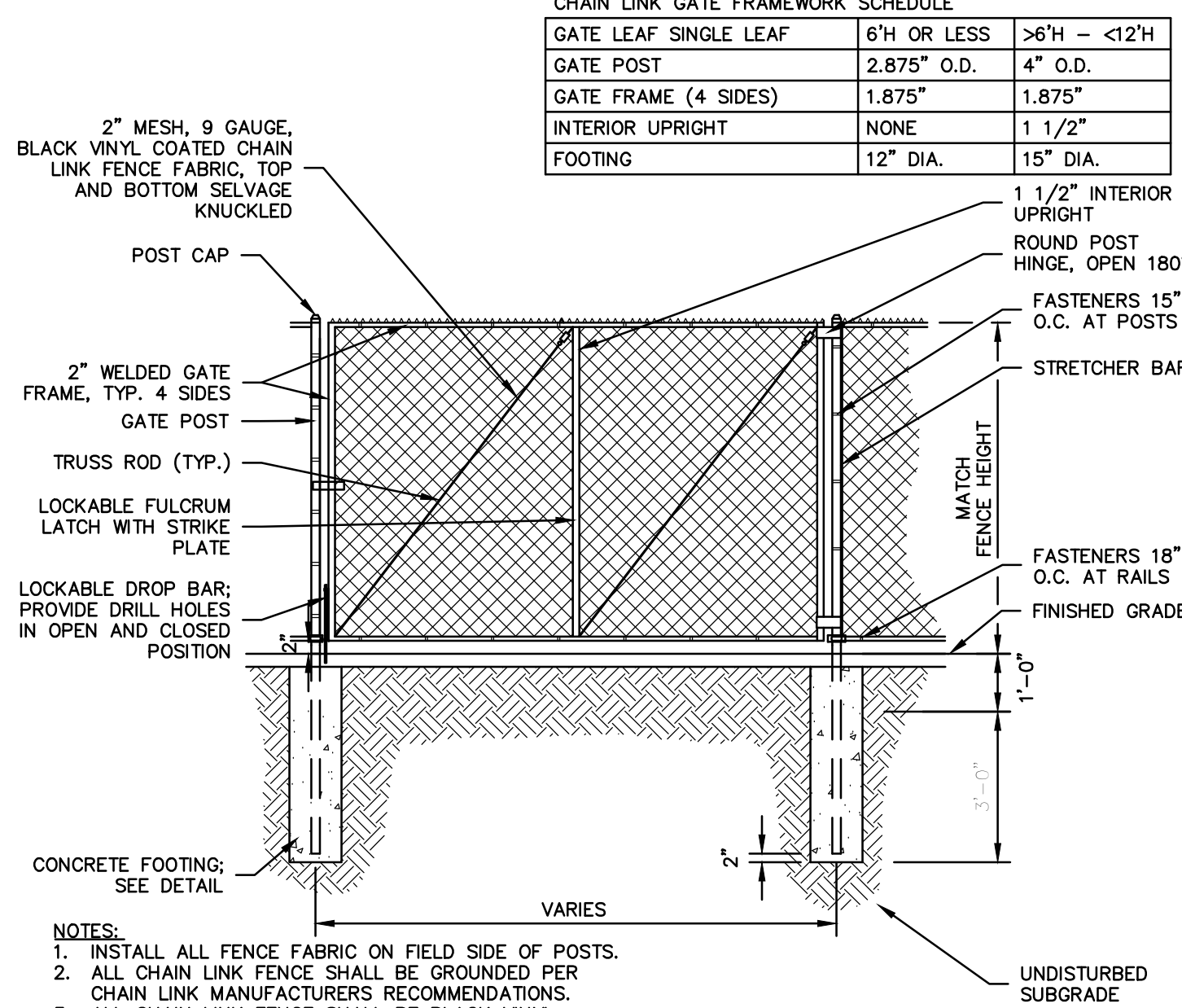
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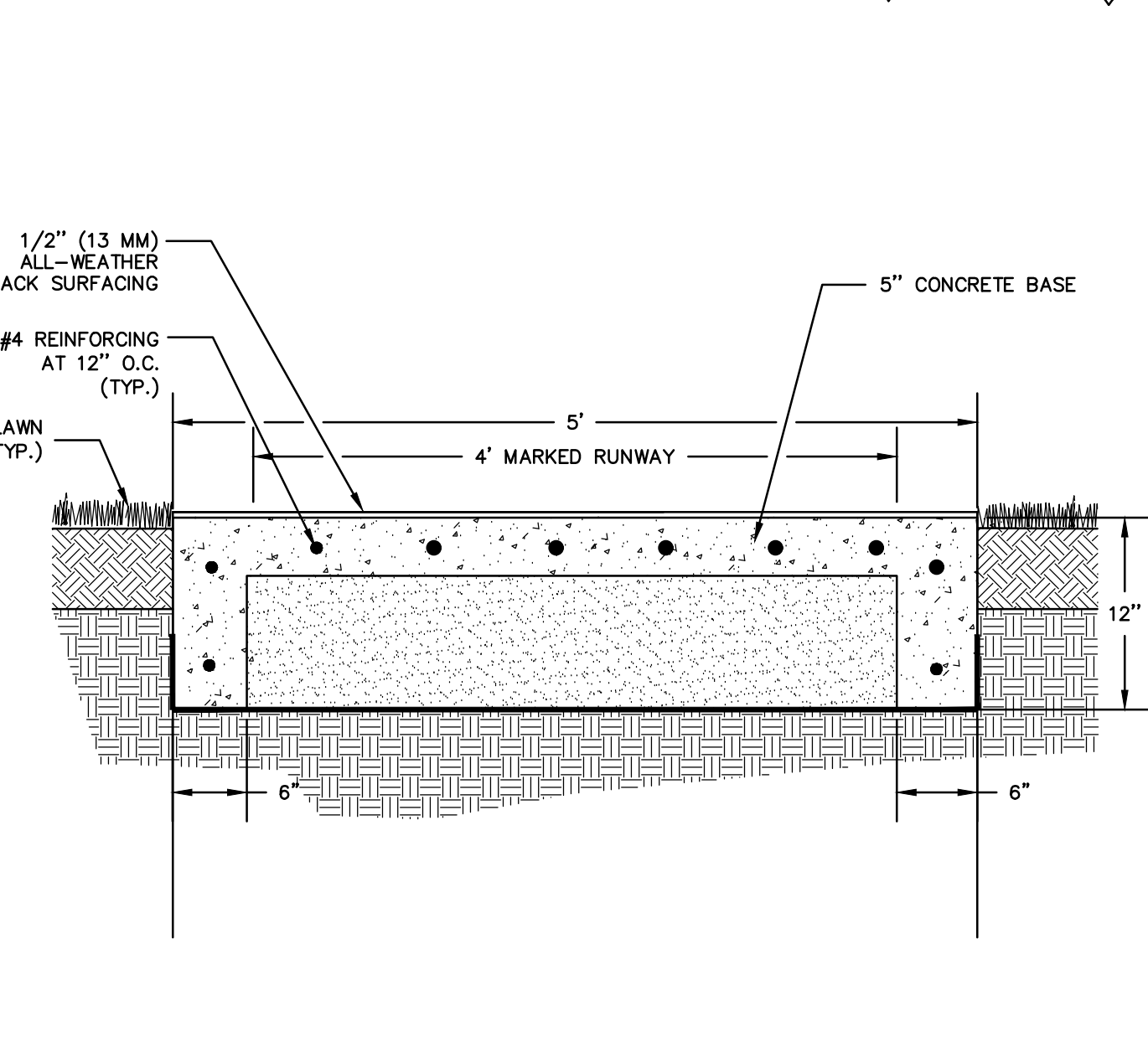
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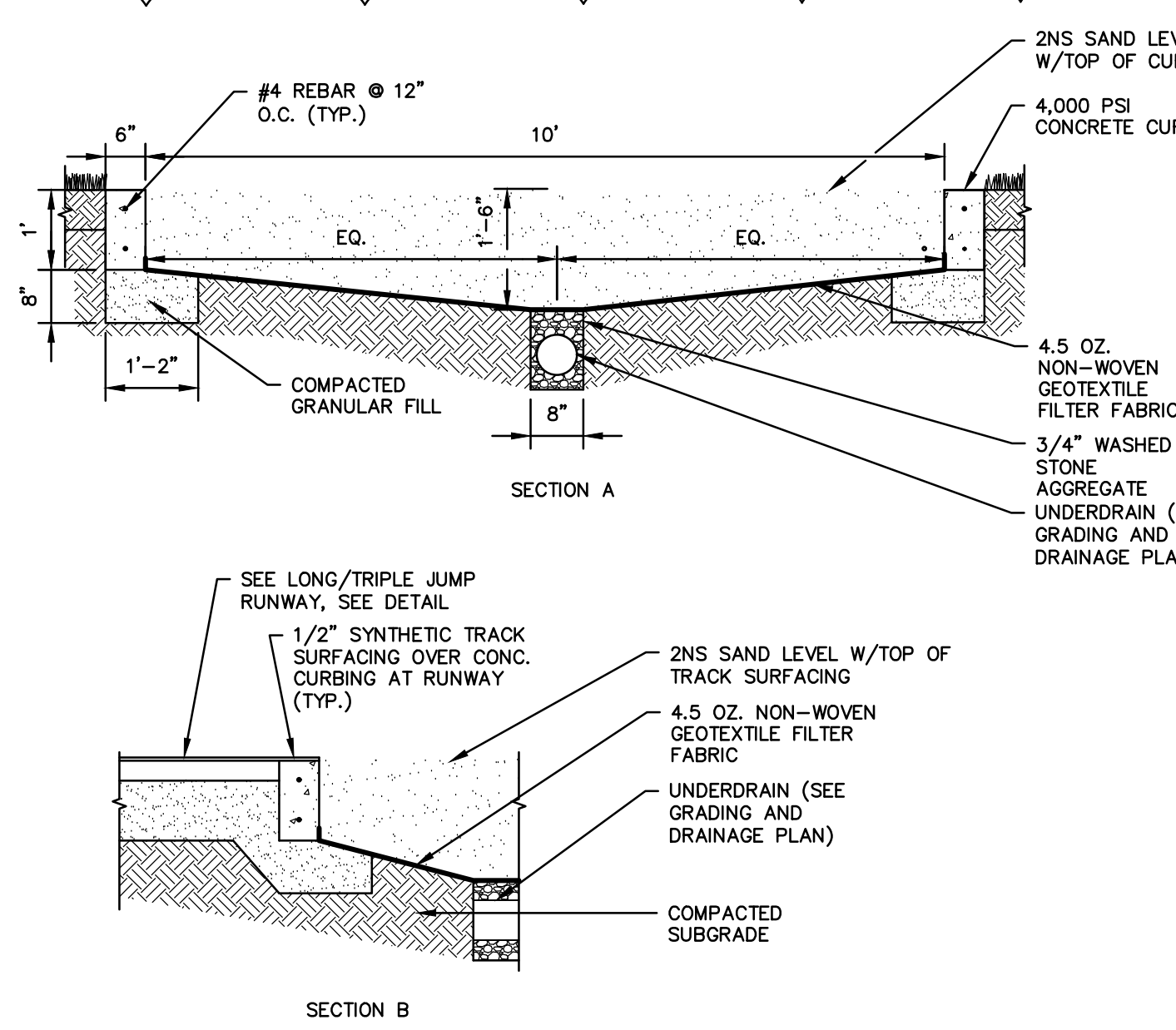
NOTES:
1. INSTALL ALL FENCE FABRIC ON FIELD SIDE OF POSTS.
2. ALL CHAIN LINK FENCE SHALL BE GROUNDED PER CHAIN LINK MANUFACTURERS RECOMMENDATIONS.
3. ALL CHAIN LINK FENCE SHALL BE BLACK VINYL COATED.



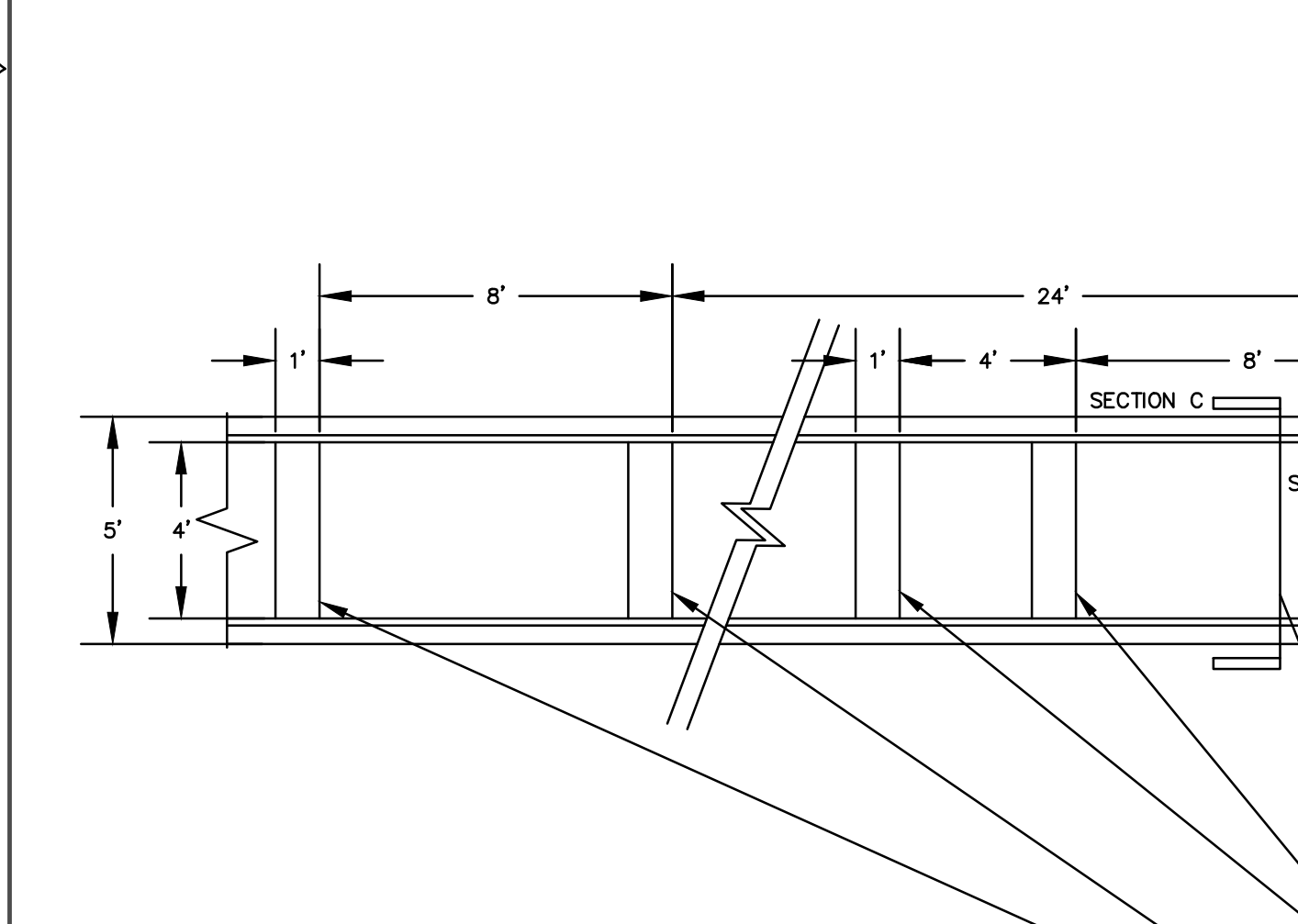
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1. INSTALL ALL FENCE FABRIC ON FIELD SIDE OF POSTS.
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3. ALL CHAIN LINK FENCE SHALL BE BLACK VINYL COATED.



