

**ALLEGHENY COUNTY SANITARY AUTHORITY**

**April 6, 2021**

**CONTRACT NO. 1729 G, E, H, P**

**EAST HEADWORKS**

**ADDENDUM NO. 11**

All bidders bidding Contract No. 1729 G, E, H, P shall read and take note of this Addendum No. 11. The Contract Documents for **Contract No. 1729 G, E, H, P – East Headworks** are hereby revised and/or clarified as stated below.

**Acknowledgement of Contract No. 1729 G, E, H, P; Addendum No. 11**

The Acknowledgement attached to Addendum No. 11 is to be signed and returned immediately via email to Kathleen Uniatowski at [contract.clerks@alcosan.org](mailto:contract.clerks@alcosan.org) and acknowledged with the Bidder's Proposal.



Kimberly Kennedy, P.E.

Director – Engineering and Construction

**ACKNOWLEDGEMENT OF  
CONTRACT NO. 1729 G, E, H, P – EAST HEADWORKS**

**ADDENDUM NUMBER 11**

**FIRM NAME:** \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

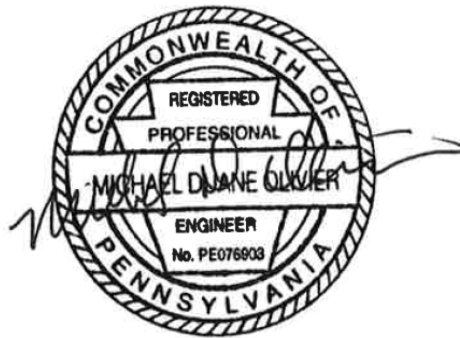
**DATE:** \_\_\_\_\_

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**April 6, 2021**

**CONTRACT NO. 1729 G, E, H, P**

**EAST HEADWORKS**

**ADDENDUM NO. 11**

**A. Contract Documents – Volume 1**

**B. Contract Specifications – Volume 2**

1. Maintenance of Plant Operation (Section 01 52 00)

- a) Paragraph 1.7.G, **DELETE** this paragraph in its entirety and **REPLACE** with the following,

“G. The Gallery Tunnel (520) work shall be coordinated with the construction of the 120-inch East Headworks influent conduit and East Headworks grit effluent conduit. In addition to the process pipelines, Contractor shall provide temporary utility connections and piping to maintain all utilities in operation at all times. This shall include, but not be limited to, medium pressure steam (SMP), low pressure air (PAL), potable city water (PCW), effluent flushing water (EWF) including 12-inch EWF as described in paragraph 1.7.Q, primary sludge (PSL), waste activated sludge (WAS), steam condensate (MPC), and steam condensate return (MPR).”

- b) Paragraph 1.7, **ADD** paragraph Q as follows,

“Q. Scrubber Drain (DRS) and Boiler Blow-off (12-inch EWF) Temporary Piping Modifications

1. Both the 14-inch Scrubber Drain (DRS) line and the 12-inch Steam Letdown Cooling Water (12-inch EWF) line originate within the Energy Recovery Facility (near the Odor Control Facility (420) and discharge into the south end of the West Headworks Grit Tanks Common Effluent Channel (514). The DRS line is routed above ground from generally following the

odor control pipe support structure to its 514 discharge location. The 12-inch EWF line is routed below ground, within the Pipe Galleries, to near the Grit Tanks from where it comes above ground in a gooseneck pipe before discharging into 514.

2. Both the DRS line and 12-inch EWF lines continuously discharge flow into the West Headworks Grit Tank Common Effluent Channel. These lines must be temporarily re-routed to discharge into a sanitary manhole as coordinated with the Owner, during times when the West Headworks Grit Tanks (514) are out of service. This will occur during various construction activities described in paragraph 1.9.
3. The contractor will be required to install temporary piping and valves within these lines in order to provide the flexibility to send flow to either the respective 514 discharge point or to a sanitary manhole. During times when the Grit Tanks are offline, the contractor will be required to redirect these flows to a sanitary manhole. During times when the Grit Tanks are online, the contractor will be required to redirect these flows to the original discharge location in the Grit Tank Common Effluent Channel.
4. The Contractor will be required to return both the DRS and 12-inch EWF lines to their original condition, by removing the temporary piping and valves and re-installing the appropriate piping, once the secondary connections for these lines to the East Headworks facilities are in place.
5. The Energy Recovery Facility that feeds flow to both the DRS and 12-inch EWF lines is taken offline each August for a two-week maintenance and inspection time. The exact timing should be coordinated with the Owner to allow the Contractor to perform installation of the temporary piping and valves on the DRS and EWF lines during this shutdown.”

### **C. Contract Specifications – Volume 3**

#### 1. Hangers and Supports for Process Piping (Section 40 05 07)

- a) Paragraph 1.3.B, **ADD** paragraph 3 as follows,

“3. Piping Support Layout Drawings - Certain pipe support systems are required to be designed by the Contractor, as described in this Section. Piping support layout drawings are required to be submitted for these systems. Drawings shall show location of each support, sway brace, hanger, guide, component, and anchor. Identify support, hanger, guide, and anchor type by catalog number and Shop Drawing detail number. Single line piping drawings are not acceptable. Piping support systems

shall be designed and Shop Drawings prepared and sealed by a Registered Professional Engineer in the state having jurisdiction over the project.”

- b) Paragraph 2.1, **ADD** the following to the end of paragraph A:

“Piping smaller than 24 inches and FRP Ductwork of all sizes shall be designed by the Contractor and stamped by a professional engineer. Supports are shown on the Contract Documents only where specific types and locations are required; additional pipe supports may be required.

1. Piping 24 Inches and larger: Support systems have been designed for piping shown.
2. Meet requirements of MSS SP 58, MSS SP 69, MSS SP 89, and ASME B31.3 or as modified by this section.
3. Pipe support systems shall be designed for gravity and thrust loads imposed by weight of pipes or internal pressures, including weight of fluid in pipes and insulation.
4. Seismic loads in accordance with governing codes **and as shown on Structural Notes Drawing.**
5. Wind loads in accordance with governing codes **and as shown on Structural Notes Drawing.**
6. Maximum support spacing and minimum rod size in accordance with MSS SP-69.”

2. Butterfly Valves (Section 40 05 64)

- a) Paragraph 2.3, **ADD** paragraph 8 as follows:

“8. DRS service butterfly valves shall be provided with extension bonnets as required to clear interferences indicated on the Contract Drawings.”

3. Horizontal Centrifugal Pumps (Section 43 23 13)

- a) Paragraph 2.1.A.1, **DELETE** “Weir Group”, and **ADD** to the end, “as manufactured by Trillium.”
- b) Paragraph 2.1.C, under ‘Motor / Pump Configuration’ **DELETE** “Side by Side”, and **REPLACE** with “Overhead Mounted” and under ‘Mechanical Seal’ **DELETE** “Single Flushless Mech Seal” and **REPLACE** with “Severe Service Mechanical Seal.”
- c) Paragraph 2.1.K.2, **DELETE** paragraph and **REPLACE** with,
- “2. Mechanical Seals – Severe Service

- a. Severe service pumps shall be provided with a mechanical seal shall be made of 316 stainless steel and shall be a cartridge-type mechanical seal with Viton® O-rings and tungsten carbide to diamond coated silicon carbide faces. This cartridge seal shall be pre-assembled and pre-tested so that no seal settings or adjustments are required from the installer.”
4. Grit Removal and Handling Equipment (Section 46 23 00)
    - a) Paragraph 2.3.D.2.d, **DELETE** “Chesterton 442”, and **REPLACE** with, “Chesterton 442M”
  5. Grit Classifying and Washing Equipment (Section 46 23 63)
    - a) Paragraph 2.2, **DELETE** “The Weir Group (WEMCO)”, and **REPLACE** with, “WEMCO as manufactured by Trillium.”
    - b) Paragraph 2.5, **DELETE** from the second sentence, “The Classifier Manufacturer shall design the ladder to be part of the classifier structure, and” **REVISE** sentence to read, “Access ladders shall not interfere with the normal operation and maintenance of the classifiers.”

#### **D. Contract Drawings**

1. Drawing 420-G-10
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 420-G-10.
2. Drawing CD-10
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing CD-10.
3. Drawing CD-12
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing CD-12.
4. Drawing 530-A-08
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-A-08.
5. Drawing 530-A-11
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-A-11.

6. Drawing 530-A-15
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-A-15.
7. Drawing 530-A-19
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-A-19.
8. Drawing 530-A-29
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-A-29.
9. Drawing 530-A-51
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-A-51.
10. Drawing SD-13
  - a) Detail C, **ADD** the following above the detail title: “NOTE: THE CONNECTION PLATES MUST BE THE SAME GRADE OF MATERIAL AS THE CONNECTING MOMENT BEAM.”
11. Drawing 420-S-12
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 420-S-12.
12. Drawing 420-S-13
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 420-S-13.
13. Drawing 420-S-30
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 420-S-30.
14. Drawing 420-SD-52
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 420-SD-52.
15. Drawing 420-SD-53
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 420-SD-53.
16. Drawing 530-S-15
  - a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-S-15.



17. Drawing 530-S-18

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-S-18.

18. Drawing 530-S-36

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-S-36.

19. Drawing 530-SD-51

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-SD-51.

20. Drawing 530-SD-58

- a) Detail 7 “DUCTWORK SUPPORT SECTION” **DELETE** beam tag “W10X45” approximately in the middle of the detail and **REPLACE** with “W10X49”.

21. Drawing MS-02

- a) **DELETE** this drawing and **REPLACE** with the attached drawing MS-02

22. Drawing MD-04

- a) **DELETE** this drawing and **REPLACE** with the attached drawing MD-04

23. Drawing 420-MDM-11

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 420-MDM-11

24. Drawing 420-M-15

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 420-M-15

25. **ADD** new Drawing 420-M-35

26. Drawing 530-M-01

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-01

27. Drawing 530-M-03

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-03

28. Drawing 530-M-11

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-11

29. Drawing 530-M-12

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-12

30. Drawing 530-M-13

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-13

31. Drawing 530-M-14

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-14

32. Drawing 530-M-32

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-32

33. Drawing 530-M-34

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-34

34. Drawing 530-M-35

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-35

35. Drawing 530-M-36

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-36

36. Drawing 530-M-41

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 530-M-41

37. Drawing 535-M-01

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 535-M-01

38. Drawing 535-M-10

- a) **DELETE** this drawing and **REPLACE** with the attached drawing 535-M-10

## E. Questions

224. **QUESTION:** Reference Specification 41 21 23.13 BELT CONVEYOR EQUIPMENT section 2.1.H.1.e: Which conveyor length does ALCOSAN want the one complete set of idler rollers for – grit or screenings conveyor?

**RESPONSE:** The longer of the two if they are compatible for both. If not compatible for both, supply one complete set for each.

225. **QUESTION:** Reference Specification 41 21 23.13 Belt Conveyor Equipment section 2.1.H.1.e: Does ALCOSAN require idler sets for both the grit conveyor and screenings conveyor?

**RESPONSE:** If compatible for both, one set is acceptable. If not, provide sets for both.

226. **QUESTION:** Room Finish Schedule on 530-A-58 has a wall finish listed labeled HPC. Please clarify what HPC wall finish is. It is not listed in the interior finish list on the same drawing.

**RESPONSE:** HPC is “High Performance Coating.” Please refer to Technical Specification 09 96 00 High Performance Coatings.

227. **QUESTION:** Specification 09 96 00 -High Performance Coating, section 1.2 Summary and section 3.6 Exterior High Performance Coating Schedule both mention that Concrete, CMU, and Steel are all suppose get this coating. Please clarify the coating location(s) for Concrete, CMU, and Steel.

**RESPONSE:** Interior high performance coatings are further clarified on the architectural drawings. See response to question 228. Regarding exterior coatings, refer to schedule 3.6.

-Regarding steel, the schedule and summary indicate that all exterior exposed steel receives HPC's. See response to question 228 for interior steel.

-Regarding concrete, refer to item 6 in the schedule for surfaces to be coated, including Immersion and Fumes – H2S Environments. Note that general exterior exposed concrete such as walking surfaces, exposed faces of building foundation, and other exterior faces of concrete structures not immersed or exposed to such environments are not indicated to be coated. See response to question 228 for interior concrete.

-Regarding CMU – all exposed CMU is to receive HPC unless noted otherwise in the notes and Room Finish Schedule references in the response to question 228.

228. **QUESTION:** Please provide clarification on location(s) of steel and metal(s) that are to fall under specification 09 91 23 -Interior paint, and which are to fall under specification 09 96 00 - High Performance Coating.

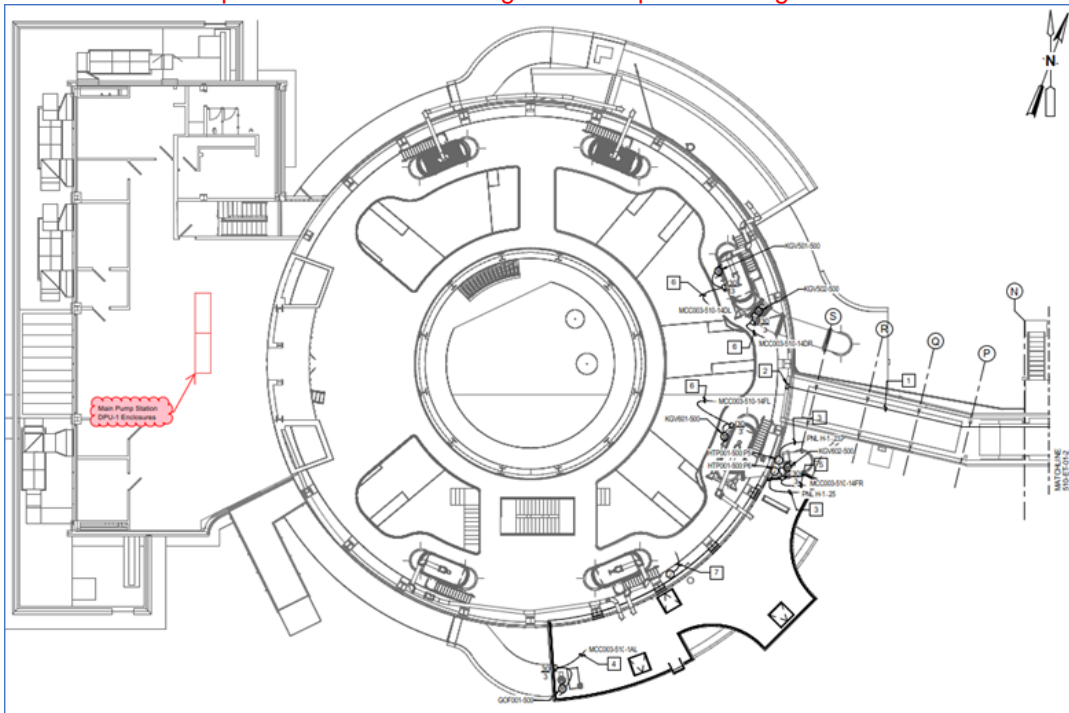
**RESPONSE:** Refer to the General Notes on the floor plans. Each basement floor plan has a note stating: PROVIDE HIGH PERFORMANCE COATINGS ON FERROUS METALS, CONCRETE, MASONRY, AND OTHER MATERIALS THROUGHOUT THE BASEMENT LEVEL. SEE SPECIFICATION SECTION 099600. Similarly, the plans on sheets 530-A-07 and 530-A-08 have notes stating: PROVIDE HIGH PERFORMANCE COATINGS ON FERROUS METALS, CONCRETE, MASONRY, AND OTHER MATERIALS THROUGHOUT PROCESS AND INDUSTRIAL AREAS. SEE FINISH SCHEDULE AND SPECIFICATION SECTION 099600. Also, to confirm exactly which rooms are “process and industrial” refer to the Room Finish Schedule on sheet 530-A-58, which shows HPC finishes on the walls in each process room.

229. **QUESTION:** Please refer to the valve schedule – valve #s BFV101, BFV201, BFV501 and BFV601. Valves are for siphon air service. Please confirm that these valves should be supplied per spec # 40 05 64, 2.1.

**RESPONSE:** The referenced butterfly valves do not need to be supplied and are being removed from the valve schedule per this addendum. The existing valves are to be re-used as called out in the drawings.

230. **QUESTION:** Reference DRAWING 500-1-11 MAIN PUMP STATION UPPER PLAN: General Sheet Note 2 “Unless otherwise noted, terminate conduit and conductors at Main Pump Station Panel DPU-1.” No location is detailed for Main Pump Station DPU-1. Can a location for this existing DPU be provided?

**RESPONSE:** The Main Pump Station DPU-1 enclosures are located in the pump station control room as shown depicted as the red rectangles on the plan drawing below:



231. **QUESTION:** Reference DRAWING 520-EDM-01 PIPE GALLERY TUNNEL-DEMOLITION and DRAWING 520-ET-01 PIPE GALLERY TUNNEL POWER PARTIAL PLANS: 520-EDM-01 Plan Note 1 “De-energize, disconnect and remove power and control wiring circuits in the entirety to north end. Save south end of line S-265, C-214, P204, C-701, T-301, T904 (to be field verified and any other as directed by the owner. For re-connection provide temporary connections if required.” 520-ET-01 Plan Note 3 “Provide power and control circuits verify and re-route circuits T-904, C-701, S-265 and any other circuits as directed by owner.” Can the conduit size and conductor fill and wire types be provided for existing conduits S-265, C-214, P-204, C-701, T-301, and T-904?

**RESPONSE:** There is no known as-built for the conduit details in the designer’s record. Please follow the notes to field verify and work with the Owner for these circuits.

232. **QUESTION:** Reference SPECIFICATION SECTION 26 05 33 RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS 3.1 RACEWAY APPLICATION "A. See Contract Drawings for raceway products types... B. Where indicated on the Contract Drawings raceway products located outdoors... C. Where not indicated on the Contract Drawings Raceway products located indoors shall comply with the following..." Since not notes are present on the Drawings for the following areas or locations can corrosive environments be identified that will require PVC Coated Galvanized Conduit or if Aluminum Rigid Conduit can be used.

Drawing 420-ET-02 Odor Control Facility  
Drawing 500-ET-01 Main Pumping Station  
Drawing 510-ET-01 Rack and Chlorination Building  
Drawing 513-ET-01 Screening Garage  
Drawing 514-ET-01 Grit Chamber  
Drawing 515-ET-01 Gate Structure  
Drawing 520-ET-01/520-ELP-01 Pipe Gallery Tunnel  
Drawing 420-I-11 Scrubber Plan

**RESPONSE:**

The conduit material required for the specific areas in question has been noted below.

Drawing 420-ET-02 Odor Control Facility- **PVC Coated**  
Drawing 500-ET-01 Main Pumping Station-**Rigid Aluminum**  
Drawing 510-ET-01 Rack and Chlorination Building - **PVC Coated**  
Drawing 513-ET-01 Screening Garage- **PVC Coated**  
Drawing 514-ET-01 Grit Chamber - **PVC Coated**  
Drawing 515-ET-01 Gate Structure - **PVC Coated**  
Drawing 520-ET-01/520-ELP-01 Pipe Gallery Tunnel -**Rigid Aluminum**  
Drawing 420-I-11 Scrubber Plan - **PVC Coated**

233. **QUESTION:** Reference the door schedule: Can you confirm where openings 530-D-104C, 530-D-2S2C & 530-D-3S2 are located? They are noted on the schedule, but not marked on the plans. Also, openings 530-D-106G, 530-D-2S2E, 530-D-203 & 530-D-111Q are tagged on the floor plans but not on the schedule. Please clarify.

**RESPONSE:** Door opening corrections are shown on drawings issued under Addendum 11.

234. **QUESTION:** Reference Specification Section 44 31 10 Chemical Scrubber Odor Control System Part 2.1: Perry Fiberglass Products, Inc. is an established manufacturer of activated carbon odor control systems. Question: Can Perry Fiberglass Products, Inc. be added as a named supplier?

**RESPONSE:** ALCOSAN will not be adding any products to the list for any of the listed products during the bid period. Not listed products will have to go through the substitution process if submitted by the successful bidder after the notice to proceed. Reference Article 2 – 2.05 B.3.

235. **QUESTION:** Reference Specification Section 40 10 16 Fiberglass Plastic Duct and Dampers Part 1.2 - Perry Fiberglass Products, Inc. is an established manufacturer of corrosion resistant fiberglass ductwork. Question: Can Perry Fiberglass Products, Inc. be added as a named supplier?

**RESPONSE:** ALCOSAN will not be adding any products to the list for any of the listed products during the bid period. Not listed products will have to go through the substitution process if submitted by the successful bidder after the notice to proceed. Reference Article 2 – 2.05 B.3.

236. **QUESTION:** Please provide clarification on signage that falls under 10 14 53 - Traffic Signage. All Signage in the schedule on 530-A-56 seems to fall under specification 10 14 23 - Panel Signage.

**RESPONSE:** The schedule on 530-A-56 is specific to Panel Signage for inside use and does not cover Traffic Signage. For Traffic Signage refer to the specification and the details on the plans.

237. **QUESTION:** Reference drawing 500-SDM-31 (159 of 645), Section 4 shows a 2'-3" thick slab remaining below the demolished pipe encasement of Pump 6. Also reference drawing 500-SD-52 (167 of 645), Section 1 shows a new 2'-3" thick slab in what appears to be the same location. Please clarify.

**RESPONSE:** The existing 2'-3" thick slab shown on 500-SDM-31 is to remain as indicated. The footprint of this existing 2'-3" slab must be expanded as indicated in Detail 2/500-SD-52 and Sheet Keynote 1 to accommodate modification to Pump 6 discharge piping. Section 1/500-SD-52 is cutting through the new, expanded, 2'-3" thick slab. Additionally, the remaining 2'-3" thick slab is located plan north of the expanded portion.

238. **QUESTION:** Reference drawing 520-M-11 (353 of 645) as well as other drawings which show the 12" EWF line (EFW per Addendum No. 10) in the tunnels. This line is called out as Ductile Iron Pipe but it is drawn as a Fabricated Pipe System. Please confirm what material shall be used for the EWF/EFW piping.

**RESPONSE:** The 12" EWF line is ductile iron pipe.

239. **QUESTION:** Reference drawing 520-M-11 (353 pf 645) which shows a 3" Sump Drain line that runs off the top of the dwg at match line 520-M-10, but this 3" Sump Drain is not shown on 520-M-10. Please clarify the end-point/routing of this 3" Sump Drain line and confirm this is a 3" SCH 80 PVC.

**RESPONSE:** The 3" sump drain line is DIP. Section 3/520-M-11 shows the 3" drain line dropping to an elevation of 717.50 and it will continue along the east wall to the existing sump pump piping (approx. 40 ft north of the East Headworks Basement junction). Sheet 520-MDM-30 shows the sump pump and piping that's remaining.

240. **QUESTION:** Reference drawing 513-M-10 (338 of 645) which shows a hydraulic pack for the dewatering compactor. There is no detail on the drawing or specification 11 82 26 indicating what pipe, hydraulic hoses, or is to connect the hydraulic pack to the compactor. The manufacturer has advised that they will not be including these materials as part of their equipment package pricing, and suggests a hard pipe to connect because of the distance. Please specify the product to be used to connect these equipment components.

**RESPONSE:** The Contractor shall provide hoses or hard piping as recommended by the Manufacturer. Piping shall at a minimum be Schedule 80 carbon steel. Fittings shall be carbon steel NPT Class 3000. Note that Two (2) 1-1/2 inch diameter, two (2) 1-1/4 inch, and two (2) 3/4 inch pipes will be required to connect from the hydraulic pack to the compactor.

241. **QUESTION:** Reference Information For Bidders, Article 2.07 which indicates that: "All Bids will remain open for acceptance by Owner for Sixty (60) calendar days after the Bid opening.....The Owner will endeavor to issue the Notice to Proceed within Ninety (90) calendar days of the Bid opening and Thirty (30) calendar days after the Contract is awarded.....The Awarded Bidder should not order any materials or equipment or make any financial commitments concerning this Contract until receiving the Notice to Proceed. Awarded Bidders that do Work or prepare to do Work prior to receiving the Owner's Notice to Proceed are proceeding at their own risk." The current market volatility of certain raw materials and building components has many suppliers providing quotes with exceptionally short validity periods (often as short as 1 week). The requirement above creates a major challenge for bidders and supplier to provide ALCOSAN with the best value by remaining competitive without putting themselves at significant financial risk. Will ALCOSAN consider allowing adjustments in contract value if the awarded bidder is able to furnish evidence of material increases after the date of the bid?

**RESPONSE:** : This project is intended to be awarded at the April 22, 2021 board meeting. As stated in Article 2.07, Notice to Proceed would be within 30 days of then (May 22, 2021). No adjustments will be made during this time period.

242. **QUESTION:** Can you please verify the pipe size needed for the temp. bypass at the pump house? 42" ID would be 44" OD pipe. Should the pipe be 44" OD with a 42" ID?

**RESPONSE:** A 42" interior diameter is required. Pipe thickness shall be suitable for the pumping application.

243. **QUESTION:** Reference Specification 43 23 13:

- 1.4: Please add the following to this section: "The Grit Classifying and Washing Equipment (Section 46 23 63) and the Horizontal Centrifugal Pumps (Section 43 23 13) shall be provided by a single source manufacturer taking system responsibility for the equipment".

This change is not acceptable.

- 2.1.A.1: Please change to "WEMCO Model C Torque-Flow as manufactured by Trillium."

Acknowledged, see modifications per this addendum.

- 2.1.C: Drawing 510-N-10 depicts the sampling pumps as overhead mounted. The specs call for side mount arrangement. Please clarify which is the correct arrangement.

Overhead was the design intent. See modifications per this addendum.

- 2.1.C & 2.2.K.2: Calls for a flush-less mechanical seal, however a flush-less mechanical seal is not available in the specified pump model/size. We propose a Chesterton S10 single mechanical seal in lieu of the flush-less seal.

Acknowledged, see modifications to severe service seal per this addendum.

- 2.3.A.1: Motor classification rating is unclear based on the reviewed documents. Please provide clarification of the classification rating. Standard motors are certified for Class 1 Division 2 Groups B, C, & D.

Motors that are certified for Class 1 Division 2 Groups B, C & D are compliant with this paragraph.

**RESPONSE:** See responses to individual questions above.

244. **QUESTION:** Reference Specification 46 23 63

- All stainless steel materials will be provided in 316/316L.

Acknowledged.

- 1.4: Please added the following to this section: “The Grit Classifying and Washing Equipment (Section 46 23 63) and the Horizontal Centrifugal Pumps (Section 43 23 13) shall be provided by a single source manufacturer taking system responsibility for the equipment”.

This change is not acceptable.

- 2.2.: Please change Weir Group (WEMCO) to “WEMCO as manufactured by Trillium.”

Acknowledged, see modifications per this addendum.

- 2.4.H: Note of Clarification: A Torque limiter switch will be provided to act as the low speed switch. The Torque limiter functionality is in-line with what is described in the specification.

Acknowledged.

- 2.4.K: Request for clarification. The spec calls for two (2) fabricated grit chutes which will attach to the grit discharge opening of the classifier tank. One (1) grit chute shall be constructed to direct grit onto a belt conveyor. One (1) grit chute shall be constructed to direct grit beyond the belt conveyor and either onto the ground, or into a portable container. Is it the intent to have (2) separate chutes, with only one (1) chute attached to the grit discharge opening at a time depending on the required service?

That is correct. Two chutes provided, one installed at a time. Alternatively, one chute could be provided along with a diverter plate or tray that attaches to the chute to re-direct grit to a portable container, in this alternative the chute would remain on the classifier.

- 2.5: The spec calls for access ladders on each side of each classifier and for the Classifier Manufacturer to design the ladders to be part of the classifier structure. We request that the ladders be independent of the equipment and supplied by the contractor or plant maintenance, due to possible safety implications.

Acknowledged. See modifications per this addendum.

**RESPONSE:** See responses to individual questions above.



245. **QUESTION:** Reference drawing 500-M-11 (326 of 645), Coded Note 5 calls for replacement of 2" Sodium Hypo lines to each discharge structure. Please provide routing info & details of these 2" Sodium Hypo lines and confirm these lines are to be CPVC.

**RESPONSE:** The 2" sodium hypochlorite lines shall be CPVC. The existing piping shall be replaced from the discharge location at each discharge structure back to the demolition extent at the breezeway structure. Photos of the existing piping are attached for reference.



246. **QUESTION:** Reference drawing 530-M-10 (373 of 645), SECTION 4 indicates STL-2"-VNT coming out of each sump pump cover (sump pumps 10 to 14 on dwg). Please confirm that 2" steel pipe is required & not 2 SCH 80 PVC pipe per Pipe System #6 in specification 40 05 00. Please clarify if this 2" Steel Vent pipe is required to be welded or threaded steel pipe.

**RESPONSE:** The STL-2"-VNT line on DWG 530-M-10 is not connected to the sump, rather is part of the steam system. Note there is an unlabeled 2-inch PVC vent line connected to the sump shown on 530-M-10 but is called on 530-P-11. Please see Section 5 on DWG 530-M-33 for further detail on the STL-2"-VNT extending up from the condensate pump and connecting to the STL-4"-VNT at centerline elevation 716.25.

## **F. Clarifications**

1. The significant number of drawings in this addendum is dedicated to providing an alternate discharge to the East Headworks for the 12” EFW line (steam letdown cooling water) and a 14” scrubber drain line. Each of these lines currently continuously discharges into the West Headworks Grit Effluent Channel and this change is needed to provide operational flexibility as well as to maintain plant operations during construction.

Attachments:

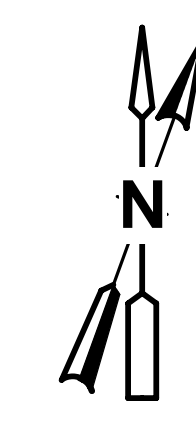
Specifications:

Drawings:

420-G-10  
CD-10  
CD-12  
530-A-08  
530-A-11  
530-A-15  
530-A-19  
530-A-29  
530-A-51  
420-S-12  
420-S-13  
420-S-30  
420-SD-52  
420-SD-53  
530-S-15  
530-S-18  
530-S-36  
530-SD-51  
MS-02  
MD-04  
420-MDM-11  
420-M-15  
420-M-35  
530-M-01

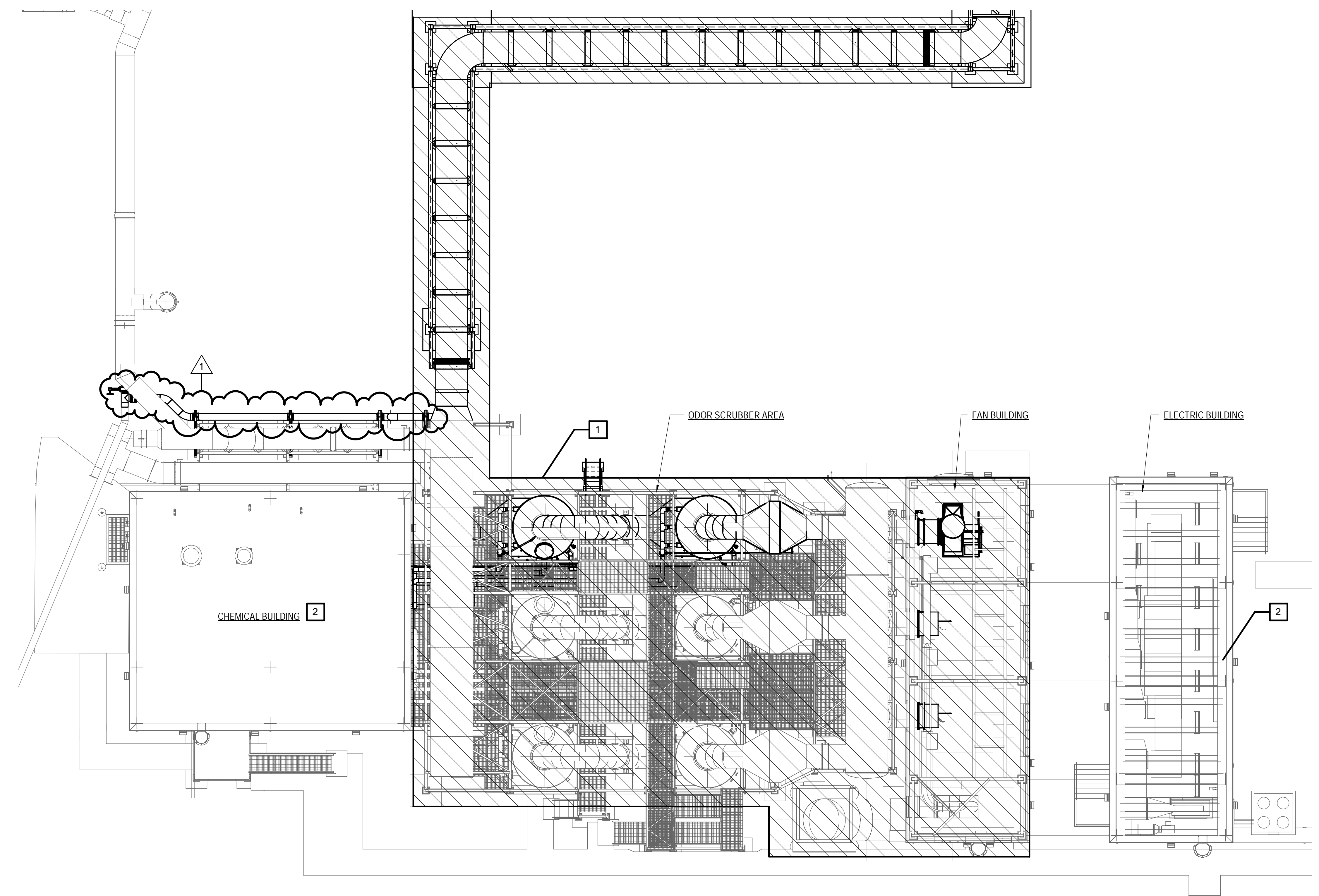
530-M-03  
530-M-11  
530-M-12  
530-M-13  
530-M-14  
530-M-32  
530-M-34  
530-M-35  
530-M-36  
530-M-41  
535-M-01  
535-M-10

**\*\*\*\* END OF ADDENDUM NO. 11\*\*\*\***



**X SHEET KEYNOTES**

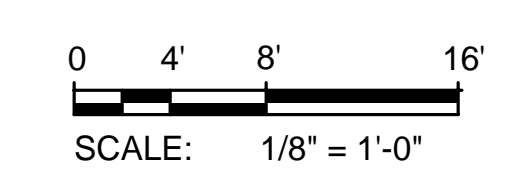
1. ENTIRE INTERIOR OF ODOR CONTROL DUCTWORK AND EQUIPMENT IS NFPA 820 CLASS 1 DIVISION 2. OUTDOOR AREA IS CLASSIFIED WITHIN 3 FT OF ALL LEAKAGE POINTS INCLUDING DAMPERS AND FLEXIBLE CONNECTIONS.
2. THE INTERIOR AND EXTERIOR OF THE ELECTRIC BUILDING AND CHEMICAL BUILDING ARE UNCLASSIFIED AREAS.