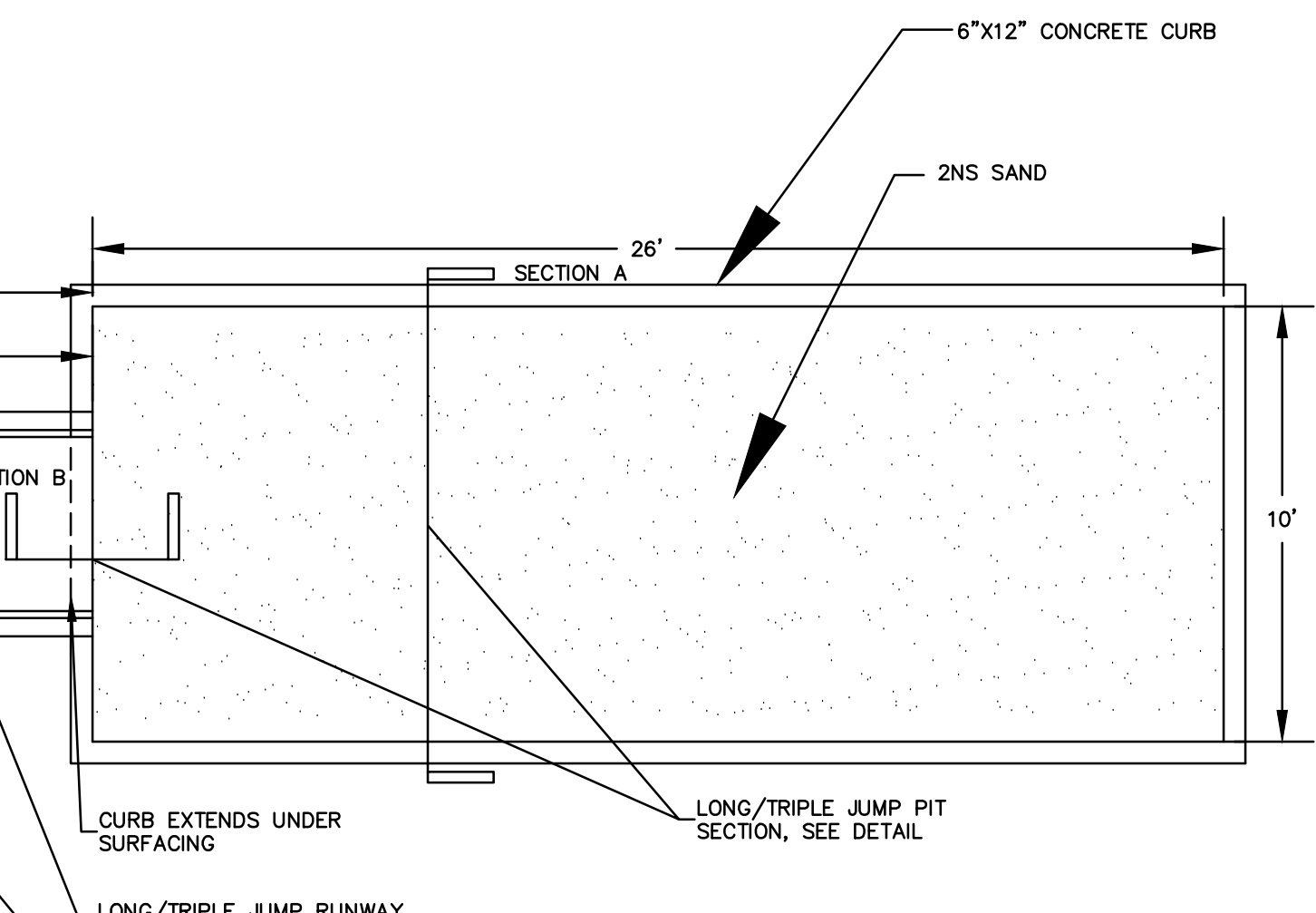
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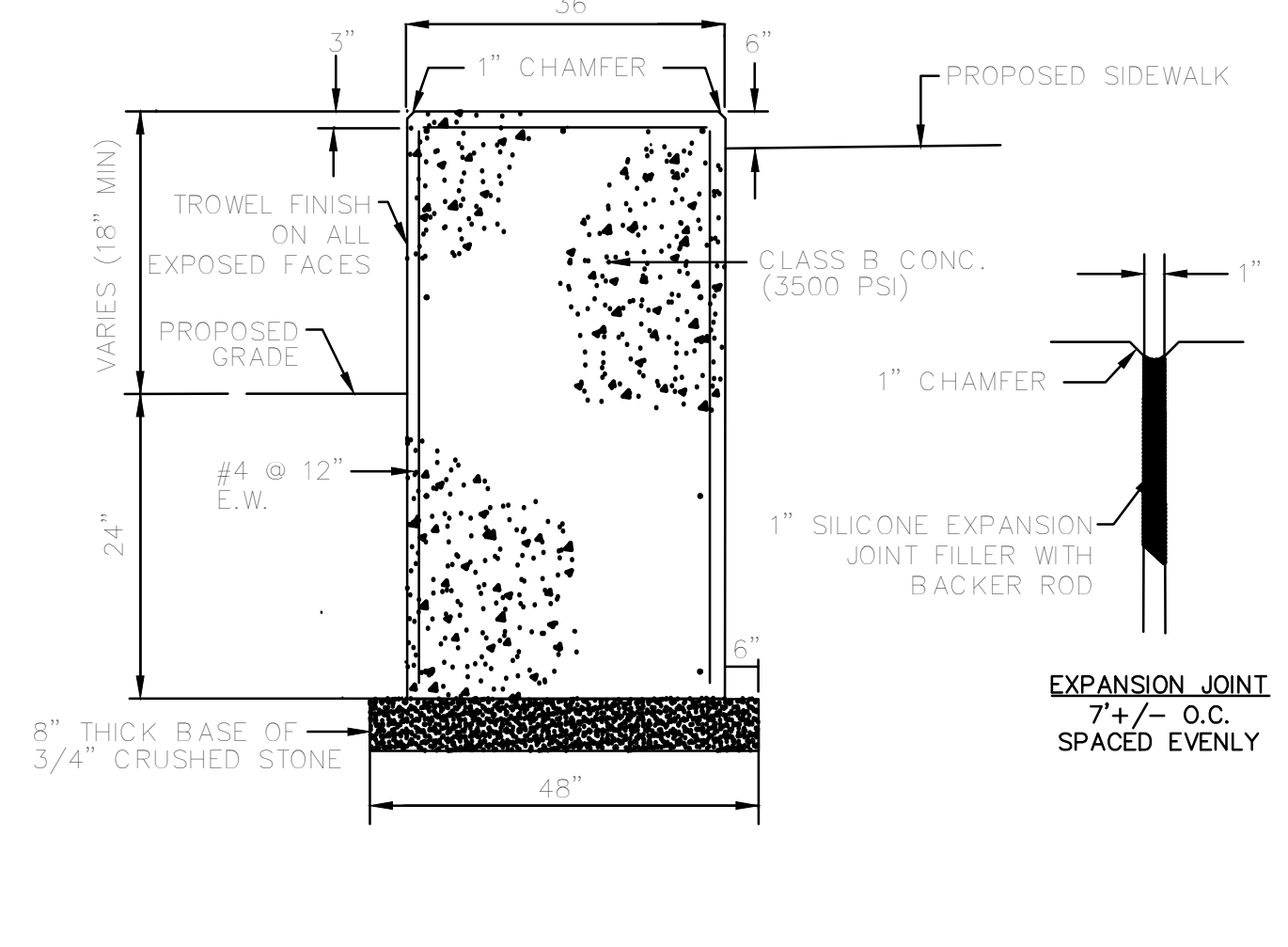
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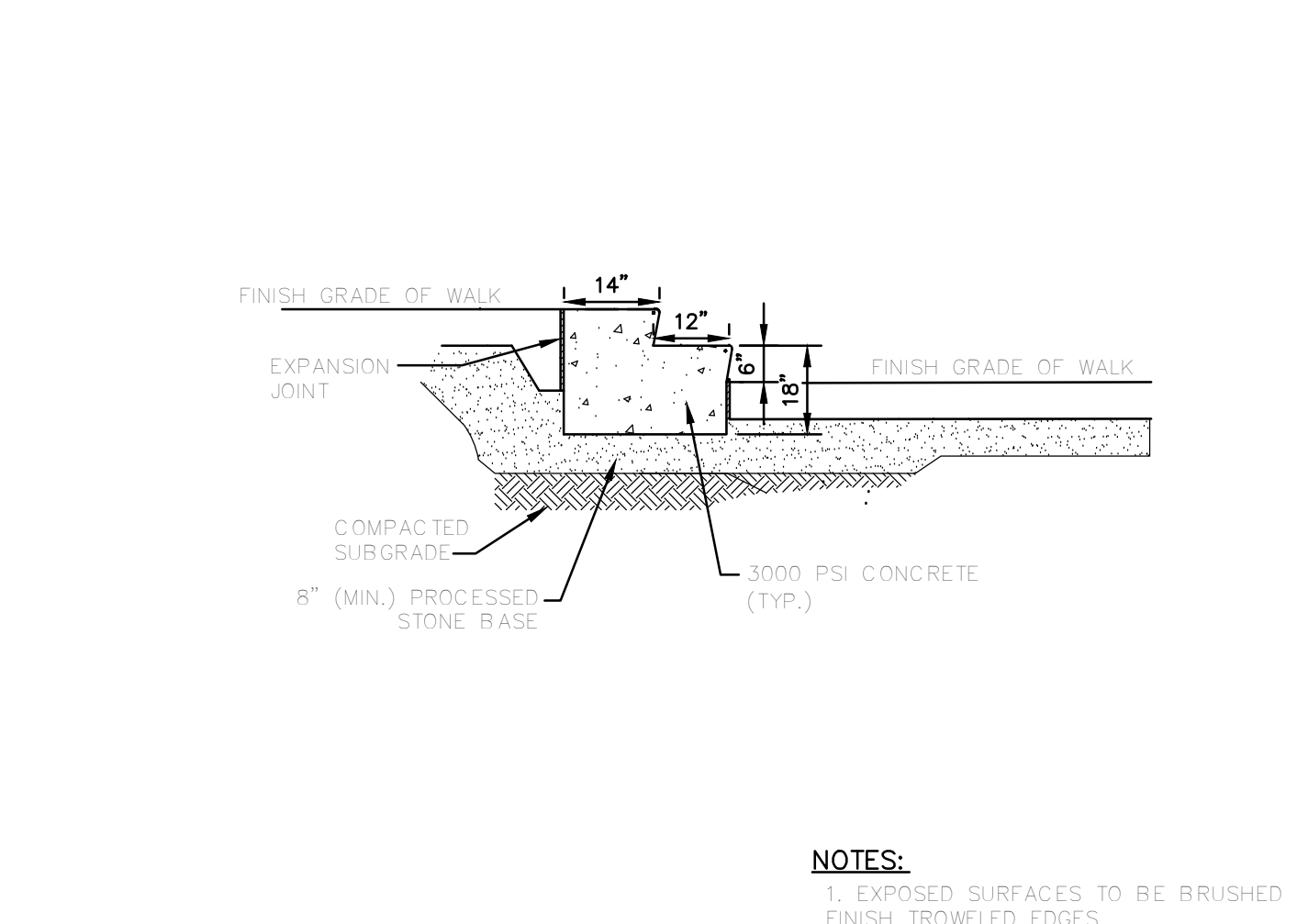
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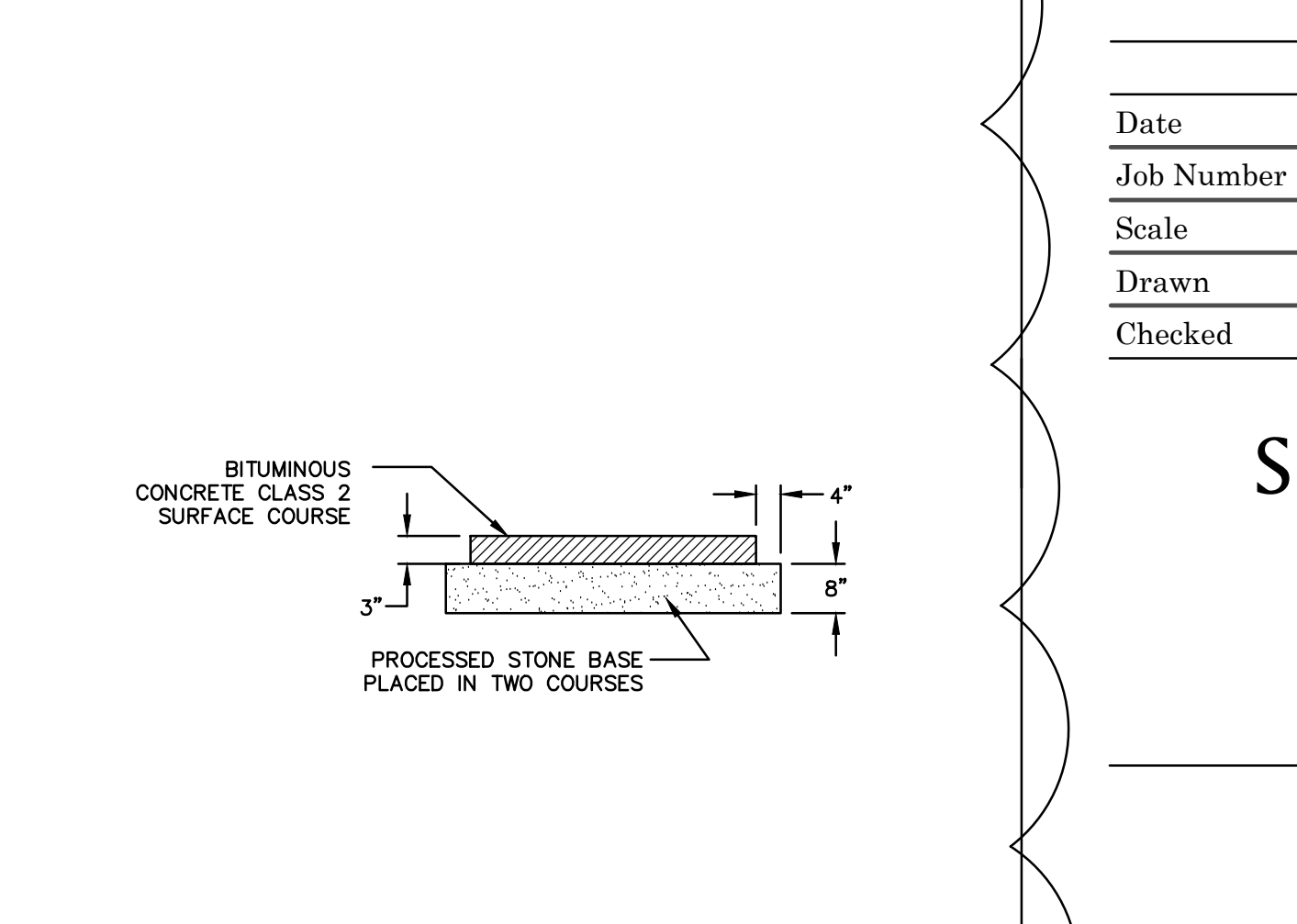
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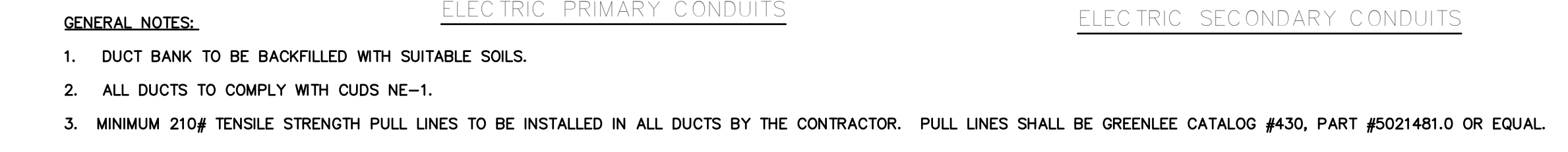
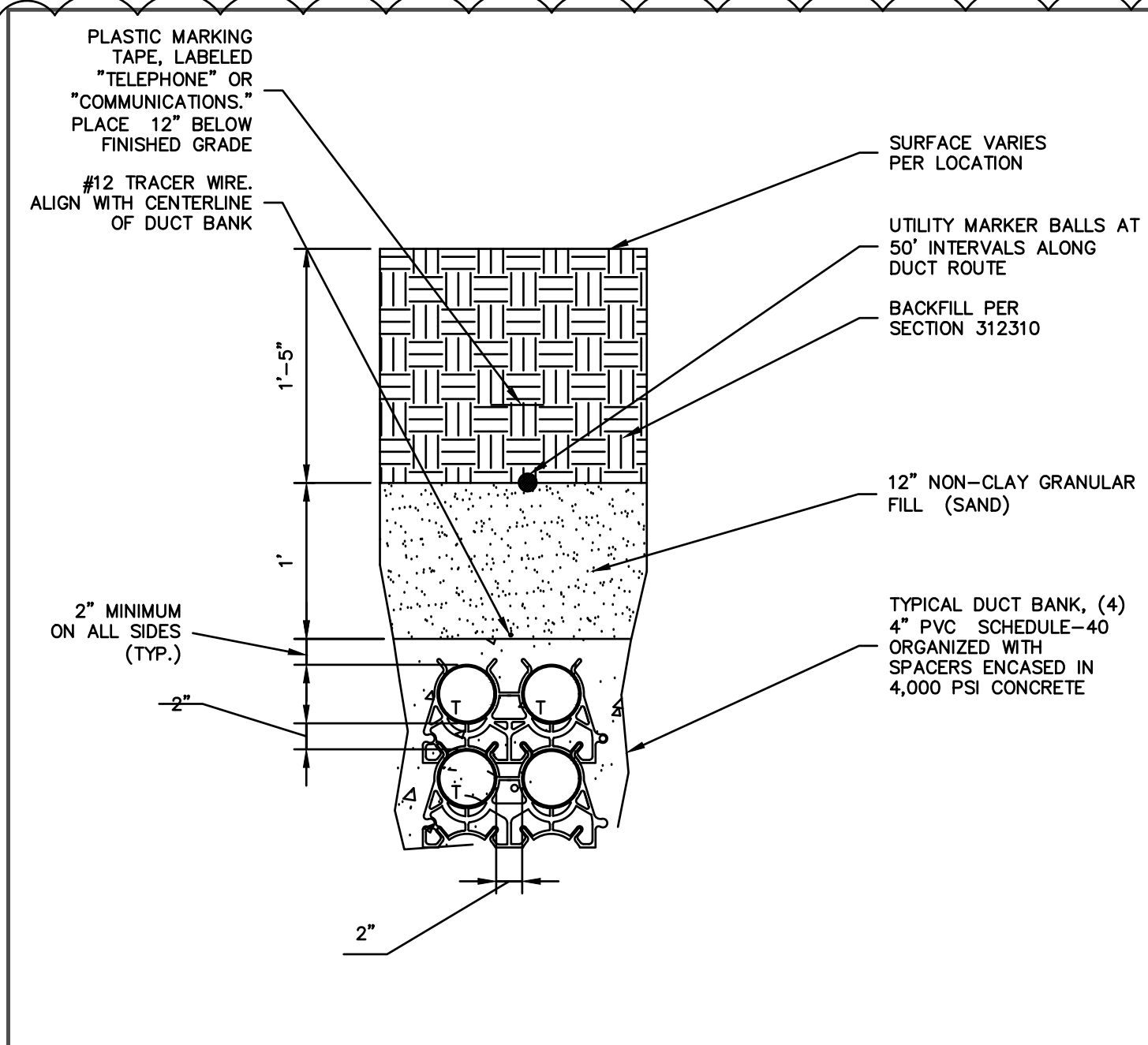
NOTES:
1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS.
2. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

Revisions		
1	Addendum 2	12/10/20

Issue Record		
	Issued for Bid	11/20/20

Drawing Information		
Date	11/18/20	
Job Number	GL-2021-05	
Scale	As indicated	
Drawn	MS	
Checked	RN	
Drawing Name		

SITE DETAILS

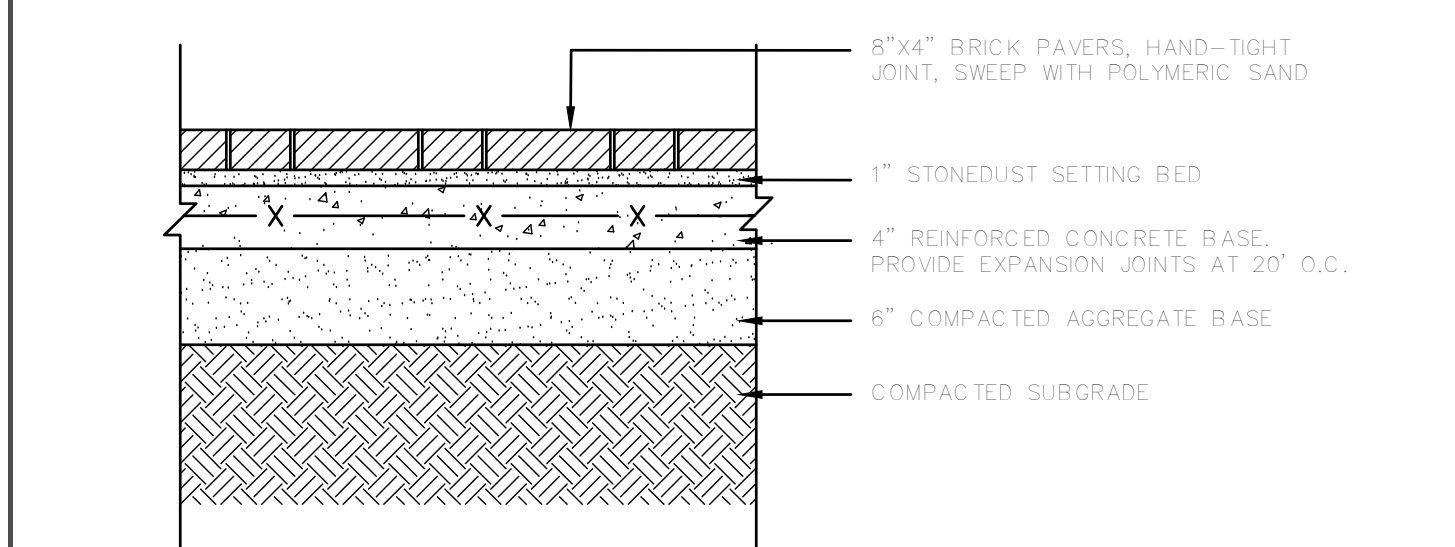


GENERAL NOTES:

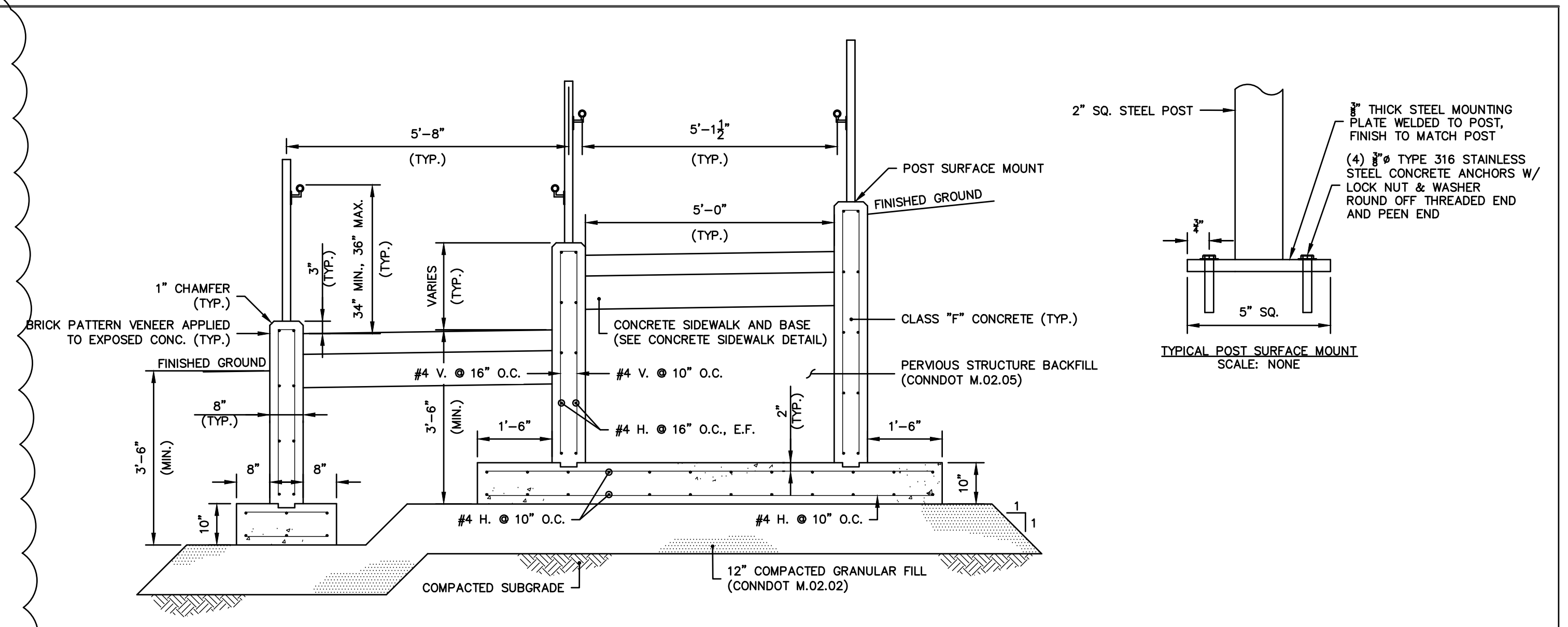
- DUCT BANK TO BE BACKFILLED WITH SUITABLE SOILS.
- ALL DUCTS TO COMPLY WITH CUDS NE-1.
- MINIMUM 210g TENSILE STRENGTH PULL LINES TO BE INSTALLED IN ALL DUCTS BY THE CONTRACTOR. PULL LINES SHALL BE GREENLEE CATALOG #430, PART #5021481.0 OR EQUAL.

TYPICAL TELECOMMUNICATIONS DUCT BANK SECTION
SCALE: NTS

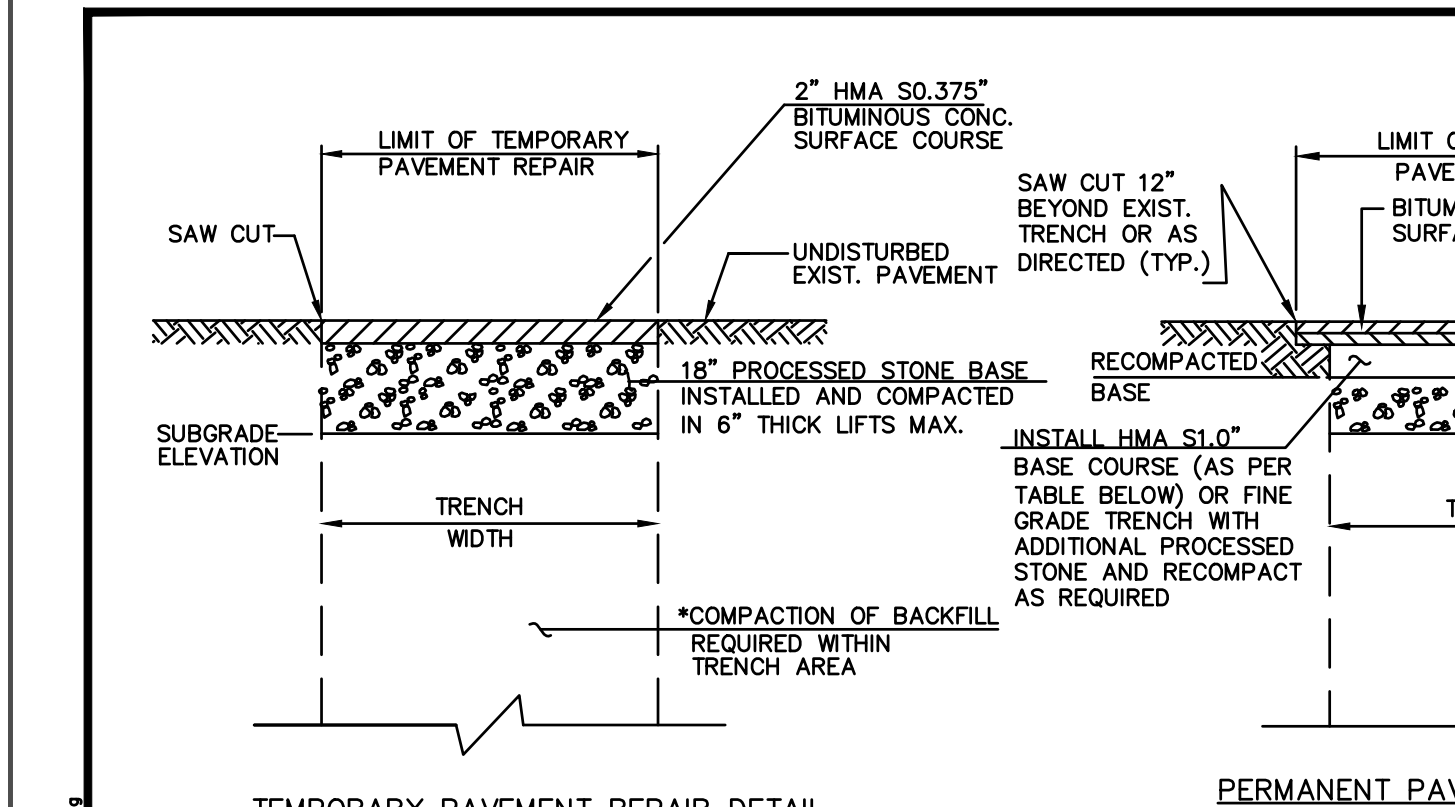
ELECTRIC DUCT BANKS
SCALE: NONE



PAVERS ON CONCRETE BASE-PEDESTRIAN
SCALE: NONE



CAST-IN-PLACE CONCRETE SWITCHBACK RAMP
SCALE: NONE

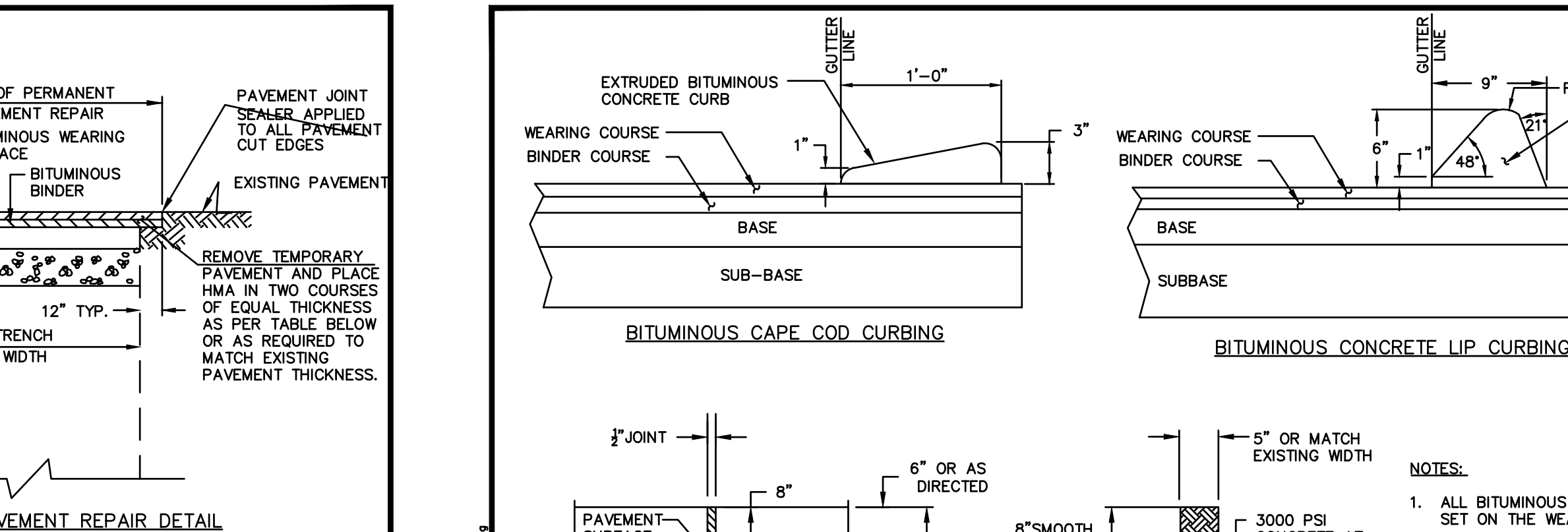


	LOCAL OR COLLECTOR (> 3000 ADT)	ARTERIAL (> 3000 ADT)
HMA S0.375"	1.5"	N/A
HMA S0.5"	2"	3" (ON TWO LIFTS)
HMA S1.0"	N/A	6" (ON TWO LIFTS)

NOTES:

- PROCESS STONE BASE SHALL BE CRUSHED TRAP ROCK CONFORMING TO ARTICLE M.05.01 OF THE FORM B17 AND TOWN SPECIFICATIONS. GRAVEL OR RECLAIMED MISCELLANEOUS AGGREGATE SHALL NOT BE USED.
- PERMANENT TRENCH REPAIRS FOR STREETS WITH CONCRETE PAVEMENT OR CONCRETE BASE MAY CONSIST OF 2" HMA S0.4", 4" HMA S1.0", AND 10" GRAVEL SUBBASE AT THE DISCRETION OF THE TOWN ENGINEER.
- AT THE REQUEST OF THE TOWN ENGINEER THE CONTRACTOR SHALL VERIFY AND SUBMIT PROPER TESTING RESULTS THAT COMPACTION MEETS WITH TOWN'S STANDARDS FOR A 55% COMPACTED DENSITY.

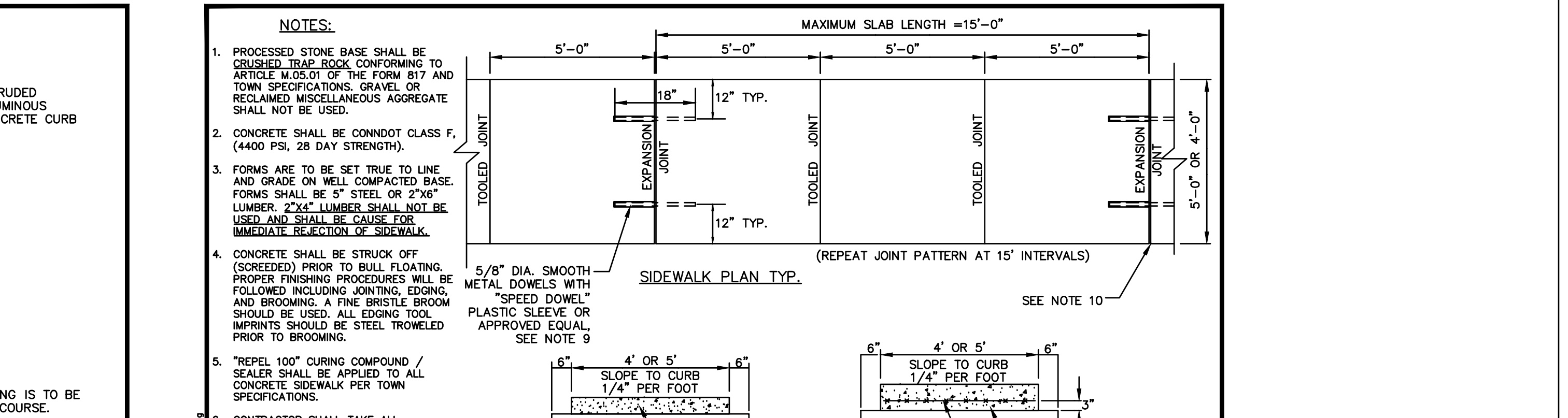
TEMPORARY AND PERMANENT PAVEMENT REPAIRS
SCALE: NONE
DRAWN BY: SR
CHECKED BY: SMI
APPROVED BY: DAP
LAST REVISED: 3/28/2017



NOTES:

- ALL BITUMINOUS CURBING IS TO BE SET ON THE WEARING COURSE.
- ROADWAY SHALL BE SWEEP CLEAN AND PROPERLY TACK COATED PRIOR TO BITUMINOUS CURB INSTALLATION.
- CAPE COD CURB SHALL BE INSTALLED THROUGHOUT ALL CUL-DE-SACS AND OTHER AREAS AS DIRECTED.

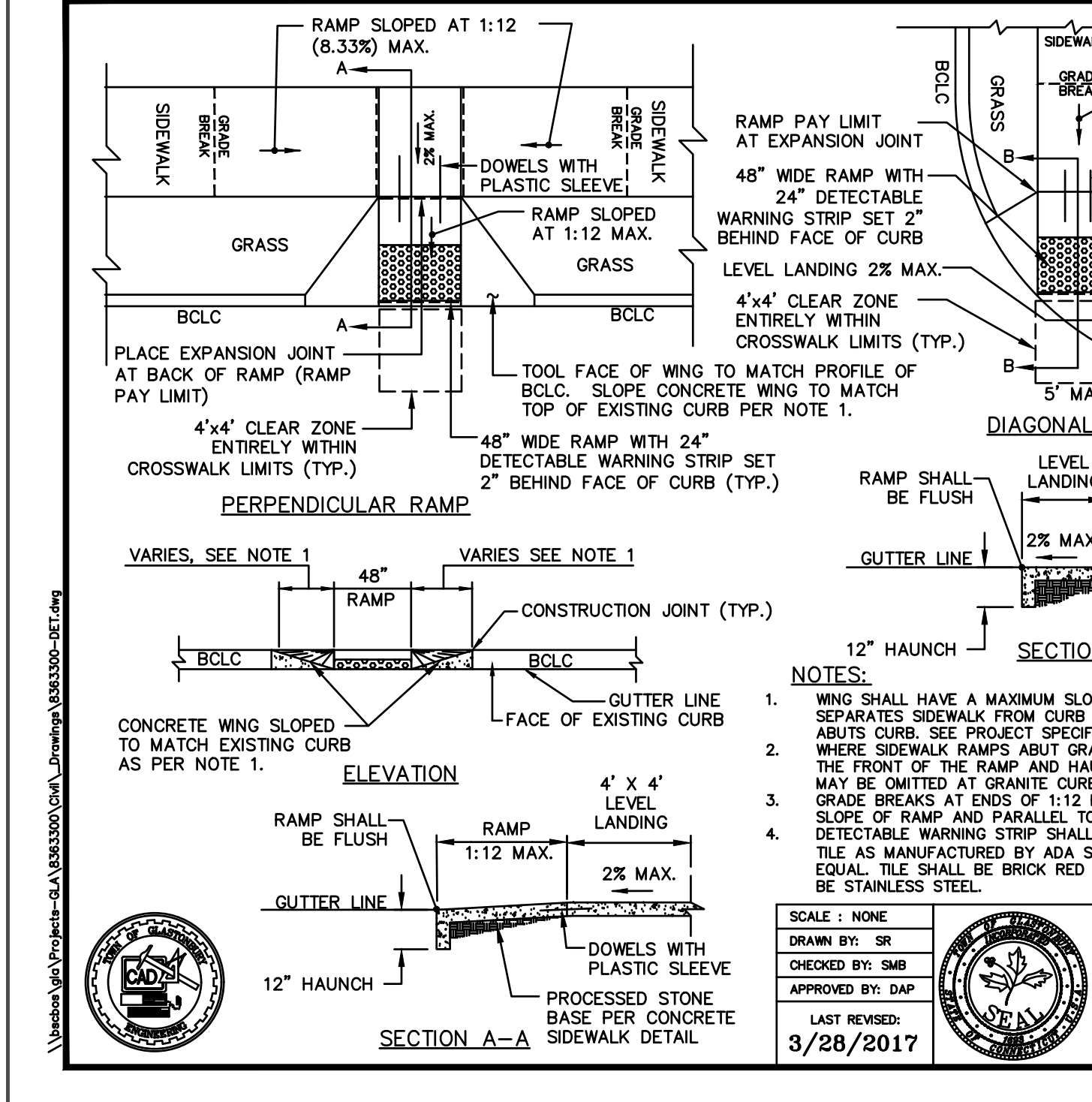
TEMPORARY AND PERMANENT PAVEMENT REPAIRS
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DRAWN BY: SR
CHECKED BY: SMI
APPROVED BY: DAP
LAST REVISED: 3/28/2017



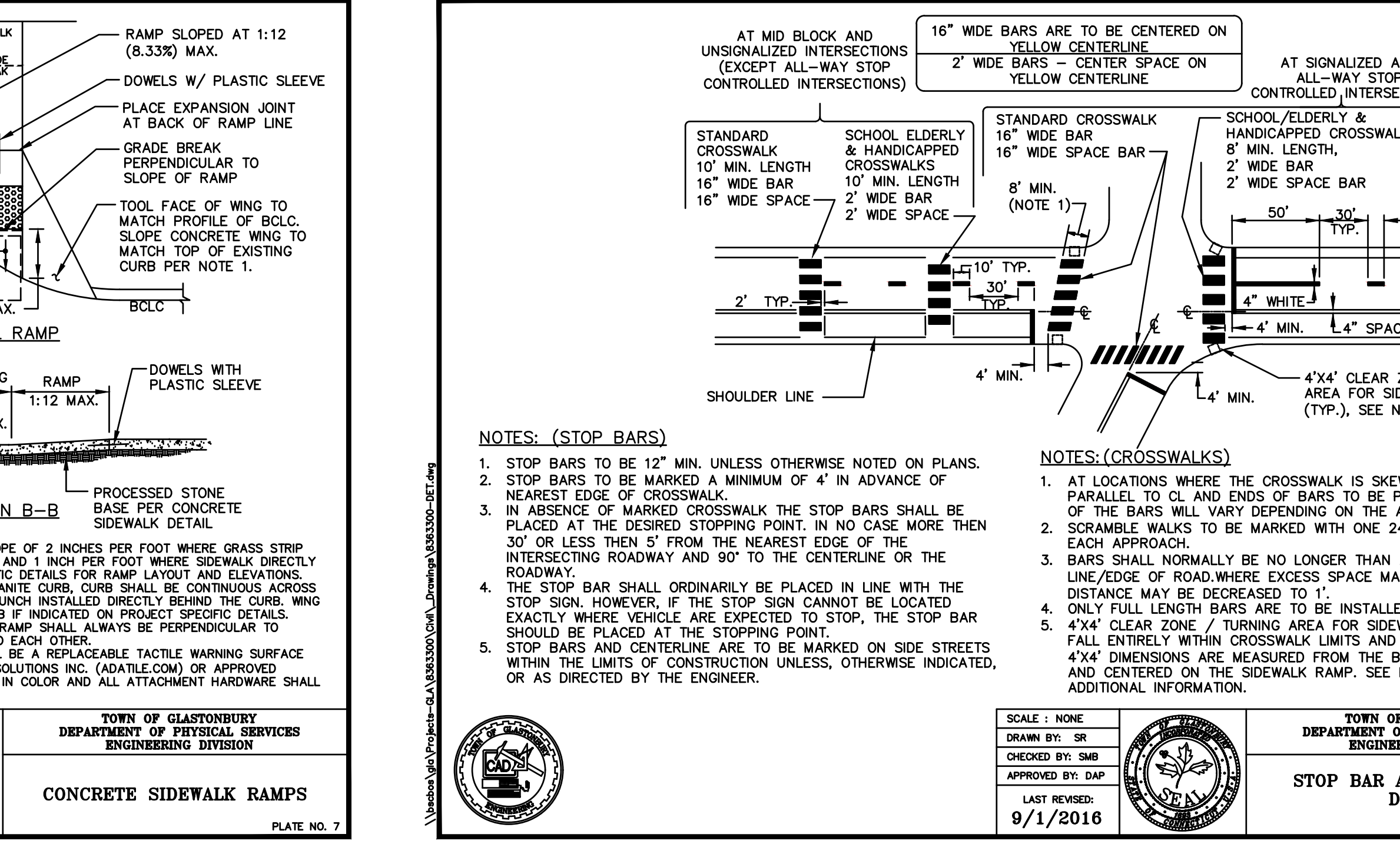
NOTES:

- PROCESSED STONE BASE SHALL BE CRUSHED TRAP ROCK CONFORMING TO ARTICLE M.05.01 OF THE FORM B17 AND TOWN SPECIFICATIONS. GRAVEL OR RECLAIMED MISCELLANEOUS AGGREGATE SHALL NOT BE USED.
- CONCRETE SHALL BE CONDOT CLASS F, (4400 PSI, 3R DAY STRENGTH).
- FORMS ARE TO BE SET TRUE TO LINE AND GRADE ON WELL COMPACTED BASE. FORMS SHALL BE 3" STEEL OR 2"x8" LUMBER. 2"x4" LUMBER SHALL NOT BE USED AND SHALL BE CHASED FOR IMMEDIATE REMOVAL OF SIDEWALK.
- CONCRETE SHALL BE STRUCK OFF (SCREED) PRIOR TO BULL FLOATING. PROPER FINISHING PROCEDURES WILL BE FOLLOWED INCLUDING JOINTING, EDGING, AND BROOMING. A FINE BRISTLE BROOM SHOULD BE USED. ALL EDGING TOOL IMPRINTS SHOULD BE STEEL TROWELLED PRIOR TO BROOMING.
- NEPEL 100' CURING COMPOUND / SEALER SHALL BE APPLIED TO ALL CONCRETE SIDEWALK PER TOWN SPECIFICATIONS.
- CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT SURFACE FROM DAMAGE.
- WALKS SHALL BE BACKFILLED AS SOON AS FORMS ARE REMOVED.
- SIDEWALK SLABS SHOULD NOT EXCEED 5' IN WIDTH IF SIDEWALK SLABS GREATER THAN 2' IN WIDTH ARE TO BE CONSTRUCTED. A LONGITUDINAL EXPANSION JOINT SHALL BE CONSTRUCTED TO FORM ACCEPTABLE SLABS.
- INSERT 18" LONG SMOOTH METAL DOWELS AT ALL EXPANSION JOINTS, AT SIDEWALK RAMPS, AND AT THE LAST SLAB POURED AT THE END OF THE WORKING DAY. DOWELS SHALL ALSO BE INSTALLED BETWEEN NEW AND EXISTING CONCRETE SLABS.
- EXPANSION JOINT SHALL BE 1/2" ASPHALT IMPREGATED CELLULAR FIBER AND OF A DIMENSION EQUAL TO THE FULL SLAB DEPTH.

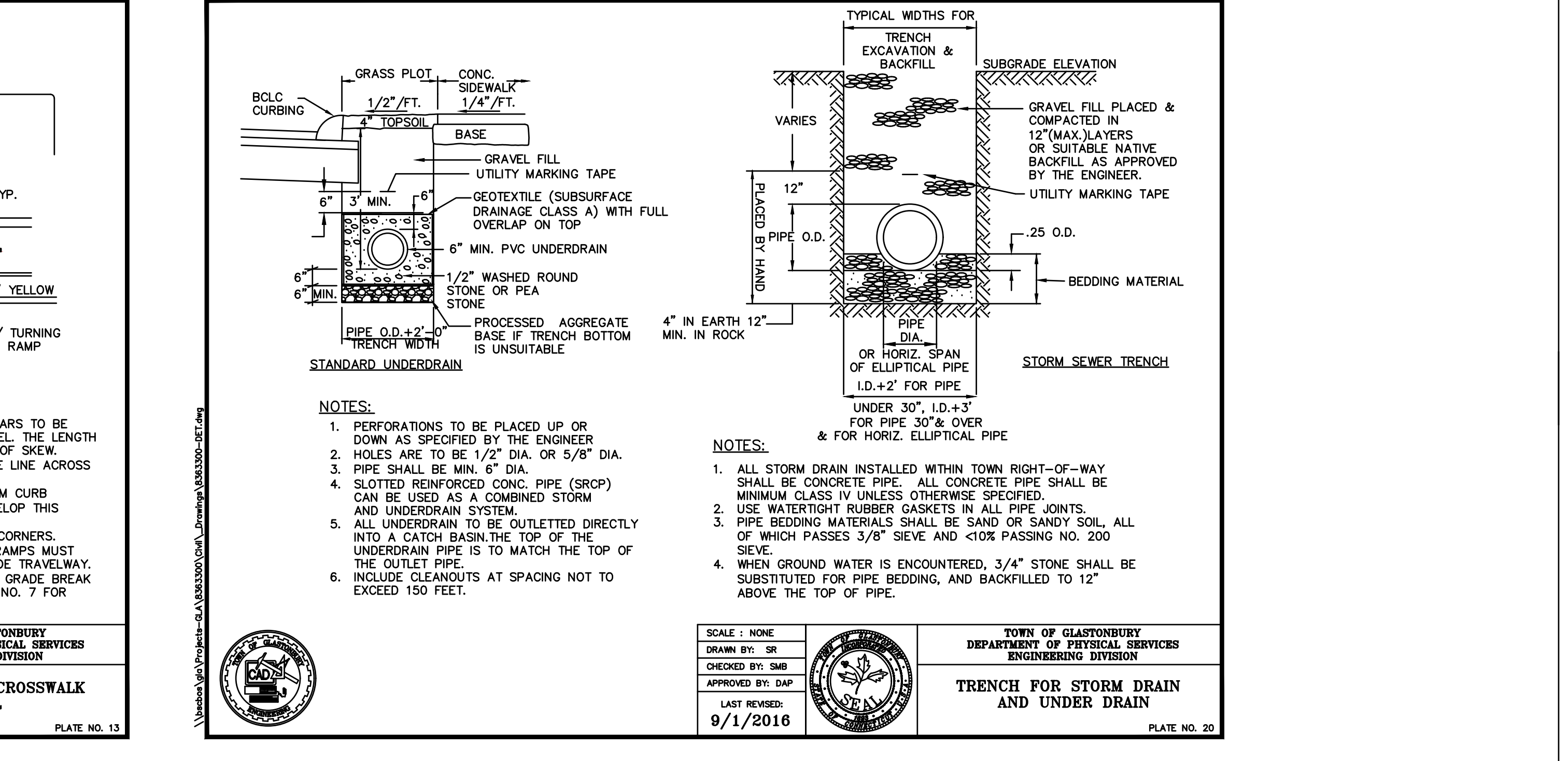
CONCRETE SIDEWALKS
SCALE: NONE
DRAWN BY: SR
CHECKED BY: SMI
APPROVED BY: DAP
LAST REVISED: 9/1/2016



CONCRETE SIDEWALK RAMP
SCALE: NONE
DRAWN BY: SR
CHECKED BY: SMI
APPROVED BY: DAP
LAST REVISED: 3/2/2017



STOP BAR AND CROSSWALK DETAIL
SCALE: NONE
DRAWN BY: SR
CHECKED BY: SMI
APPROVED BY: DAP
LAST REVISED: 9/1/2016



TRENCH FOR STORM DRAIN AND UNDER DRAIN
SCALE: NONE
DRAWN BY: SR
CHECKED BY: SMI
APPROVED BY: DAP
LAST REVISED: 9/1/2016

Revisions	Date
1 Addendum 2	12/10/20

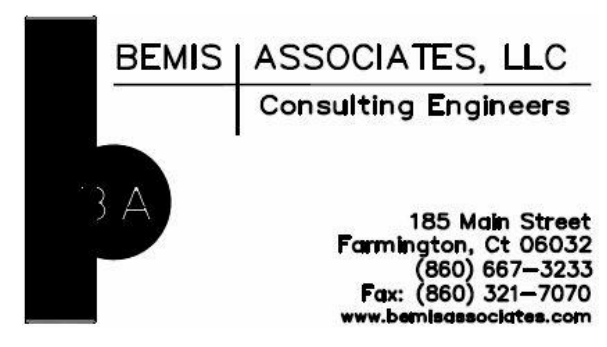
Issue Record	Date
Issued for Bid	11/20/20

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Date	11/18/20
Job Number	GL-2021-05
Scale	As indicated
Drawn	MS
Checked	RN
Drawing Name	