**LEGEND**

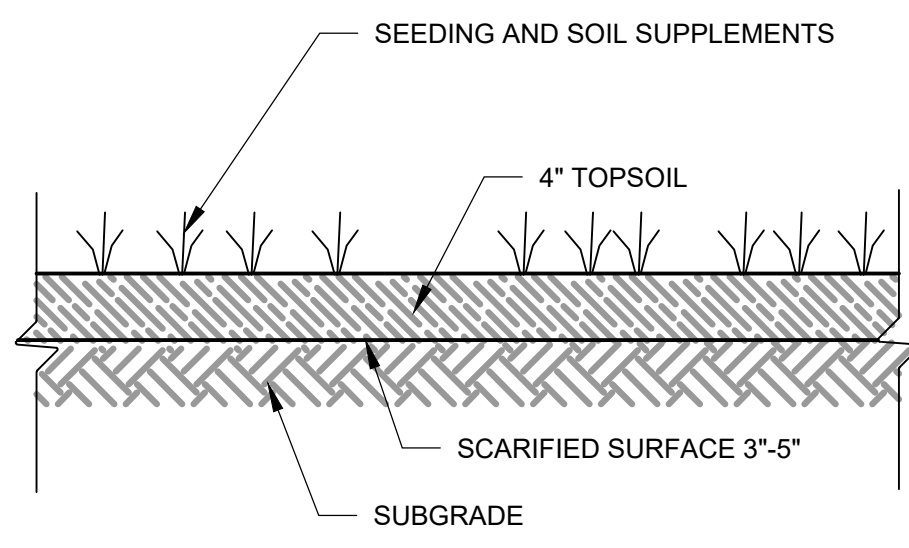
- NFPA 820 CLASS 1 DIVISION 1
- NFPA 820 CLASS 1 DIVISION 2
- UNCLASSIFIED

**AREA CLASSIFICATION PLAN** 1  
SCALE: 3/32" = 1'-0"

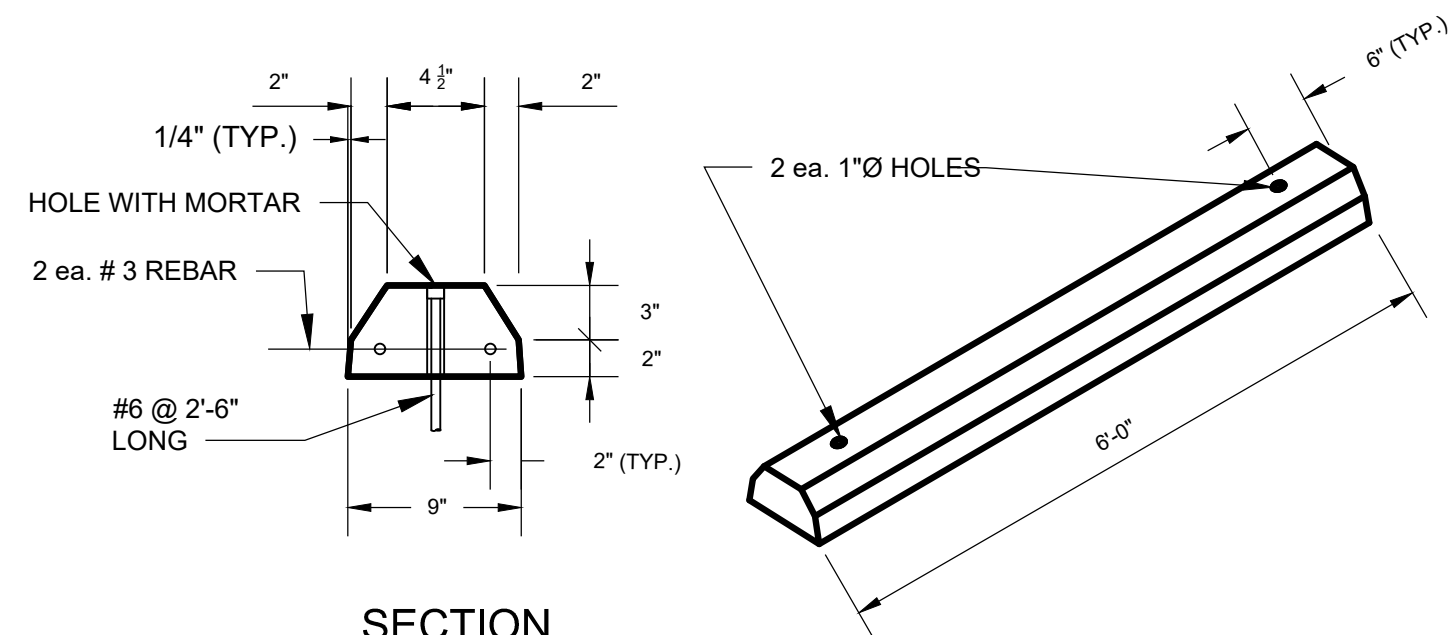


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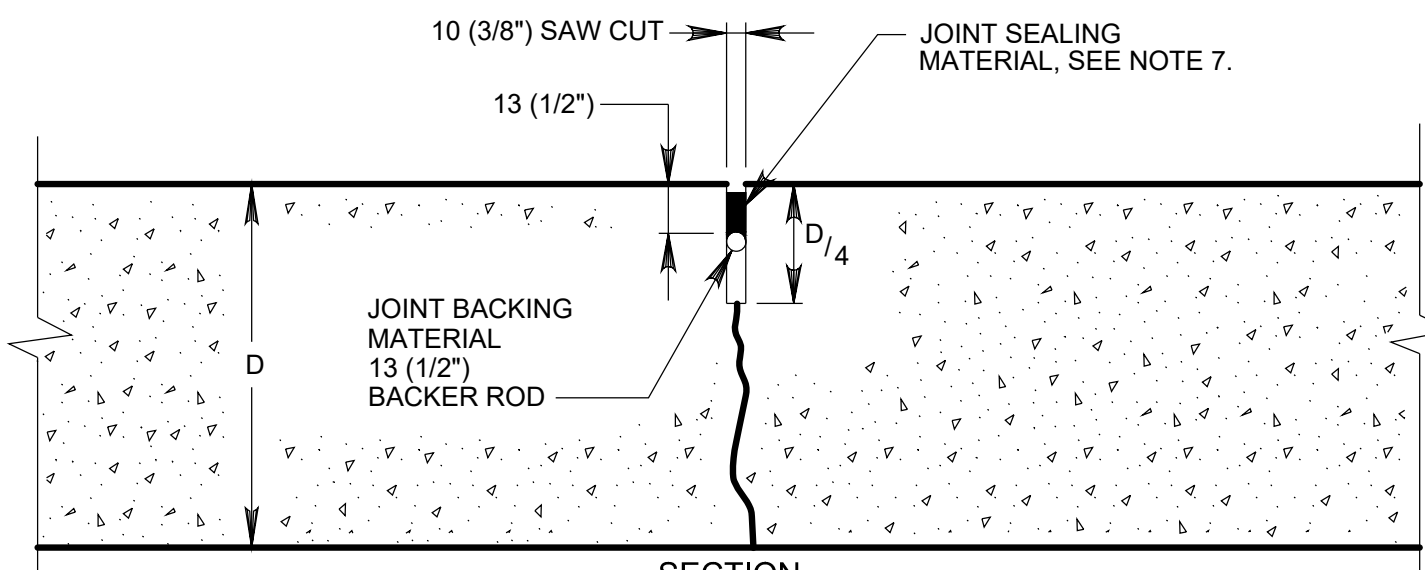
Designed by: EMS Drawn by: EMS Checked by: MDO	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">REVISION</th> </tr> <tr> <th>REV No.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>APPV</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>10/28/20</td> <td>ISSUE FOR BIDS</td> <td></td> </tr> <tr> <td>1</td> <td>4/2/21</td> <td>ADDENDUM NO. 11</td> <td></td> </tr> </tbody> </table>	REVISION				REV No.	DATE	DESCRIPTION	APPV	0	10/28/20	ISSUE FOR BIDS		1	4/2/21	ADDENDUM NO. 11		 <b>Whitman, Requardt &amp; Associates, LLP</b> <small>801 South Caroline Street, Baltimore, MD 21231</small>		 <small>allegheeny county sanitary authority</small> <b>ARLETTA SCOTT WILLIAMS</b> <small>EXECUTIVE DIRECTOR, ALCOSAN</small> 3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810 <a href="http://www.alcosan.org">www.alcosan.org</a>	<b>ALLEGHENY COUNTY SANITARY AUTHORITY</b> WASTEWATER TREATMENT PLANT EAST HEADWORKS  <b>420-G-10</b> <b>HEADWORKS ODOR CONTROL FACILITY</b> <b>AREA CLASSIFICATION PLAN</b>	Contract: 1729 CAD File Name: 420-G-10.DGN Date: OCTOBER 2020 Sheet: 14 of 645
REVISION																						
REV No.	DATE	DESCRIPTION	APPV																			
0	10/28/20	ISSUE FOR BIDS																				
1	4/2/21	ADDENDUM NO. 11																				



RE-VEGETATED LANDSCAPE 1  
NTS

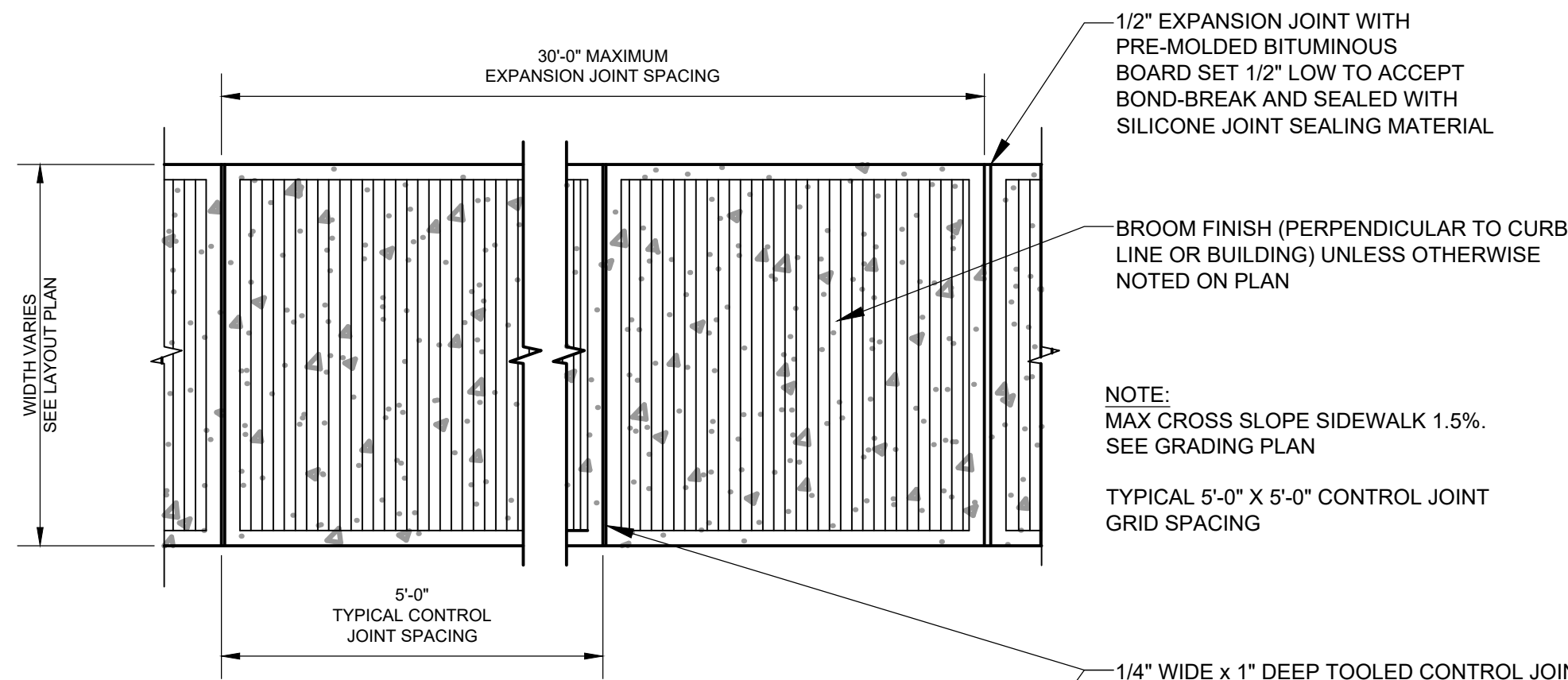


PRECAST CONCRETE WHEEL STOP 2  
NTS

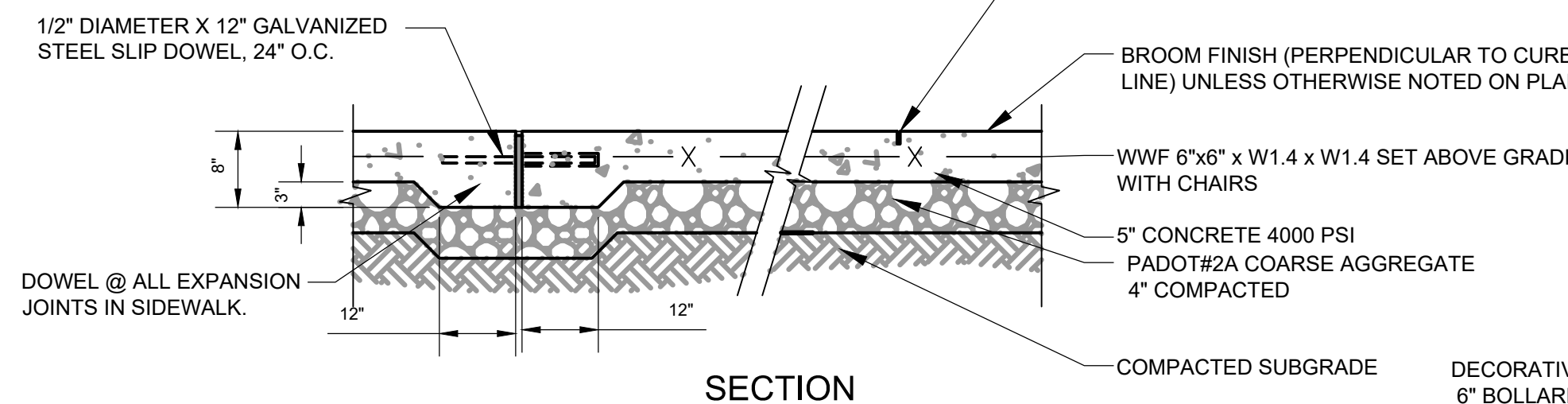


MAXIMUM 12' X 12' SECTIONS

CONCRETE PAVEMENT 3  
N.T.S.

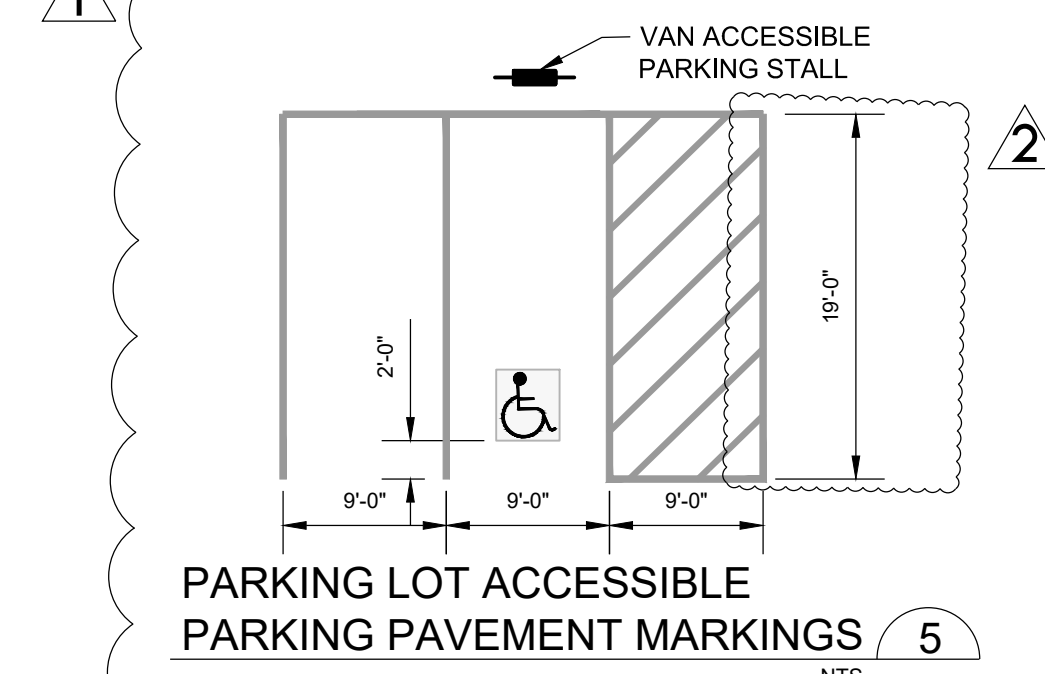
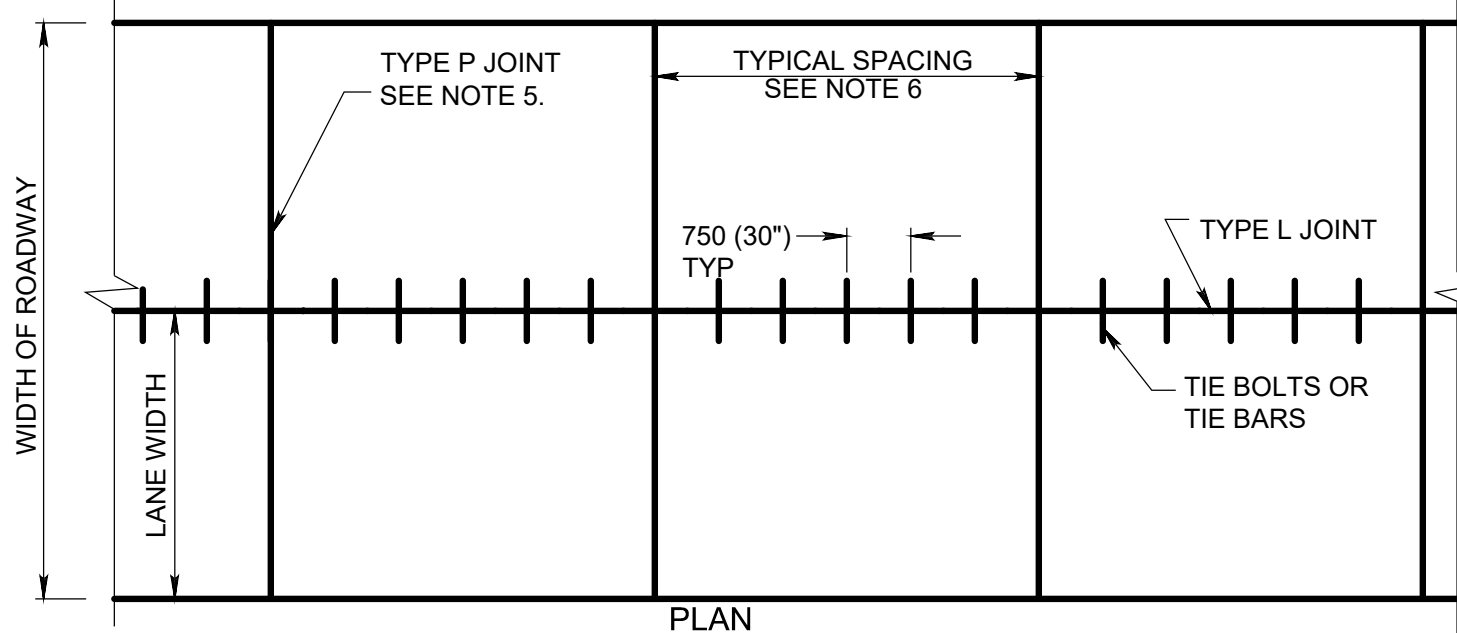


SIDEWALK 4  
NTS



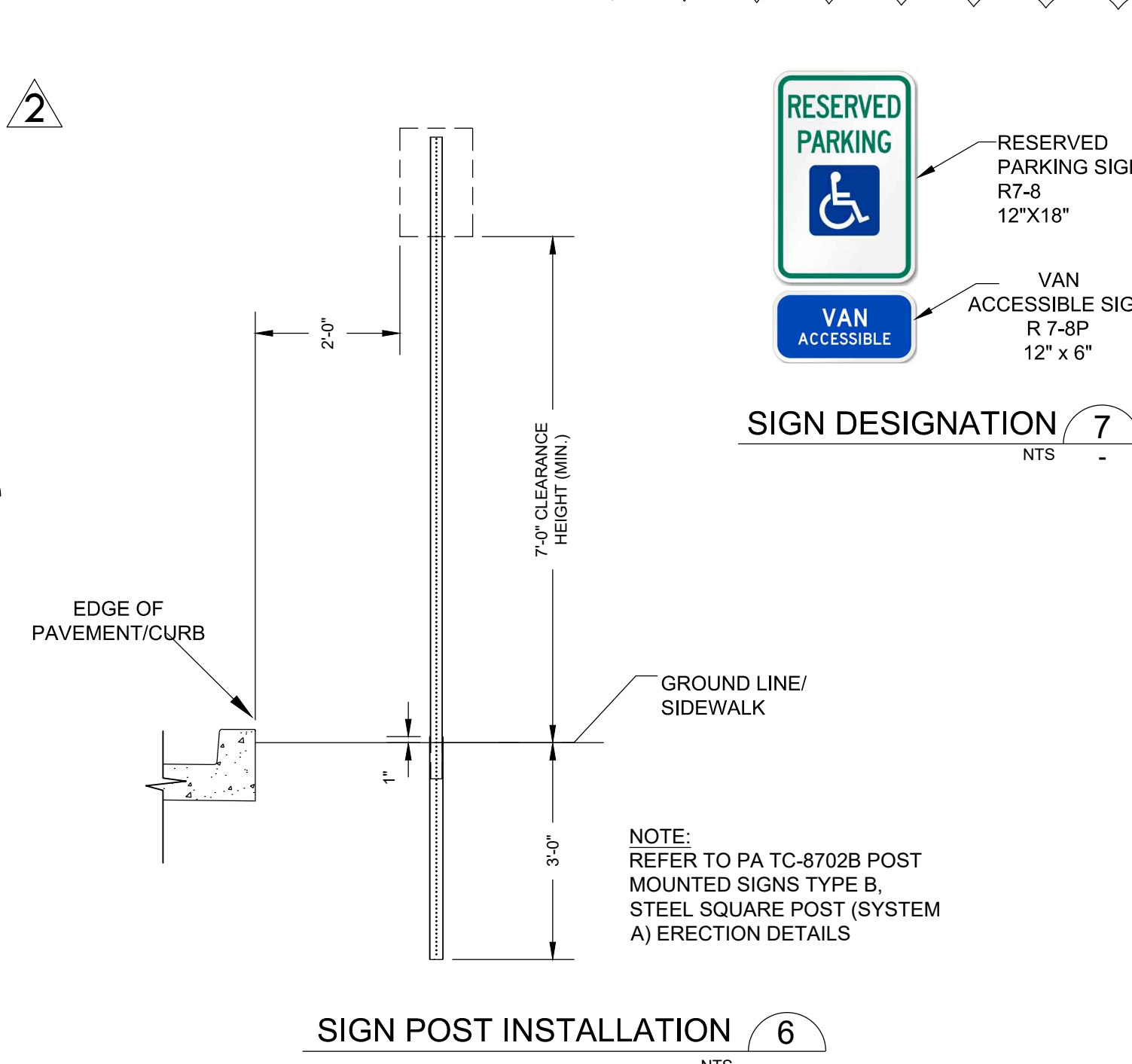
NOTE  
MAKE THE TOP OF THE JOINT SEALING MATERIAL FROM 3 (1/8") TO 6 (1/4") BELOW THE SURFACE OF THE PAVEMENT. USE HEAT RESISTANT JOINT BACKING MATERIAL FOR HOT POURED JOINTS.  
D = 8" FOR PAVEMENT  
D = 6" FOR DUMPSTER PAD  
D = 5" FOR SIDEWALKS

- NOTES
- FOR JOINT DETAILS, SEE RC-20M.
  - CONSTRUCT TYPE D JOINTS ON INTERSTATE, EXPRESSWAY, ARTERIAL AND RAMP PAVEMENTS.
  - WHEN RAMP OR LANE WIDTH EXCEEDS 4.2 m (14'), A TYPE L JOINT IS REQUIRED AT THE MIDPOINT.
  - CONSTRUCT ACCELERATION AND DECELERATION PORTION OF RAMP WITH THE SAME PAVEMENT STRUCTURE AS THE MAINLINE PAVEMENT TO THE FIRST TRANSVERSE JOINT BEYOND THE RAMP GORE.
  - CONSTRUCT TYPE P JOINT, AS INDICATED, ON COLLECTORS AND LOCAL ROADS.
  - USE A 4.5 m (15'-0") JOINT SPACING ON ALL PAVEMENTS.
  - ON CURVES, THE JOINT SHALL BE CONSTRUCTED PERPENDICULAR TO THE TANGENT ON THE LONG RADIUS SIDE OF THE CURVE.
  - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. U.S. CUSTOMARY UNITS IN ( ) PARENTHESES.

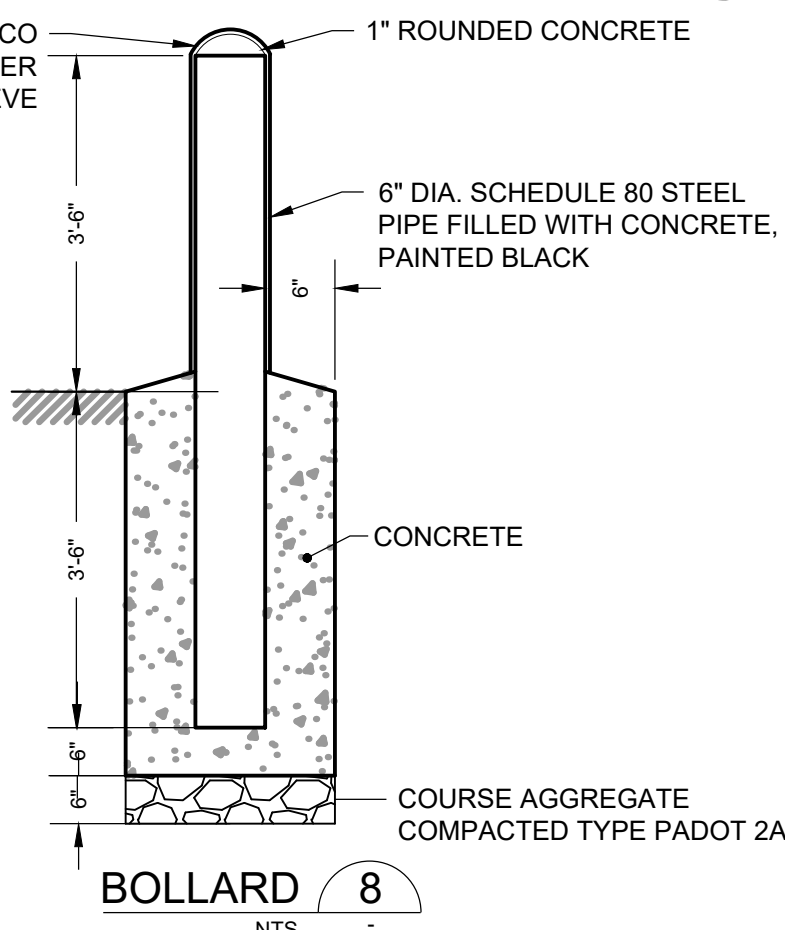


PARKING LOT ACCESSIBLE PARKING PAVEMENT MARKINGS 5  
NTS

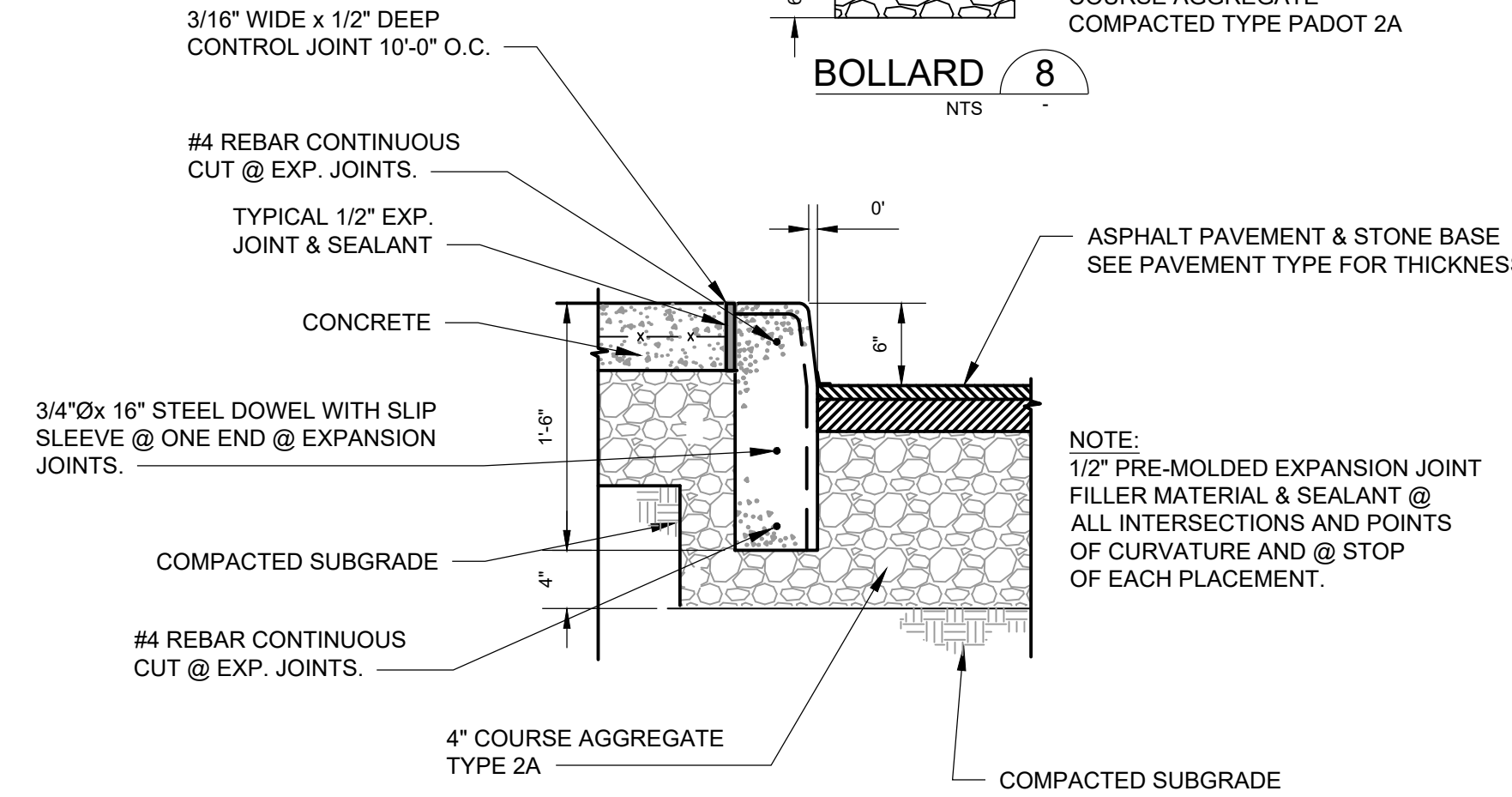
- ACCESSIBLE PARKING SPACE STRIPING
- 4" WIDE BLUE PAVEMENT MARKING
- HATCHING
- 4" WIDE 45° BLUE PAVEMENT MARKINGS 30" O.C.
- ACCESSIBLE WALKWAY
- 6" WIDE 45° BLUE PAVEMENT MARKINGS
- ADA PARKING SYMBOL PAVEMENT
- HANDICAP SYMBOL SHALL BE WHITE. IT MAY BE INSTALLED ALONE OR WITH A BLUE BACKGROUND WHICH EXTENDS A MINIMUM OF 3" BEYOND THE SYMBOL. IF MATERIAL THICKNESS OF SYMBOL IS GREATER THAN 20 MILS THE BLUE BACKGROUND MUST BE USED. ANY REDUCTION IN DIMENSIONS MUST BE APPROVED BY THE DEPARTMENT