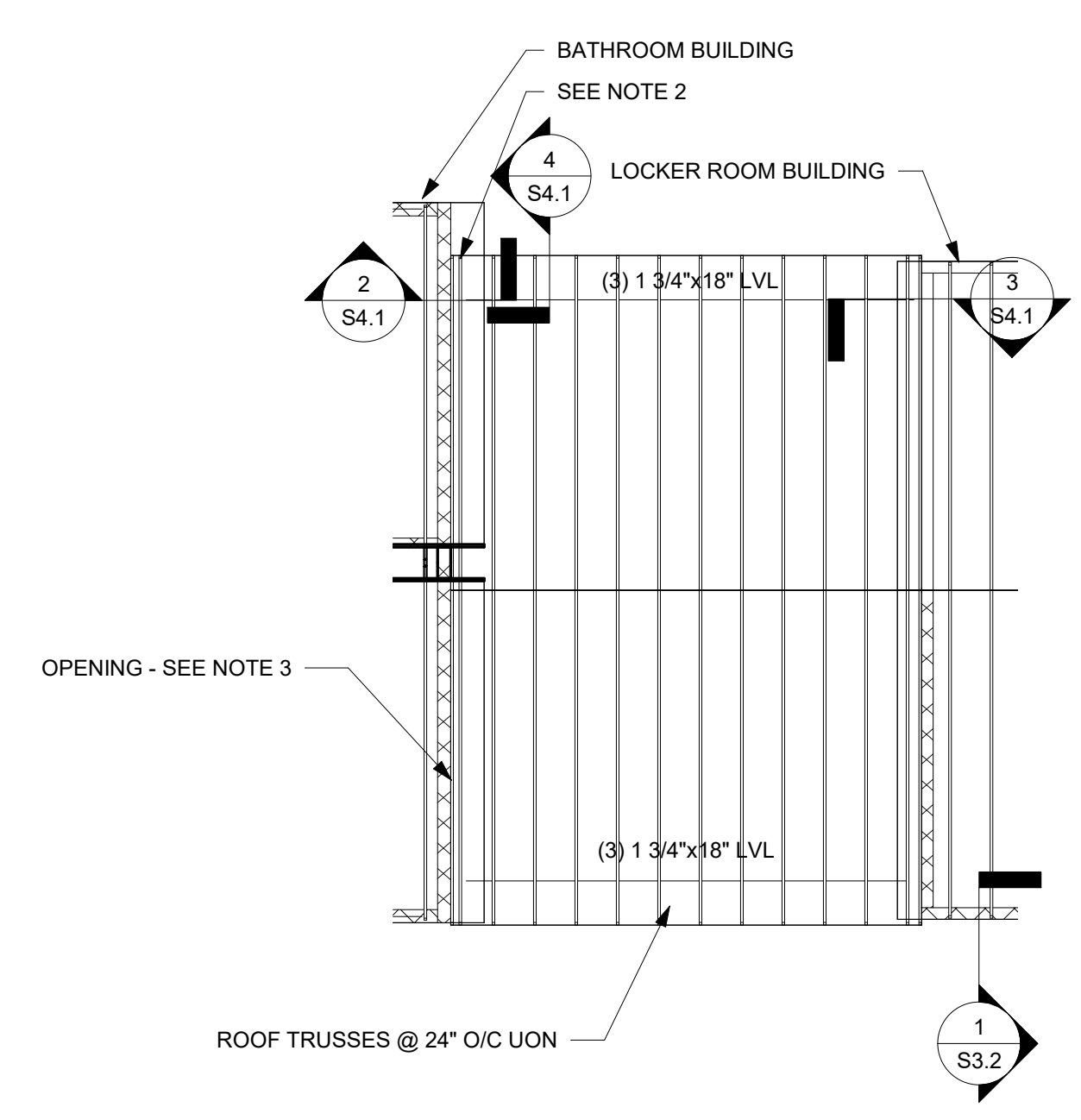
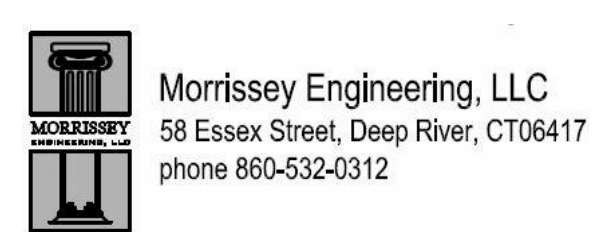
SITE DETAILS



MEP Engineer

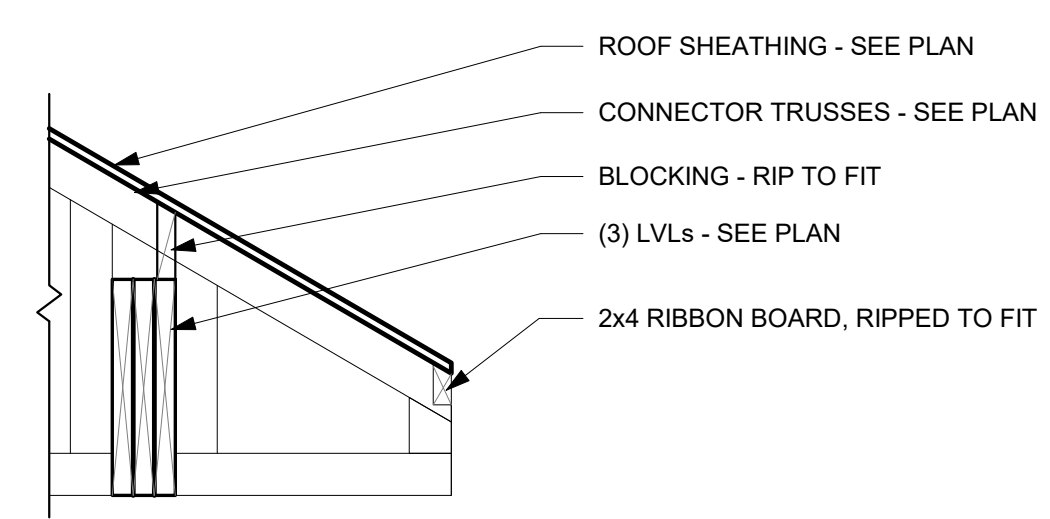


Structural Engineer

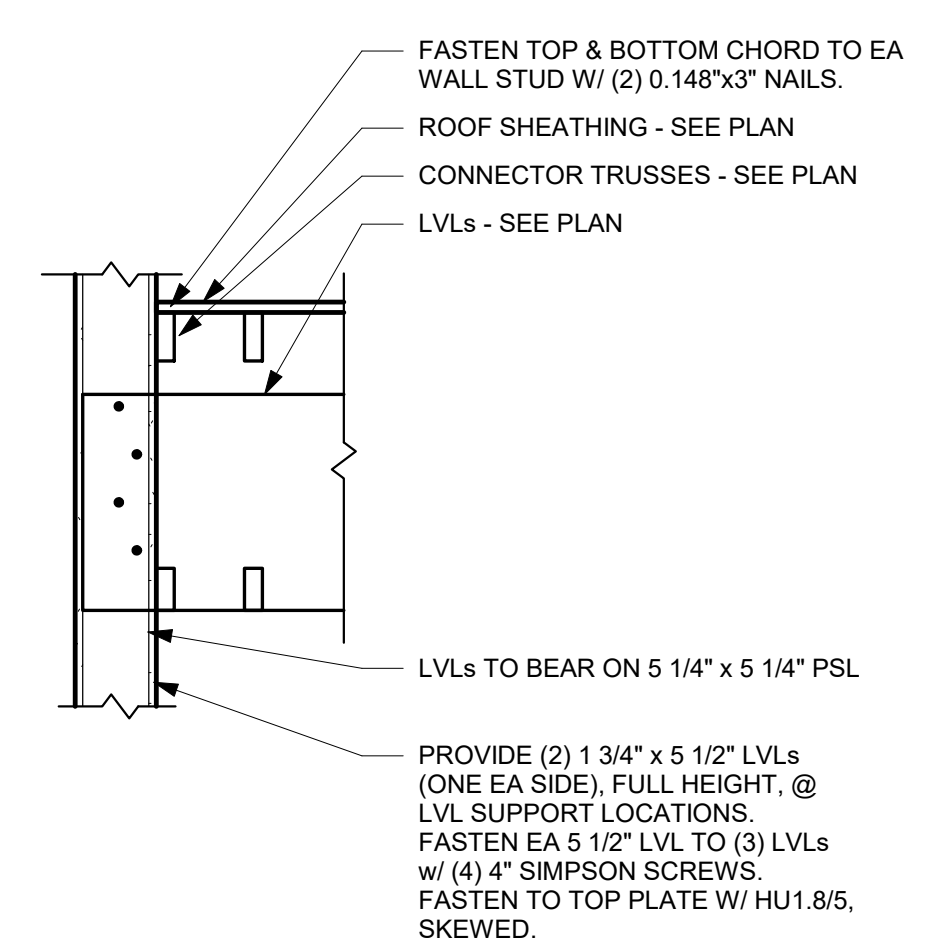


1 CONNECTOR ROOF FRAMING PLAN
1/8" = 1'-0"

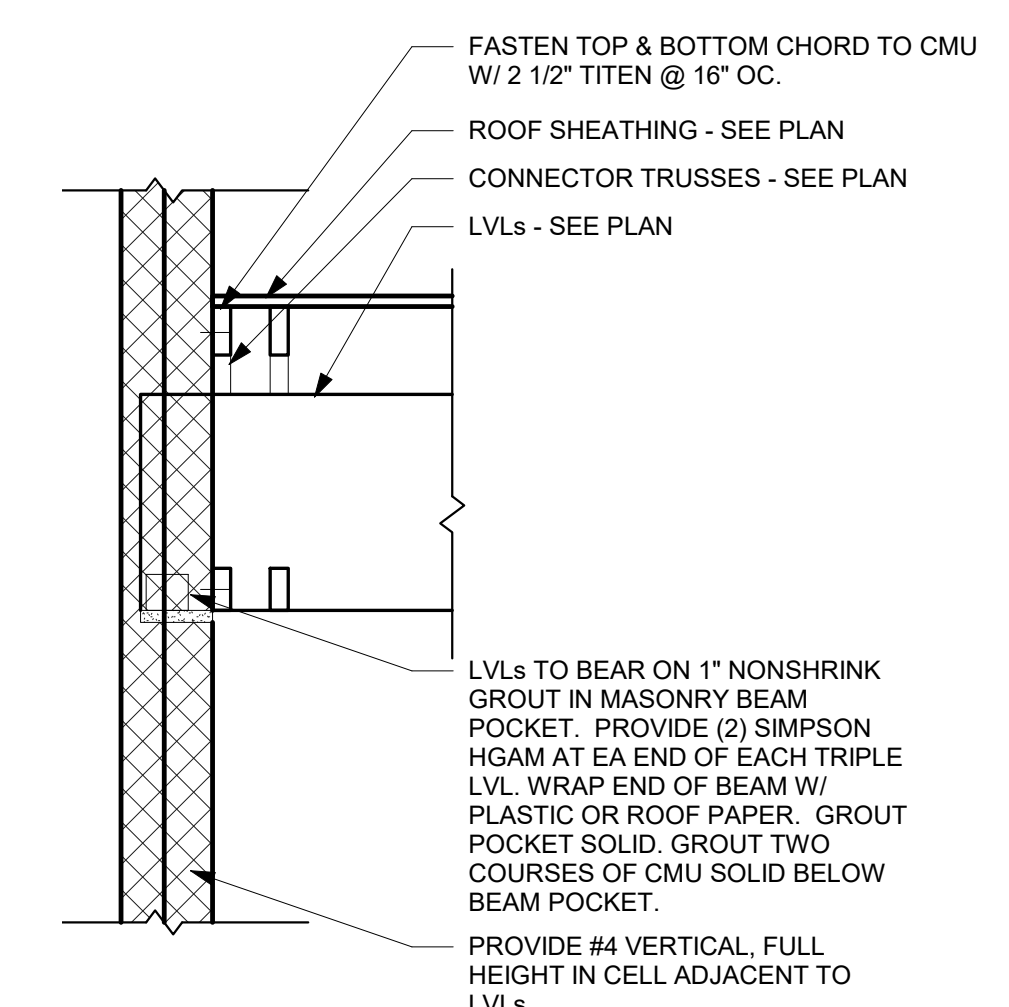
- NOTES:
- SEE ROOF FRAMING PLAN NOTES.
 - TRUSS TO BE DESIGNED FOR AN ADDITIONAL DEAD LOAD OF 150PLF ON EASTERN HALF OF TRUSS. TOTAL DEFLECTION SHOULD BE LIMITED TO THE LESSER OF 0.3" OR L/600.
 - PROVIDE W8X10 LINTEL W/ 1/4"X7" PLATE AT BOTTOM. WELD PLATE TO WF FLANGE W/ 2" LONG FILLET WELD @ 12" O.C. EF. PROVIDE 4" BEARING @ EA END.



4 SECTION
3/4" = 1'-0"



3 SECTION
3/4" = 1'-0"



2 SECTION
3/4" = 1'-0"

Revisions		
1	Addendum 2	12/10/20

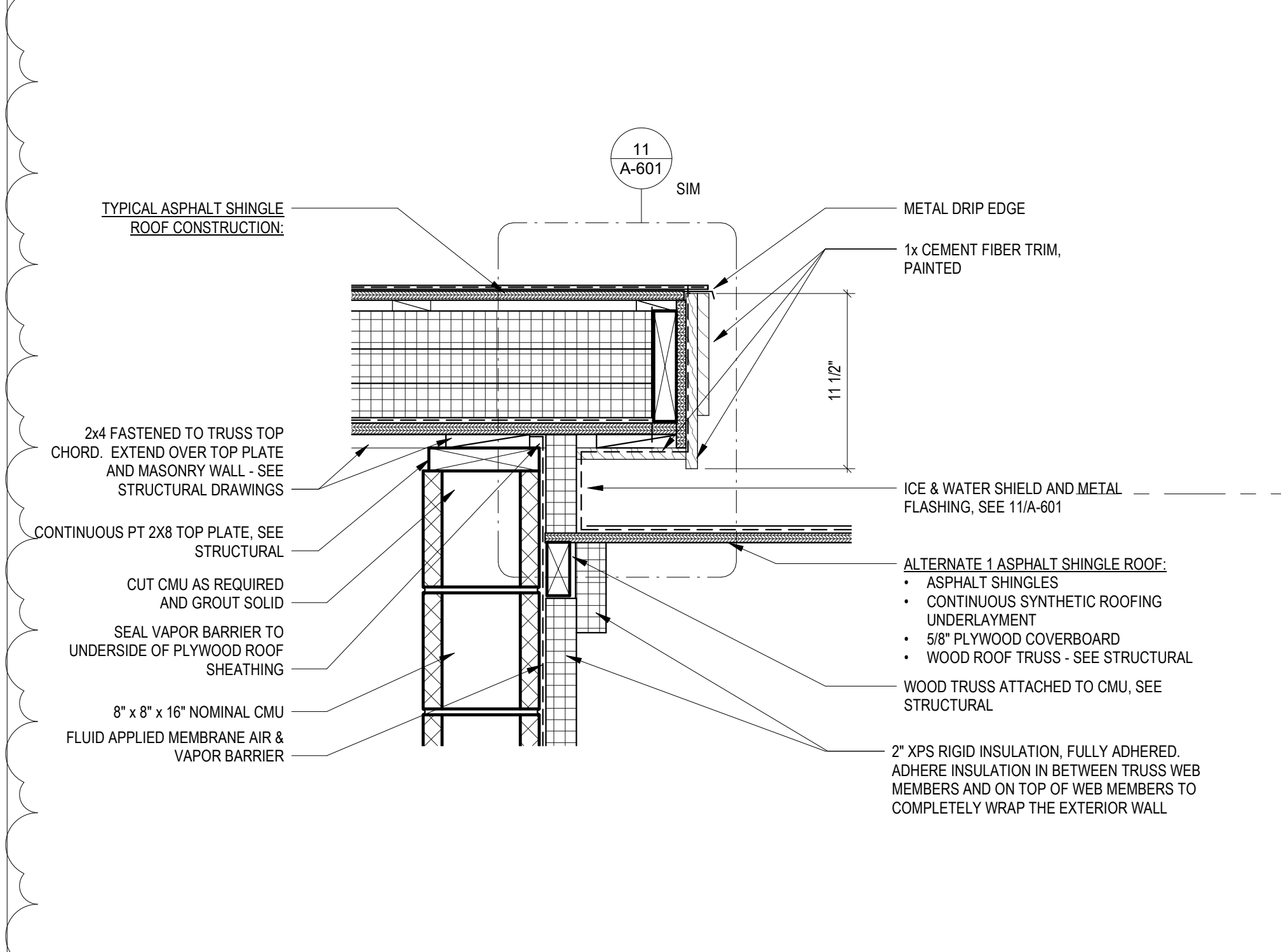
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Job Number	GL-2021-05
Scale	As indicated
Drawn	EAM
Checked	DJM
Drawing Name	