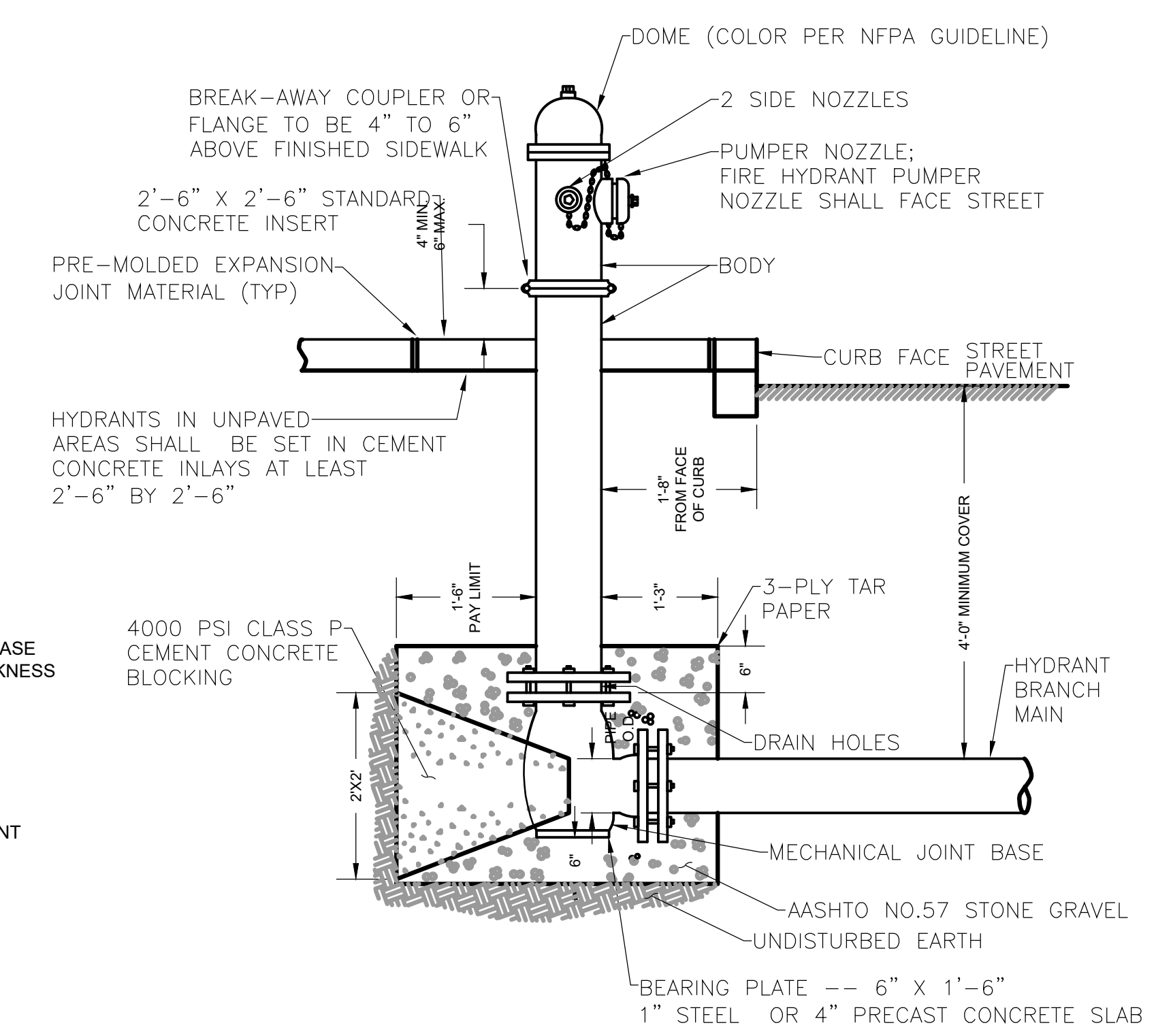
SIGN POST INSTALLATION 6  
NTS



BOLLARD 8  
NTS



FULL-DEPTH CONCRETE CURB 9  
NTS



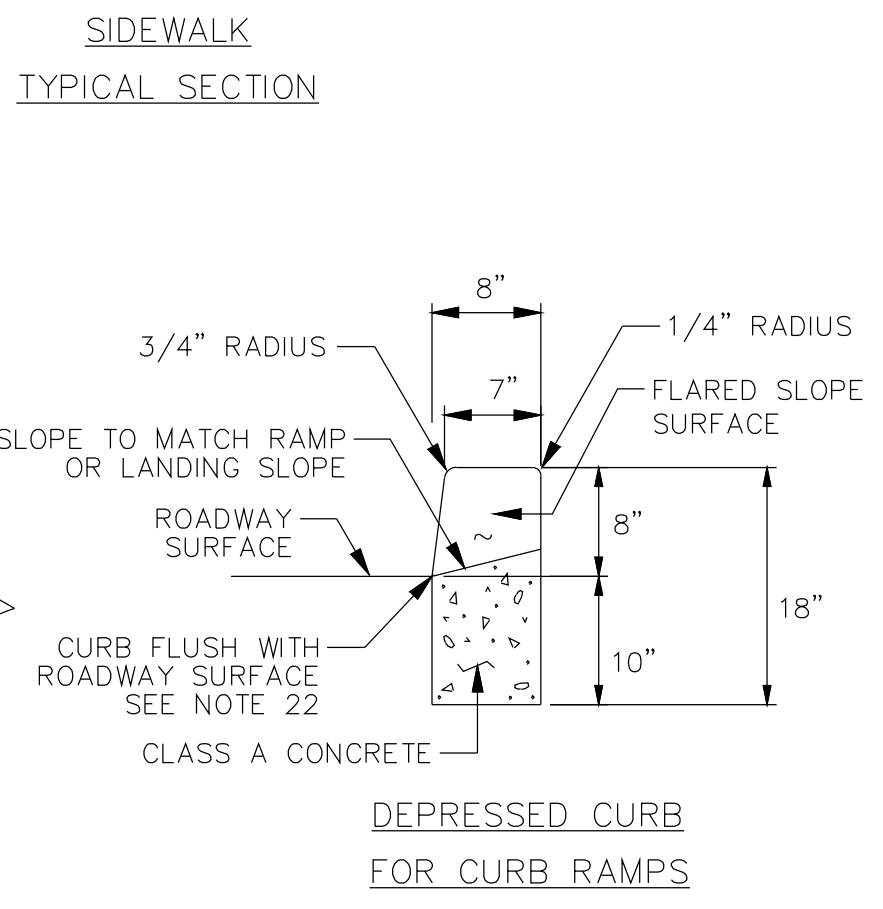
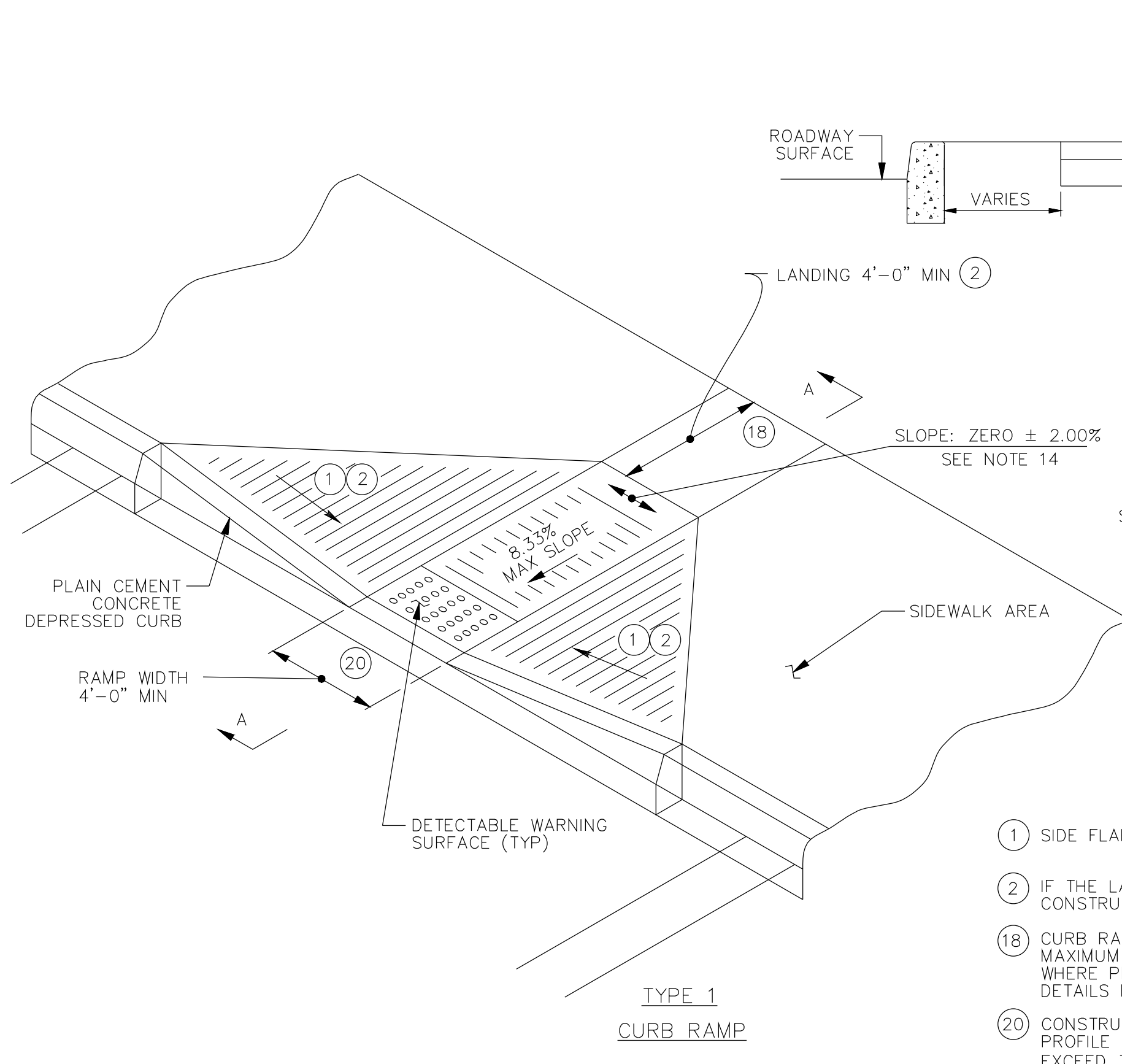
FIRE HYDRANT 10  
NTS

Designed by:	LJK	REVISION		
Drawn by:	TPM	REV No.	DATE	DESCRIPTION
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		2	4/2/21	ADDENDUM 11
				APPV

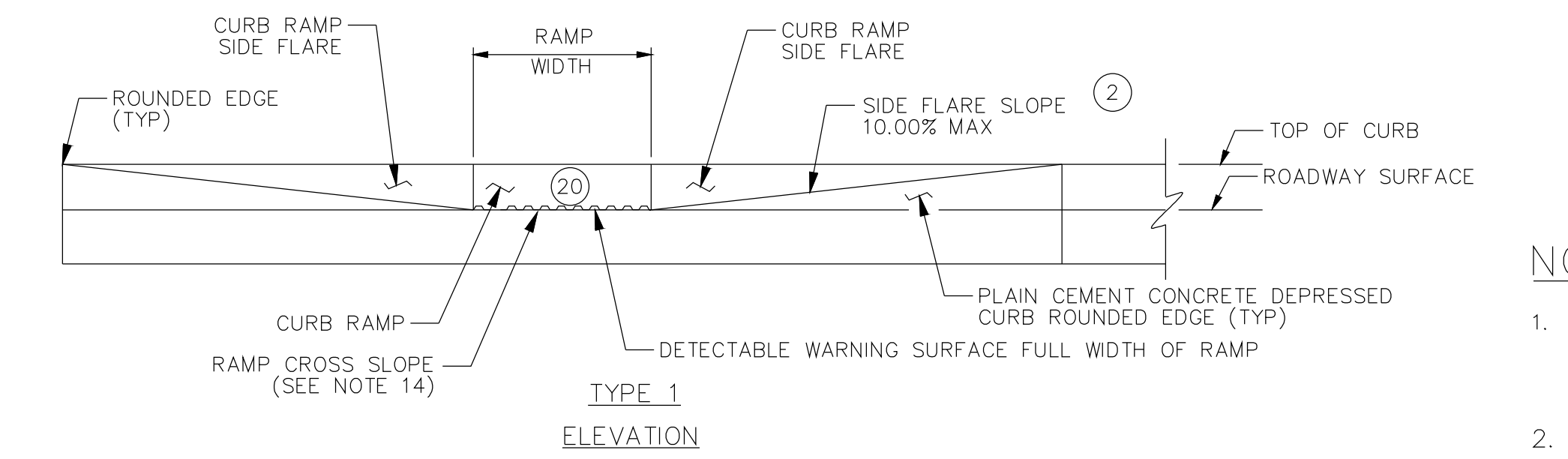
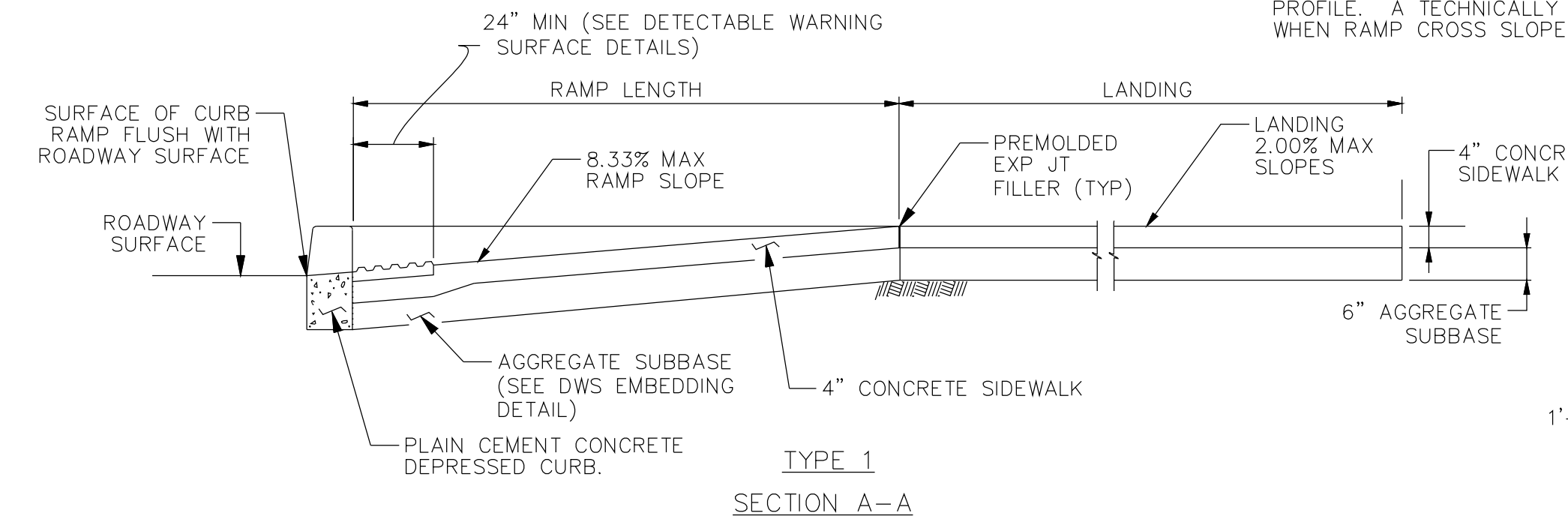
ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

CD-10  
CIVIL SITE DETAILS

Contract:	1729
CAD File Name:	C-SITE-DESIGN.DWG
Date:	OCTOBER 2020
Sheet:	56 OF 645

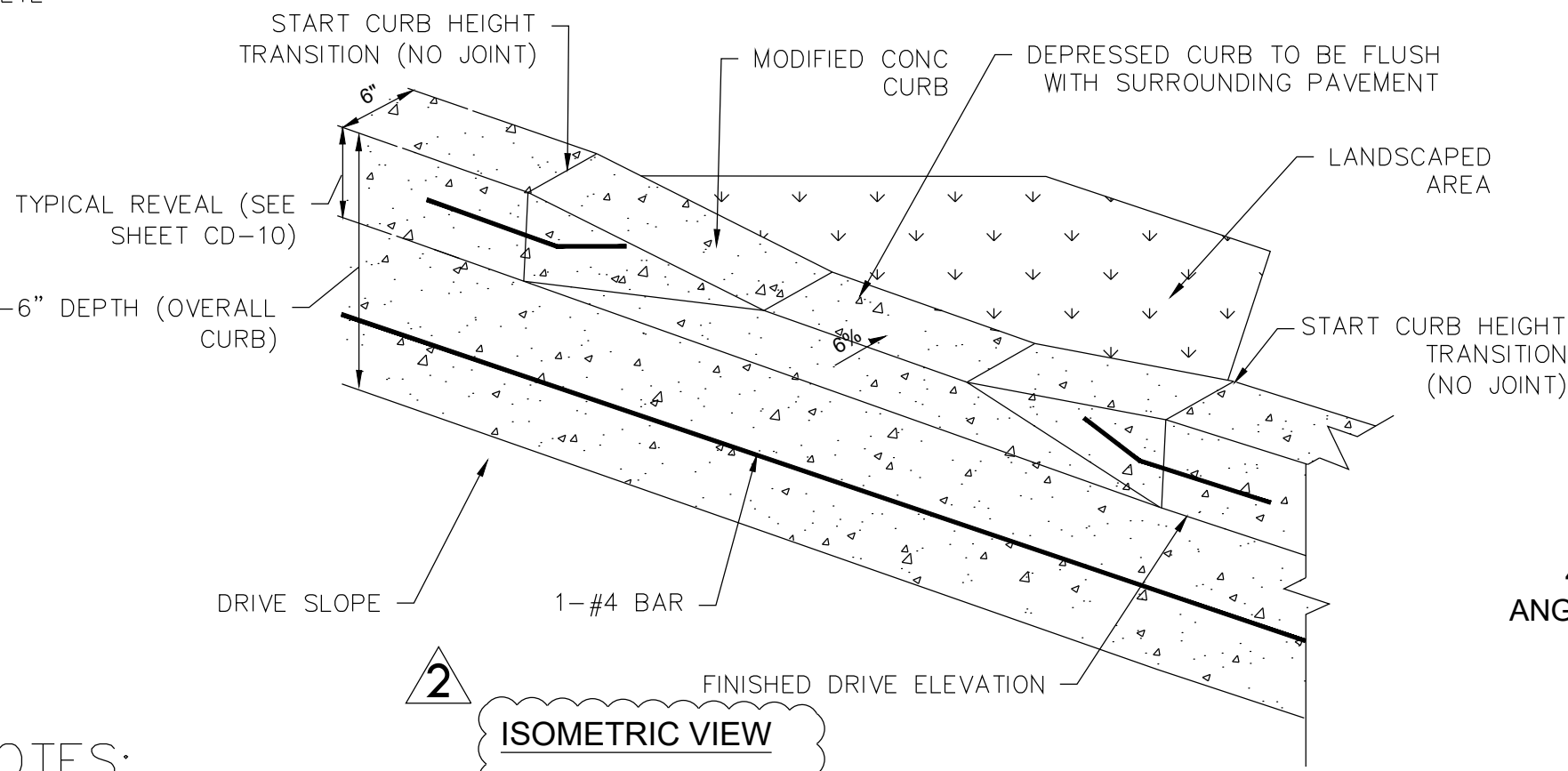


- ① SIDE FLARES 10.00% MAX SLOPE
- ② IF THE LANDING IS INDICATED TO BE LESS THAN 4'-0", CONSTRUCT SIDE FLARES 8.33% MAX SLOPE.
- ⑧ CURB RAMPS REQUIRE A 4'-0" MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.
- ⑩ CONSTRUCT DEPRESSED CURB SLOPE TO MATCH ROADWAY PROFILE AND HAVE A FLUSH CONNECTION. DO NOT EXCEED 3.00% PER 1'-0" CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING FROM LEVEL LANDING TO ROADWAY PROFILE. A TECHNICALLY INFEASIBLE FORM IS REQUIRED WHEN RAMP CROSS SLOPE EXCEEDS 2.00%.



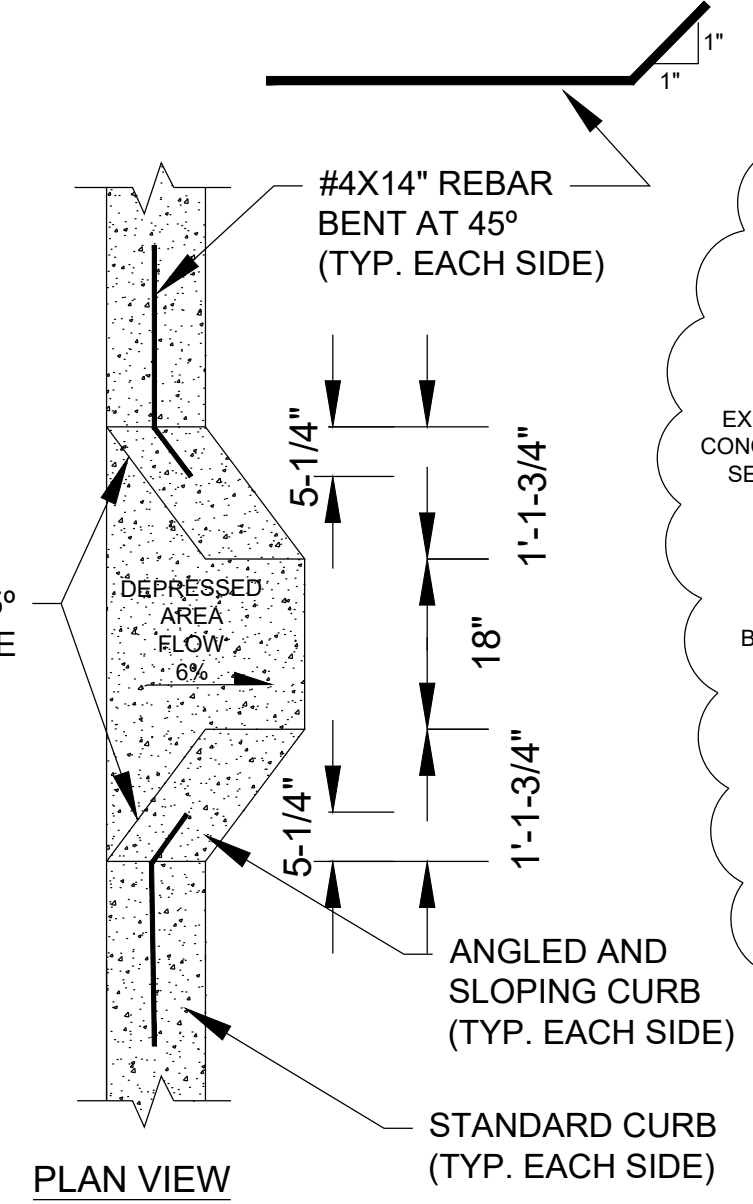
PERCENT SLOPE	EQUIVALENT SLOPE
10.00%	10:1
8.33%	12:1
7.14%	14:1
5.00%	20:1
2.00%	50:1
1.00%	100:1

ADA TYPE 1 CURB RAMP 19



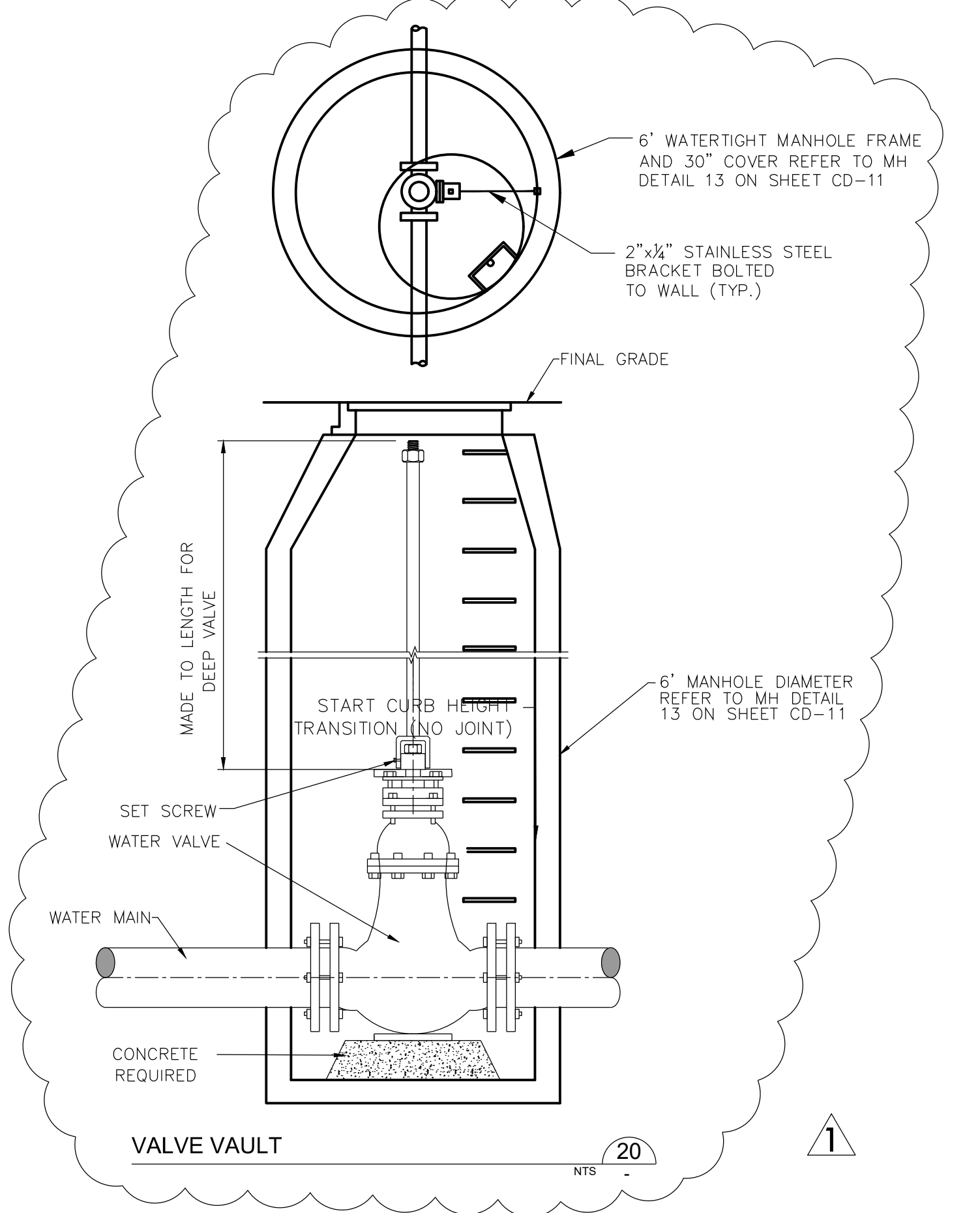
- NOTES:**
- ALL CONCRETE CURBING, INCLUDING STANDARD CURB, SLOPING CURB, AND DEPRESSED CURB SHALL BE FORMED ON SITE. PREFABRICATED SECTIONS / SAW CUTTING OF CURBING TO MEET DESIGN SHALL NOT BE PERMITTED.
  - THE CONTRACTOR SHALL REPAIR ALL DAMAGES TO THE PAVEMENT (INCLUDING THE BASE) THAT IS THE RESULT OF HIS/HER WORK, AT NO COST TO THE OWNER.
  - EXPANSION/CONTRACTION JOINTS SHALL BE EVERY 20' AND AT EXISTING STRUCTURES.
  - 1/2" PREMOLDED FIBER EXPANSION JOINT MATERIAL REQUIRED FOR ENTIRE CURB CROSS SECTION.
  - CONTROL JOINTS REQUIRED EVERY 10 FEET- 1/2" WIDE X 1" DEEP, FILLED WITH HOT POUR RUBBER/ASPHALT JOINT SEALER.

CONCRETE CURB CUT 22

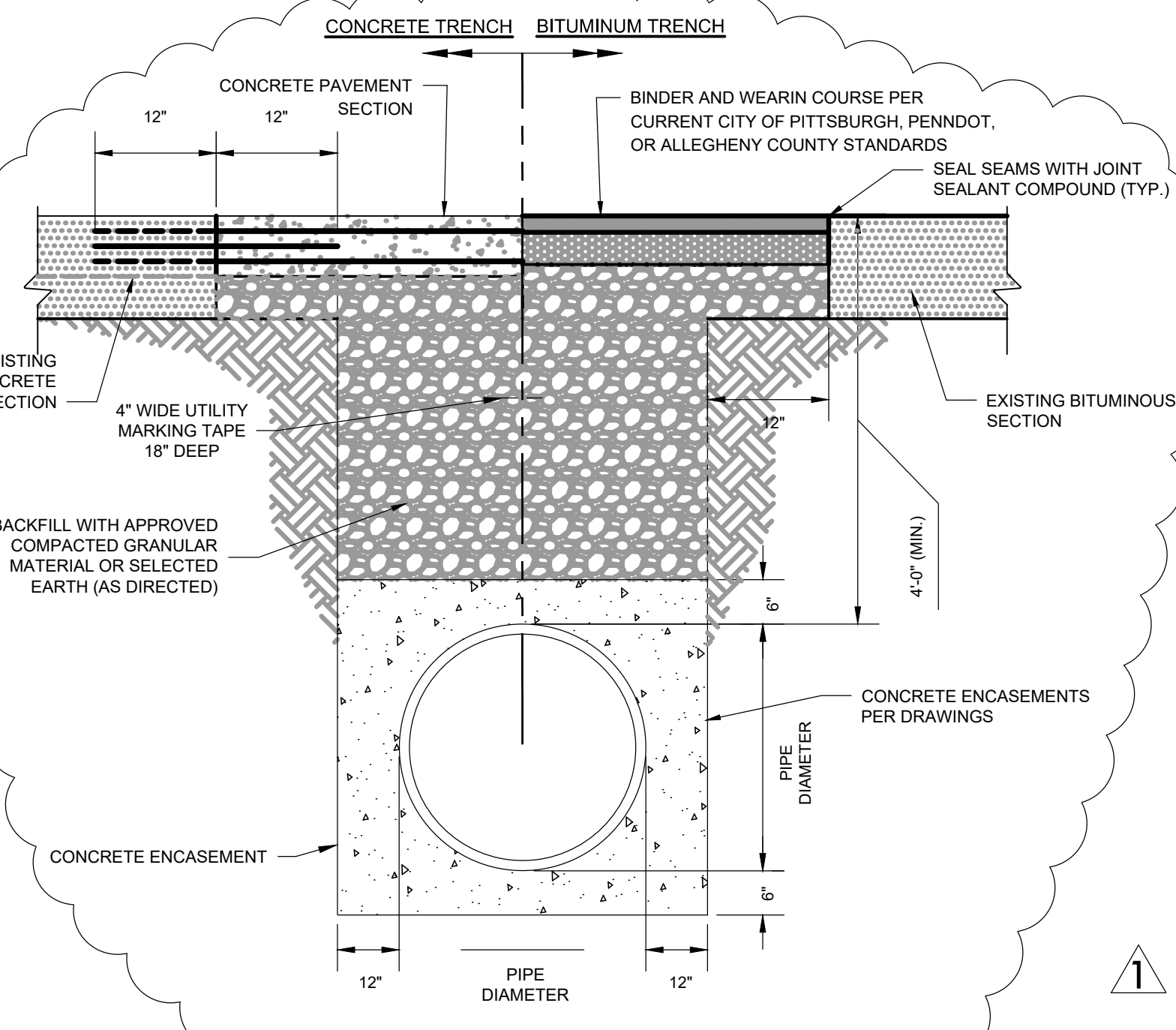


**NOTES**

- PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 350, 409, 630, 676 AND 694.
- PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
- CONSTRUCT CURB RAMPS WITH A MINIMUM 4'-0" X 4'-0" CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
- SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
- PROVIDE SLIP-RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING FLARED SIDE RAMPS.
- MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 8" HEIGHT.
- CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
- TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, RAMP LENGTH NOT TO EXCEED 15'-0". ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT FEASIBLE.
- NON-WALK AREA IS AN OBSTRUCTED OR GRASS/NON-PAVED AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE THAT IS NOT USED BY THE PEDESTRIAN FOR ACCESS. ALIGN DETECTABLE WARNING SURFACE TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB.
- PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE.
- PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
- FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESSIBLE ROUTE.
- FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE.
- THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. SLOPES THAT EXCEED THOSE INDICATED IN THE DETAILS, OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE RECONSTRUCTED.
- THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION.
- ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
- ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6'-0" FOR A 1:12 SLOPE.)
- SIDEWALK WIDTH MAY BE REDUCED TO 4'-0", WHEN PASSING AREAS 5'-0" X 5'-0" ARE PROVIDED EVERY 200'.
- THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
- CONSTRUCT DEPRESSED CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY.
- GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL LANDINGS BEHIND DEPRESSED CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE.
- CONSTRUCT TOP OF PLAIN CEMENT CONCRETE DEPRESSED CURB TO BE FLUSH WITH ADJACENT SURFACES (RAMPS, SIDEWALKS, FLARES).
- FOR CURB RAMPS THAT LEAD TO A SINGLE CROSSWALK, THE RAMP (EXCLUDING FLARES) TO BE FULLY INSIDE OF MARKED CROSSWALK LINES.
- A 4'-0" MAXIMUM DIGITAL DISPLAY LEVEL WILL BE USED TO VERIFY THE SLOPES OF CURB RAMPS AND SIDEWALKS.