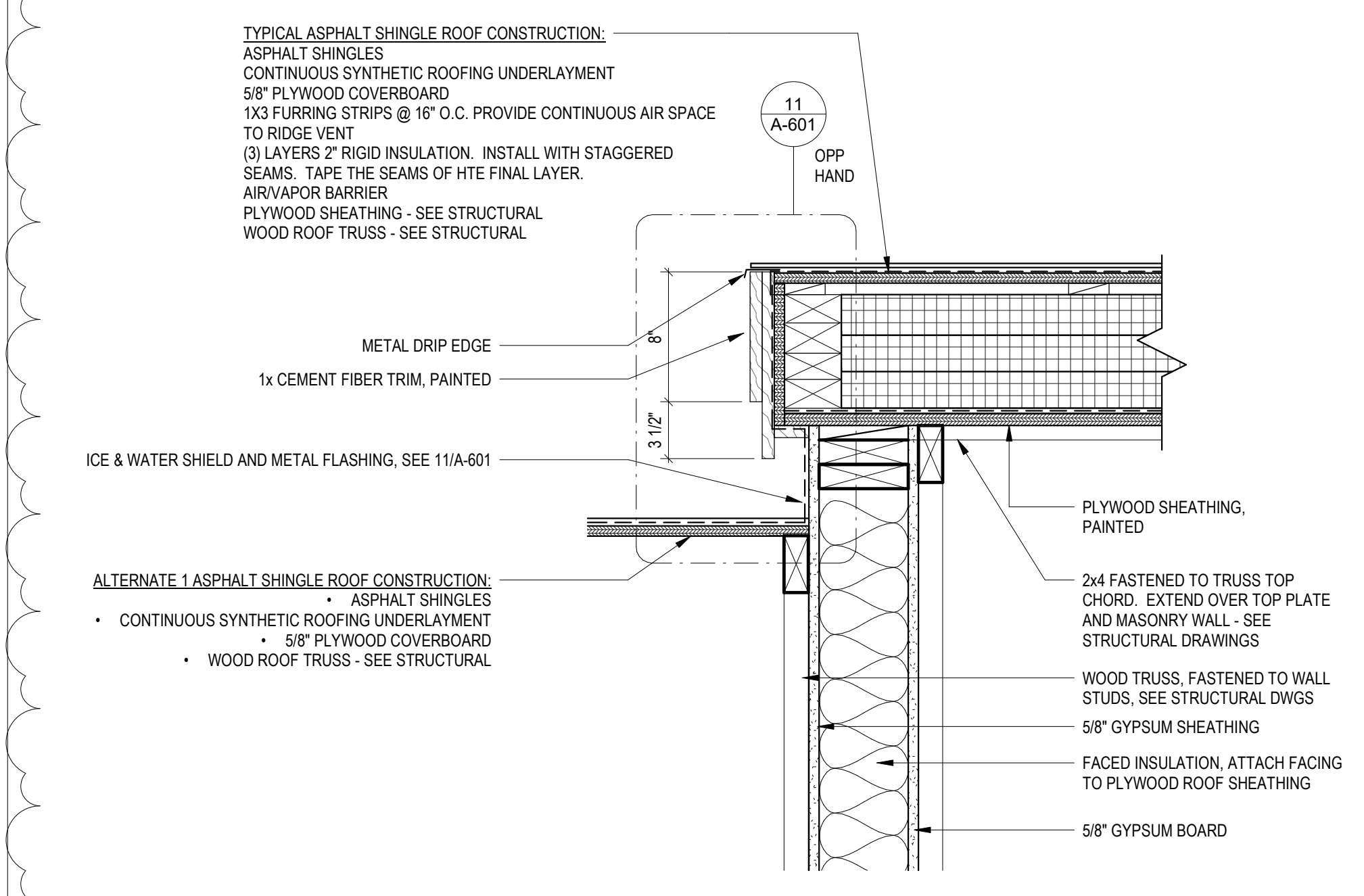
Connector Roof Alternate

Drawing Number

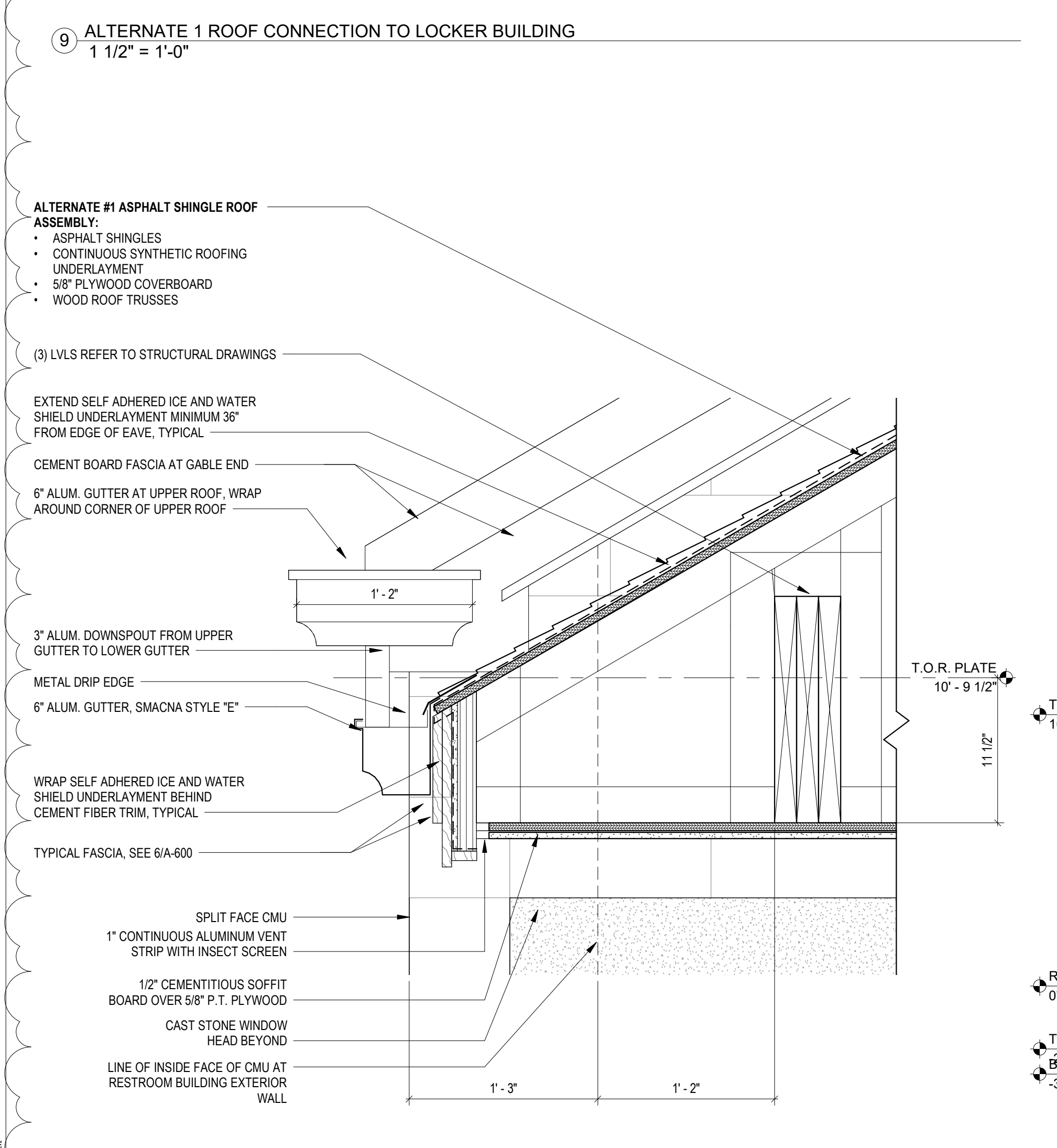
S4.1



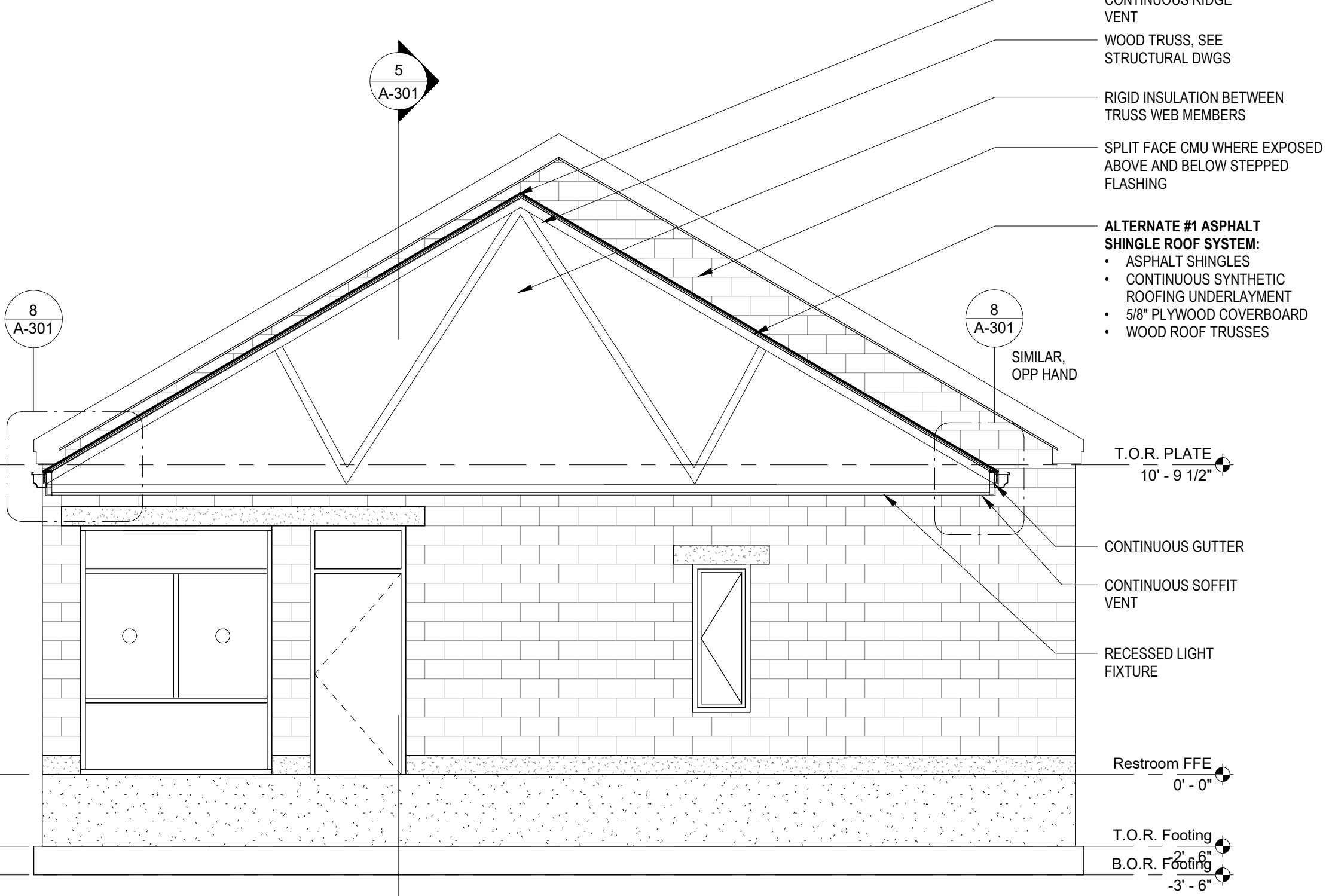
10 ALTERNATE 1 ROOF CONNECTION TO RESTROOM BUILDING
1 1/2" = 1'-0"



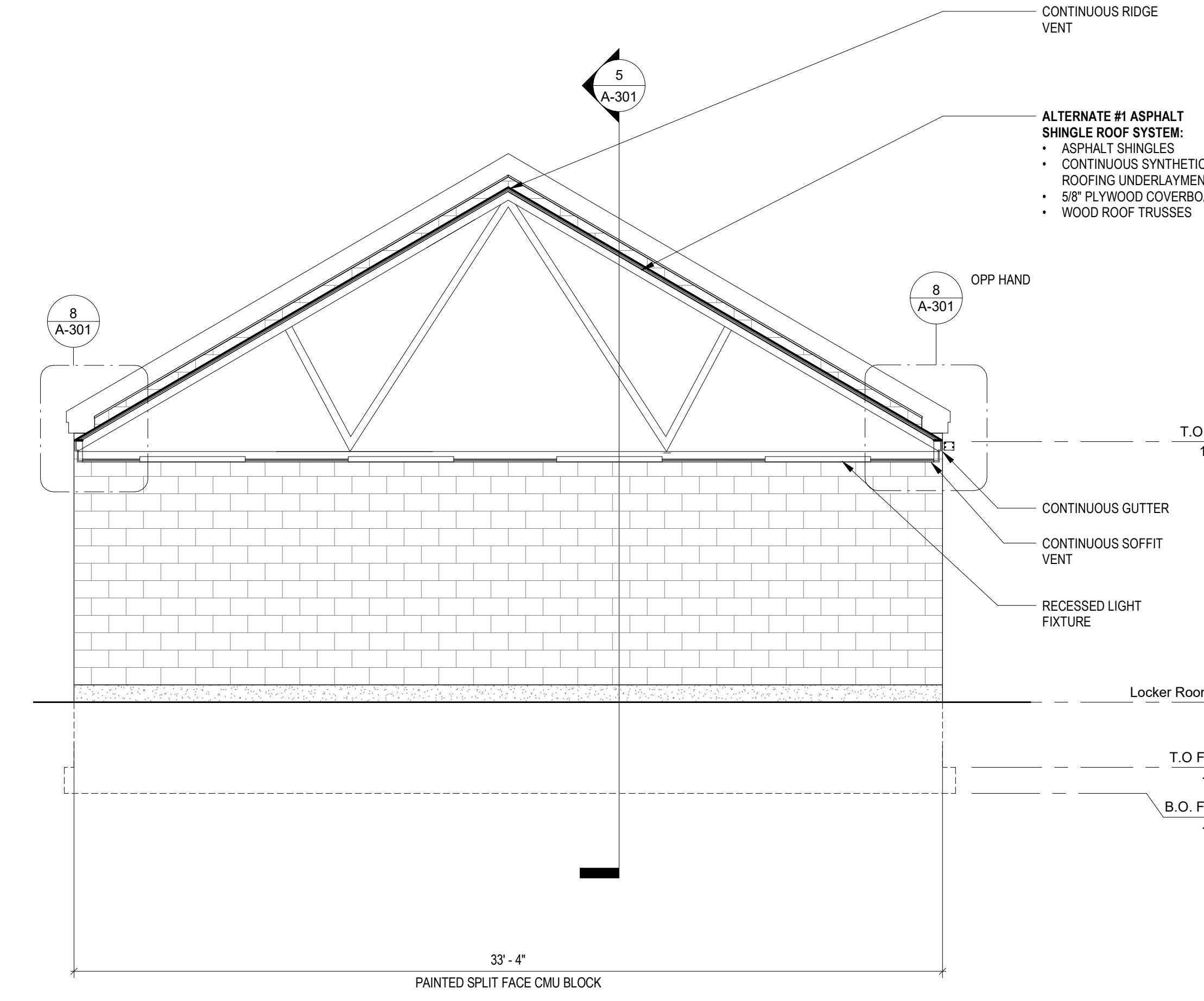
9 ALTERNATE 1 ROOF CONNECTION TO LOCKER BUILDING
1 1/2" = 1'-0"



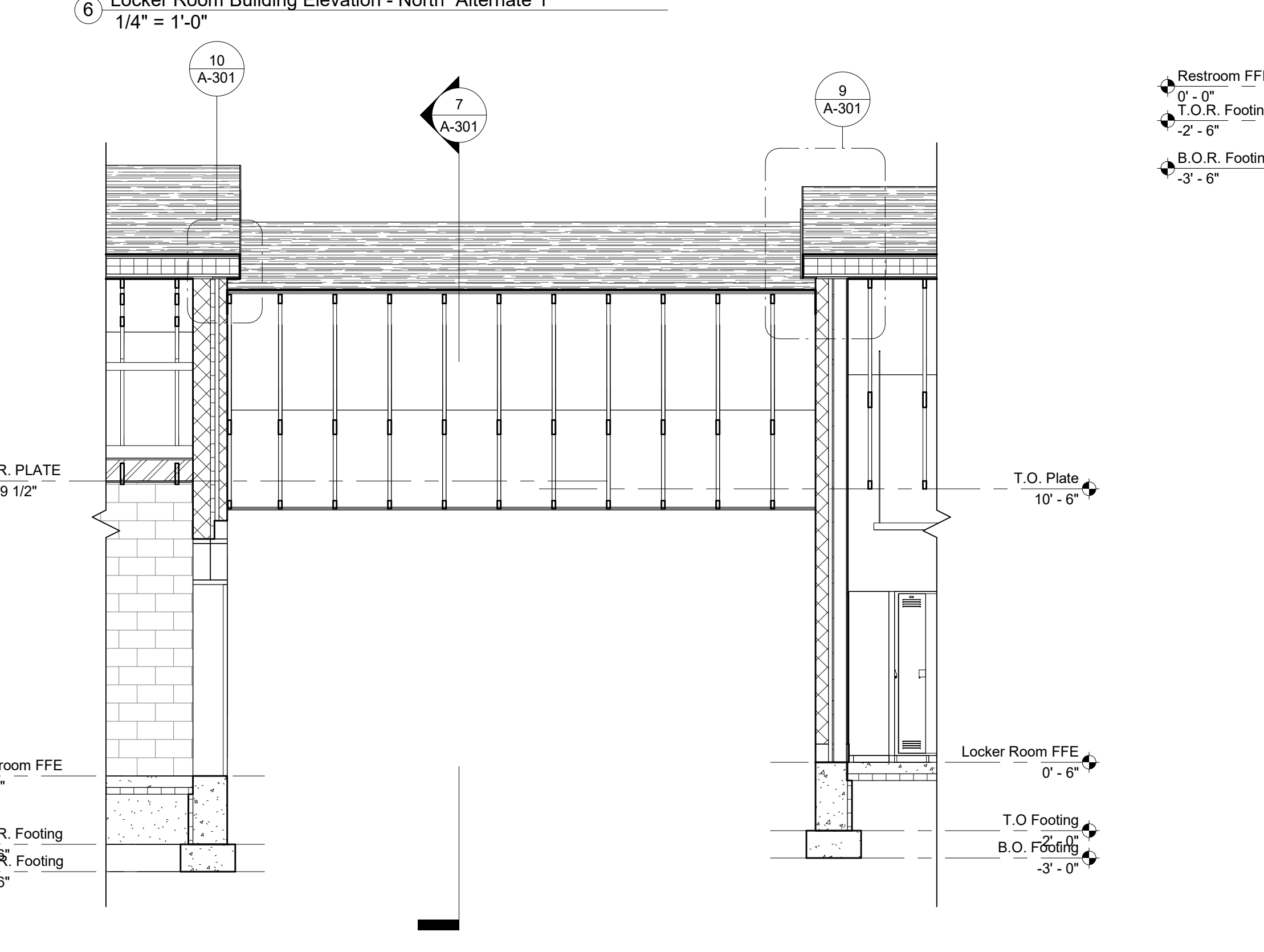
8 ROOF CONNECTOR FASCIA DETAIL
1 1/2" = 1'-0"



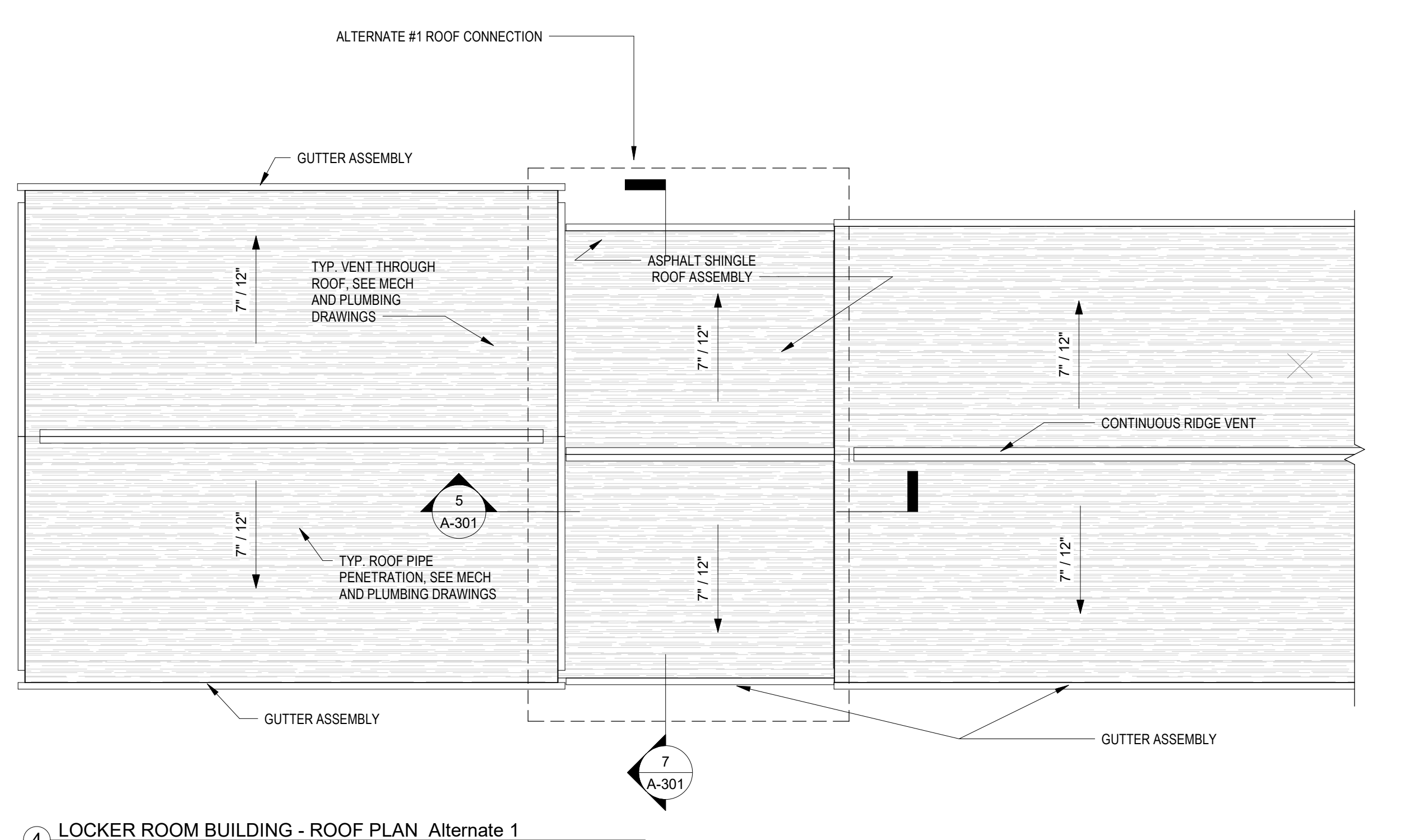
7 Alt 1 Building Section 1
1/4" = 1'-0"



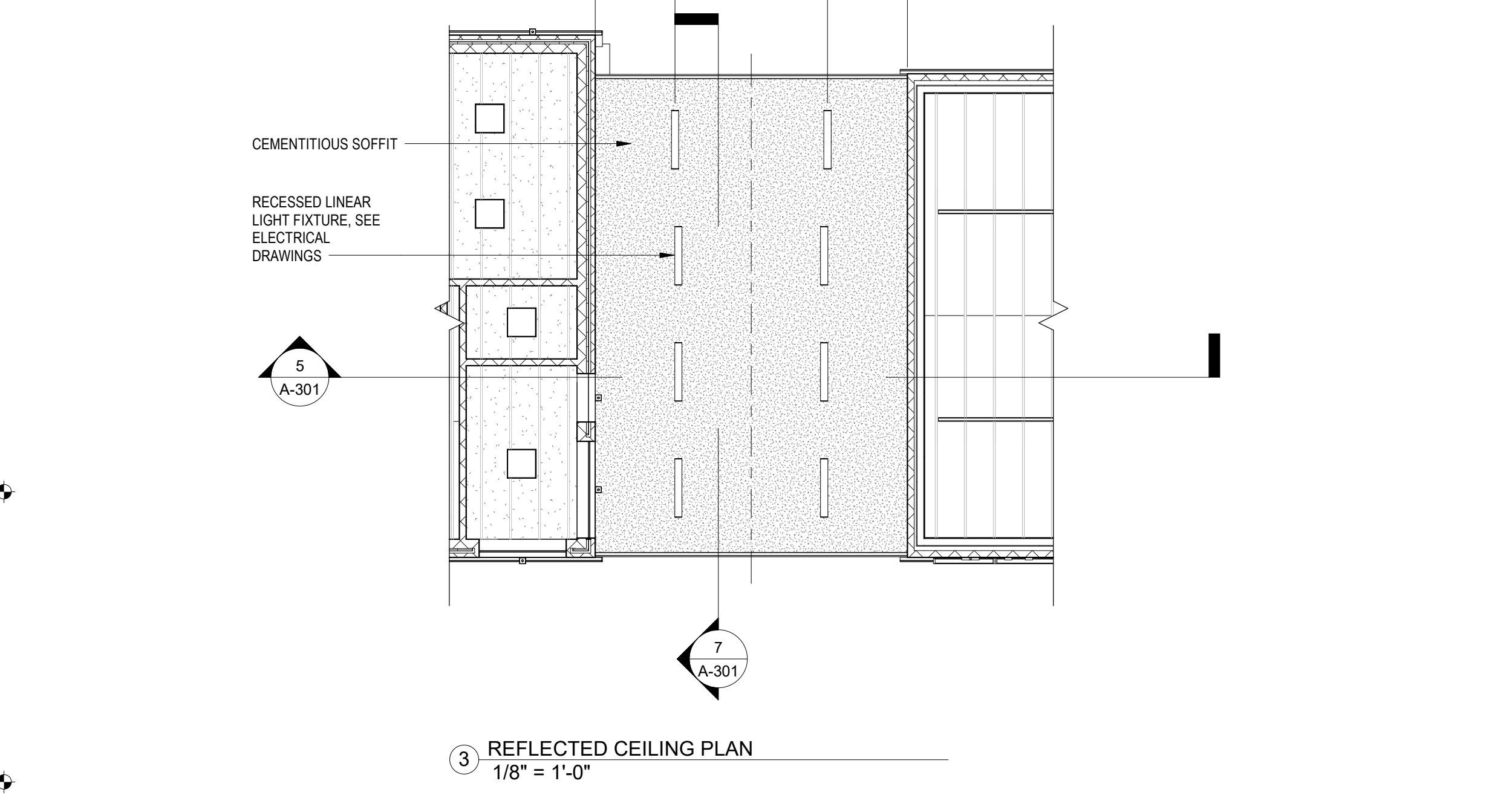
6 Locker Room Building Elevation - North
1/4" = 1'-0"



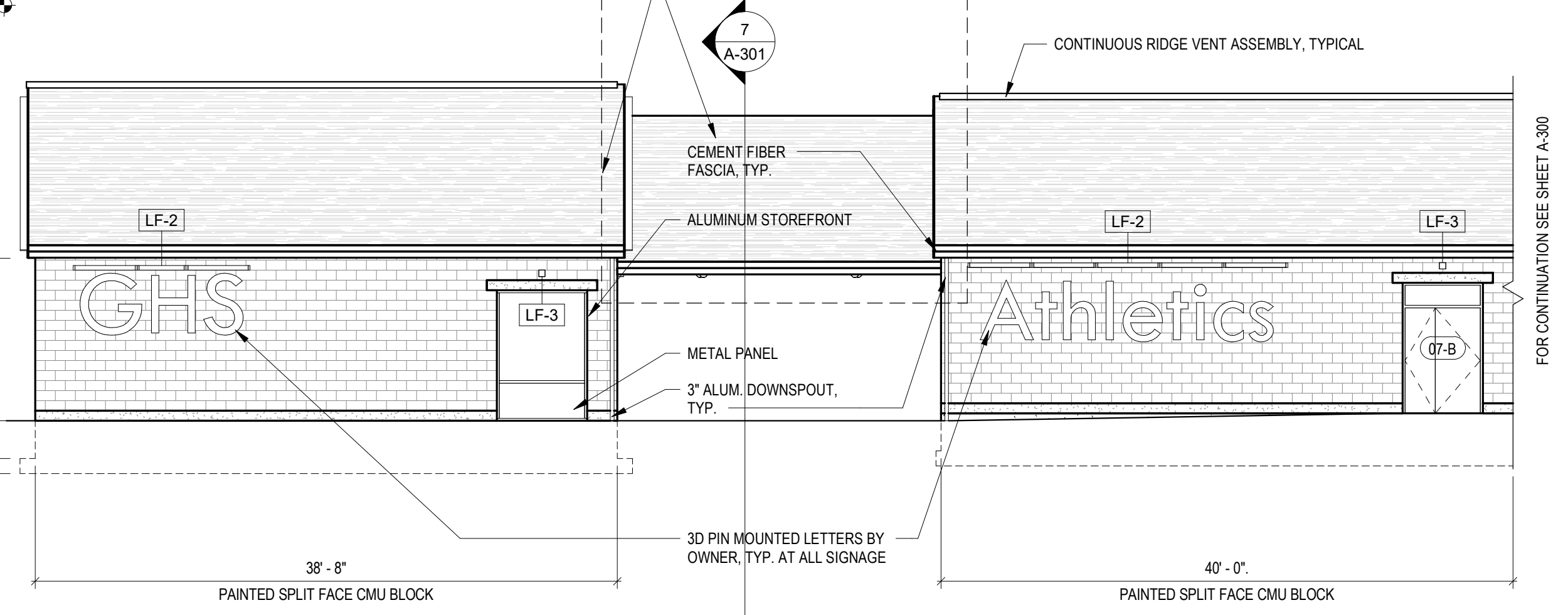
5 Alt 1 Building Section 2
1/4" = 1'-0"



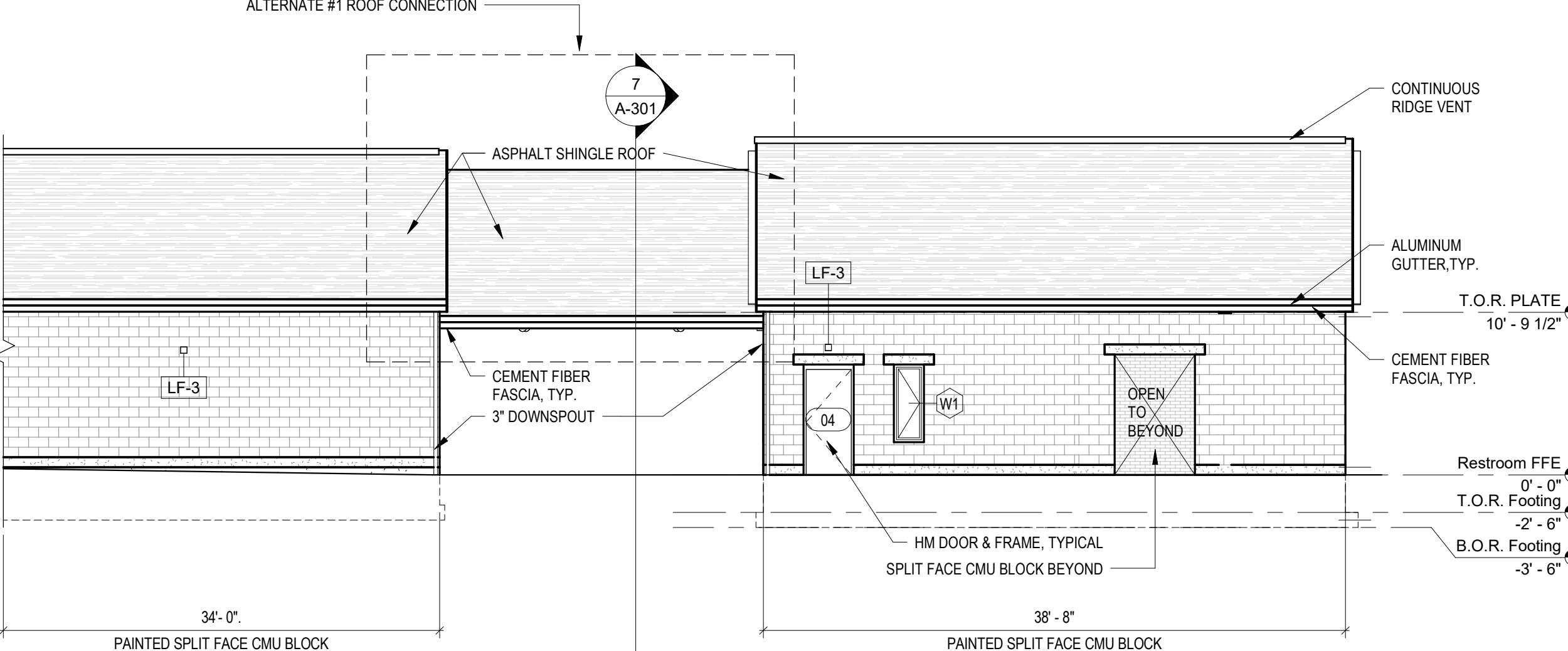
4 LOCKER ROOM BUILDING - ROOF PLAN
1/8" = 1'-0"



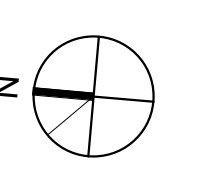
3 REFLECTED CEILING PLAN
1/8" = 1'-0"



2 Exterior Building Elevation - West
1/8" = 1'-0"



1 Exterior Building Elevation - East
1/8" = 1'-0"



Revisions	
1	Addendum 2 12/10/20

Issue Record	
Issued for Bid	11/18/20

Drawing Information	
Date	November 20, 2020
Job Number	GL-2021-05
Scale	As indicated
Drawn	Author
Checked	Checker
Drawing Name	

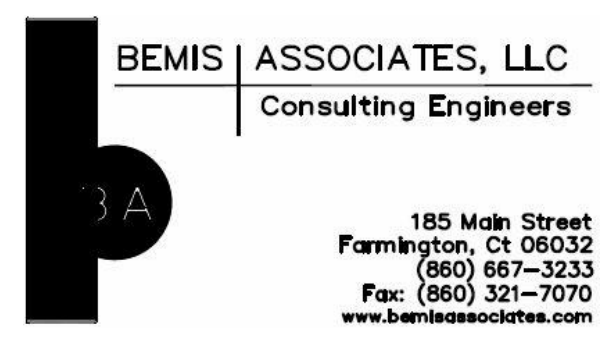
ALTERNATE #1 ROOF CONNECTOR

Drawing Number	
A-301	



300 Winding Brook Drive
Glastonbury, CT 06033
860-652-8227

MEP Engineer

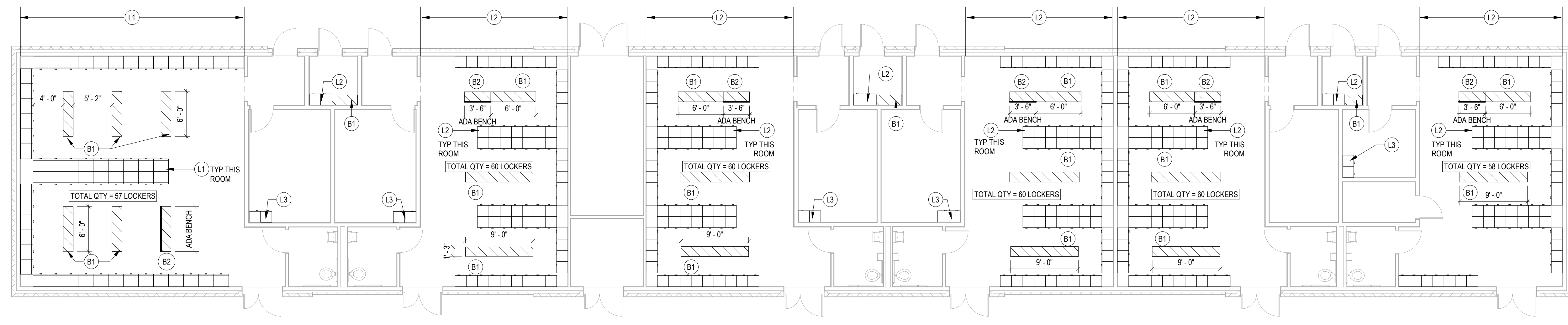


185 Main Street
Farmington, CT 06032
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Structural Engineer



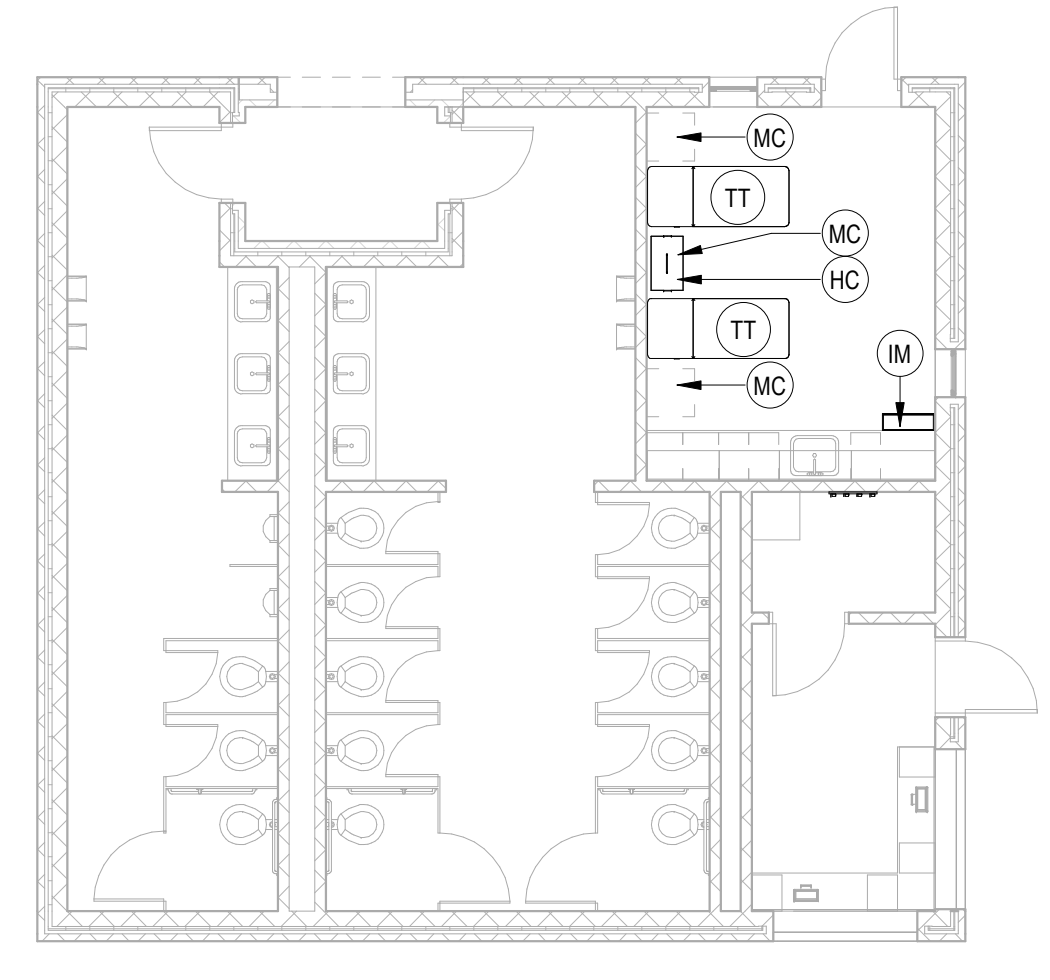
58 Essex Street, Deep River, CT 06417
phone 860-532-0312



1 LOCKER ROOM BUILDING - FLOOR PLAN
1/8" = 1'-0"

FF&E SCHEDULE		
LOCKERS	BENCHES	MOBILE CARTS
<p>L1 24" WIDE WOOD FOOTBALL LOCKER</p> <p>MANUF.: PLAYER STALL PRODUCT: MODEL # PSY0028 CONSTRUCTION: PRO SPORTS LOCKER 3/4" WHITE BIRCH WITH WHITE BIRCH FINISHED EDGING SEAT ENCLOSED COMPARTMENT FOR EXTRA STORAGE PROVIDE LOCKS ON STORAGE COMPARTMENT SIZE: 76"W X 24"W X 20"D</p> <p>L2 18" WIDE WOOD SPORTS LOCKER</p> <p>MANUF.: PLAYER STALL PRODUCT: MODEL # PSY0028 CONSTRUCTION: PRO SPORTS LOCKER 3/4" WHITE BIRCH WITH WHITE BIRCH FINISHED EDGING SEAT ENCLOSED COMPARTMENT FOR EXTRA STORAGE PROVIDE LOCKS ON STORAGE COMPARTMENT SIZE: 76"W X 18"W X 18"D</p> <p>L3 18" WIDE PLAM LOCKER</p> <p>MANUF.: HOLLMAN PRODUCT: PLASTIC LAMINATE LOCKER FINISH: AS SELECTED FROM MANUFACTURER'S STANDARD RANGE SIZE: 72"H X 18"W X 18"D</p>	<p>B1 TYPICAL BENCH</p> <p>MANUF.: HOLLMAN PRODUCT: OSLO STYLE BENCH BENCH: 15" WIDE X 5' AND 6' LENGTHS AS NOTED ON PLAN SEAT HEIGHT: 18"</p> <p>B2 ADA BENCH</p> <p>MANUF.: HOLLMAN PRODUCT: OSLO STYLE BENCH WITH ATTACHED BACK BENCH: 20" WIDE X 42", U.N.O SEAT HEIGHT: 18"</p> <p>TT TRAINING TABLES</p> <p>MANUF.: CLINTON INDUSTRIES, INC. PRODUCT: MODEL #1013-30, 72" X 30" X 31" CLASSIC SERIES TREATMENT TABLE WITH DRAWERS MATERIAL: HARDWOOD LEGS, LAMINATE SHELF, TWO EASY CLEAN DRAWERS AND ADJUSTABLE BACK REST FINISH: TO BE SELECTED FROM MANUFACTURER'S STANDARD RANGE FINISH SHALL BE SCRATCH RESISTANT TOPCOAT FINISH</p> <p>PADDING: 2" FIRM FOAM PADDING UPHOLSTERY: HEAVYWEIGHT, KNOT-BACKED LOAD CAPACITY: 400 LBS LOAD CAPACITY UNDER NORMAL USE</p>	<p>MC MOBILE CARTS</p> <p>MANUF.: THE ATHLETIC EDGE by PHS MEDICAL PIVOTAL HEALTH SOLUTIONS PRODUCT: MODEL #SMC-002 24"W x 18"D x 32"H (1) 5.5" DRAWER (2) HINGED DOORS (1) ADJUSTABLE SHELF LAMINATE IN COLOR SELECTED FROM MANUFACTURER'S STANDARD RANGE</p> <p>HC HYDROCOLLATOR HEATING UNIT</p> <p>MANUF.: CHATTANOOGA PRODUCT: MODEL #E-2 11 7/8"W x 14"D x 16 1/2"H STATIONARY UNIT INCLUDES 2 OVERSIZE, 1 CERVICAL AND 3 STANDARD HOTPACS</p> <p>IM ICE MACHINE</p> <p>MANUF.: SCOTSMAN PRODUCT: MODEL #030920 20"W x 26"D x 31.9" PROVIDE FLOOR MOUNT KIT FOR 31.9" HEIGHT TO FIT UNDER COUNTER 24 HR PRODUCTION: 100 LB @ 70/50, 80 LB @ 90/70 STORES 57 LB ICE</p>

FF&E PLAN SCHEDULE
1/8" = 1'-0"



2 LOCKER ROOM BUILDING - FLOOR PLAN
1/8" = 1'-0"

Revisions	
1	Addendum 2 12/10/20

Issue Record	
Issued for Bid	11/18/20

Drawing Information	
Date	November 20, 2020
Job Number	GL-2021-05
Scale	1/8" = 1'-0"
Drawn	Author
Checked	Checker
Drawing Name	

ALTERNATE #4 - FURNITURE
FIXTURES AND EQUIPMENT
PLANS

Drawing Number
A-910

2
1
0

- MECHANICAL DRAWING KEYED NOTES**
- 5' VENT THROUGH ROOF.
 - 5' COMBUSTION AIR THROUGH ROOF.
 - 35F MIN FREE AREA, OUTSIDE AIR LOUVER AND ALUMINUM BRID SCREEN UNDER ARCHITECTURAL DIVISION. FURNISHED AND INSTALLED BY SHEETMETAL CONTRACTOR. SHEETMETAL CONTRACTOR SHALL PROVIDE INSULATED SHEETMETAL FRESH AIR PLENUM, PITCH PLENUM TOWARD LOUVER.
 - PROVIDE REMOVABLE SERVICE PANEL BOTH UPSTREAM AND DOWNSTREAM THE GAS FURNACE TO ALLOW INSPECTION OF THE HEAT EXCHANGER TUBE DURING ANNUAL MAINTENANCE. DUCTWORK TRANSITION ANGLE SHALL NOT EXCEED 150° TO INSURE UNIFORM AIRFLOW. DISTRIBUTION OVER THE HEAT EXCHANGER. PROVIDE EQUIPMENT RAILS.

Issued for Bid
330 Hubbard Street
Glastonbury, CT 06033
GL-2021-05
Project Team
Civil Engineer

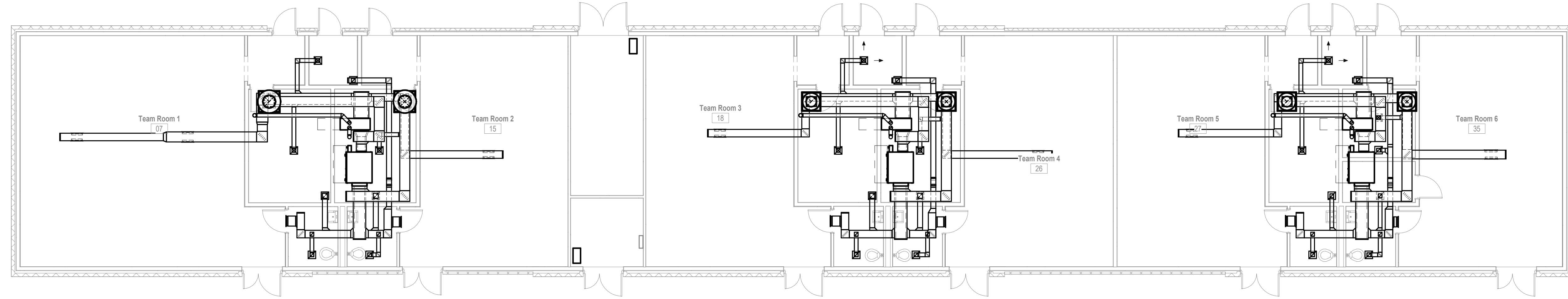
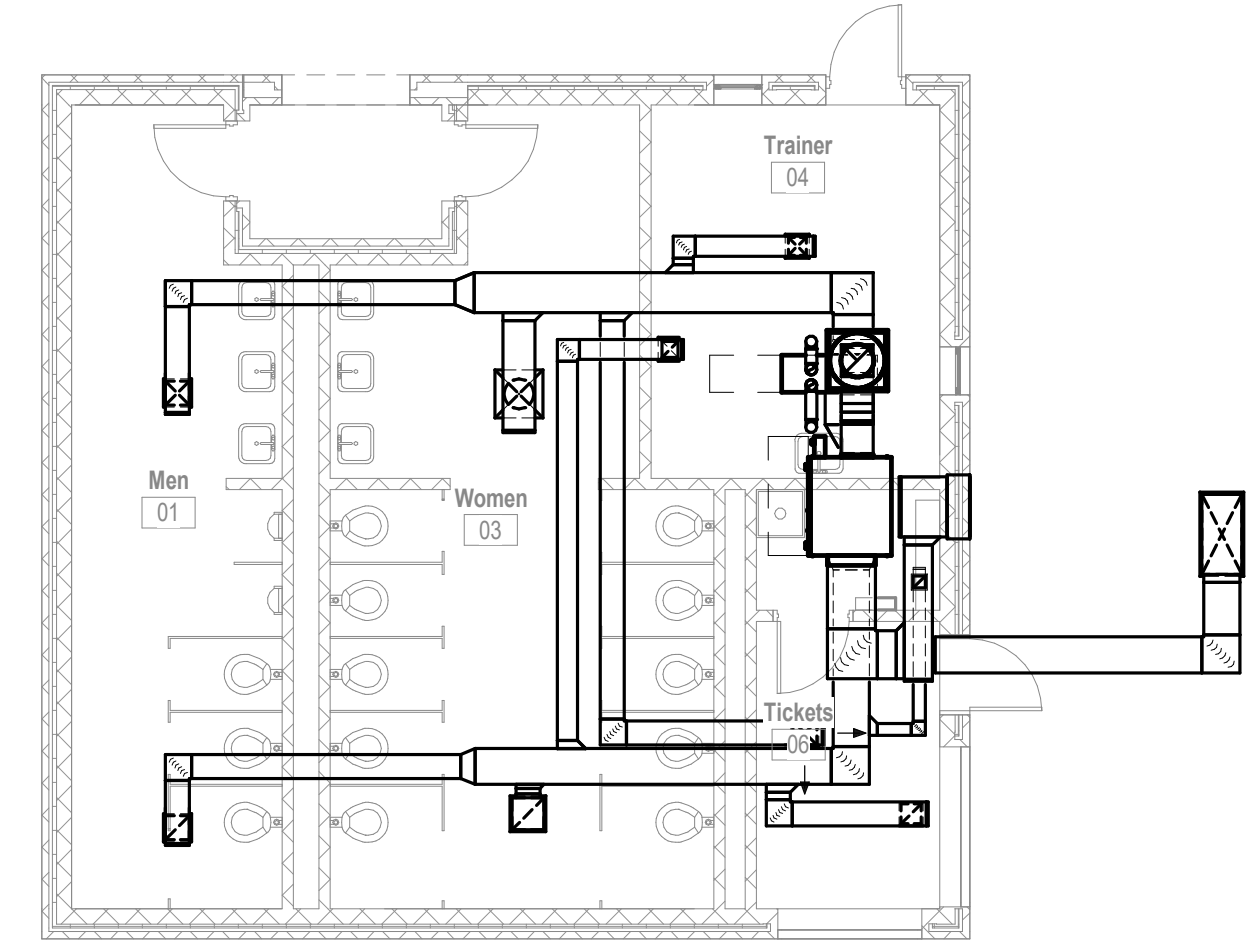
BSC GROUP
300 Winding Brook Drive
Glastonbury, CT 06033
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MEP Engineer

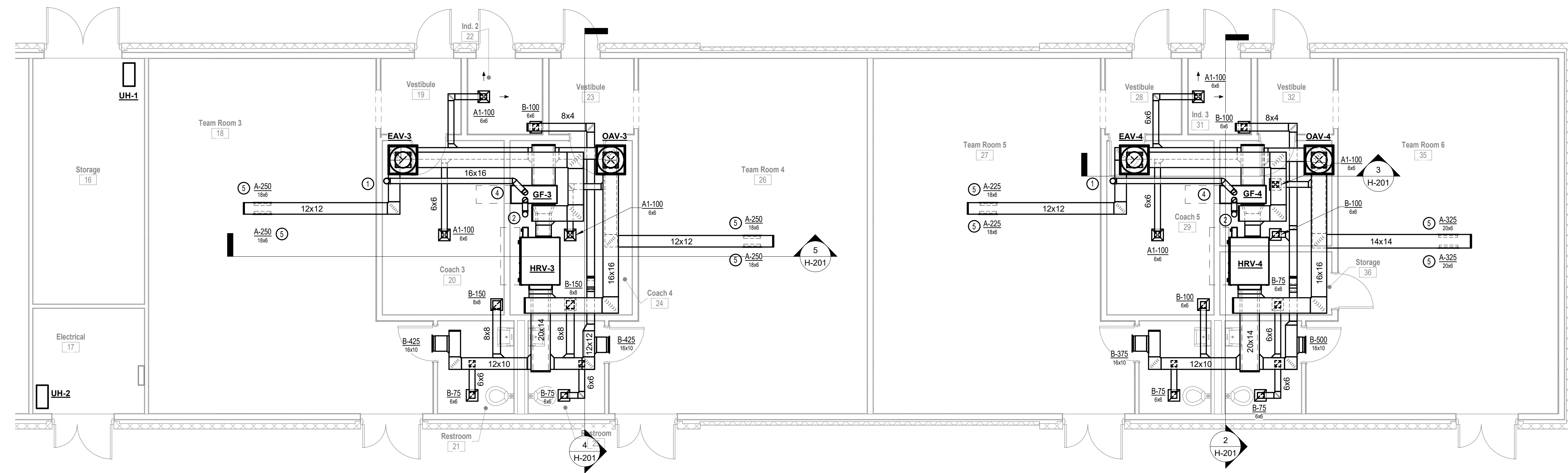
BEMIS ASSOCIATES, LLC
Consulting Engineers
185 Main Street
Farmington, CT 06032
(860) 667-3333
Fax: (860) 321-7070
www.bemisassociates.com