VALVE VAULT 20



CONCRETE ENCASED SEWER LINE 21

Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
LJK	0	10/28/20	ISSUED FOR BIDS	
Drawn by:	1	1/5/21	ADDENDUM 3	
	2	4/2/21	ADDENDUM 11	
Checked by:				
KPK				

**WRA**  
Whitman, Requardt & Associates, LLP  
801 South Caroline Street, Baltimore, MD 21231

**SciTek**  
CONSULTANTS, INC.  
655 RODI ROAD - PITTSBURGH PA15235  
PHONE: (412) 371-4460 FAX: (412) 371-4462  
www.scitekengineers.com

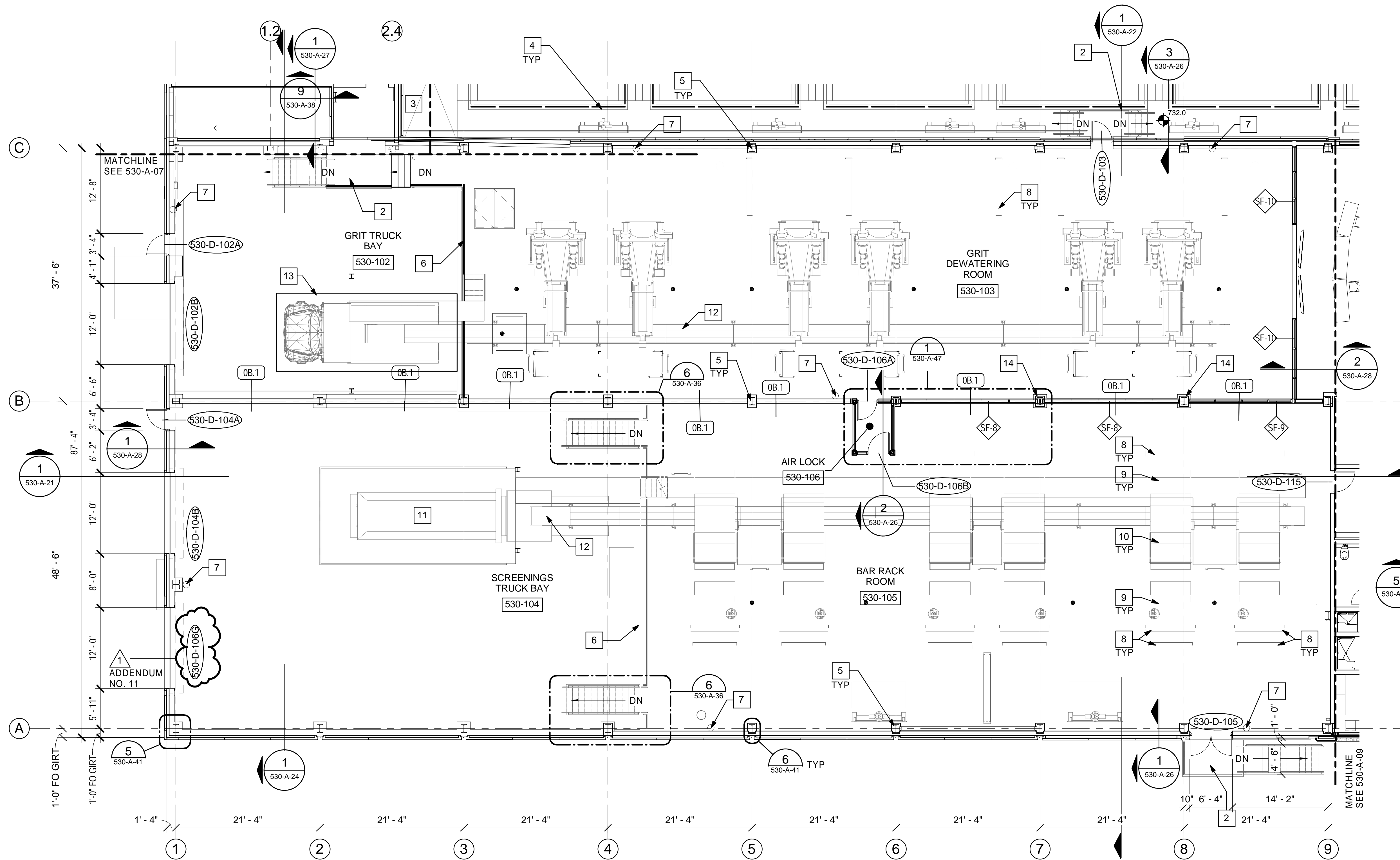
REGISTERED PROFESSIONAL ENGINEER  
**JOHN D. HARDING**  
ENGINEER 022494  
APRIL 2, 2021

**alcosan**  
Allegheny County Sanitary Authority

ARLETTA SCOTT WILLIAMS  
EXECUTIVE DIRECTOR, ALCOSAN  
3300 PREBLE AVE.  
PITTSBURGH, PA 15233  
(412) 766 - 4810  
www.alcosan.org

ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS  
**CD-12**  
CIVIL SITE DETAILS

Contract: 1729  
CAD File Name: C-SITE-DESIGN.DWG  
Date: OCTOBER 2020  
Sheet: 58 OF 645

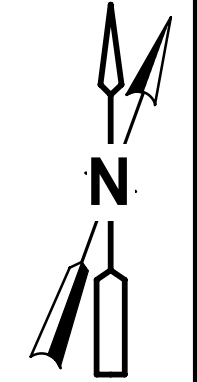


**GENERAL SHEET NOTES**

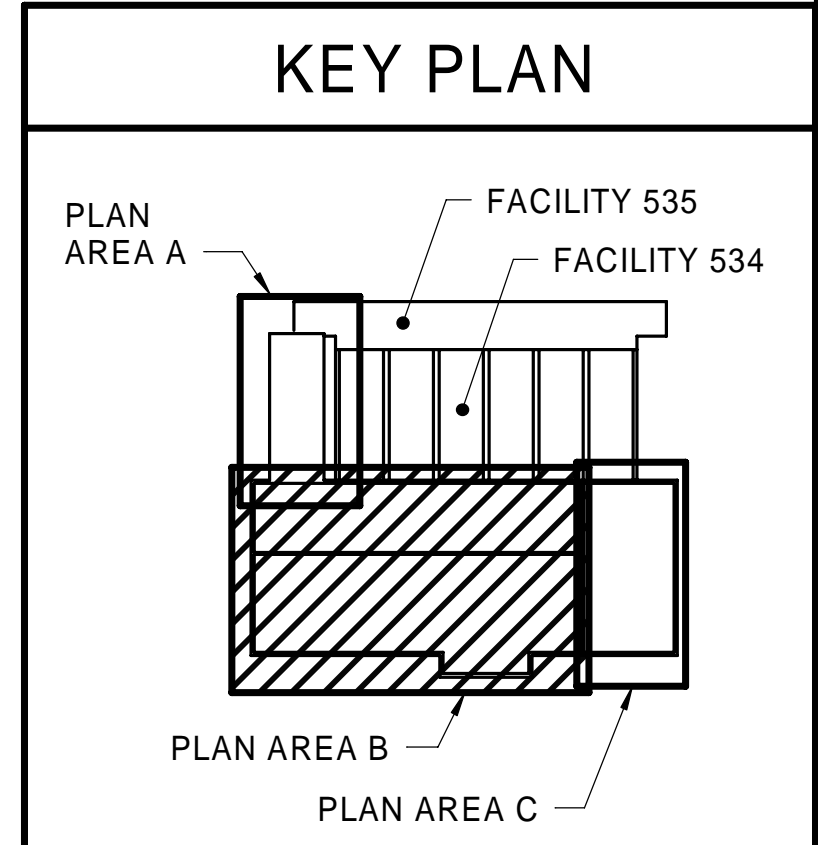
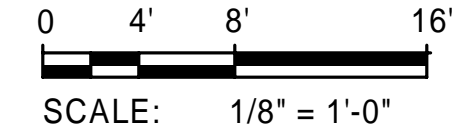
1. SEE SHEET A-01 FOR ARCHITECTURAL GENERAL NOTES.
2. PROVIDE HIGH PERFORMANCE COATINGS ON FERROUS METALS, CONCRETE, MASONRY, AND OTHER MATERIALS THROUGHOUT PROCESS AND INDUSTRIAL AREAS. SEE FINISH SCHEDULE AND SPECIFICATION SECTION 099600.
3. GUARDS TO BE ALUMINUM AND HANDRAILS TO BE STAINLESS STEEL UNLESS OTHERWISE NOTED.
4. SEE STRUCTURAL DRAWINGS FOR CONSTRUCTION OF MISCELLANEOUS STAIRS AND PLATFORMS.

**X SHEET KEYNOTES**


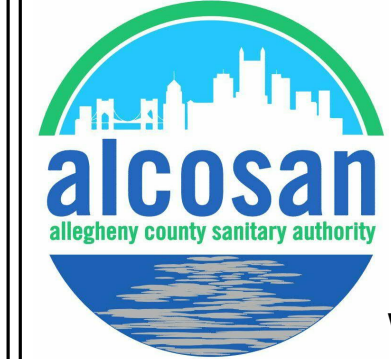
1. PROCESS EQUIPMENT, SEE MECHANICAL DRAWINGS
2. METAL PLATFORM AND STAIR
3. CONCRETE TOPPING SLAB WITH MEMBRANE WATERPROOFING.
4. GRIT TANK WITH PERIMETER ALUMINUM GUARD
5. 8'-8" HIGH STAINLESS STEEL COLUMN SURROUND WITH CAP
6. GUARD
7. BRACKET MOUNTED FIRE EXTINGUISHER FURNISHED BY OWNER, INSTALLED BY GENERAL CONTRACTOR.
8. FLOOR OPENING, SEE STRUCTURAL DRAWINGS
9. ACCESS PLATE
10. PROCESS EQUIPMENT PENETRATIONS, SEE MECHANICAL DRAWINGS
11. COMPACTOR TRASH SCALE, SEE STRUCTURAL AND MECHANICAL DRAWINGS
12. CONVEYOR, SEE MECHANICAL DRAWINGS
13. TRUCK SCALE
14. 2' SQUARE CONCRETE PEDASTAL, SEE STRUCTURAL



**FIRST FLOOR PARTIAL PLAN - B**  
SCALE: 1/8" = 1'-0" 530-A-06

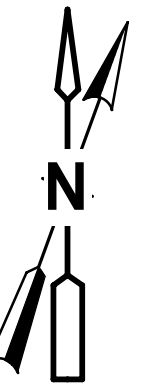


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Designed by: ECR	REVISION				 <p><b>Whitman, Requardt &amp; Associates, LLP</b> 801 South Caroline Street, Baltimore, MD 21231</p>	 <p><b>alcosan</b> allegheny county sanitary authority www.alcosan.org</p>	<p>ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN</p> <p>3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810</p>	<p>ALLEGHENY COUNTY SANITARY AUTHORITY WASTEWATER TREATMENT PLANT EAST HEADWORKS</p> <p><b>530-A-08 EAST HEADWORKS FIRST FLOOR PARTIAL PLAN - B</b></p>	<p>Contract: 1729 CAD File Name: 530-A-08.DGN Date: OCTOBER 2020 Sheet: 73 of 645</p>
	Drawn by: KEH	REV No.	DATE	DESCRIPTION					
Checked by: FAH	1	04/06/21	ADDENDUM NO. 11						

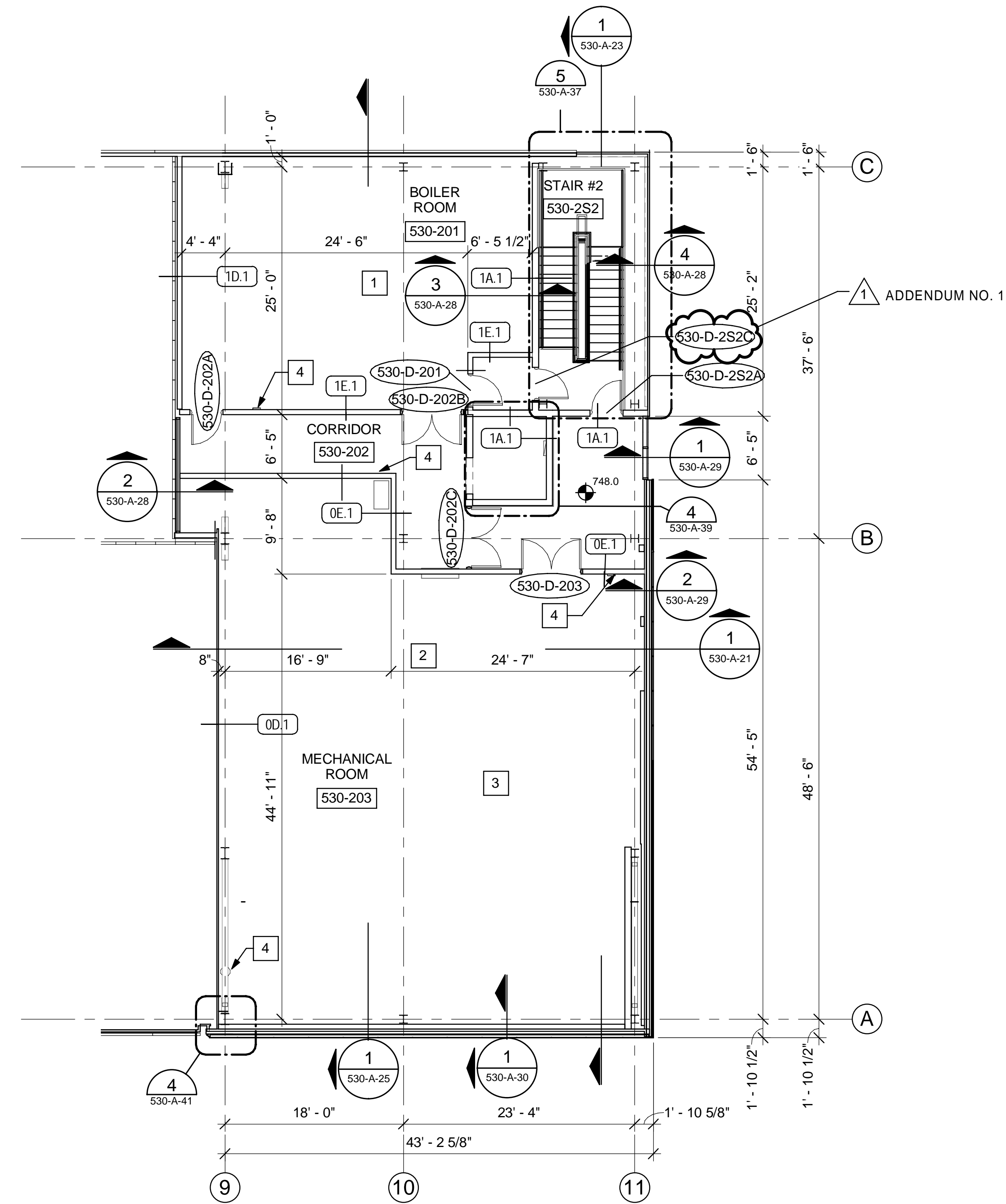
**GENERAL SHEET NOTES**

1. SEE SHEET A-01 FOR ARCHITECTURAL GENERAL NOTES.

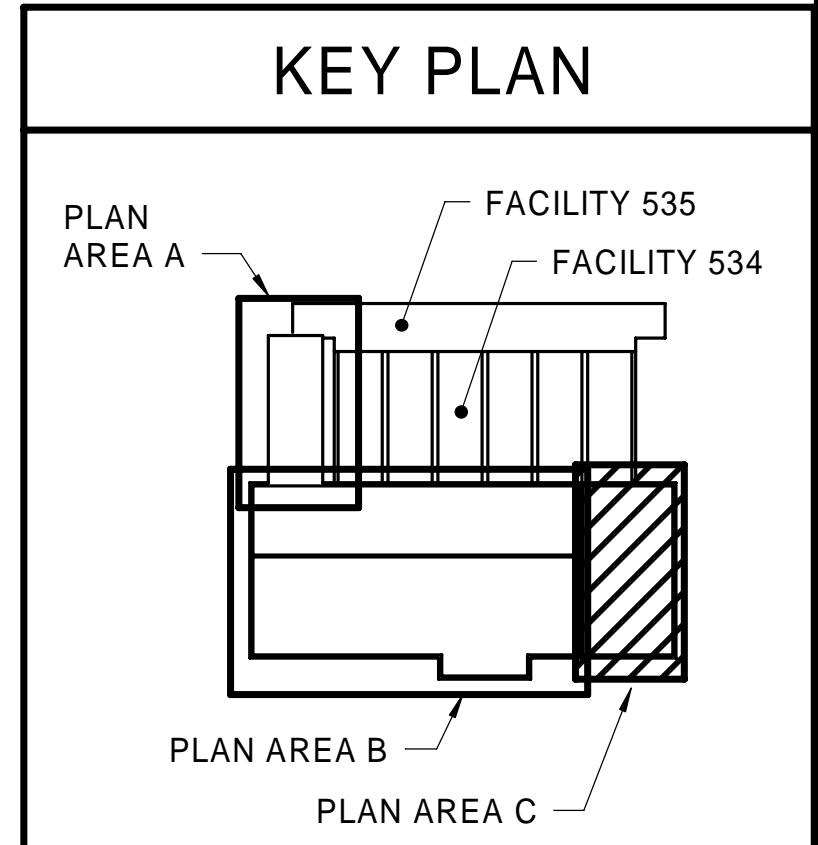


**X SHEET KEYNOTES**

1. BOILER, SEE HVAC DRAWINGS
2. AIR HANDLING UNIT, SEE HVAC DRAWINGS
3. DUCTWORK, SEE HVAC DRAWINGS
4. BRACKET MOUNTED FIRE EXTINGUISHER FURNISHED BY OWNER, INSTALLED BY GENERAL CONTRACTOR



**SECOND FLOOR PARTIAL PLAN - C**  
SCALE: 1/8" = 1'-0" 530-A-10



0 4' 8' 16'  
SCALE: 1/8" = 1'-0"

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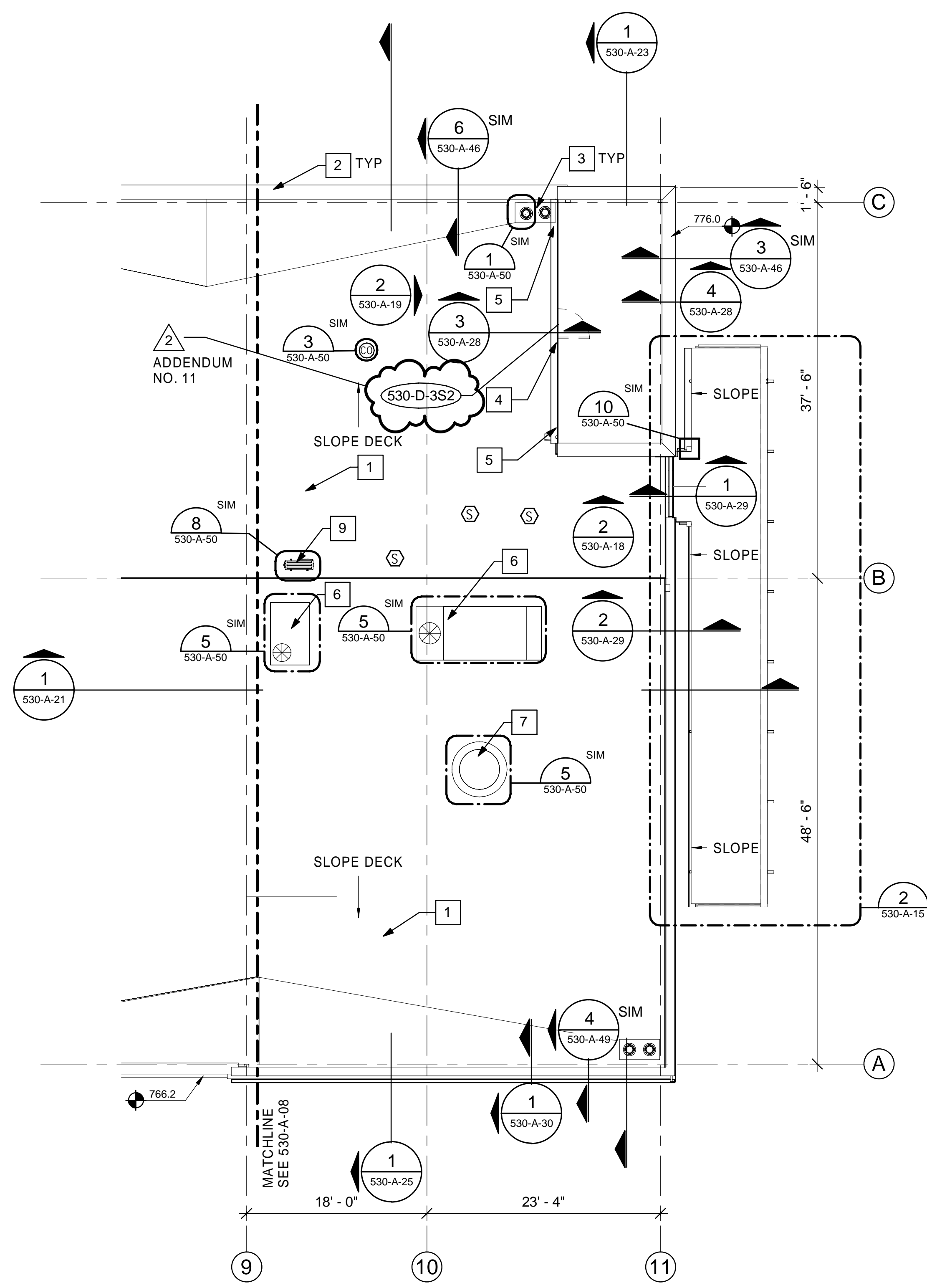
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KEH				
Checked by:				
FAH				

ARLETTA SCOTT WILLIAMS  
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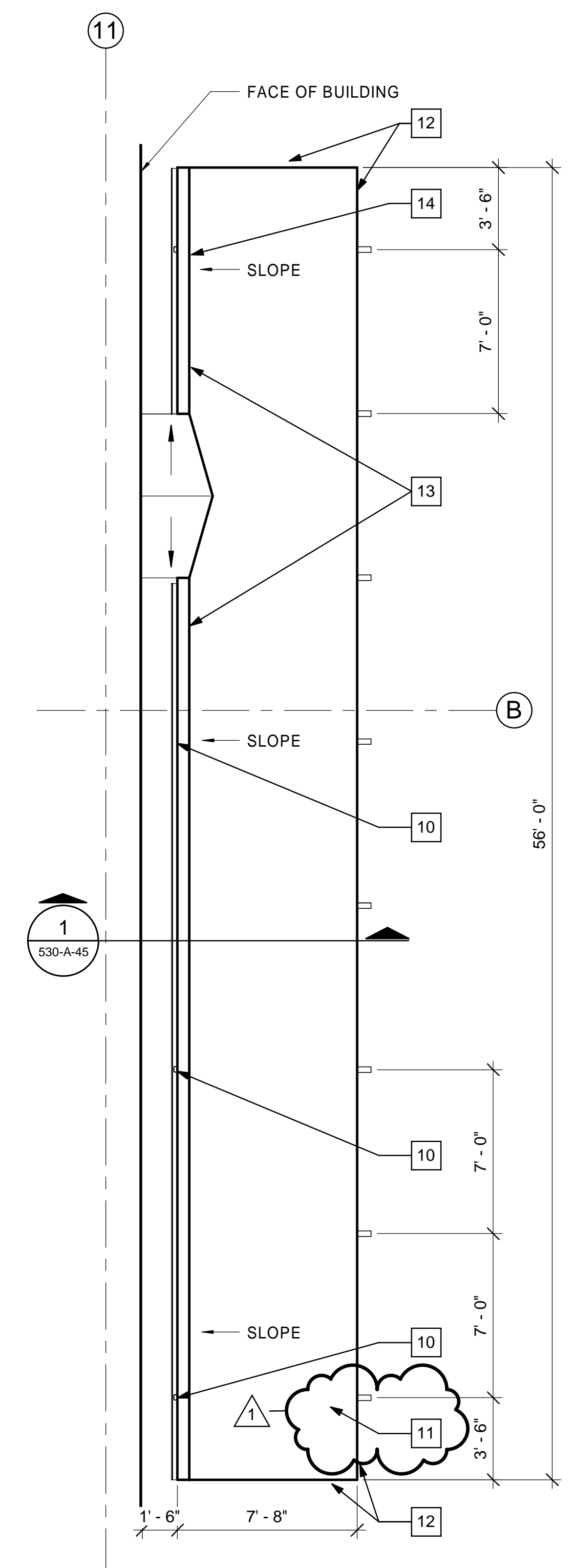
ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS  
  
**530-A-11**  
**EAST HEADWORKS**  
**SECOND FLOOR PARTIAL PLAN - C**

Contract: 1729  
CAD File Name: 530-A-11.DGN  
Date: OCTOBER 2020  
Sheet: 76 of 645





**ROOF PLAN PART C**  
SCALE: 1/8" = 1'-0" 530-A-12



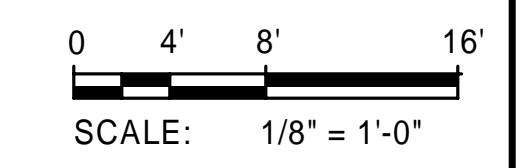
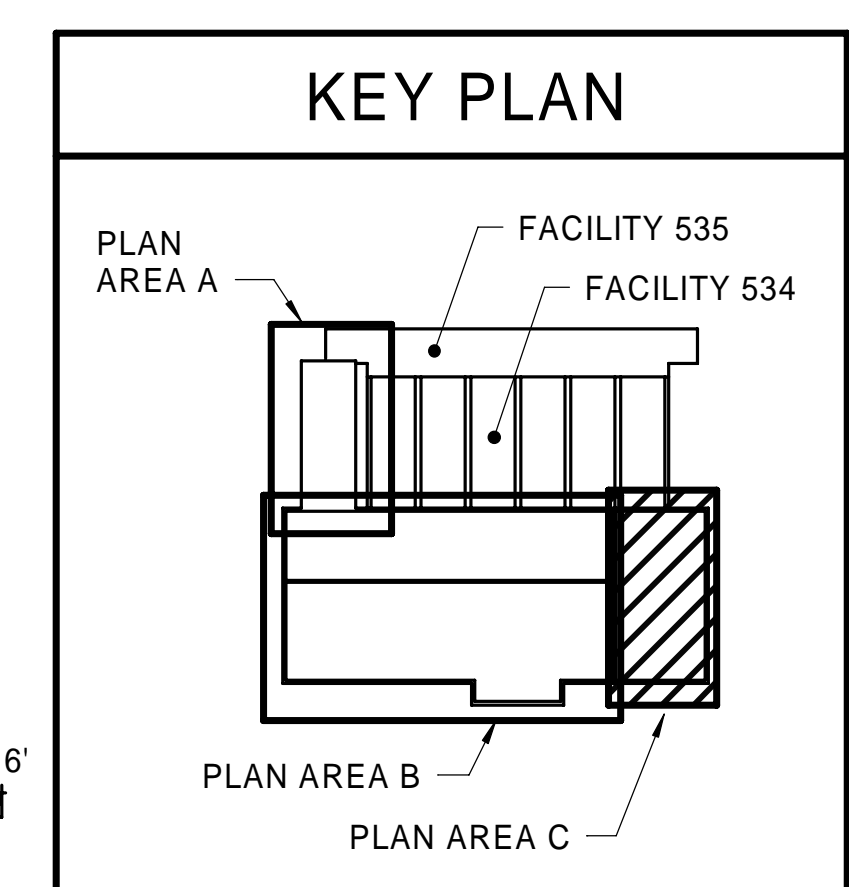
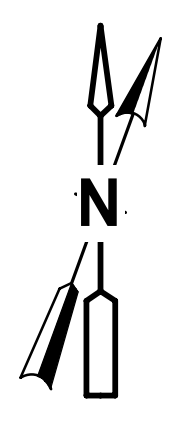
**CANOPY ROOF PLAN**  
SCALE: 1/4" = 1'-0" 530-A-15

**GENERAL SHEET NOTES**

1. SEE DETAIL 1/530-A-12 FOR TYPICAL ROOF CONSTRUCTION
2. CURBS FOR MECHANICAL UNITS TO BE FURNISHED BY HVAC CONTRACTOR, INSTALLED BY GENERAL CONTRACTOR

**X SHEET KEYNOTES**

1. MODIFIED BITUMEN ROOF SYSTEM OVER R-30 INSULATION AND COVER BOARD
2. PARAPET WITH METAL COPING
3. ROOF DRAIN - BY PLUMBING CONTRACTOR
4. GUTTER
5. DOWNSPOUT WITH SPLASHBLOCK
6. MECHANICAL UNIT BY HVAC CONTRACTOR
7. EXHAUST - BY HVAC CONTRACTOR
8. SCUPPER
9. CONDENSING UNIT EQUIPMENT RAIL BY HVAC CONTRACTOR
10. DOWNSPOUT TO CONCRETE RUNNEL
11. MODIFIED BITUMEN ROOF SYSTEM OVER TAPERED INSULATION
12. STAINLESS STEEL ROOF EDGE FASCIA
13. STAINLESS STEEL BENT PLATE GUTTER
14. DOWNSPOUT, TIE TO UNDERSLAB DRAIN SEE FLOOR PLAN FOR ADDITIONAL INFORMATION



04/06/21

4/6/2021 10:35:10 AM

Designed by:	REVISION			
ECR	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	03/31/21	ADDENDUM NO. 10	
KEH	2	04/06/21	ADDENDUM NO. 11	
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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

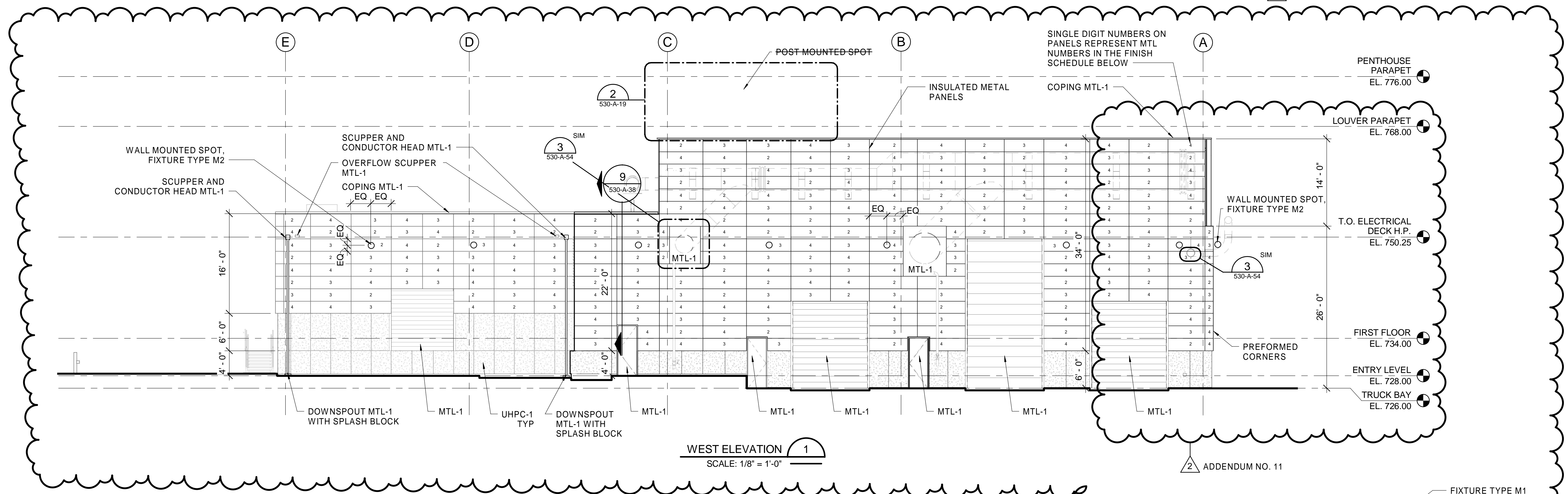
**530-A-15  
EAST HEADWORKS  
ROOF PARTIAL PLAN - C**

Contract:	1729
CAD File Name:	530-A-15.DGN
Date:	OCTOBER 2020
Sheet:	80 of 645

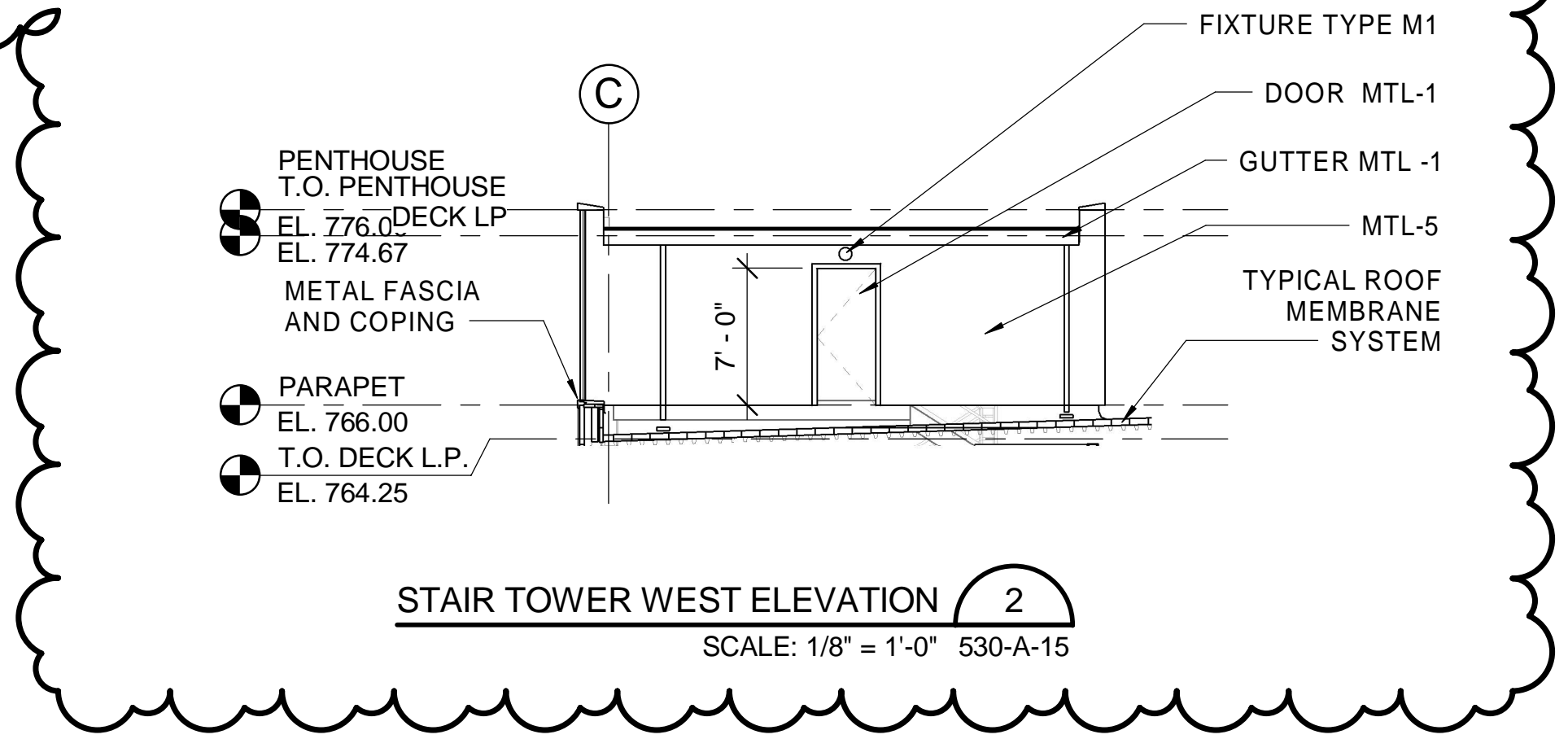
**GENERAL SHEET NOTES**

1. UHPC PANEL SUPPORT RAILS AND SUBGIRT SYSTEMS TO HAVE MATTE BLACK FINISH.

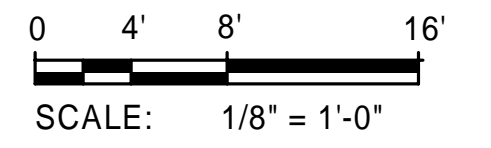
1 LIGHTING REVISIONS



2 ADDENDUM NO. 11

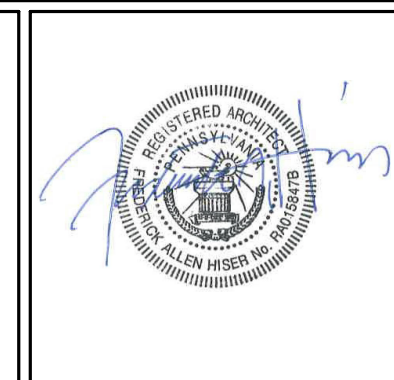


ARCHITECTURAL - EXTERIOR FINISH LIST		
NAME	MATERIAL	FINISH
ILWS-1	INTEGRATED LOUVER WALL SYSTEM	CENTRIA #9946 "SILVERSMITH"
MTL-1	VERTICAL REVEAL PANELS, COPING, CURTAINWALL, STOREFRONT MULLIONS, OTHER METAL FABRICATIONS AS NOTED	CENTRIA #9946 "SILVERSMITH"
MTL-2	3" INSULATED METAL PANEL 24" WIDE	CENTRIA VERSACOR ELITE PF COATING 439EZ7833M "ELITE LIME"
MTL-3	3" INSULATED METAL PANEL 24" WIDE	PPG DURANAR ULTRA-COOL SUNSTORM COATING BN8L102B "BLUE"
MTL-4	3" INSULATED METAL PANEL 24" WIDE	PPG DURANAR VARI-COOL COATING 865X13 "KALEIDOSCOPE"
MTL-5	3" INSULATED METAL PANEL 12" WIDE	CENTRIA #9946 "SILVERSMITH"
TLCG-1	TRANSLUCENT LINEAR CHANNEL GLASS SYSTEM	GLASS AS SPECIFIED
UHPC-1	ULTRA HIGH PERFORMANCE CONCRETE PANEL	KORSA TEXTURE: ROUGH 2, AGGREGATE: #A02, COLOR: "CUSTOM WHITE", FINISH: MEDIABLAST, SEALER: MICROSEAL
UHPC-2	ULTRA HIGH PERFORMANCE CONCRETE PANEL	TEXTURE: SMOOTH, COLOR: "BONE 78", FINISH: MEDIABLAST, SEALER: MICROSEAL