Structural Engineer

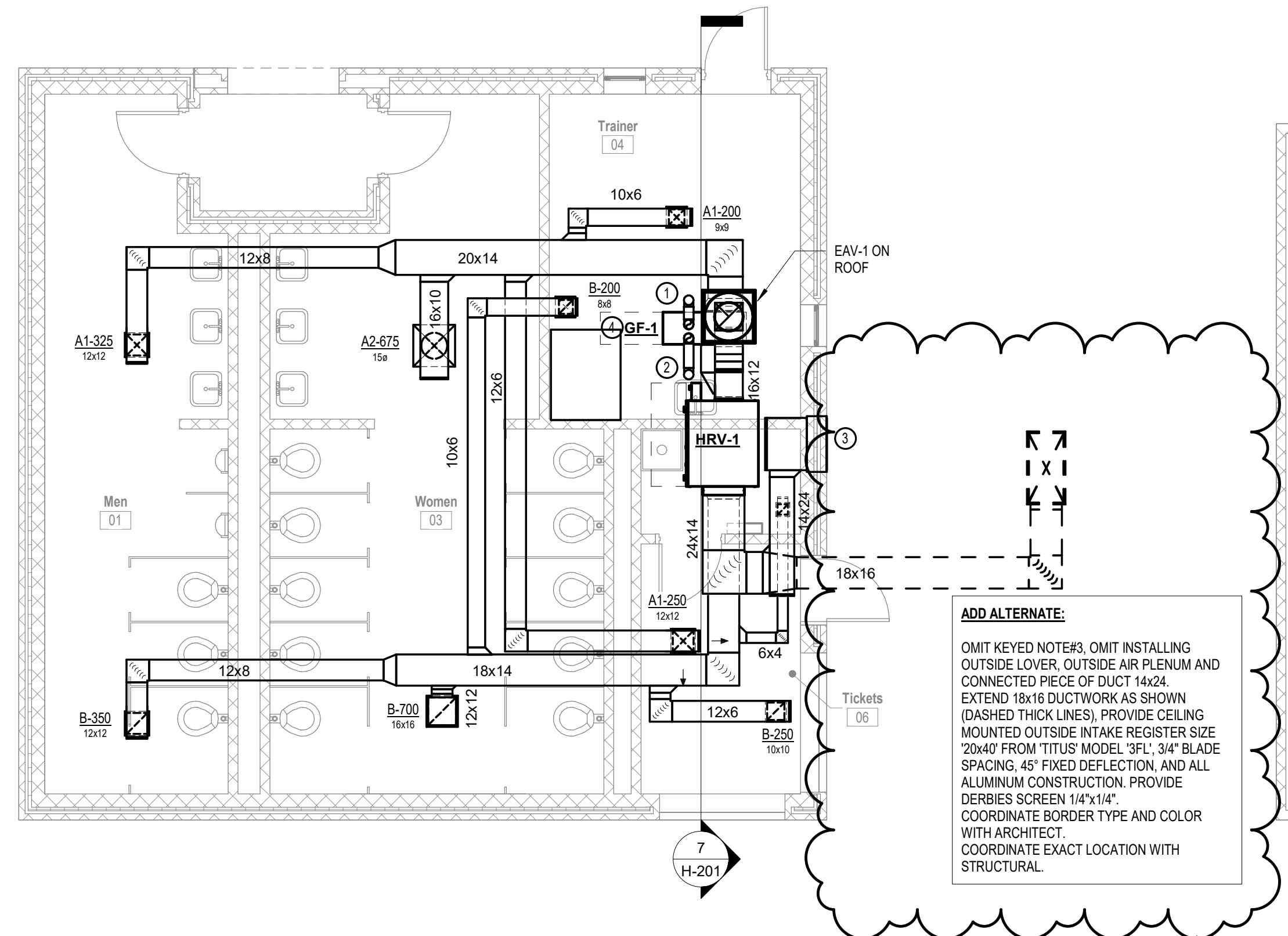
Morrissey Engineering, LLC
58 Essex Street, Deep River, CT 06417
phone 860-532-0312



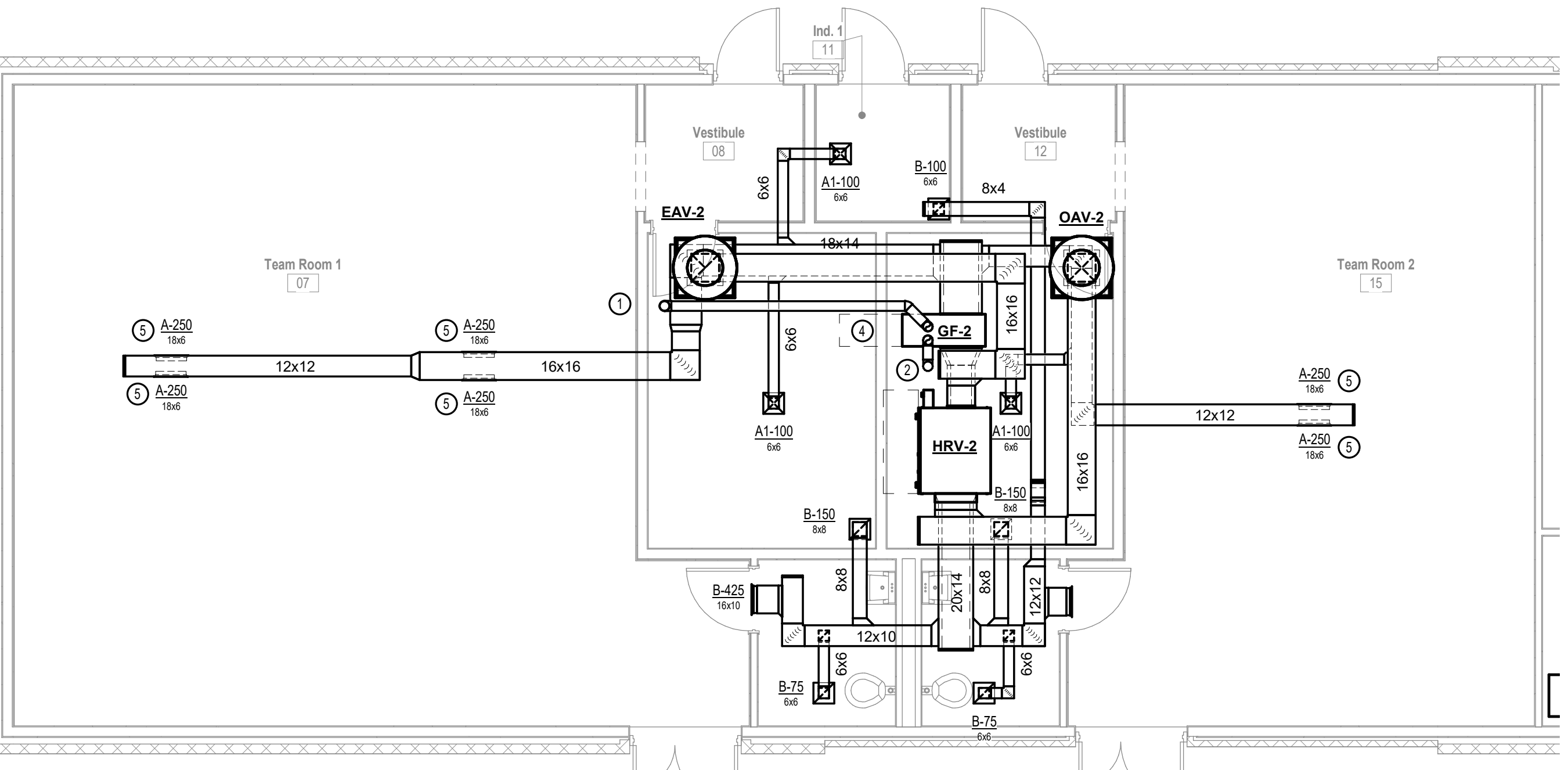
3 HVAC PLAN - FLOOR PLAN
1/8" = 1'-0"



2 HVAC PART PLAN - TEAM ROOM 3, 4, 5 AND 6
3/16" = 1'-0"



1 HVAC PART PLAN - TEAM ROOM 1&2 AND TOILET BUILDING
3/16" = 1'-0"



Revisions	
1	ADDENDUM 2 12/10/2020

Issue Record	
	Issued for Bid 11/18/20

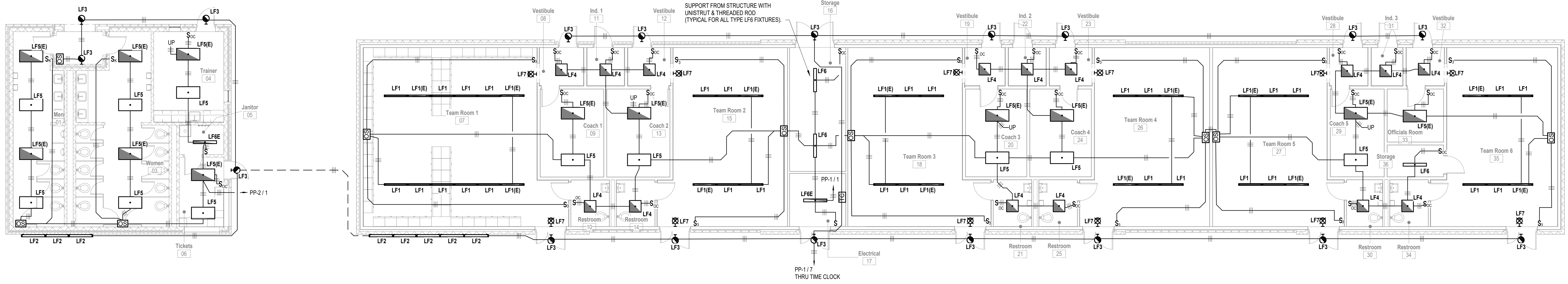
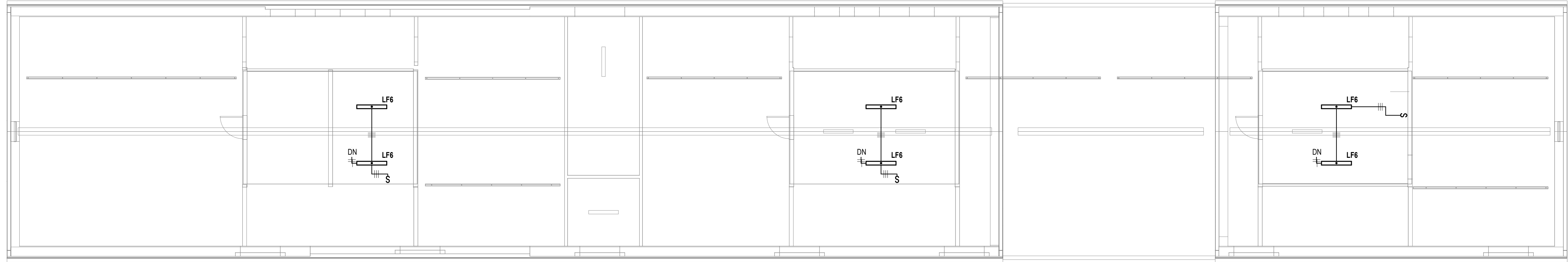
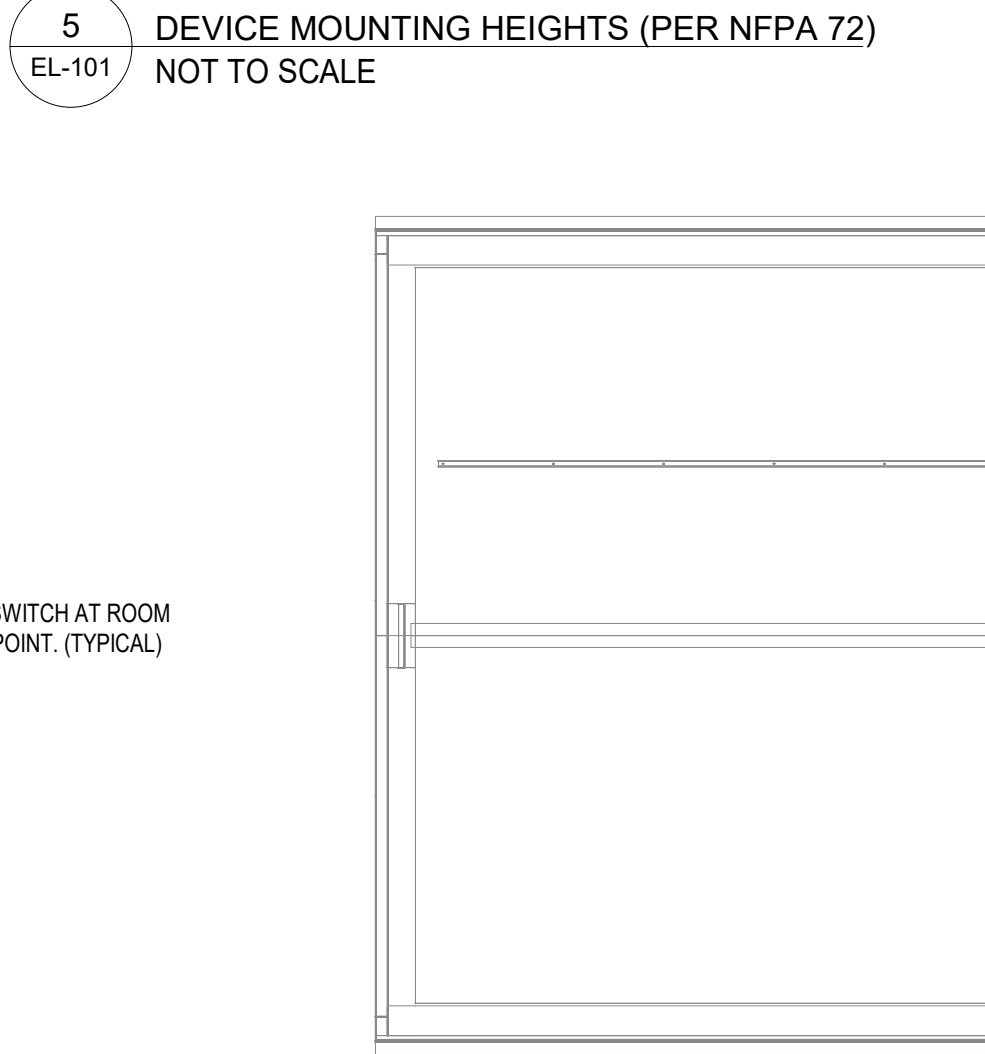
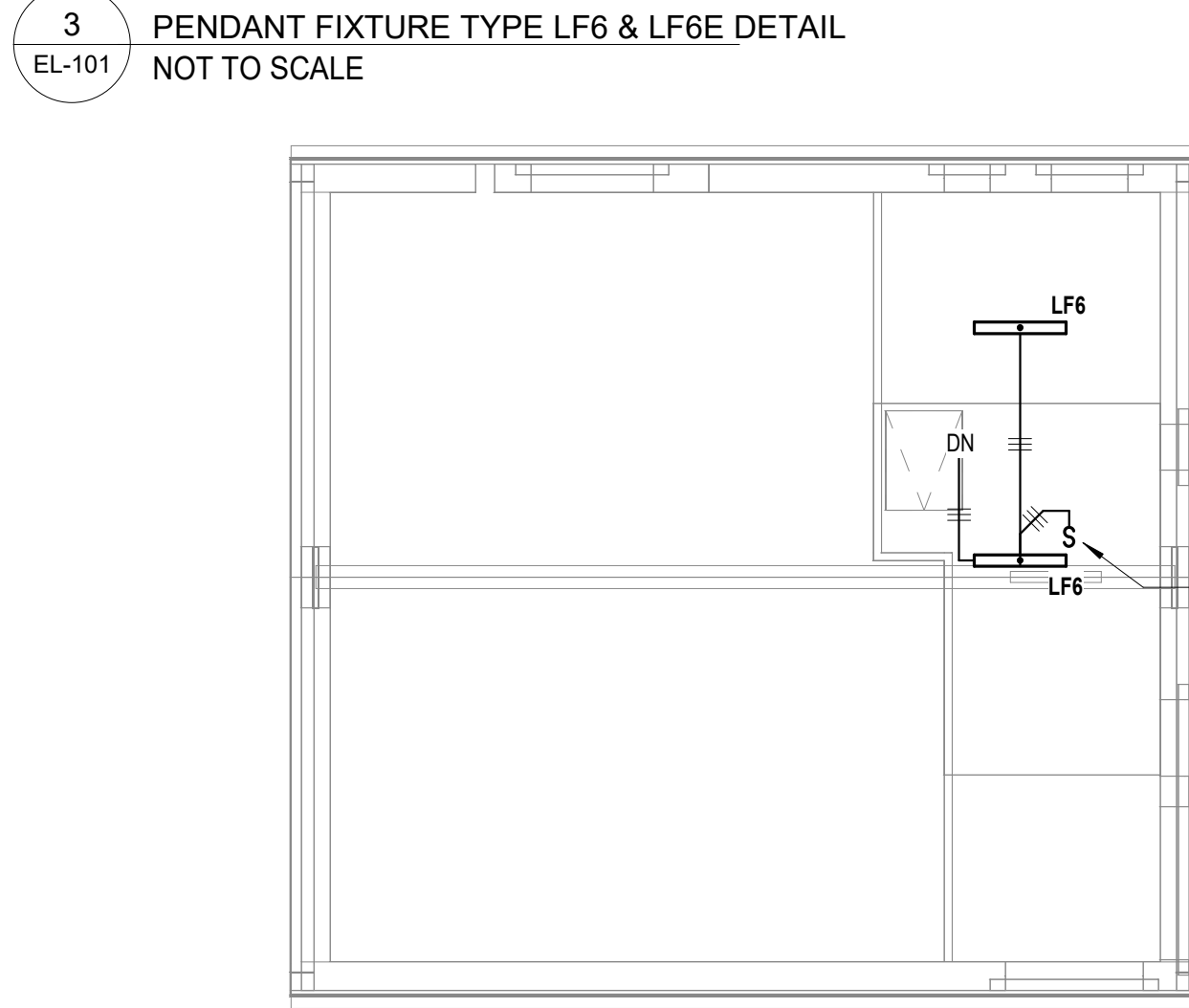
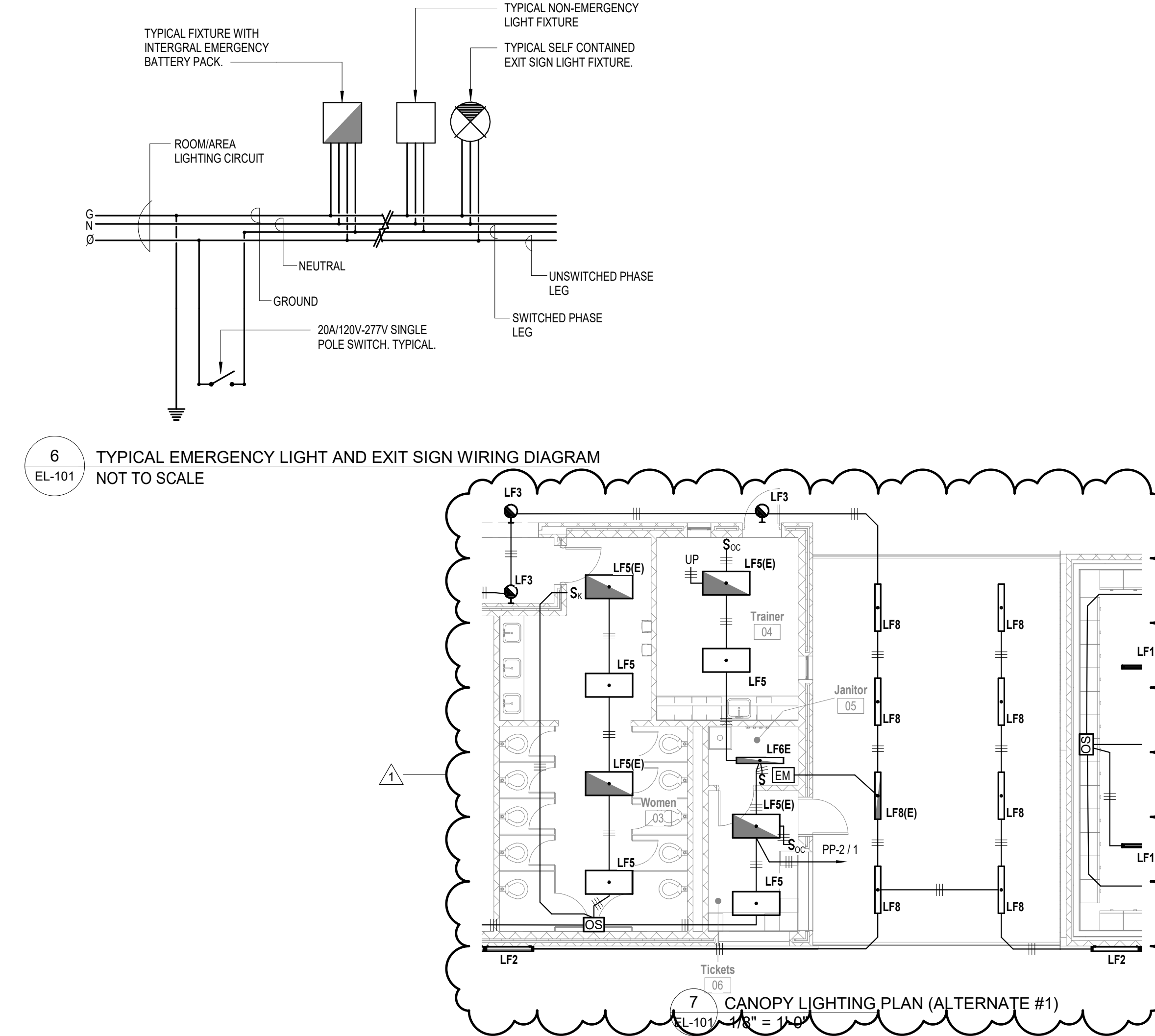
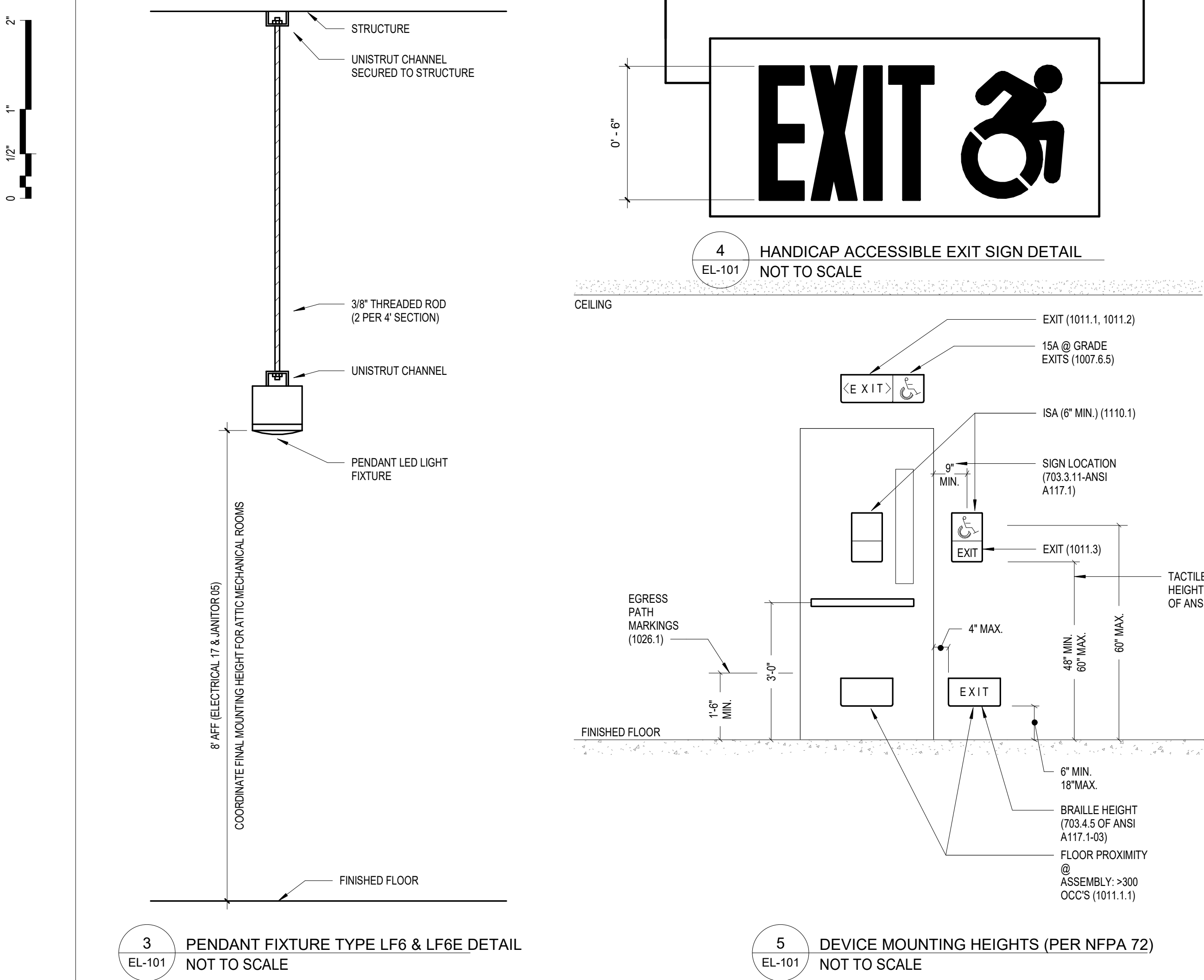
Drawing Information	
Date	11/20/20
Job Number	GL-2021-05
Scale	As indicated
Drawn	LMD
Checked	LMD
Drawing Name	

FIRST FLOOR HVAC PLAN

Drawing Number

H-101

LIGHTING FIXTURE SCHEDULE				
TYPE	FIXTURE DESCRIPTION, MANUFACTURER AND MODEL #	LAMP	FIXTURE WATTS	VOLTAGE
LF1	LINEAR PENDANT FLUXWERX #PF1-F-D-B-35-A-04-S-F1-M-06	INCLUDED LEDS 4,060 LUMENS 3,500° K 80 CRI	38 W	120 V
LF1(E)	LINEAR PENDANT WITH INTEGRAL EMERGENCY BATTERY PACK FLUXWERX #PF1-F-D-B-35-A-04-S-F1-M-06-B	INCLUDED LEDS 4,060 LUMENS 3,500° K 80 CRI	38 W	120 V
LF2	EXTERIOR WET LABELED LINEAR WALL WASH, BLACK FINISH LUMENWERX #VAVETH-PYC-HLO-LED-90-500-40-120-1-EMB-BF-CF	INCLUDED LEDS 2,000 LUMENS 4,000K	22 W	120 V
LF3	FULL CUTOFF EXTERIOR WALL MOUNTED FIXTURE, BLACK FINISH, AND 90 MINUTE REMOTE MOUNTED EMERGENCY BATTERY PACK LUMINIS #S200K4-1L10-13-R46-120V-BKT-REML2-40-9L	INCLUDED LEDS 920 LUMENS 4,000° K 80 CRI	13 W	120 V
LF4	SURFACE MOUNTED LED 2X2 WITH INTEGRAL EMERGENCY BATTERY PACK LITHONIA #ZBLT2-40HE-ADSM-G210-LP35-EL14	INCLUDED LEDS 4,188 Lumens 3,500° K 80 CRI	31 W	120 V
LF5	SURFACE MOUNTED LED 2X4 LITHONIA #ZBLT4-60HE-ADSM-G210-LP35-EL14	INCLUDED LEDS 5,000 Lumens 3,500° K 80 CRI	44 W	120 V
LF5(E)	SURFACE MOUNTED LED 2X4 WITH INTEGRAL EMERGENCY BATTERY PACK LITHONIA #ZBLT4-60HE-ADSM-G210-LP35-EL14	INCLUDED LEDS 5,000 Lumens 3,500° K 80 CRI	44 W	120 V
LF6	LED STRIP LIGHT LITHONIA #CLX L48 5000LM HEF FDL 120 G210 35K 80CRI SPD WH	INCLUDED LEDS 5,000 Lumens 3,500° K 80 CRI	33 W	120 V
LF6(E)	LED STRIP LIGHT WITH EMERGENCY BATTERY BACKUP LITHONIA #CLX L48 5000LM HEF FDL 120 G210 35K 80CRI PS1050 SPD WH	INCLUDED LEDS 4,298 Lumens 3,500° K 80 CRI	33 W	120 V
LF7	SELF CONTAINED EXIT SIGN LIGHT WITH 6" RED LETTERING "EXIT" & HANDICAP ACCESSIBLE SYMBOL WITH 90 MINUTE BATTERY BACKUP ALUMINUM PLATE & 90 MINUTE BATTERY BACKUP EVENLITE #PRE-EM-R-1M-WISC-BA	INCLUDED LEDS 2 W	2 W	120 V
LF8	4" X 8" X 4.45" D LED LINEAR FIXTURE, DIE-FORMED COLD ROLLED STEEL WITH SEAMS WELDED AND GROUND SMOOTH HOUSING, ONE PIECE, DIE-FORMED COLD ROLLED STEEL DOOR, OPTIC PLUS LENS (STANDARD) COMPLETELY HIDES DIODE IMAGE WHILE PROVIDING GREATER THAN 90% LIGHT TRANSMISSION. POLYESTER POWDER-COATED AFTER PHOSPHATE PRETREATMENT FOR SUPERIOR ADHESION AND CORROSION RESISTANCE FINISH, RECESSED, STAINLESS STEEL, TAMPER-PROOF FASTENERS, 0-10VDC 1% DIMMING, ±0.9 PF, <20% THD FACTORY PROGRAMMABLE, OPERATING TEMP -40°C MIN. TO 50°C MAX DRIVER LC DOANE #TRA-4-1L-40-N-C-W-VAR-DM-122-30-TP-FM-W	INCLUDED LEDS 1,600 Lumens 4,000° K 80 CRI	16 W	120 V
LF8(E)	4" X 8" X 4.45" D LED LINEAR FIXTURE, DIE-FORMED COLD ROLLED STEEL WITH SEAMS WELDED AND GROUND SMOOTH HOUSING, ONE PIECE, DIE-FORMED COLD ROLLED STEEL DOOR, OPTIC PLUS LENS (STANDARD) COMPLETELY HIDES DIODE IMAGE WHILE PROVIDING GREATER THAN 90% LIGHT TRANSMISSION. POLYESTER POWDER-COATED AFTER PHOSPHATE PRETREATMENT FOR SUPERIOR ADHESION AND CORROSION RESISTANCE FINISH, RECESSED, STAINLESS STEEL, TAMPER-PROOF FASTENERS, 0-10VDC 1% DIMMING, ±0.9 PF, <20% THD FACTORY PROGRAMMABLE, OPERATING TEMP -40°C MIN. TO 50°C MAX DRIVER, 90 MINUTE EMERGENCY BATTERY PACK (REMOTE MOUNTED) LC DOANE #TRA-4-1L-40-N-C-W-VAR-DM-122-30-TP-FM-W	INCLUDED LEDS 1,600 Lumens 4,000° K 80 CRI	16 W	120 V



NOTES:
1. PROVIDE A SEPARATE UNSWITCHED HOT LEG TO ALL LIGHTING FIXTURES CONTAINING EMERGENCY BATTERY PACKS, FOR BATTERY CHARGING.
2. ALL EXIT SIGN LIGHTING FIXTURES SHALL BE WIRED TO THE LINE SIDE OF THE SWITCH SERVING THE AREA LIGHTING WITH 2P/12, 14/25 IN 34°C.

Revisions

1	ADDENDUM 2	12/10/2020
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Issue Record

Issued for Bid	11/18/20
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Drawing Information

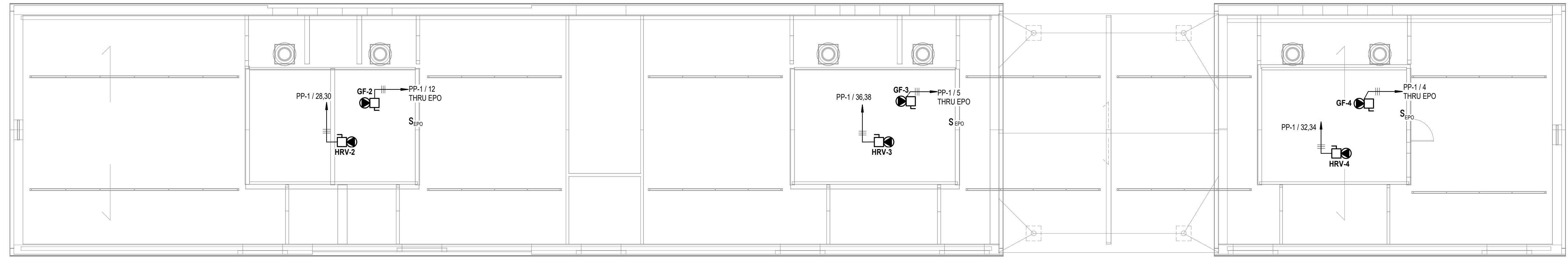
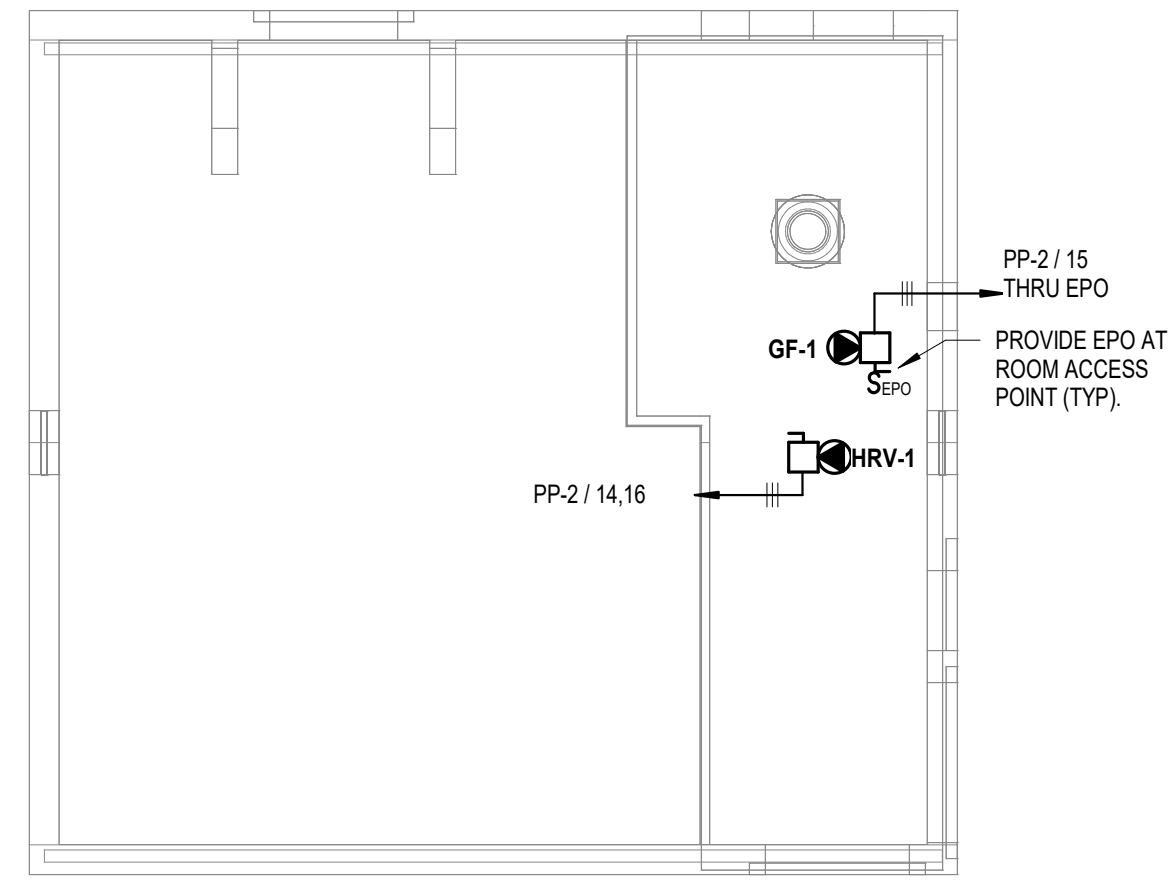
Date	11/20/20
Job Number	GL-2021-05
Scale	As indicated
Drawn	KPS
Checked	KPS

Drawing Name

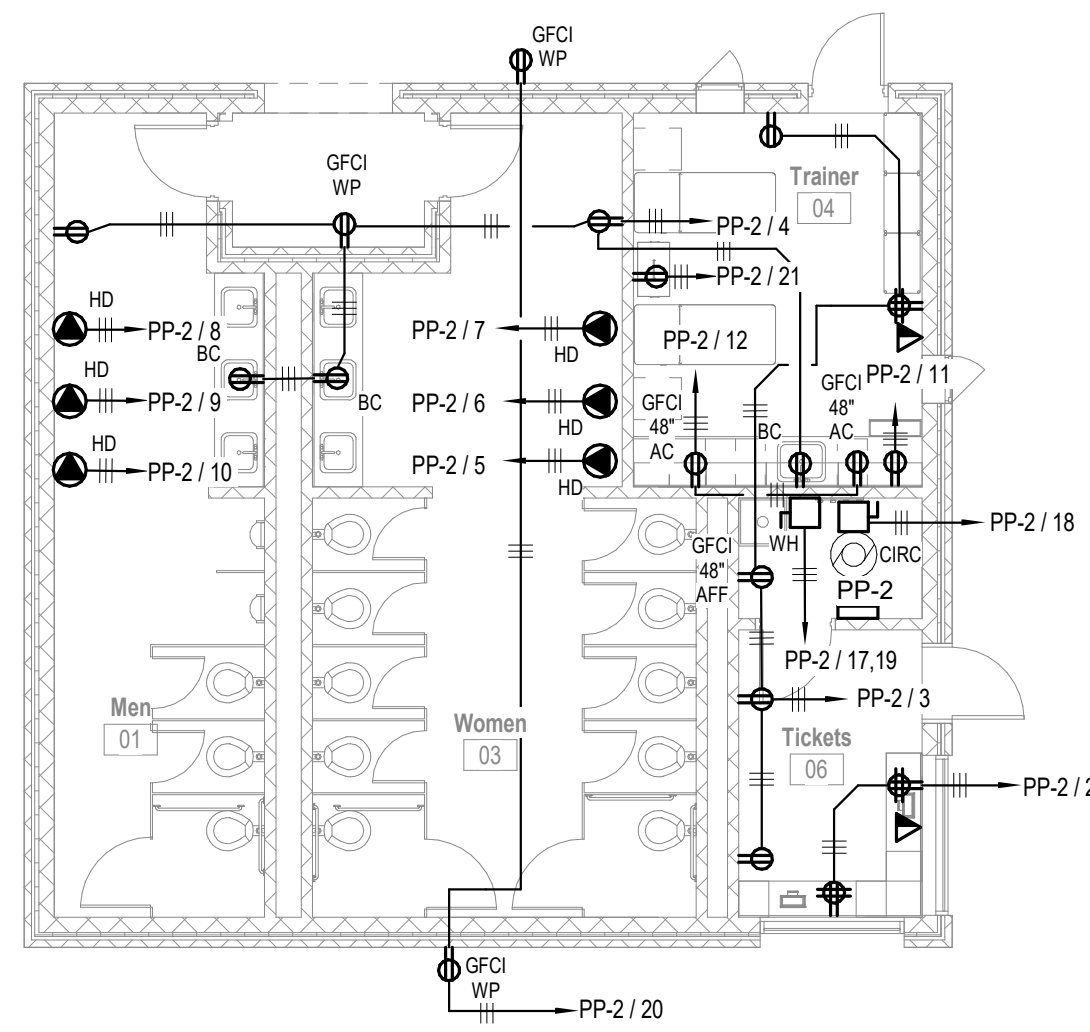
LIGHTING FLOOR PLANS

Drawing Number
EL-101

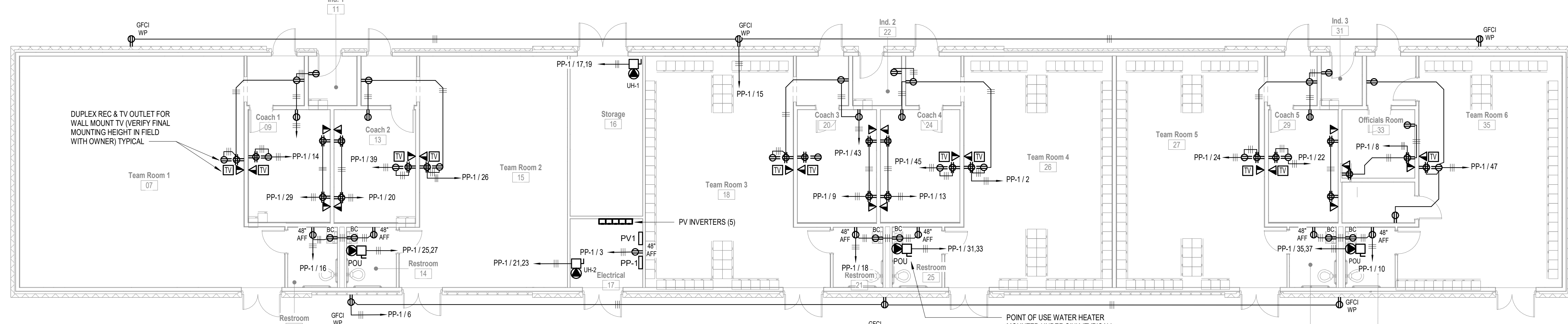
2
1' = 24"
0



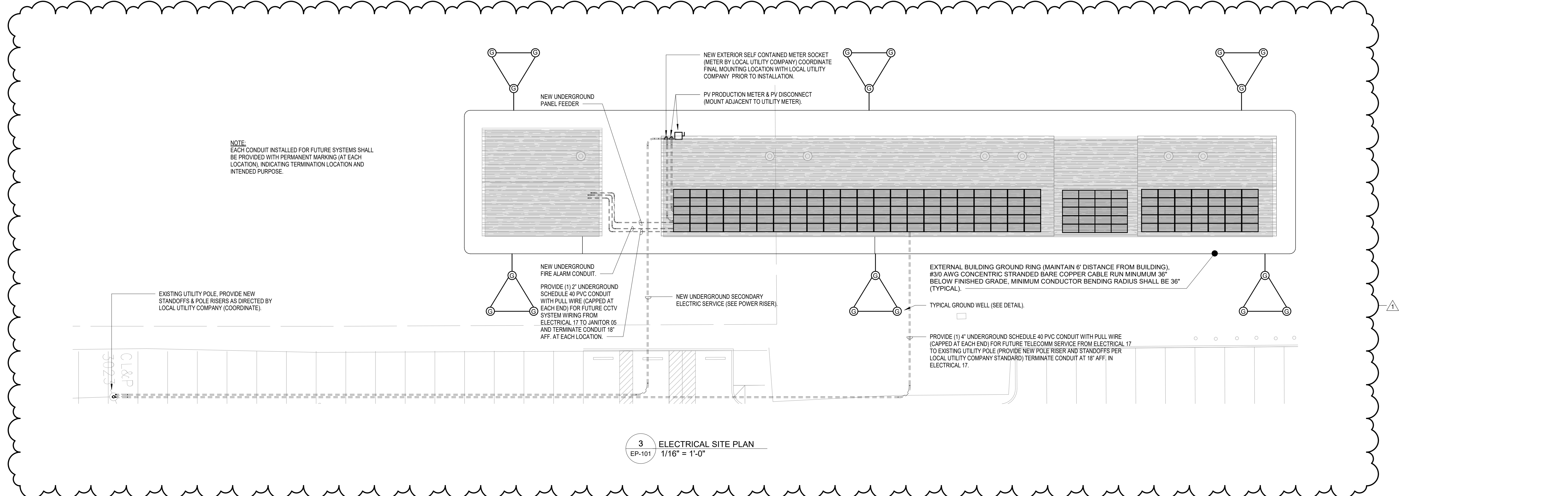
2 ATTIC POWER PLAN
EP-101 1/8" = 1'-0"



1 FIRST FLOOR POWER PLAN
EP-101 1/8" = 1'-0"



3 ELECTRICAL SITE PLAN
EP-101 1/16" = 1'-0"



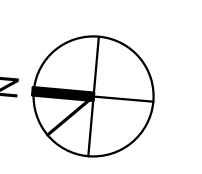
NOTE:
EACH CONDUIT INSTALLED FOR FUTURE SYSTEMS SHALL BE PROVIDED WITH PERMANENT MARKING (AT EACH LOCATION), INDICATING TERMINATION LOCATION AND INTENDED PURPOSE.

EXISTING UTILITY POLE. PROVIDE NEW STANDOFFS & POLE RISERS AS DIRECTED BY LOCAL UTILITY COMPANY (COORDINATE).

NEW UNDERGROUND SCHEDULE 40 PVC CONDUIT WITH PULL WIRE (CAPPED AT EACH END) FOR FUTURE CCTV SYSTEM WIRING FROM ELECTRICAL 17 TO JANITOR 05 AND TERMINATE CONDUIT 18\"/>

EXTERNAL BUILDING GROUND RING (MAINTAIN 6\"/>

PROVIDE (1) 4\"/>



Revisions	
1	ADDENDUM 2 12/10/2020

Issue Record	
Issued for Bid	11/18/20

Drawing Information	
Date	11/18/20
Job Number	GL-2021-05
Scale	As indicated
Drawn	KPS
Checked	KPS
Drawing Name	

POWER FLOOR PLANS AND
ELECTRICAL SITE PLAN

Drawing Number

EP-101