Designed by:	ECR
Drawn by:	KEH
Checked by:	FAH

REVISION			
REV No.	DATE	DESCRIPTION	APPV
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1	12/11/20	ADDENDUM NO. 1	
2	04/06/21	ADDENDUM NO. 11	

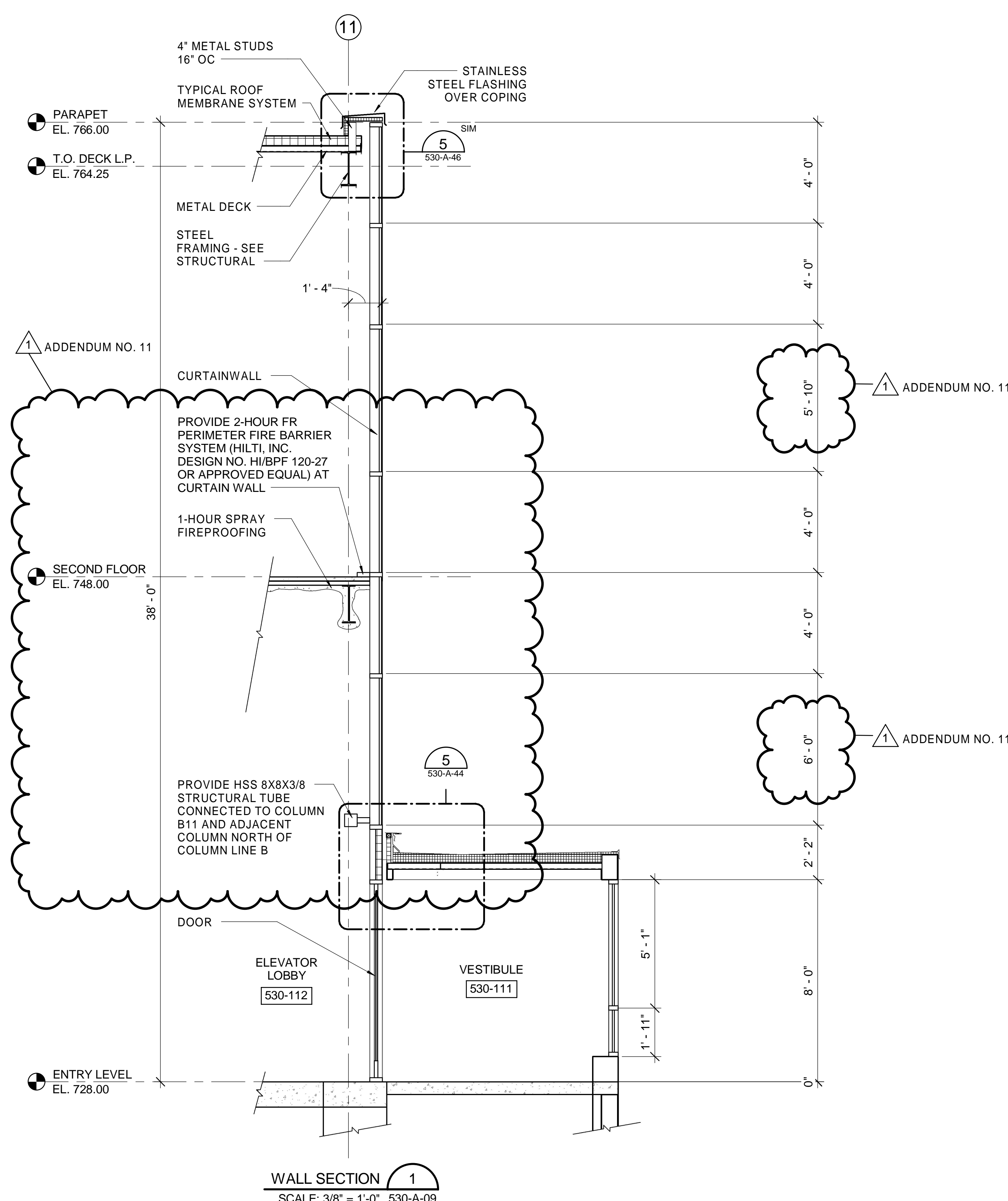


ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

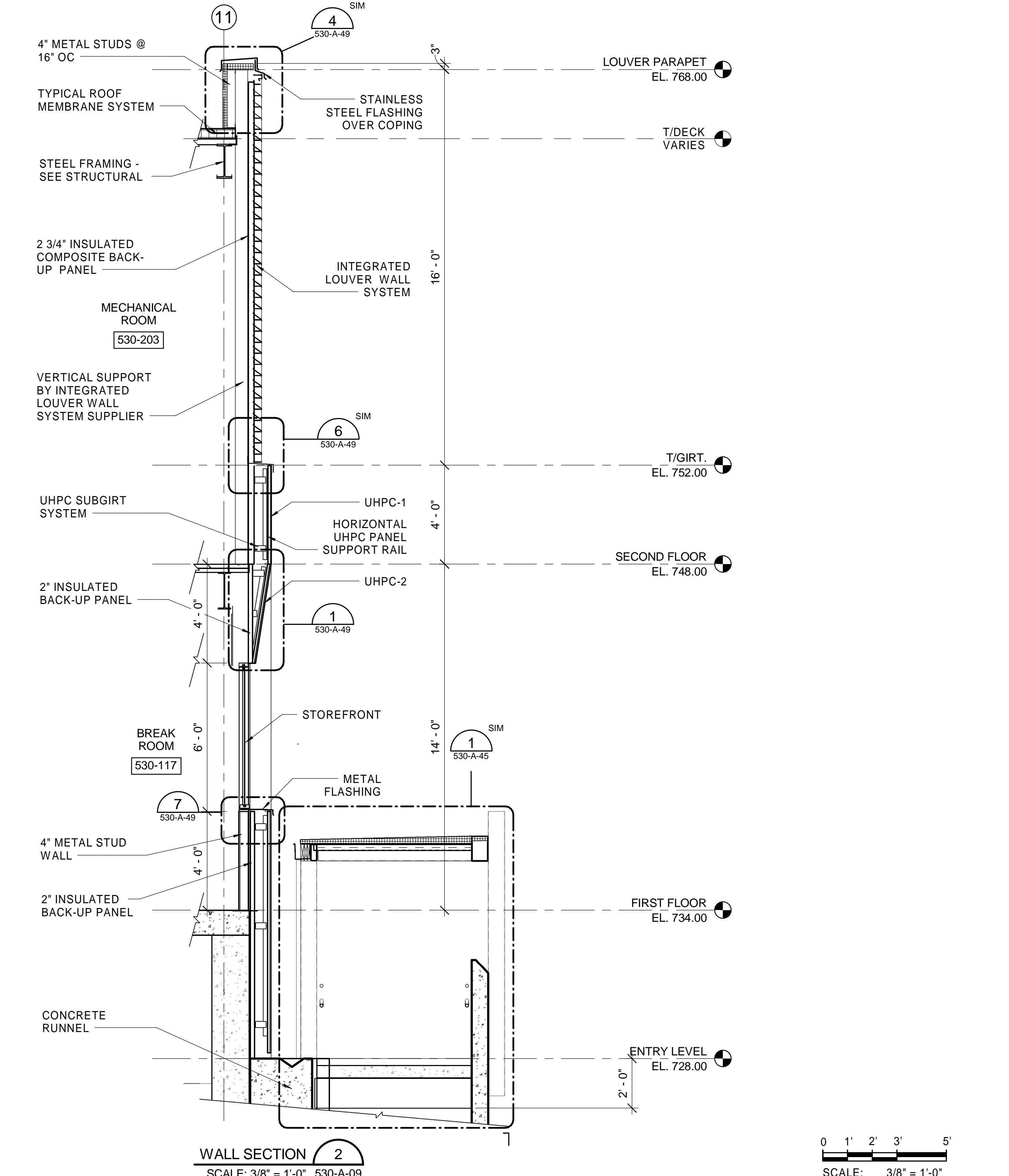
**530-A-19  
EAST HEADWORKS  
WEST ELEVATION**

Contract: 1729  
CAD File Name: 530-A-19.DGN  
Date: OCTOBER 2020  
Sheet: 84 of 645

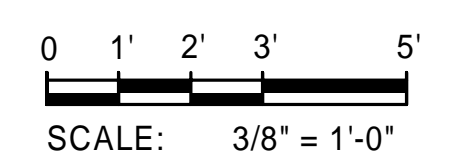
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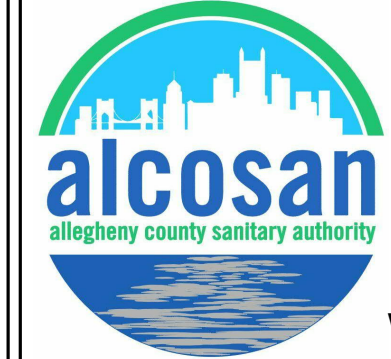
WALL SECTION 1  
SCALE: 3/8" = 1'-0" 530-A-09



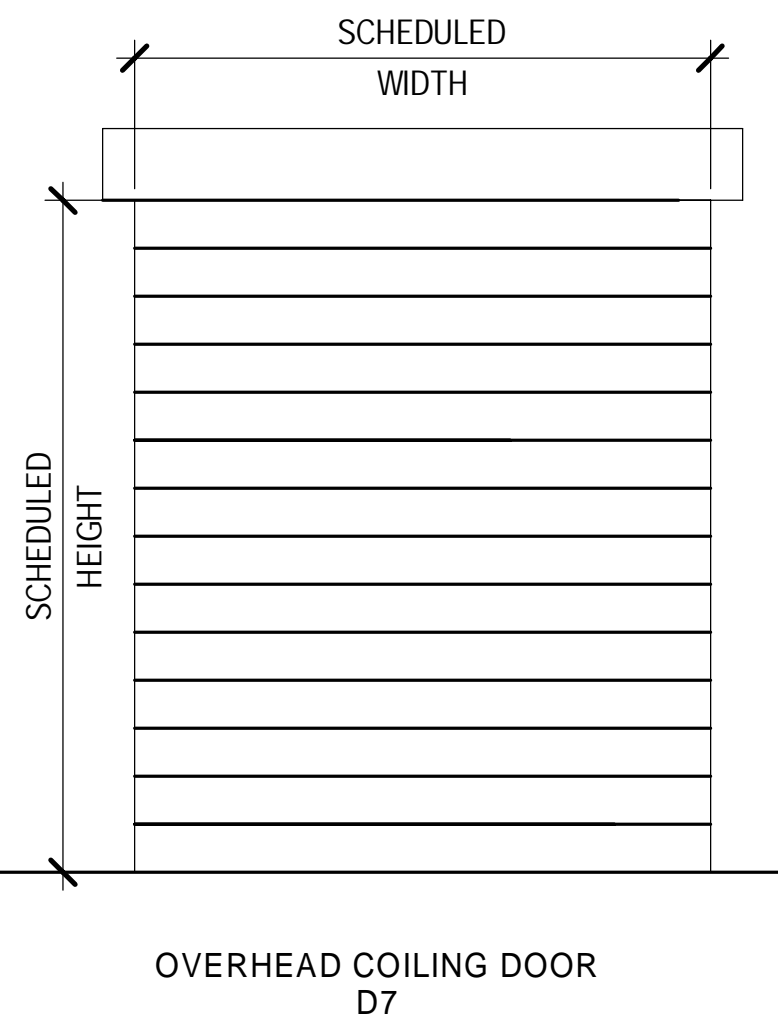
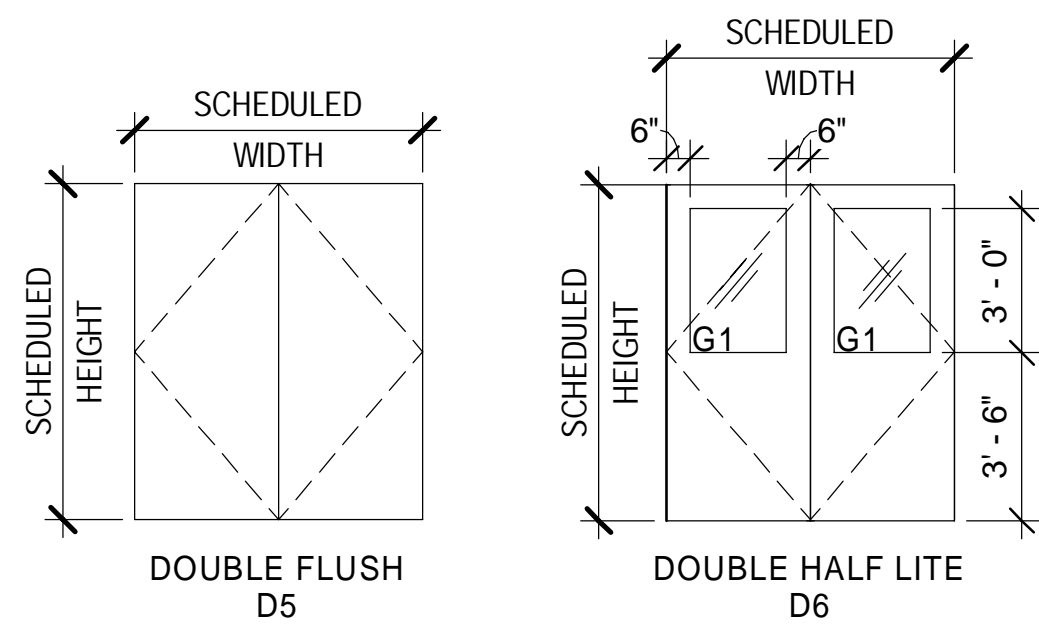
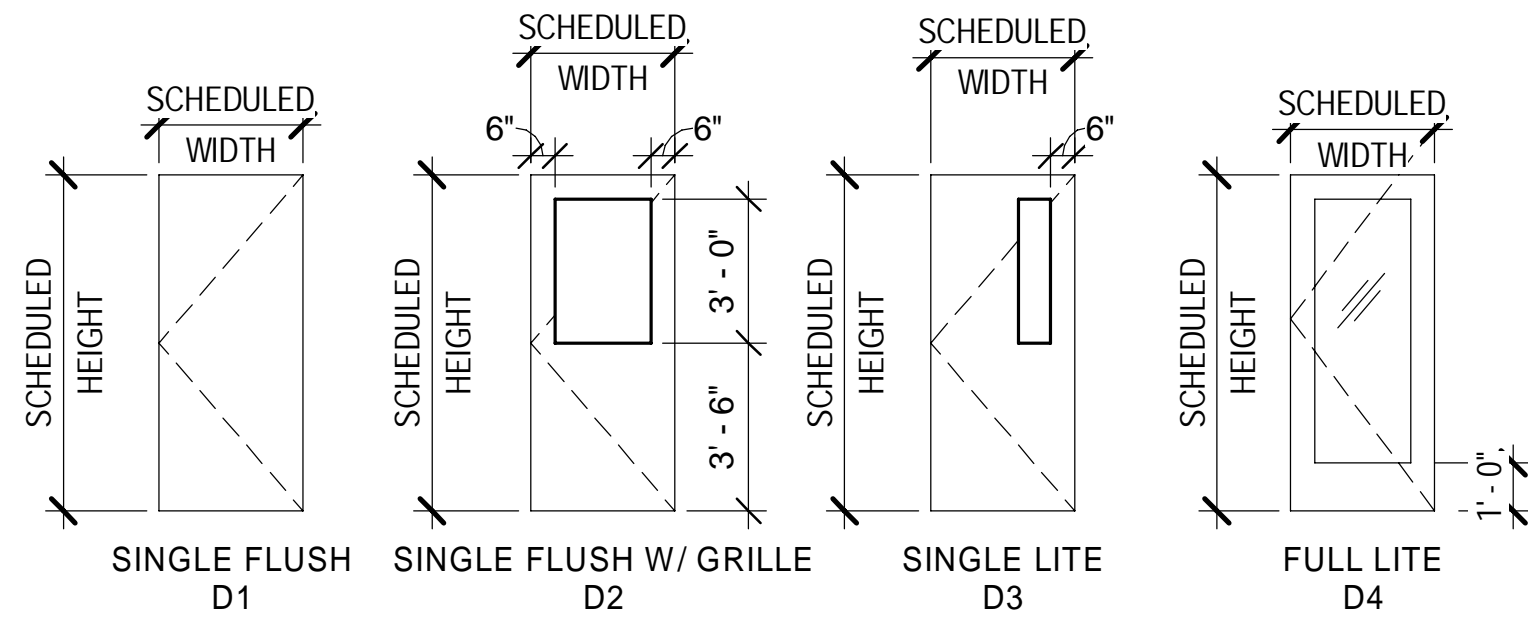
WALL SECTION 2  
SCALE: 3/8" = 1'-0" 530-A-09



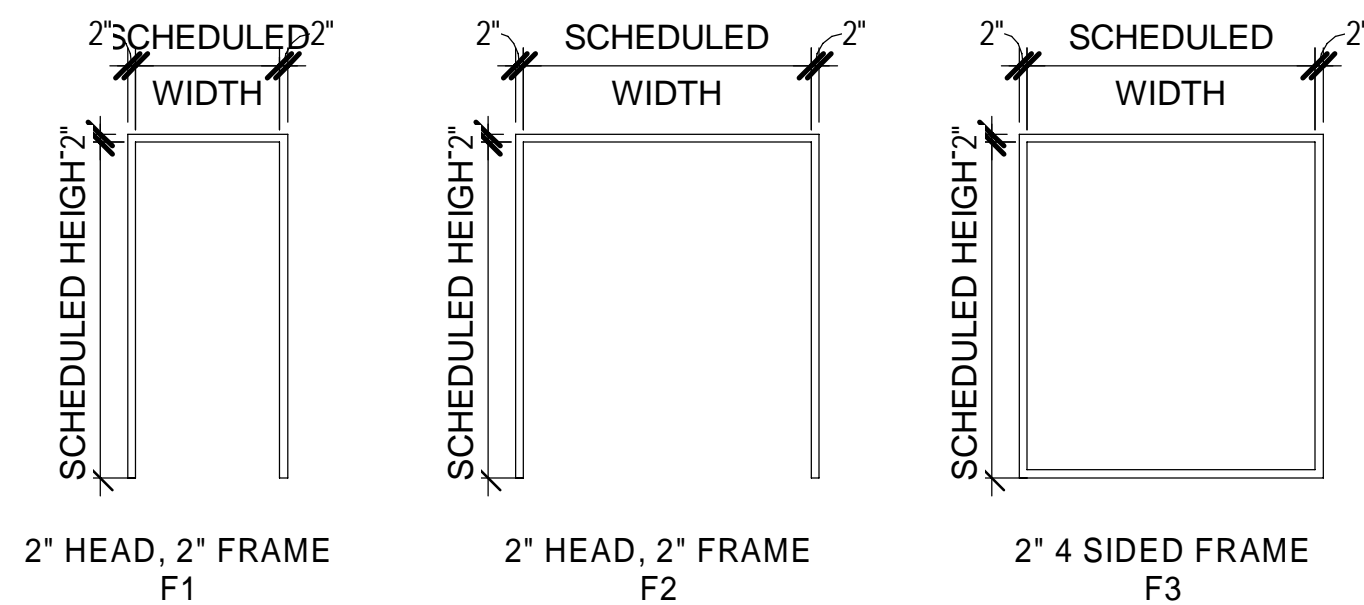
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	Drawn by: KEH	REV No.	DATE	DESCRIPTION						CAD File Name: 530-A-29.DGN Date: OCTOBER 2020 Sheet: 94 of 645
Checked by: FAH	1	04/06/21	ADDENDUM NO. 11							

## DOOR TYPES



## FRAME TYPES



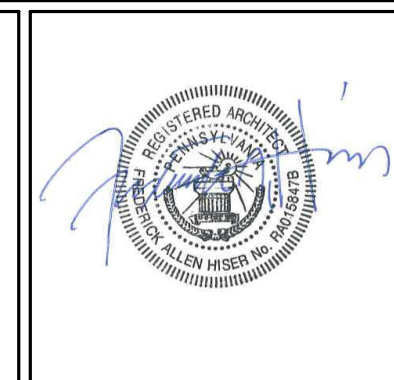
ARCHITECTURAL - DOOR SCHEDULE													
DOOR NUMBER	HDWE	DOOR					FRAMES					FIRE RATING	COMMENTS
		WIDTH	HEIGHT	ROOM NAME	TYPE	MATERIAL	TYPE	MATERIAL	HEAD	JAMB	SILL		
DETAILS ARE ON SHEET 530-A-53 UNLESS NOTED OTHERWISE													
530-D-001A	1	4' - 0"	8' - 0"	GRIT PUMPING ROOM	D1	SS	F1	SS	10	10	10	-	FLOOD RESISTANT WITH HOLD OPEN
530-D-001B	1	4' - 0"	8' - 0"	GRIT PUMPING ROOM	D1	SS	F1	SS	10	10	10	-	FLOOD RESISTANT WITH HOLD OPEN
530-D-001C	1	4' - 0"	8' - 0"	GRIT PUMPING ROOM	D1	SS	F1	SS	10	10	10	-	FLOOD RESISTANT WITH HOLD OPEN
530-D-0S1	7	3' - 0"	7' - 10"	STAIR #1	D1	ALUM	F1	ALUM	3	7	N/A	45 MIN	
530-D-0S2	7	3' - 0"	7' - 10"	STAIR #2	D1	ALUM	F1	ALUM	3	7	N/A	45 MIN	
530-D-101A	17	10' - 0"	9' - 8"	ELECTRICAL ROOM	D7	ALUM	-	STEEL	1/530-A-54	2/530-A-54	5/530-A-54	-	
530-D-101B	4	3' - 0"	7' - 10"	ELECTRICAL ROOM	D1	ALUM	F1	ALUM	1	5	11	-	
530-D-101C	8	3' - 0"	7' - 10"	ELECTRICAL ROOM	D1	ALUM	F1	ALUM	3	7	N/A	1-1/2 HR	
530-D-102A	3	3' - 0"	7' - 10"	GRIT TRUCK BAY	D1	ALUM	F1	ALUM	1	5, 9	11	-	
530-D-102B	17	12' - 0"	13' - 8"	GRIT TRUCK BAY	D7	ALUM	-	STEEL	1/530-A-54	2/530-A-54	5/530-A-54	-	
530-D-103	3	3' - 0"	7' - 10"	GRIT DEWATERING ROOM	D2	ALUM	F1	ALUM	1	5	11	-	
530-D-104A	4	3' - 0"	7' - 10"	GRIT TRUCK BAY	D1	ALUM	F1	ALUM	1	5, 9	11	-	
530-D-104B	17	12' - 0"	23' - 8"	GRIT TRUCK BAY	D7	ALUM	-	STEEL	1/530-A-54	2/530-A-54	5/530-A-54	-	
530-D-104C	17	12' - 0"	13' - 8"	GRIT TRUCK BAY	D7	ALUM	-	STEEL	1/530-A-54	2/530-A-54	5/530-A-54	-	
530-D-105	2	6' - 0"	7' - 10"	BAR RACK ROOM	D6	ALUM	F2	ALUM	1	5	11	-	
530-D-106A	12	3' - 0"	7' - 10"	AIR LOCK	D2	ALUM	SF4	ALUM	3/530-A-47	6/530-A-47	11	-	WEATHERSTRIPPED AIR-TIGHT
530-D-106B	12	3' - 0"	7' - 10"	AIR LOCK	D2	ALUM	SF6	ALUM	3/530-A-47	6/530-A-47	11	-	WEATHERSTRIPPED AIR-TIGHT
530-D-107A	14	3' - 0"	7' - 10"	CONTROL ROOM	D3	HM	F1	HM	3	7	12	-	
530-D-107B	14	3' - 0"	7' - 10"	CONTROL ROOM	D3	HM	F1	HM	3	7	12	-	
530-D-108	15	3' - 0"	7' - 10"	TOILET	D1	HM	F1	HM	3	7	12	-	
530-D-110	11	3' - 0"	7' - 10"	STORAGE	D1	HM	F1	HM	3	7	12	-	
530-D-111A	6	3' - 0"	7' - 10"	ATRIUM	D4	ALUM	SF13	ALUM	7/530-A-44	2/530-A-44	11	-	
530-D-111B	6	3' - 0"	7' - 10"	ATRIUM	D4	ALUM	SF14	ALUM	7/530-A-44	2/530-A-44	11	-	
530-D-111C	6	3' - 0"	7' - 10"	ATRIUM	D4	ALUM	SF11	ALUM	5/530-A-44	1/530-A-44	11	-	
530-D-113	9	3' - 0"	7' - 10"	IT	D1	HM	F1	HM	3	7	12	-	3/4" UNDERCUT
530-D-114	11	3' - 0"	7' - 10"	HOUSEKEEPING	D1	HM	F1	HM	3	7	12	-	
530-D-115	12	3' - 0"	7' - 10"	AIR LOCK	D2	HM	F1	HM	3	7	12	-	WEATHERSTRIPPED AIR-TIGHT
530-D-116	12	3' - 0"	7' - 10"	AIR LOCK	D2	HM	F1	HM	3	7	12	-	WEATHERSTRIPPED AIR-TIGHT
530-D-117	14	3' - 0"	7' - 10"	BREAK ROOM	D3	HM	F1	HM	3	7	12	-	
530-D-118	16	3' - 0"	7' - 10"	MEN TOILET	D1	HM	F1	HM	3	7	12	-	
530-D-122	16	3' - 0"	7' - 10"	WOMEN TOILET	D1	HM	F1	HM	3	7	12	-	
530-D-1S1A	3	3' - 0"	7' - 10"	STAIR #1 (EXTERIOR)	D1	ALUM	F1	ALUM	1	5, 9	11		
530-D-1S1B	7	3' - 0"	7' - 10"	STAIR #1	D1	ALUM	F1	ALUM	3	7	12	45 MIN	
530-D-1S2A	3	3' - 0"	7' - 10"	STAIR #2 (EXTERIOR)	D1	ALUM	F1	ALUM	3/ 530-A-48	1/ 530-A-43	11		
530-D-1S2B	7	3' - 0"	7' - 10"	STAIR #2	D1	ALUM	F1	ALUM	3	7	12	45 MIN	
530-D-201	9	3' - 0"	7' - 10"	BOILER ROOM	D1	HM	F1	HM	4	8	12	45 MIN	
530-D-202A	9	3' - 0"	7' - 10"	BOILER ROOM	D1	HM	F1	HM	4	8	12	45 MIN	
530-D-202B	10	6' - 0"	7' - 10"	BOILER ROOM	D5	HM	F2	HM	4	8	12	45 MIN	
530-D-202C	10	6' - 0"	7' - 10"	CORRIDOR	D5	HM	F2	HM	4	8	12	-	
530-D-203	10	6' - 0"	7' - 10"	MECHANICAL ROOM	D5	HM	F2	HM	4	8	12	-	
530-D-2S2A	9	3' - 0"	7' - 10"	STAIR #2	D1	HM	F1	HM	3	7	12	45 MIN	
530-D-2S2C	7	3' - 0"	7' - 10"	STAIR #2	D1	HM	F1	HM	3	7	12	45 MIN	
530-D-3S2	5	3' - 0"	7' - 10"	STAIR #2 PENTHOUSE	D1	ALUM	F1	ALUM	1	5	2/530-A-48		

1 ADDENDUM NO. 11

1 ADDENDUM NO. 11

4/6/2021 11:11:46 AM

Designed by:	ECR	REVISION		
Drawn by:	KEH	REV No.	DATE	DESCRIPTION
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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

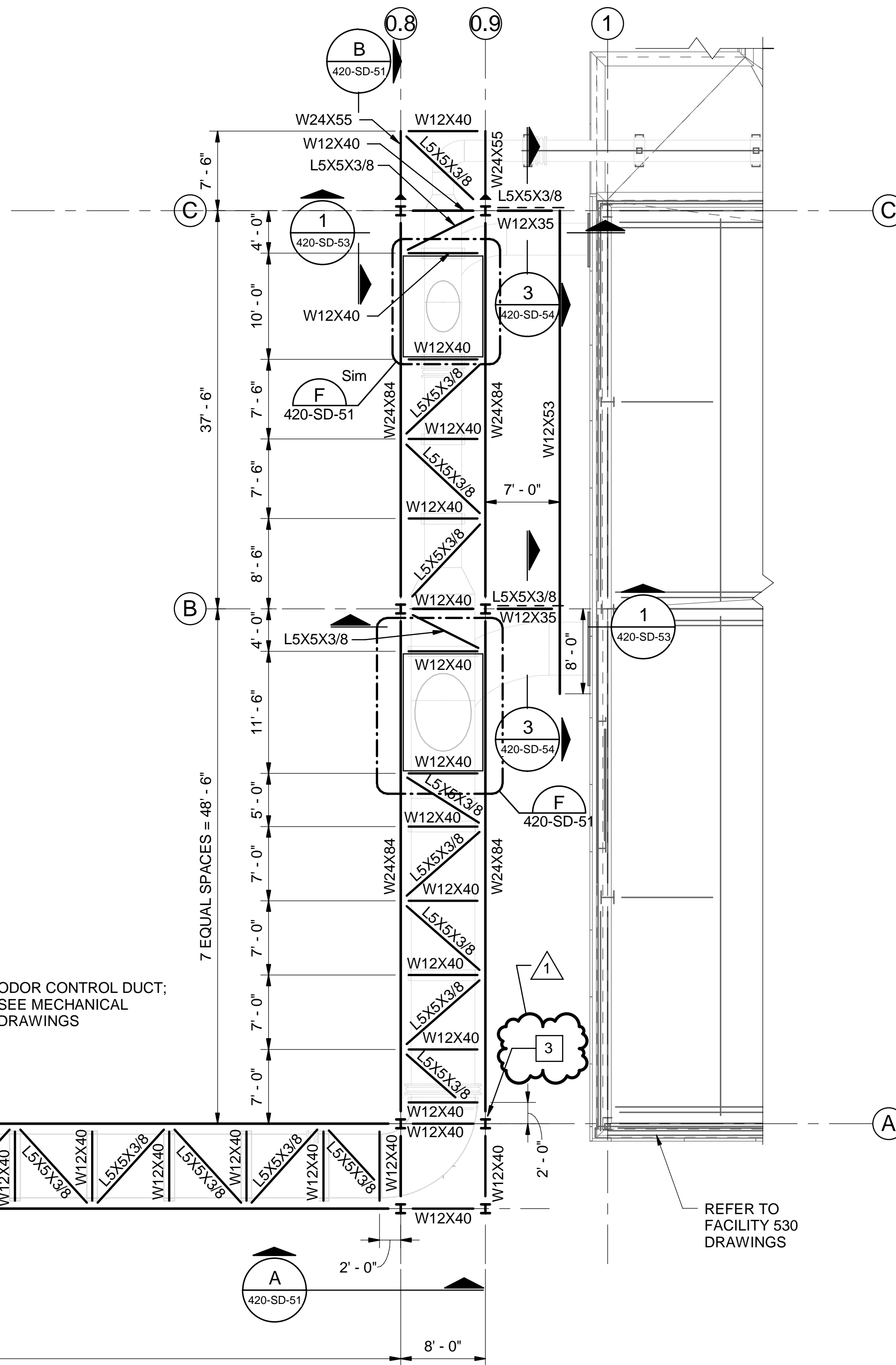
**530-A-51**  
**EAST HEADWORKS**  
**DOOR SCHEDULE, DOOR AND FRAME TYPES**

Contract:	1729
CAD File Name:	530-A-51.DGN
Date:	OCTOBER 2020
Sheet:	116 of 645



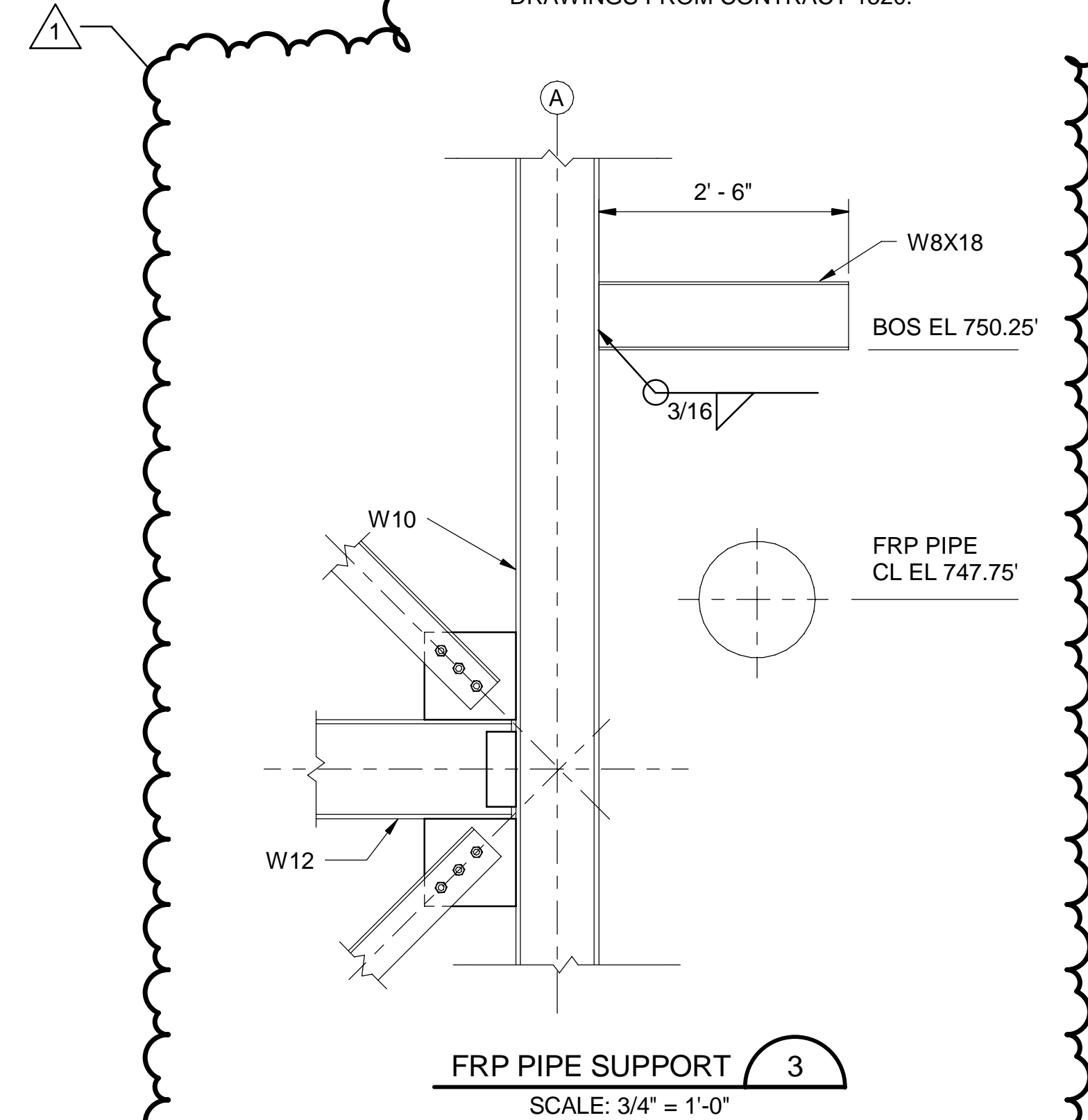


PHOTO FRP PIPE SUPPORT  
SCALE: NTS 420-S-12

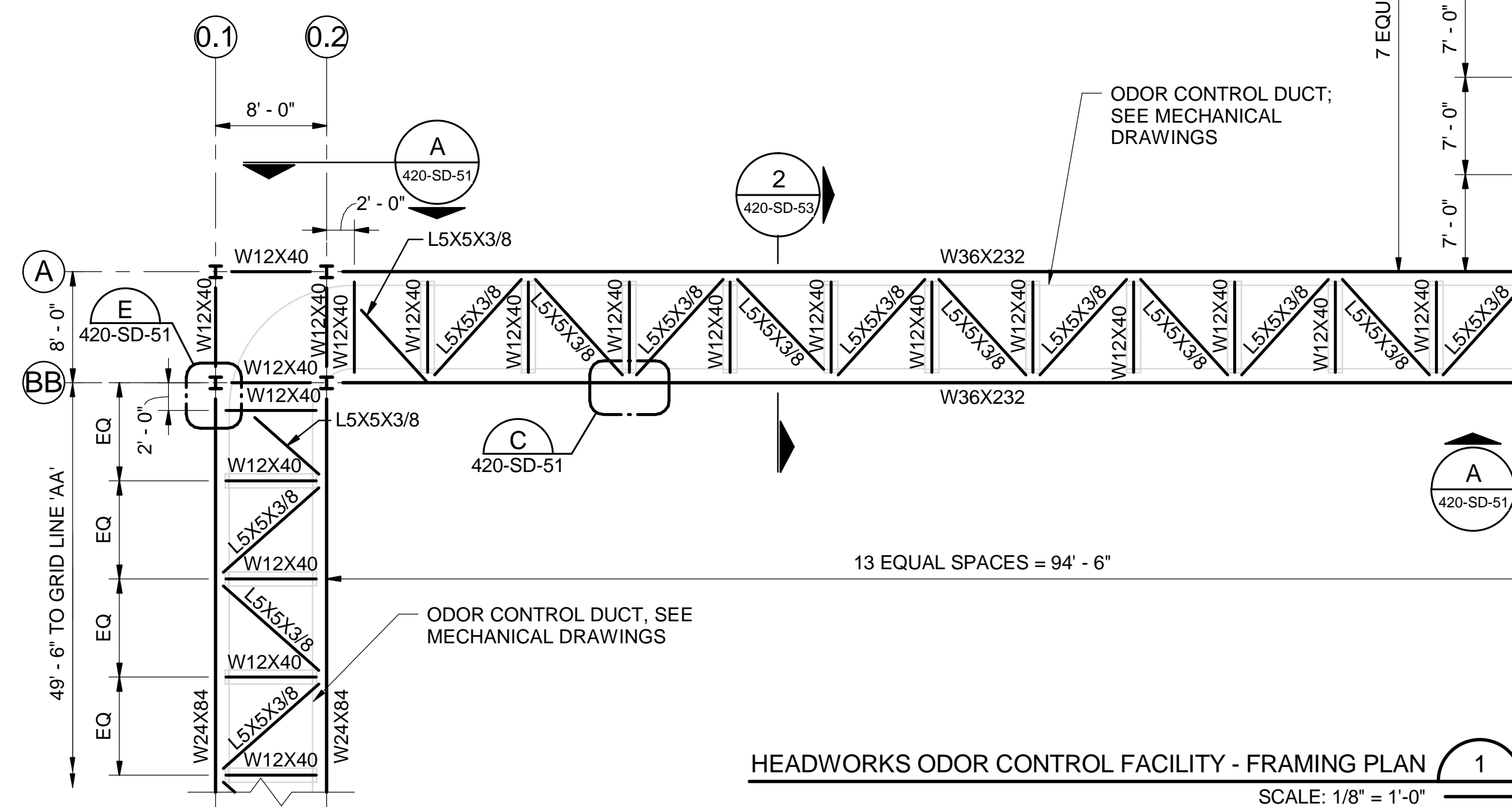


**GENERAL SHEET NOTES**  
1. REFER TO SHEET 420-S-12 FOR GENERAL NOTES.

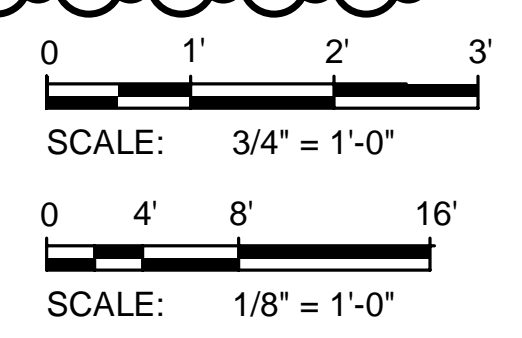
- SHEET KEYNOTES**
1. PROVIDE FRP PIPE SUPPORT FRAMING OFF EXISTING W8X24 COLUMN. SEE DETAIL 4/420-S-53.
  2. PROVIDE FRP PIPE SUPPORT FRAMING OFF EXISTING W8X24 COLUMN. SEE DETAIL 1/420-S-52.
  3. PROVIDE FRP PIPE SUPPORT FRAMING OFF W10X49 COLUMN. SEE DETAIL 3 ON THIS SHEET.
  4. PROVIDE L3 1/2x 3 1/2x 1/4 DIAGONAL VERTICAL BRACING MEMBERS AND CONNECTIONS. SEE SECTION 3/420-S-30.
  5. EXISTING DIAGONAL VERTICAL BRACING MEMBERS ALONG LINE 2x AND BETWEEN COLUMN LINE Mx AND Lx - REFER TO RECORD DRAWINGS FROM CONTRACT 1520.



FRP PIPE SUPPORT 3  
SCALE: 3/4" = 1'-0"



HEADWORKS ODOR CONTROL FACILITY - FRAMING PLAN 1  
SCALE: 1/8" = 1'-0"



4/5/2021 9:05:15 AM

Designed by:	WAY	REV No.	DATE	REVISION DESCRIPTION	APPV
Drawn by:	CJS	0	10/28/20	ISSUED FOR BIDS	
Checked by:	PSO	1	04/02/21	ADDENDUM NO. 11	

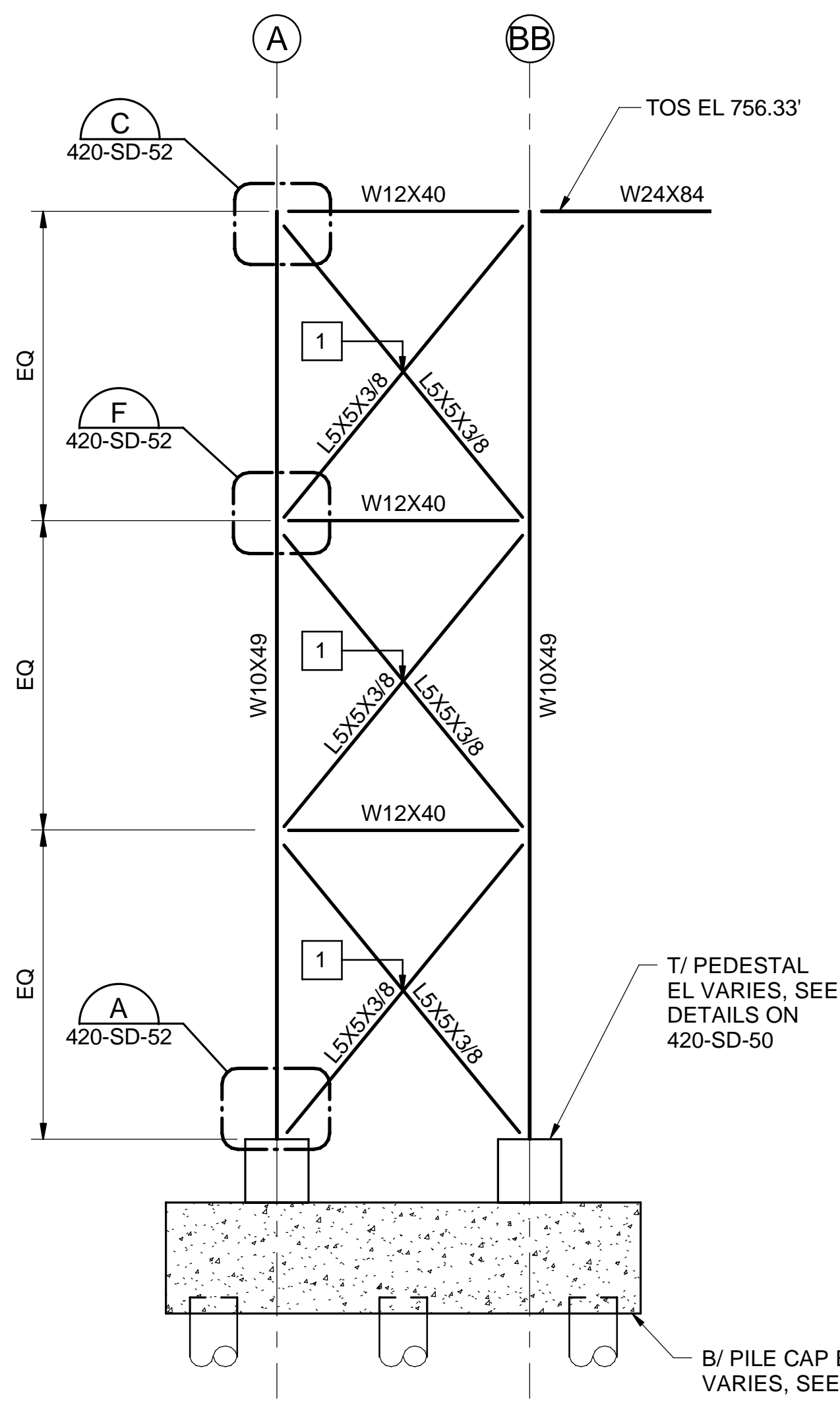
ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

**420-S-13**  
**HEADWORKS ODOR CONTROL FACILITY**  
**FRAMING PLAN**

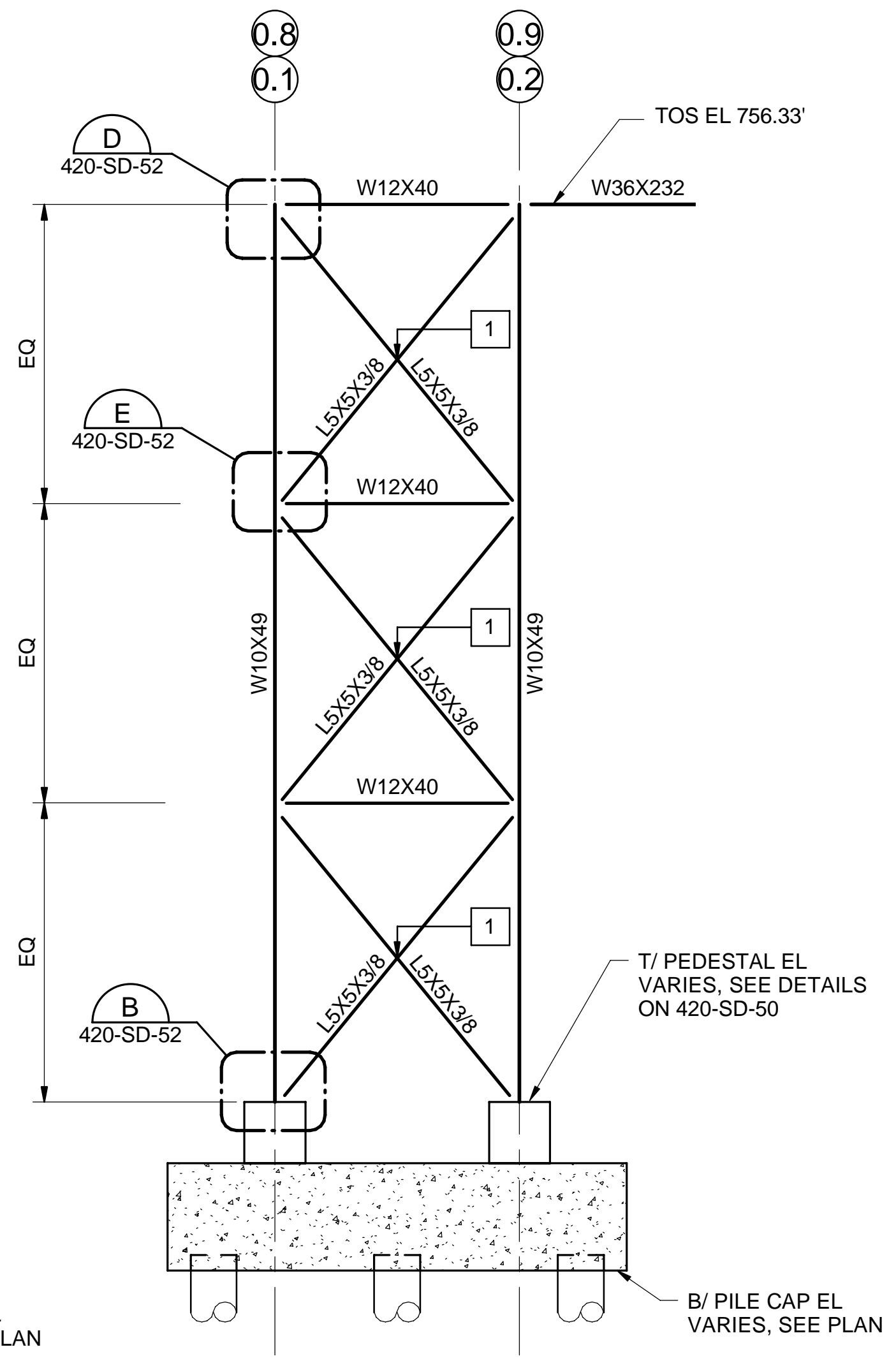
Contract:	1729
CAD File Name:	420-S-13.DGN
Date:	OCTOBER 2020
Sheet:	149 of 645

**SHEET KEYNOTES**

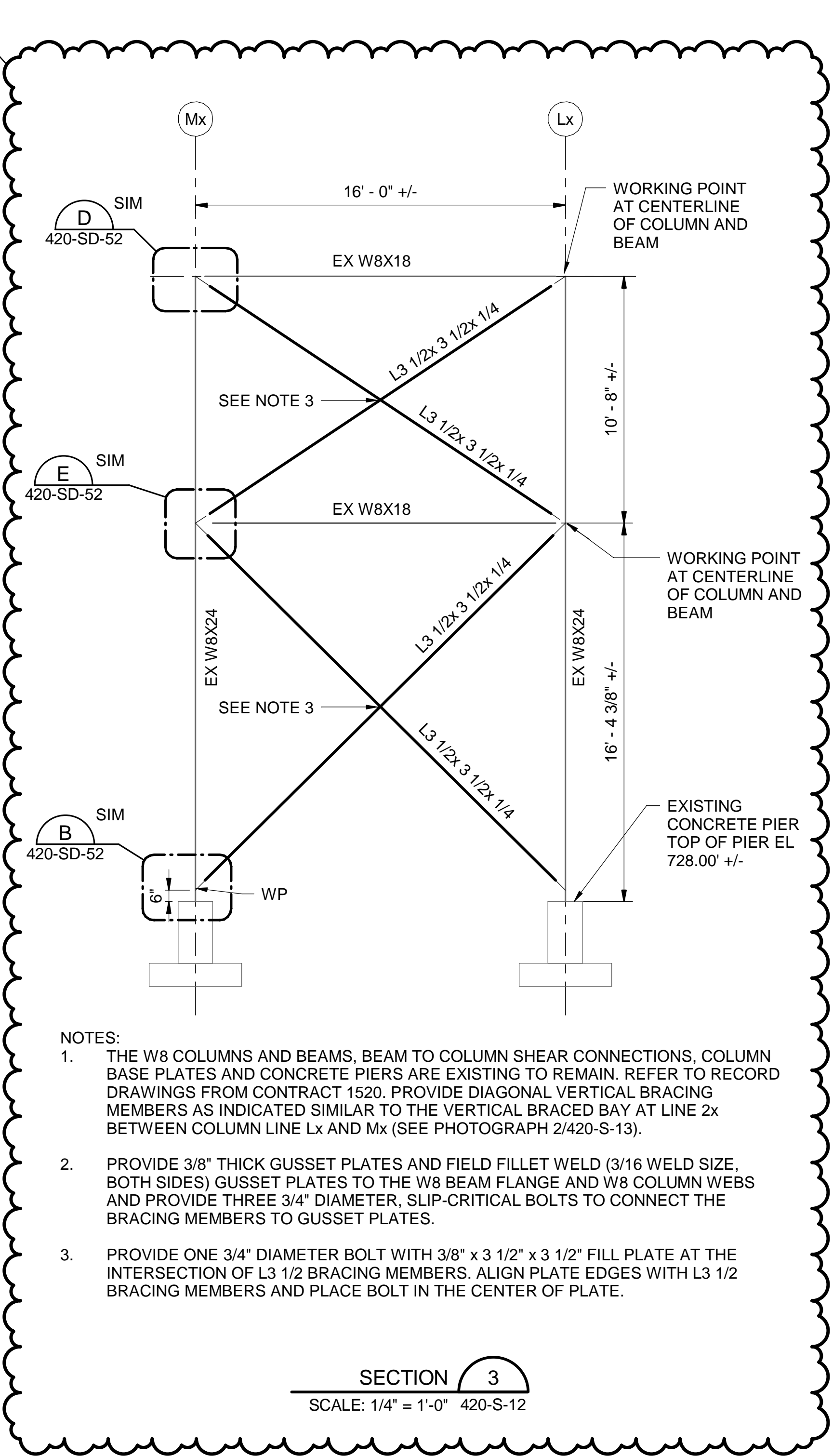
1. PROVIDE ONE 3/4" DIAMETER BOLT WITH 1/2" x 5" x 5" PLATE AT THE INTERSECTION OF L5 BRACING MEMBERS. ALIGN PLATE EDGES WITH L5 BRACING MEMBERS AND PLACE BOLT IN THE CENTER OF PLATE.
2. BASE PLATE TYPE 1, SEE DETAIL ON SHEET 420-SD-50.
3. BASE PLATE TYPE 2, SEE DETAIL ON SHEET 420-SD-50.



BRACING ELEVATION ALONG 0.1, 0.2, 0.8, AND 0.9 1  
SCALE: 1/4" = 1'-0"

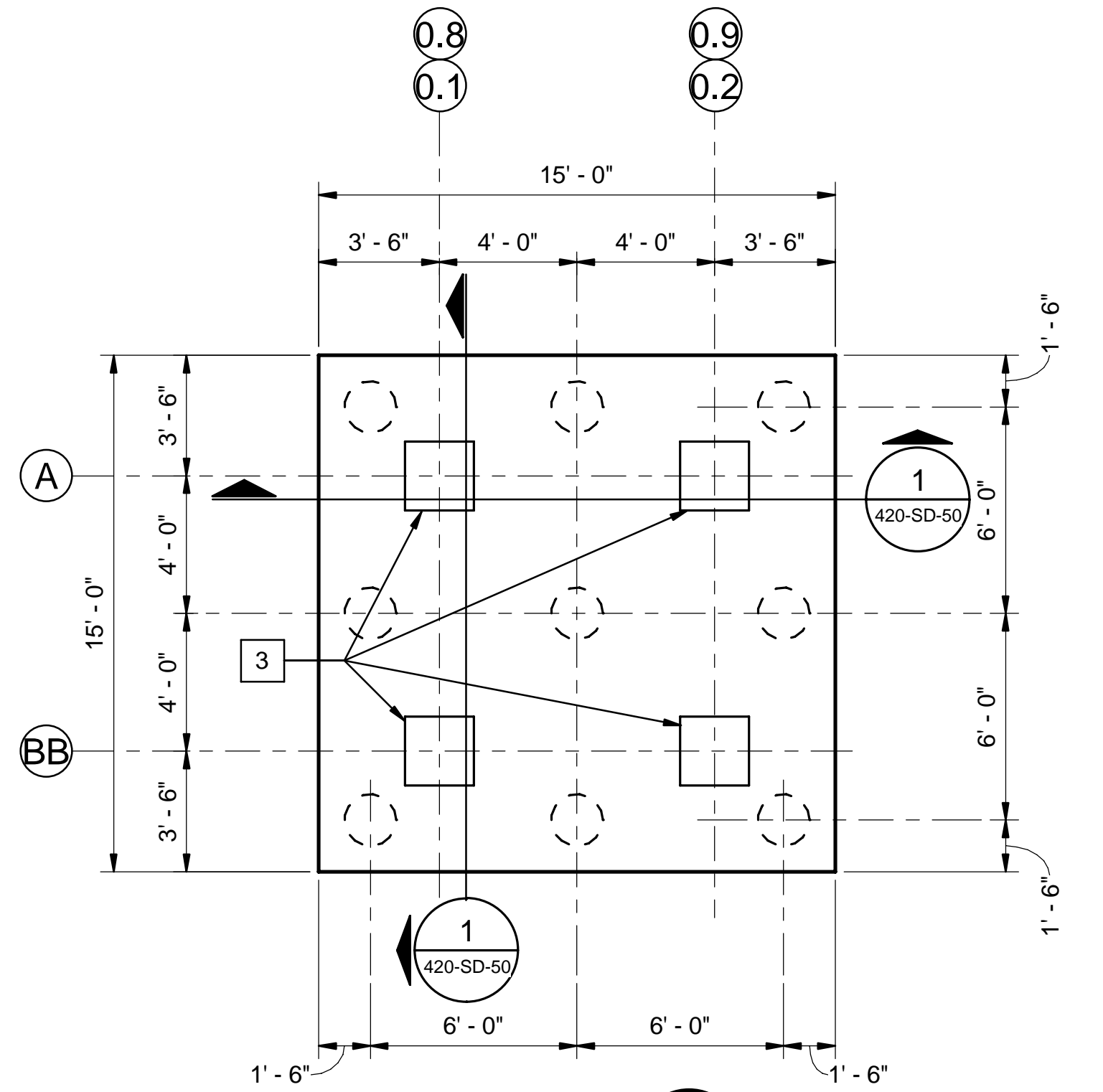


BRACING ELEVATION ALONG A, B, AA, BB, AND C 2  
SCALE: 1/4" = 1'-0"

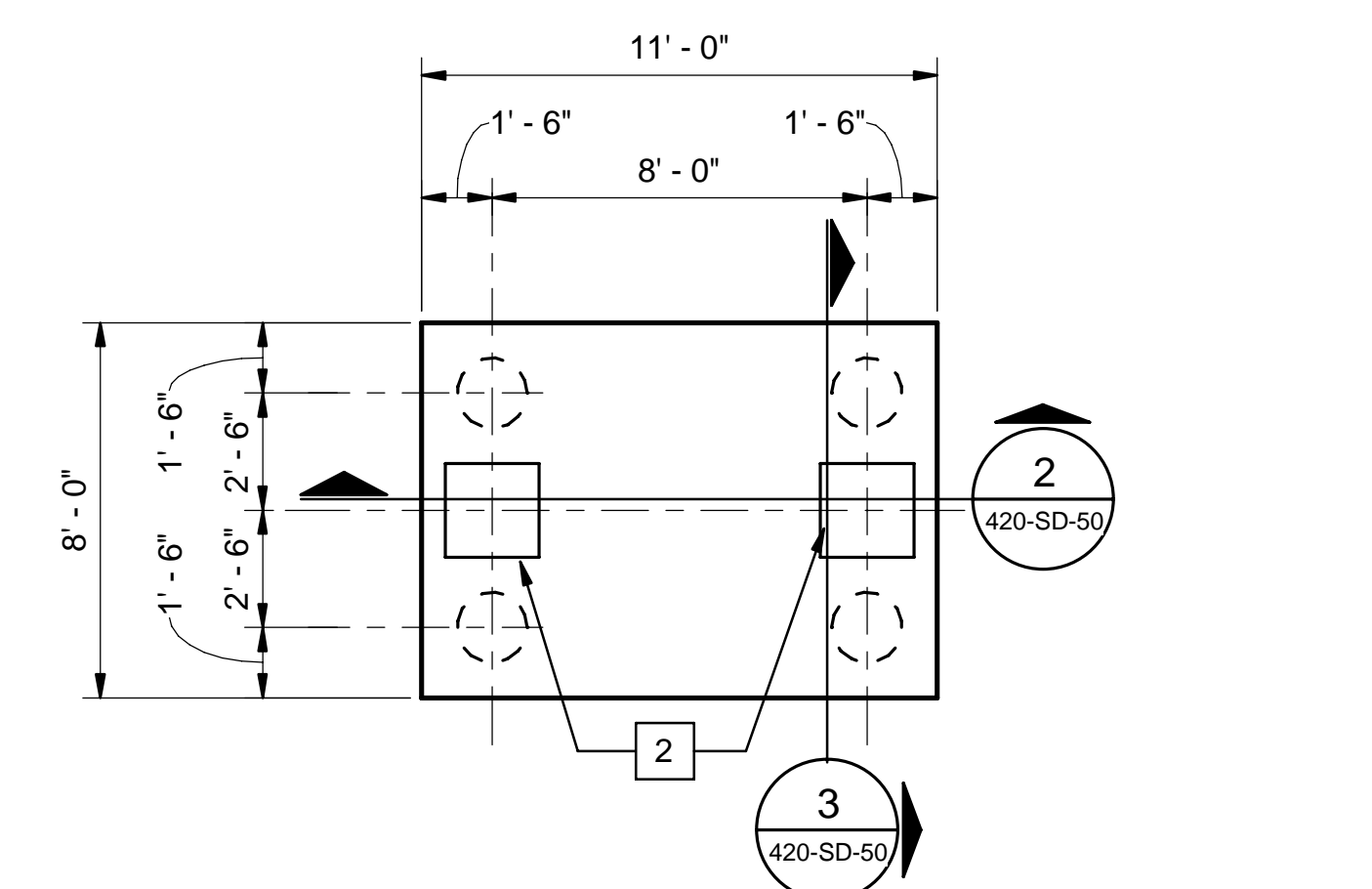


- NOTES:**
1. THE W8 COLUMNS AND BEAMS, BEAM TO COLUMN SHEAR CONNECTIONS, COLUMN BASE PLATES AND CONCRETE PIERS ARE EXISTING TO REMAIN. REFER TO RECORD DRAWINGS FROM CONTRACT 1520. PROVIDE DIAGONAL VERTICAL BRACING MEMBERS AS INDICATED SIMILAR TO THE VERTICAL BRACED BAY AT LINE 2x BETWEEN COLUMN LINE Lx AND Mx (SEE PHOTOGRAPH 2/420-S-13).
  2. PROVIDE 3/8" THICK GUSSET PLATES AND FIELD FILLET WELD (3/16 WELD SIZE, BOTH SIDES) GUSSET PLATES TO THE W8 BEAM FLANGE AND W8 COLUMN WEBS AND PROVIDE THREE 3/4" DIAMETER, SLIP-CRITICAL BOLTS TO CONNECT THE BRACING MEMBERS TO GUSSET PLATES.
  3. PROVIDE ONE 3/4" DIAMETER BOLT WITH 3/8" x 3 1/2" x 3 1/2" FILL PLATE AT THE INTERSECTION OF L3 1/2 BRACING MEMBERS. ALIGN PLATE EDGES WITH L3 1/2 BRACING MEMBERS AND PLACE BOLT IN THE CENTER OF PLATE.

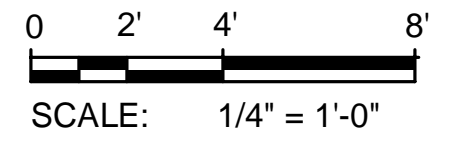
SECTION 3  
SCALE: 1/4" = 1'-0" 420-S-12



PC-420-9 A  
SCALE: 1/4" = 1'-0"



PC-420-4 B  
SCALE: 1/4" = 1'-0"



4/5/2021 9:05:53 AM

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WAY	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	0	10/28/20	ISSUED FOR BIDS	
CJS	1	04/02/21	ADDENDUM NO. 11	
Checked by:				
PSO				

ARLETTA SCOTT WILLIAMS  
EXECUTIVE DIRECTOR, ALCOSAN

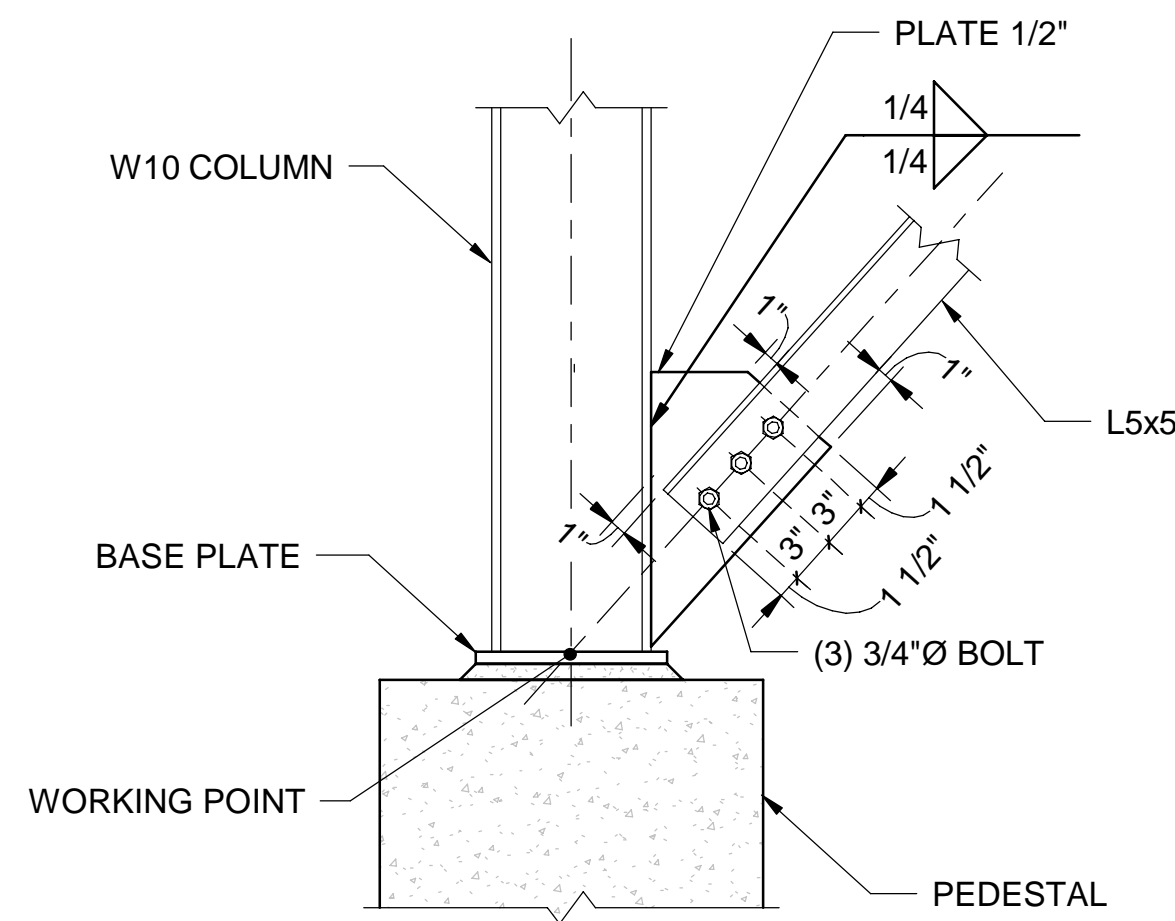
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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

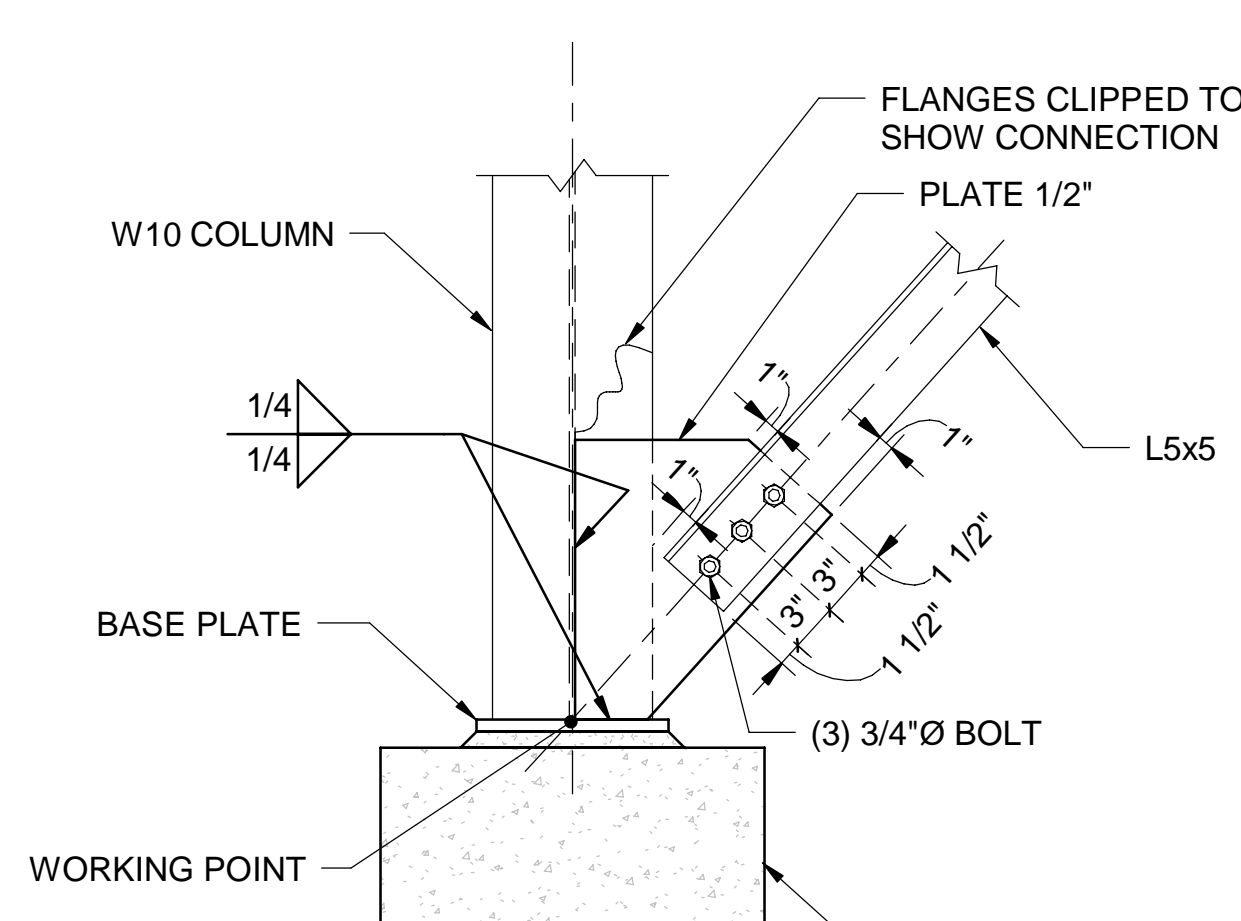
**420-S-30**  
**HEADWORKS ODOR CONTROL FACILITY**  
**ELEVATION AND SECTION**

Contract:	1729
CAD File Name:	420-S-30.DGN
Date:	OCTOBER 2020
Sheet:	150 of 645



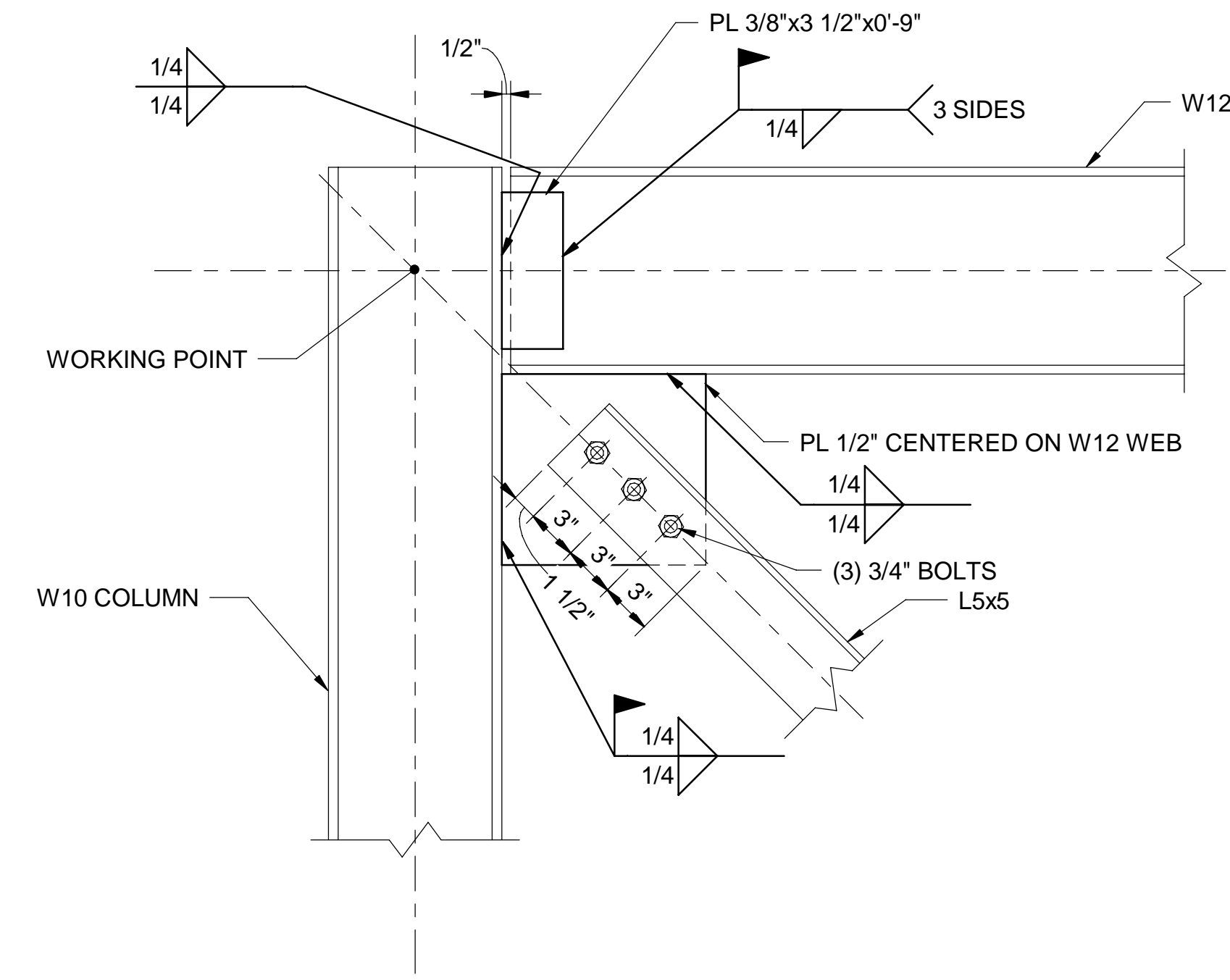
NOTE: CENTER GUSSET PLATE ON W10 CENTERLINE.

DETAIL A  
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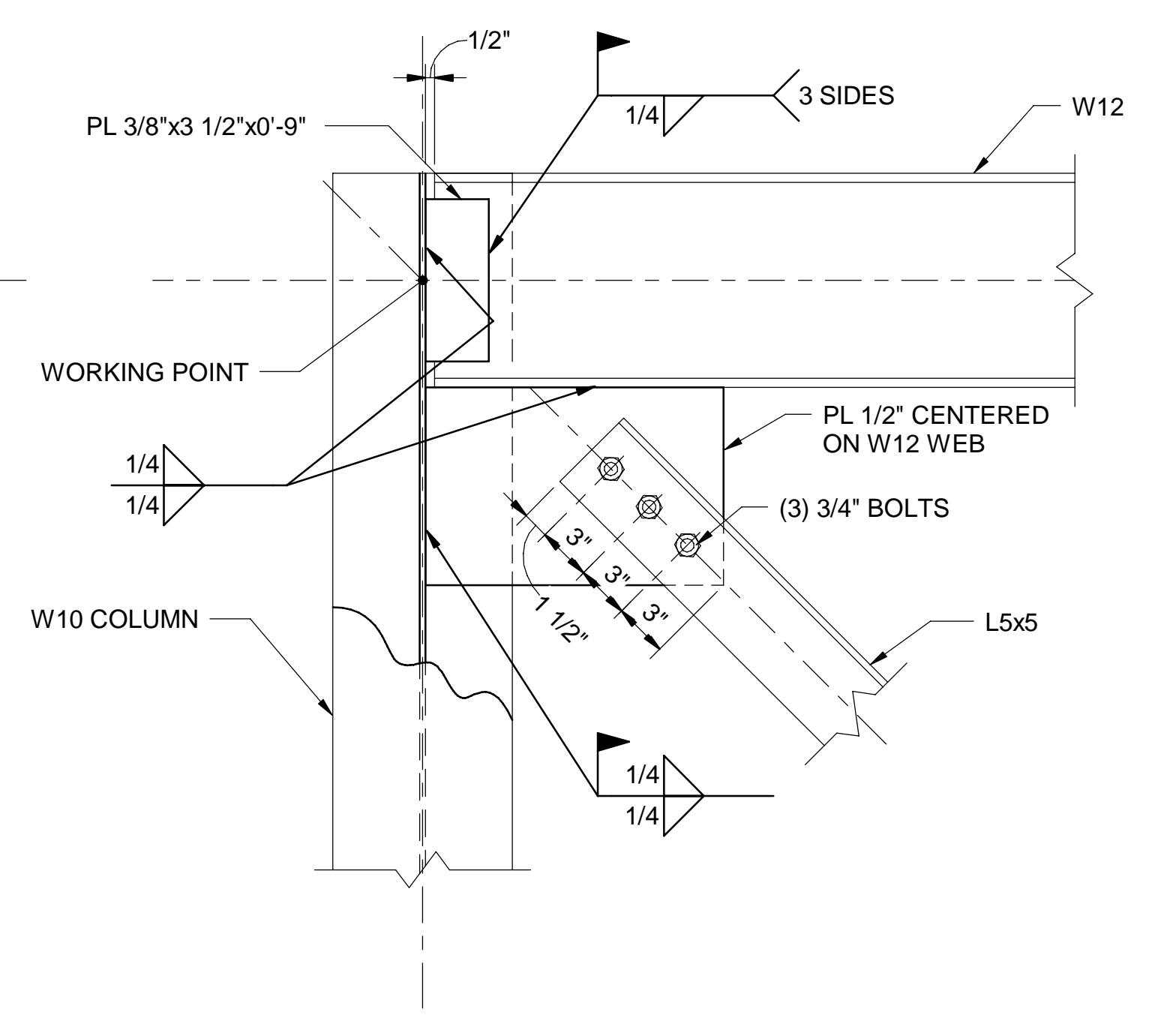


NOTE: CENTER GUSSET PLATE ON W10 CENTERLINE.

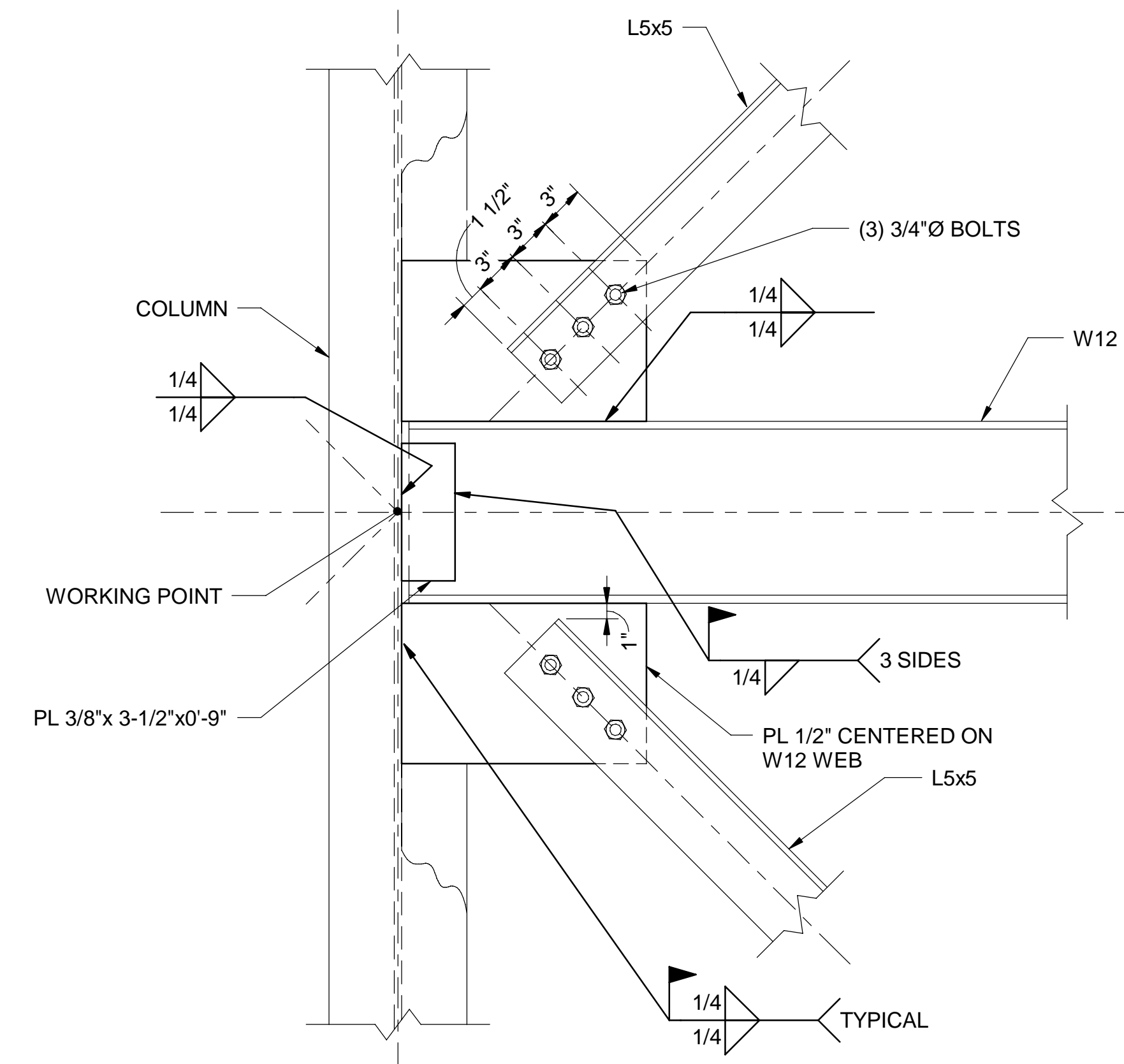
DETAIL B  
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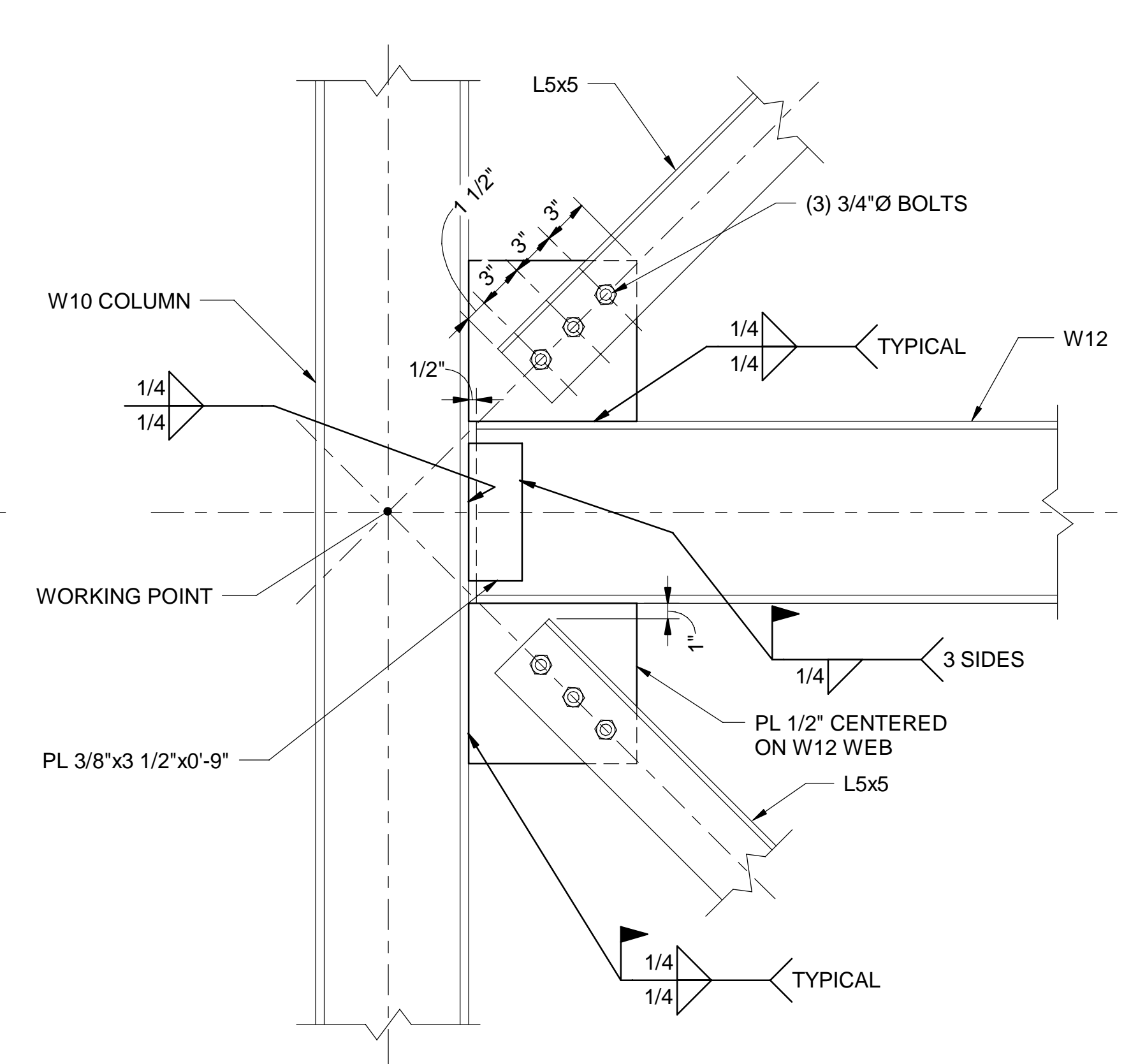
DETAIL C  
SCALE: 1 1/2" = 1'-0" 420-S-30



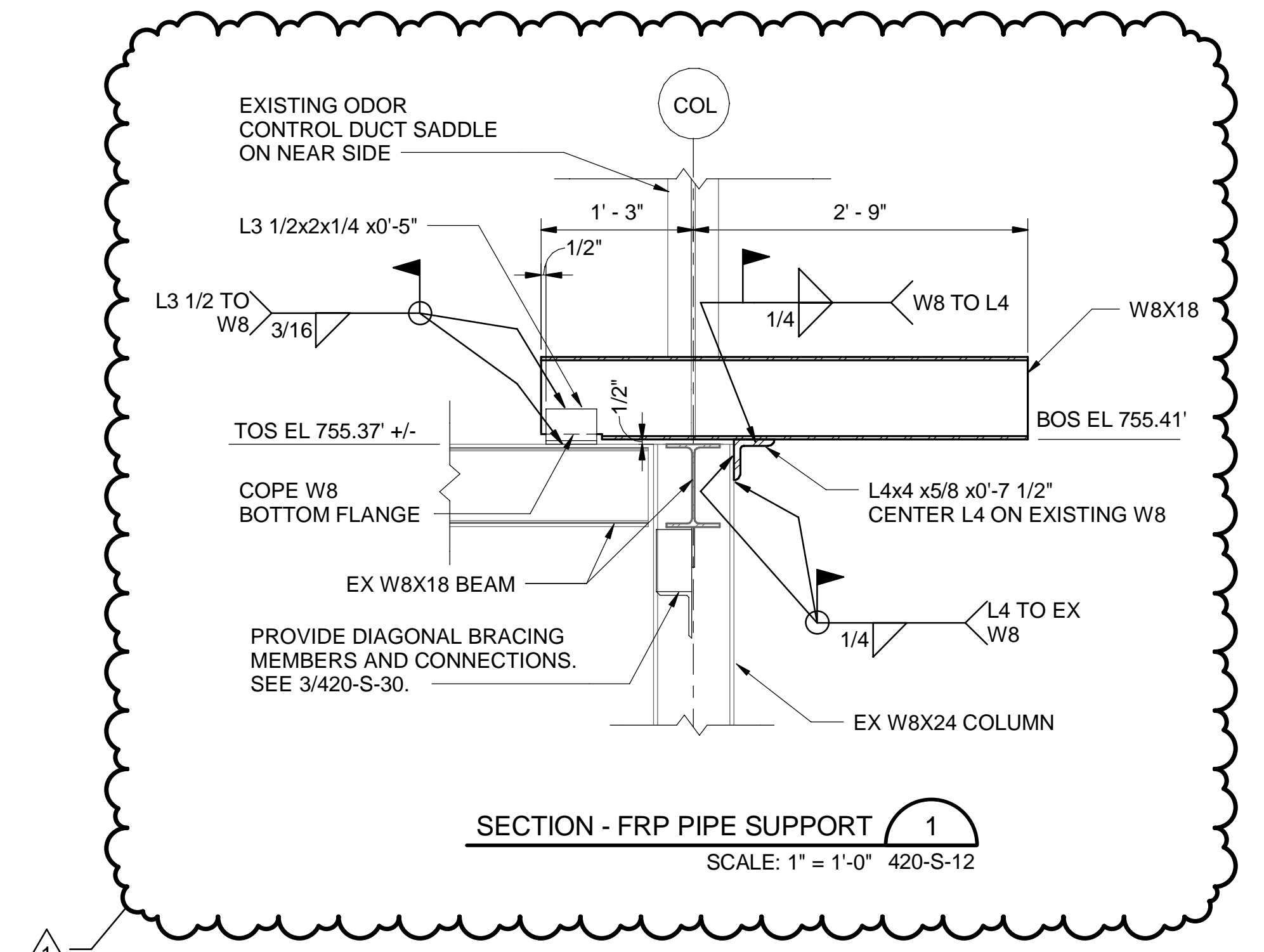
DETAIL D  
SCALE: 1 1/2" = 1'-0" 420-S-30



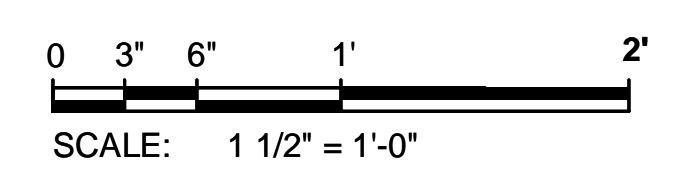
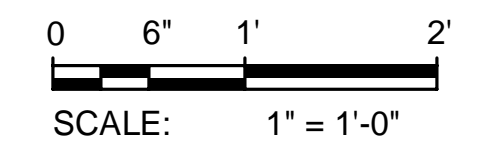
DETAIL E  
SCALE: 1 1/2" = 1'-0" 420-S-30



DETAIL F  
SCALE: 1 1/2" = 1'-0" 420-S-30



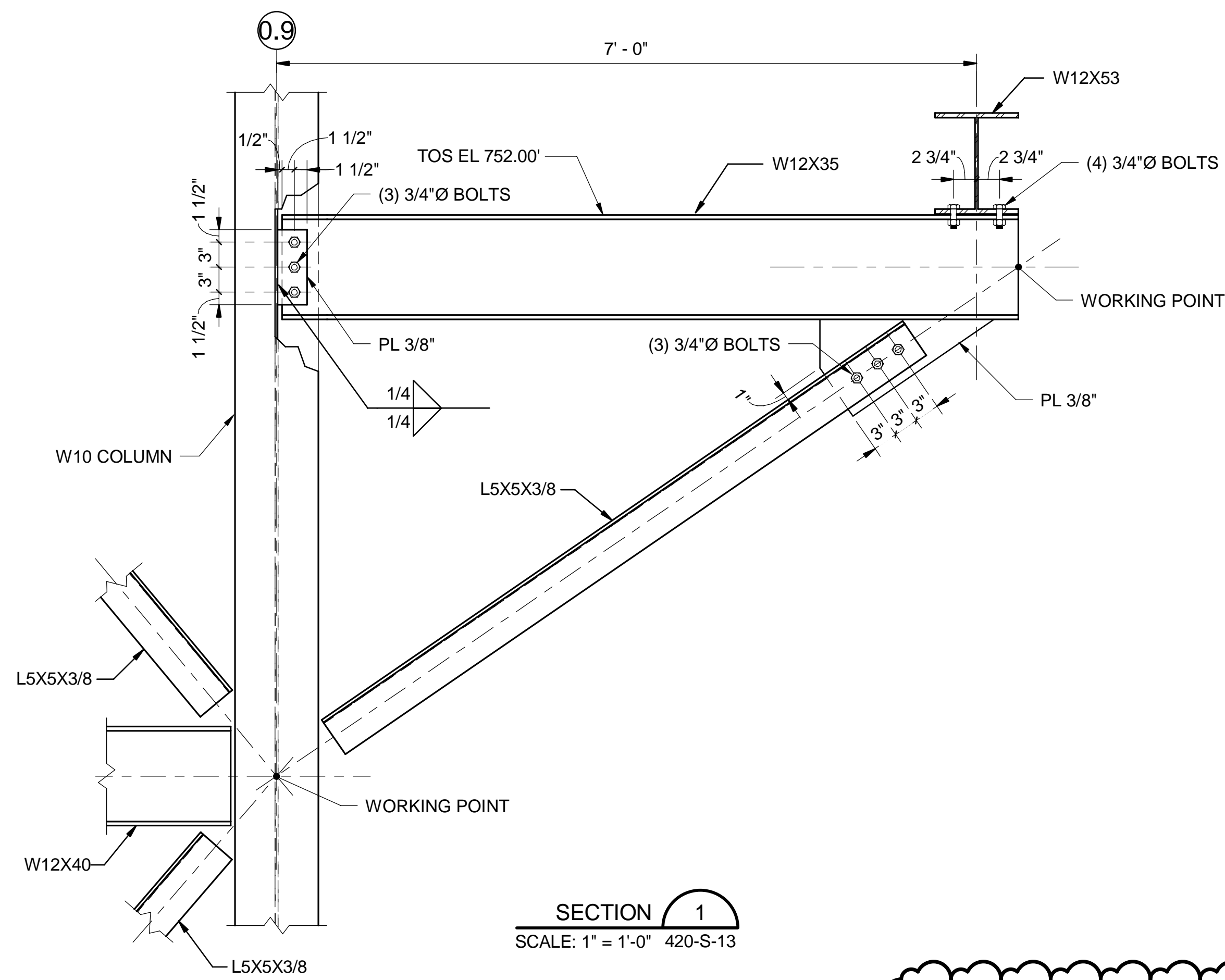
SECTION - FRP PIPE SUPPORT 1  
SCALE: 1" = 1'-0" 420-S-12



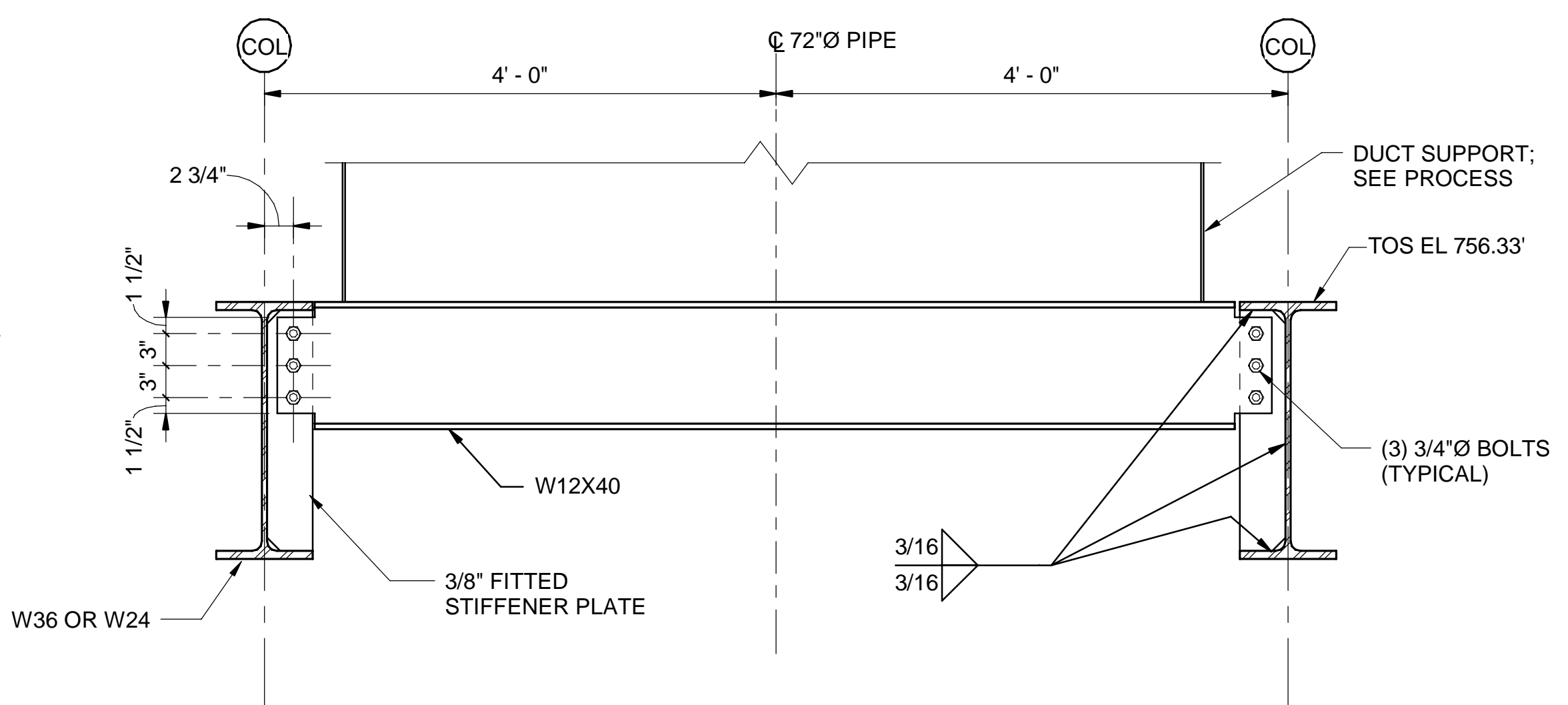
4/5/2021 9:05:55 AM

Designed by: WAY	REVISION				ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN  3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766-4810 www.alcosan.org	ALLEGHENY COUNTY SANITARY AUTHORITY WASTEWATER TREATMENT PLANT EAST HEADWORKS  <b>420-SD-52</b> <b>HEADWORKS ODOR CONTROL FACILITY</b> <b>SECTIONS AND DETAILS</b>	Contract: 1729							
Drawn by: CJS	<table border="1"> <thead> <tr> <th>REV No.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>APPV</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>10/28/20</td> <td>ISSUED FOR BIDS</td> <td></td> </tr> <tr> <td>1</td> <td>04/02/21</td> <td>ADDENDUM NO. 11</td> <td></td> </tr> </tbody> </table>						REV No.	DATE	DESCRIPTION	APPV	0	10/28/20	ISSUED FOR BIDS	
REV No.	DATE	DESCRIPTION	APPV											
0	10/28/20	ISSUED FOR BIDS												
1	04/02/21	ADDENDUM NO. 11												
Checked by: PSO						Date: OCTOBER 2020	Sheet: 154 of 645							

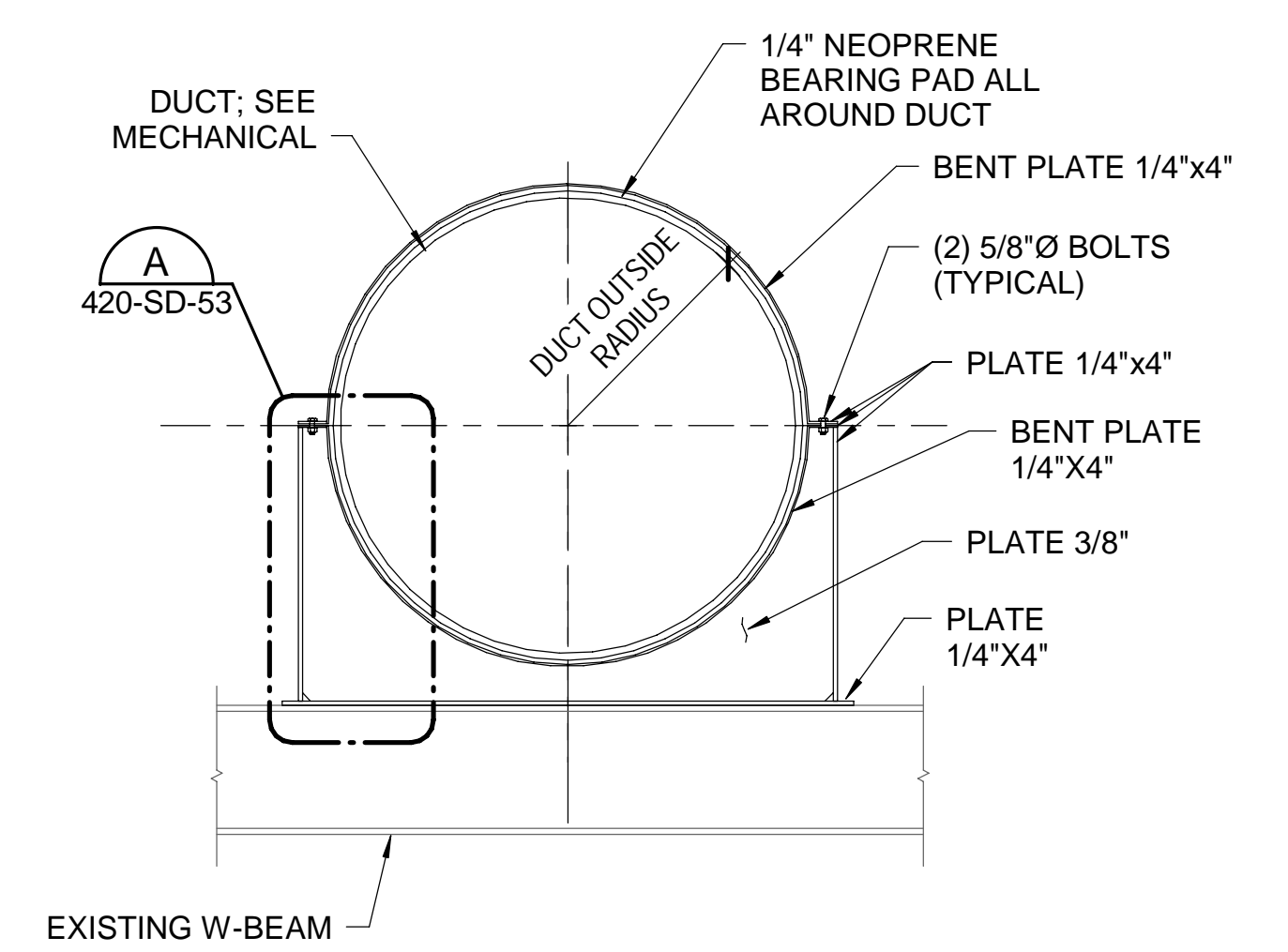




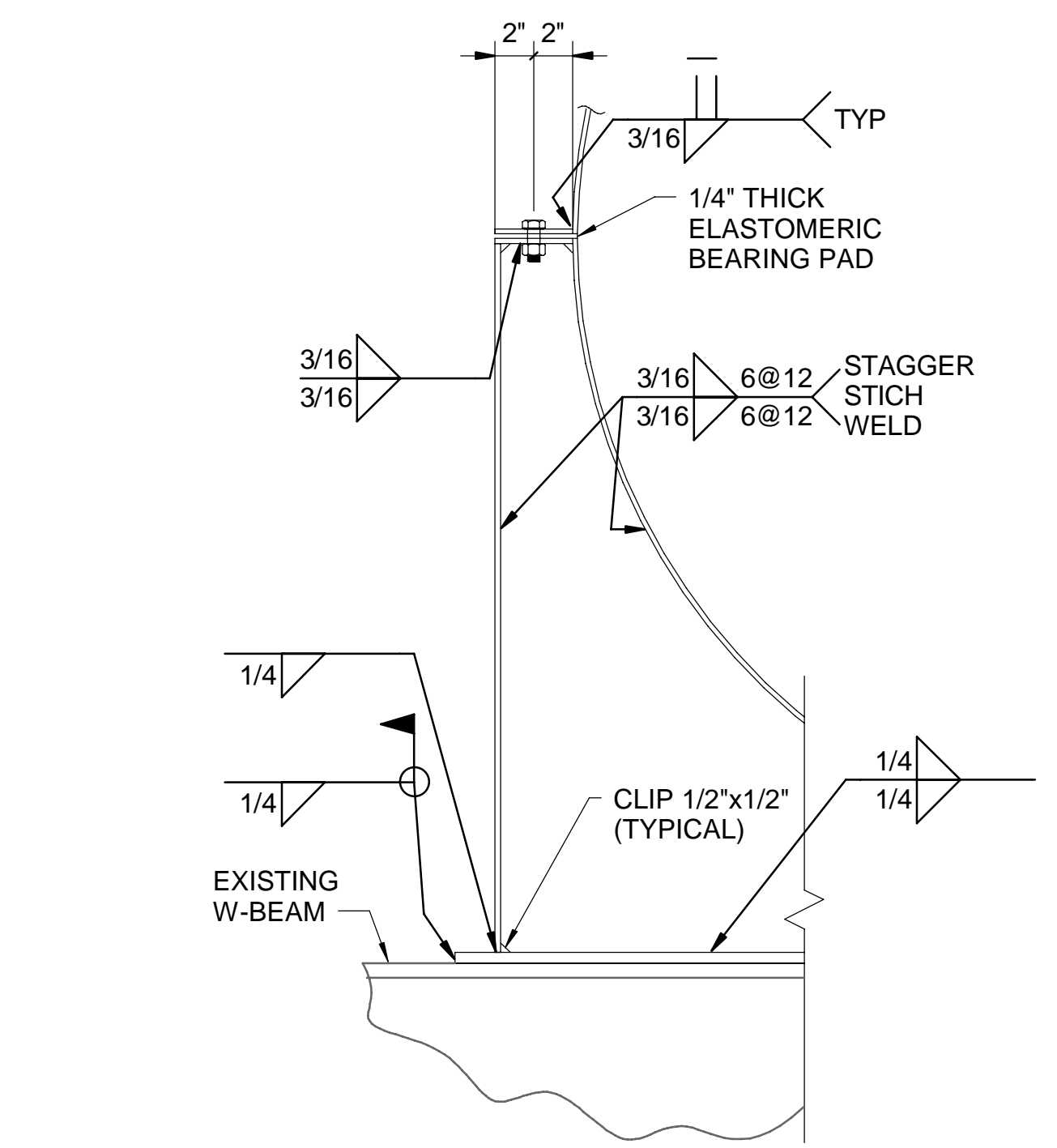
**SECTION 1**  
SCALE: 1" = 1'-0" 420-S-13



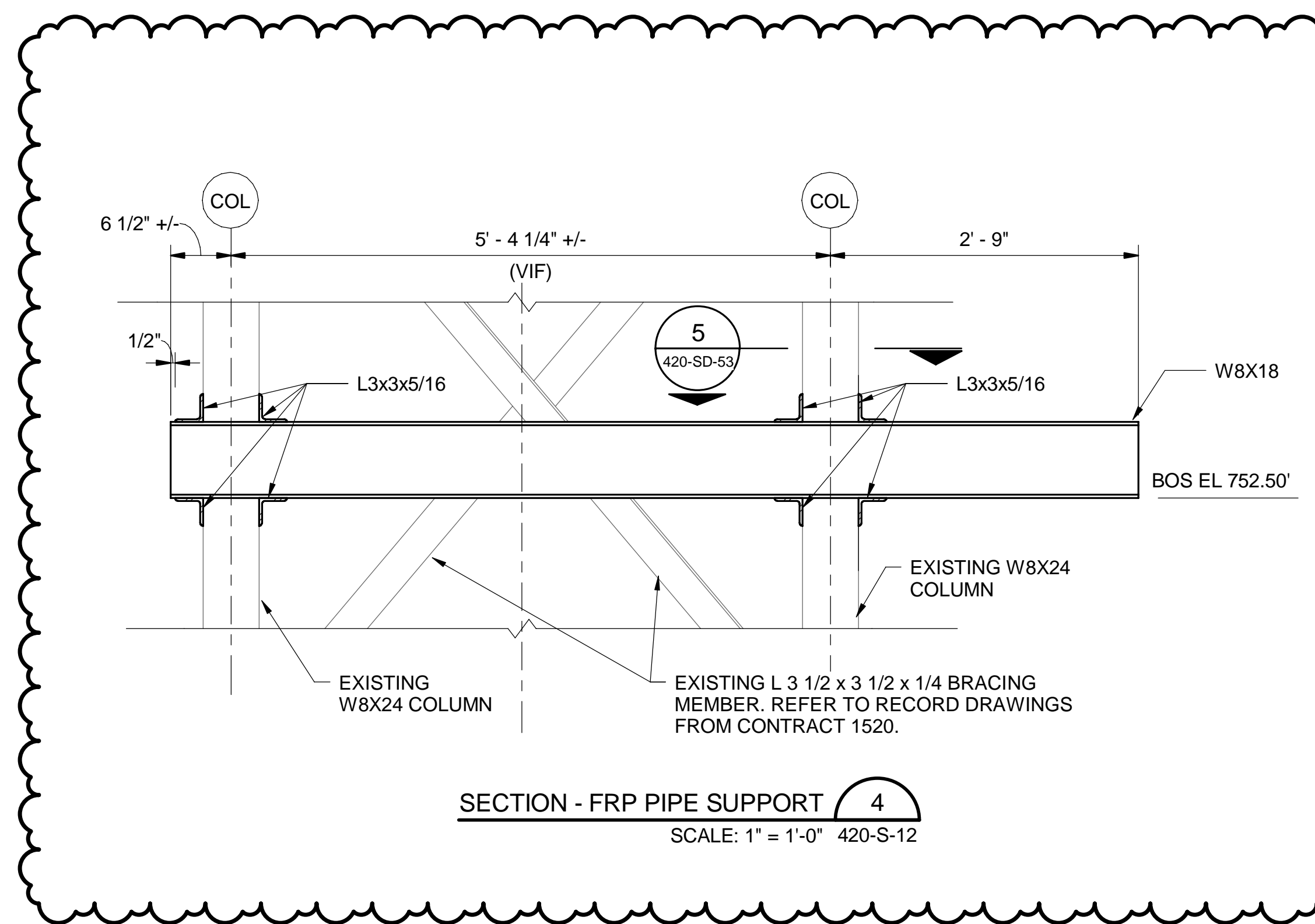
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SCALE: 1" = 1'-0" 420-S-12



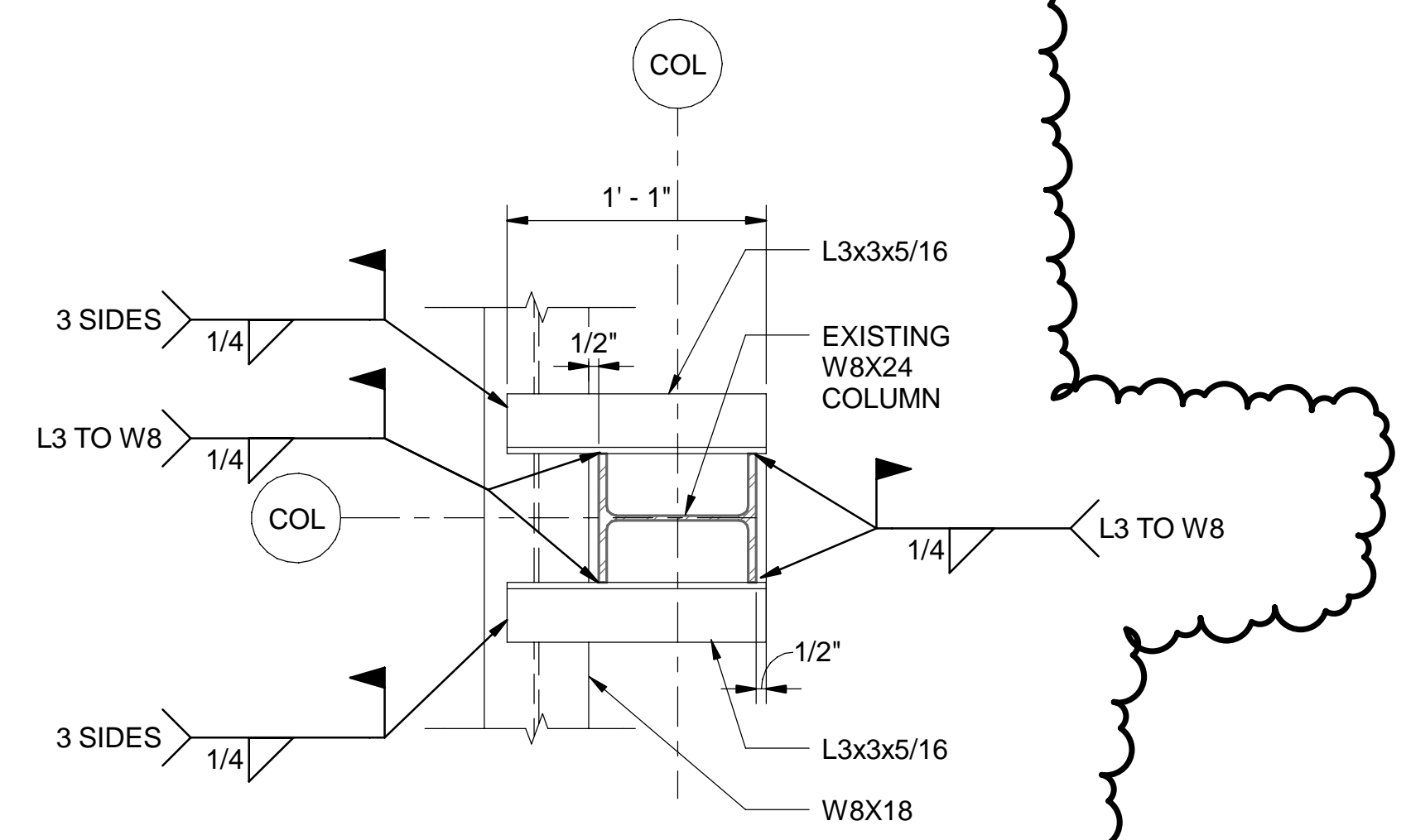
**SECTION 3**  
SCALE: 1/2" = 1'-0" 420-S-12



**DETAIL A**  
SCALE: 1 1/2" = 1'-0" 420-SD-53

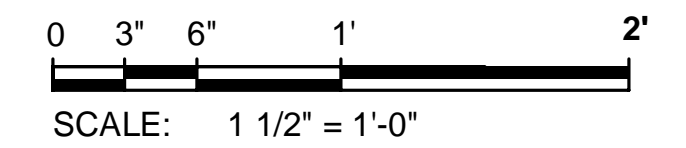
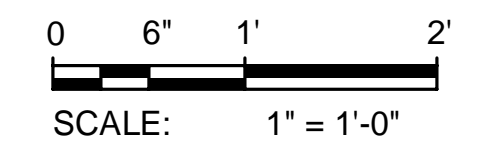
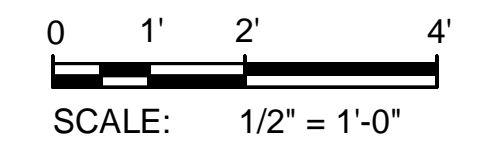


**SECTION - FRP PIPE SUPPORT 4**  
SCALE: 1" = 1'-0" 420-S-12

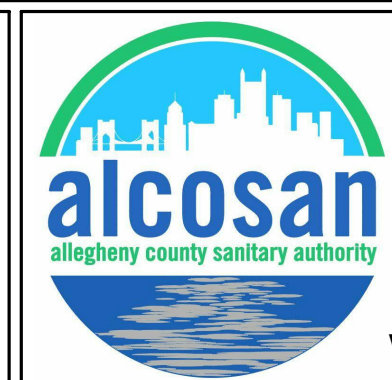
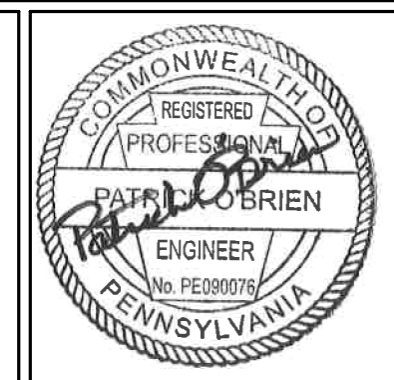


NOTE: DETAIL ABOVE SHOWS THE CONNECTION OF W8 BEAM TOP FLANGE TO EXISTING W8 COLUMN. PROVIDE SAME CONNECTION AT THE BOTTOM FLANGE OF W8 BEAM TO EXISTING W8 COLUMN. PROVIDE SIMILAR CONNECTION AT THE OTHER EXISTING W8 COLUMN ALONG THE COLUMN BENT.

**SECTION 5**  
SCALE: 1 1/2" = 1'-0" 420-SD-53



Designed by:	REVISION			
WAY	REV No.	DATE	DESCRIPTION	APPV
	0	10/28/20	ISSUED FOR BIDS	
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CJS				
Checked by:				
PSO				

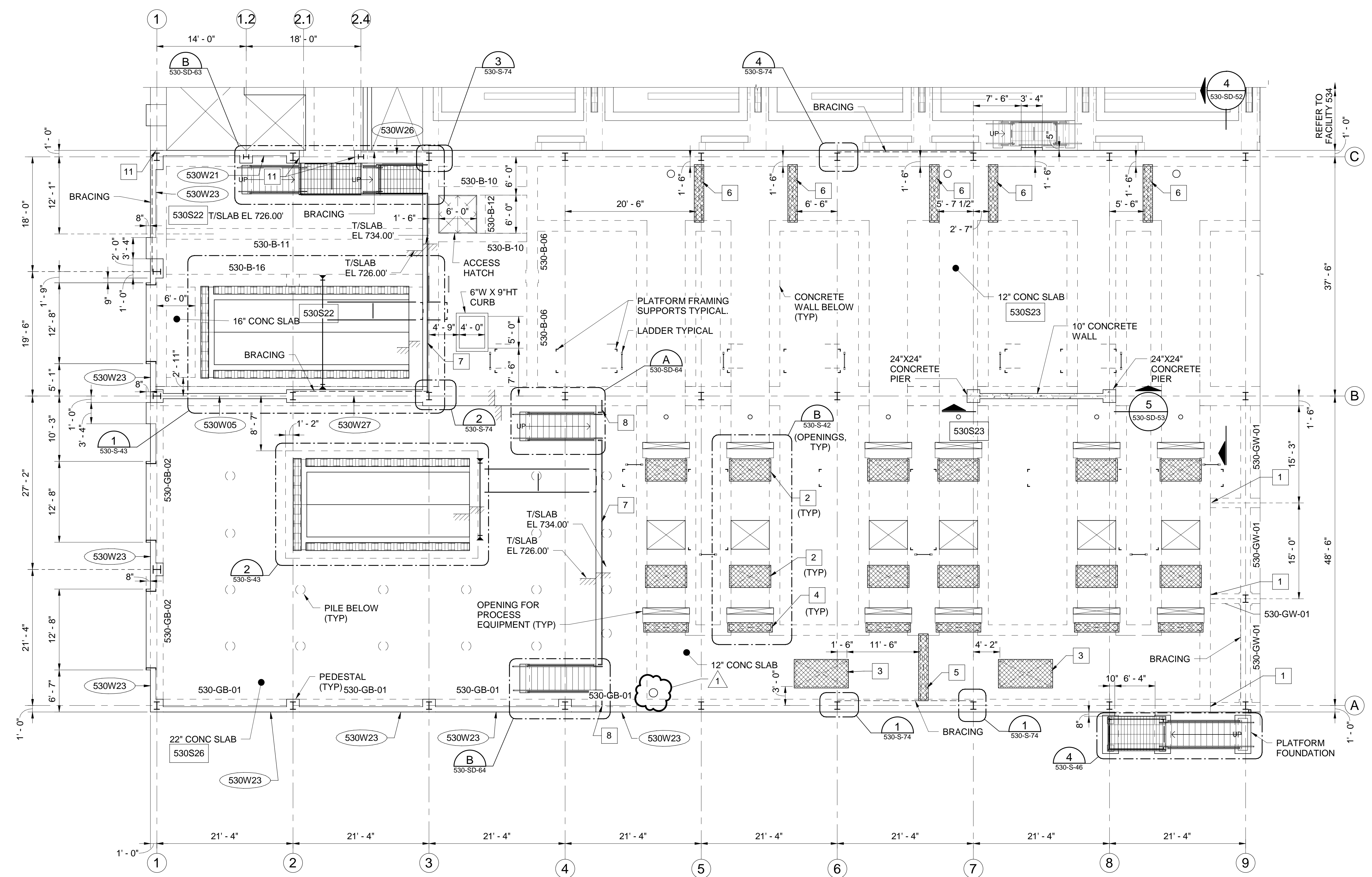
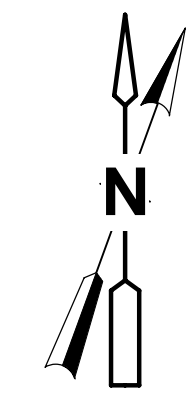


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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS  
  
420-SD-53  
HEADWORKS ODOR CONTROL FACILITY  
SECTIONS AND DETAILS

Contract: 1729  
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Date: OCTOBER 2020  
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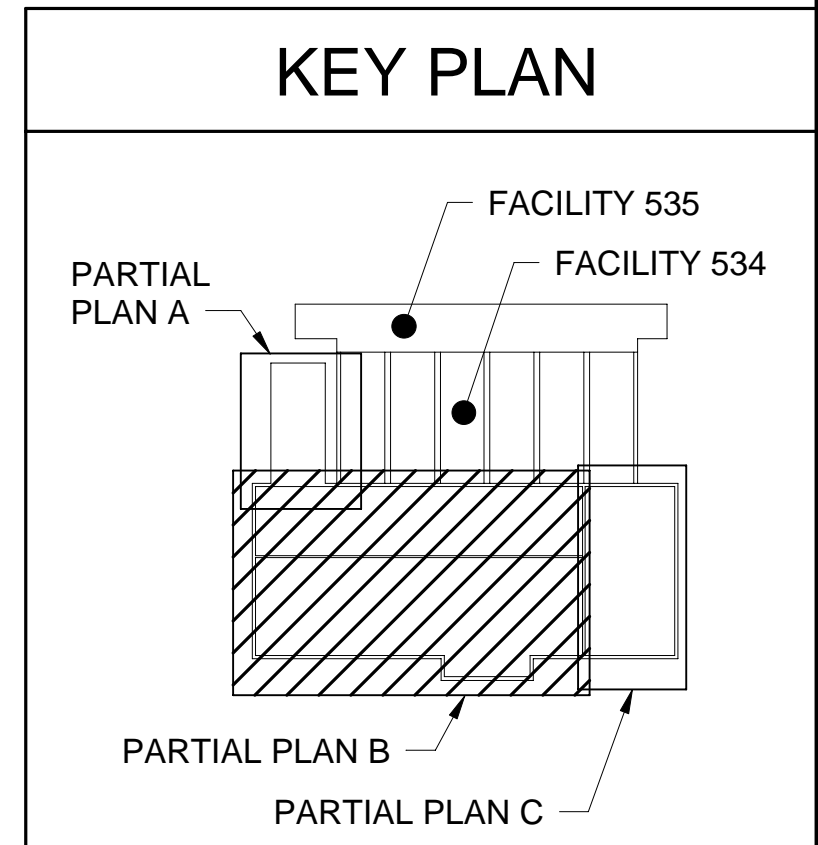
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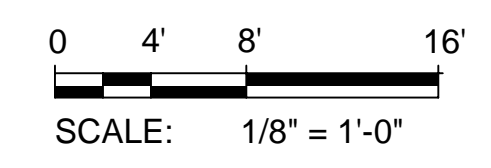
- GENERAL SHEET NOTES**
- REFER TO DRAWING 530-S-46 FOR METAL PLATFORMS ABOVE THIS LEVEL.
  - REFER TO SCHEDULES ON SHEETS 530-S-70 TO 530-S-75 FOR MORE INFORMATION.

- SHEET KEYNOTES**
- PROVIDE #4 DOWEL SPLICERS AT 12" ON CENTER WITH STANDARD 90 DEGREE HOOK IN THE FOUNDATION WALL. PLACE DOWEL SPLICERS IN THE MIDDLE OF GRADE WALL. PROVIDE #4 X 1'-6" LONG DOWELS IN THE GRADE WALL.
  - ALUMINUM ACCESS PLATE, TYPE 530-N1
  - ALUMINUM ACCESS PLATE, TYPE 530-N2
  - ALUMINUM ACCESS PLATE, TYPE 530-N3
  - ALUMINUM ACCESS PLATE TYPE 530-N4
  - ALUMINUM ACCESS PLATE TYPE 530-N5
  - REMOVABLE GUARDRAIL.
  - GUARDRAIL.

- SHEET LEGEND**
- 530S25 CONCRETE SLAB TAG. SEE CONCRETE SLAB SCHEDULE.
  - 530W01 CONCRETE WALL TAG. SEE CONCRETE WALL SCHEDULE.
  - 530-GW-02 CONCRETE GRADE WALL TAG. SEE CONCRETE GRADE WALL SCHEDULE.
  - 530-GB-02 CONCRETE GRADE BEAM TAG. SEE CONCRETE GRADE BEAM SCHEDULE.
  - 530-B-02 CONCRETE BEAM TAG. SEE CONCRETE BEAM SCHEDULE.
  - 18" DIAMETER AUGER CAST PILE.



**EAST HEADWORKS - FIRST FLOOR FRAMING PARTIAL PLAN - B**  
SCALE: 1/8" = 1'-0" 530-S-13



Designed by: KEC  
Drawn by: SLJ  
Checked by: WC

REV No.	DATE	DESCRIPTION	APPV
0	10/28/20	ISSUED FOR BIDS	
1	04/02/21	ADDENDUM NO. 11	

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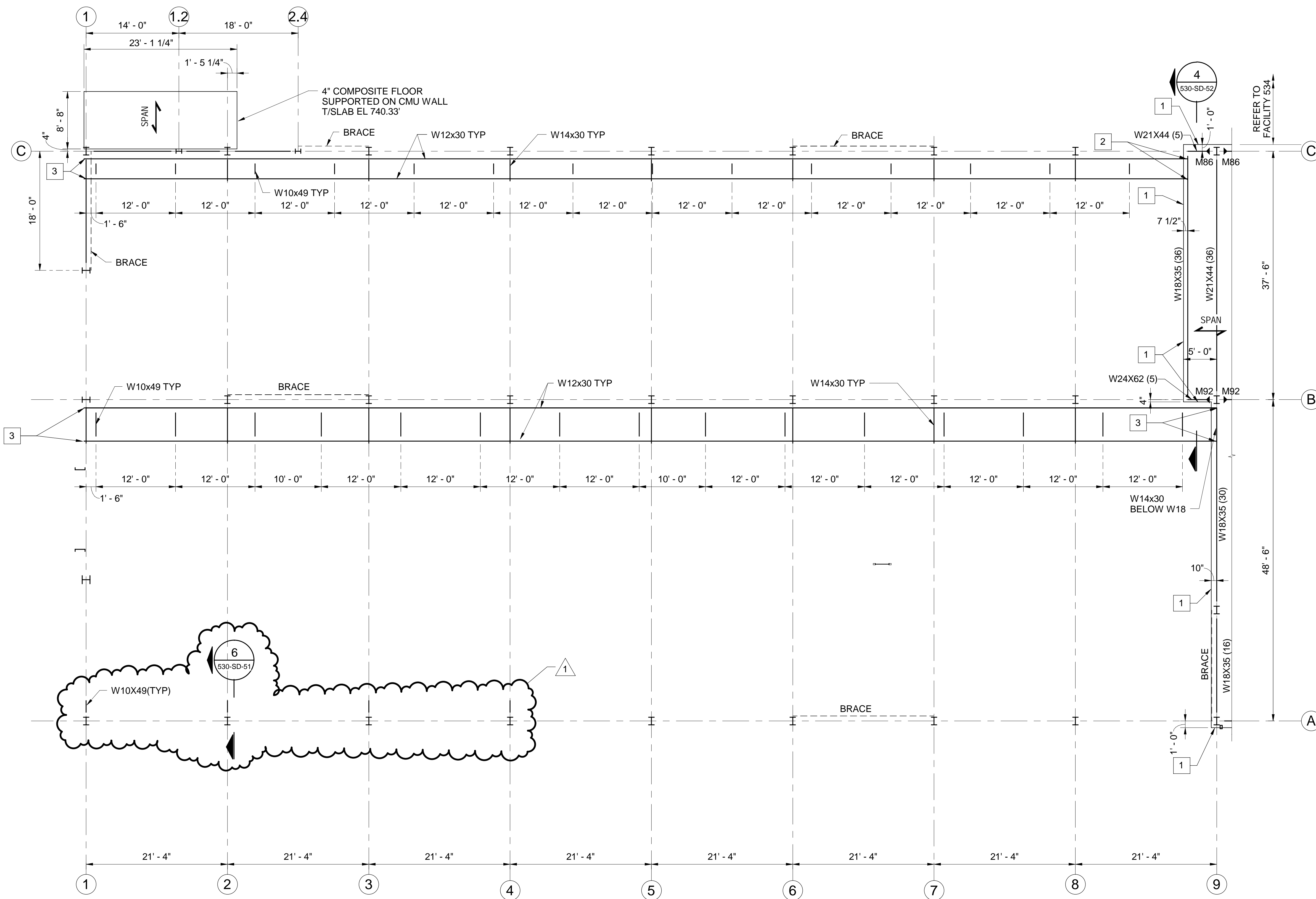
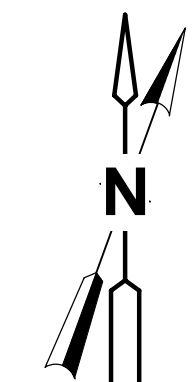
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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

**530-S-15**  
**EAST HEADWORKS**  
**FIRST FLOOR FRAMING PARTIAL PLAN - B**

Contract: 1729  
CAD File Name: 530-S-15.DGN  
Date: OCTOBER 2020  
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**GENERAL SHEET NOTES**

1. TOP OF SLAB ELEVATION THIS SHEET IS EL 748.00' UNLESS OTHERWISE NOTED.
2. FLOOR CONSTRUCTION CONSISTS OF 2" x 20 GAGE COMPOSITE METAL DECK, WITH A 2" MINIMUM LIGHT WEIGHT CONCRETE TOPPING (TOTAL THICKNESS = 4" MIN), REINFORCED WITH 6x6-W1.4xW1.4 WELDED WIRE FABRIC POSITIONED 1" BELOW THE TOP OF SLAB.
3. PROVIDE THE NUMBER OF 3/4" DIAMETER X 3.5" LONG HEADED STUDS.
4. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF CONCRETE MASONRY WALLS NOT SHOWN. FOR CONCRETE MASONRY WALLS NOT SPECIFICALLY DETAILED, REFER TO TYPICAL STRUCTURAL DETAILS.

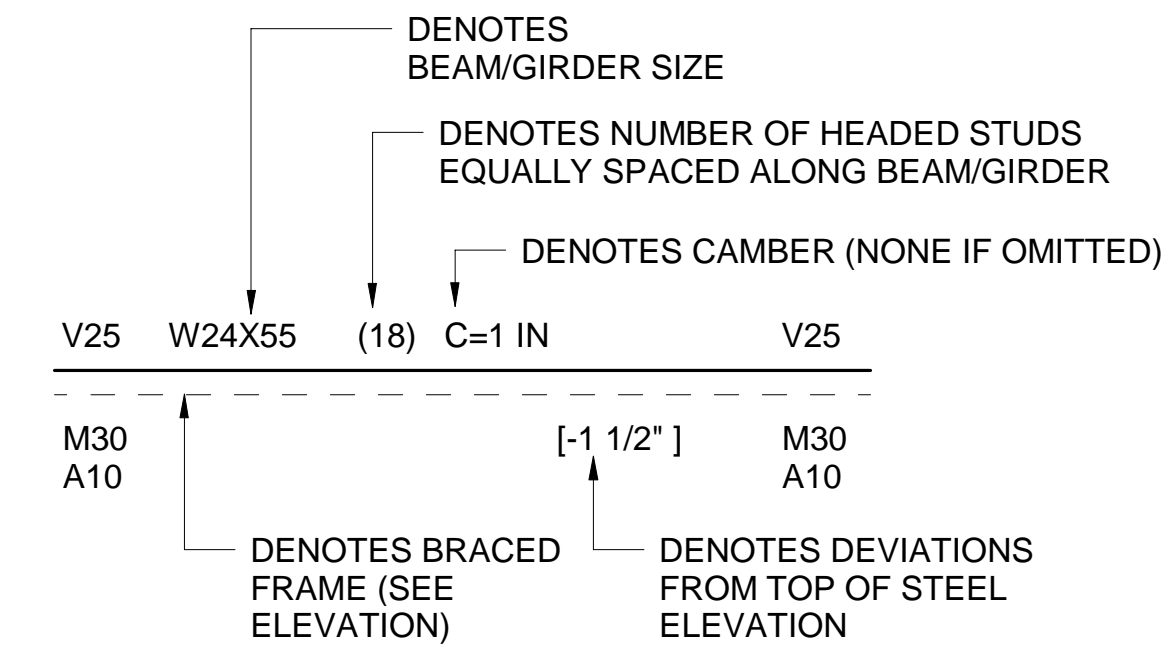
**SHEET KEYNOTES**

1. EDGE OF COMPOSITE METAL DECK.
2. COPE BOTTOM FLANGE OF W12 AND CONNECT TO WEB OF W18.
3. EXTEND W12 4" PASS THE CENTERLINE OF W14 AND PROVIDE 4-3/4" BOLT AT THE BOTTOM FLANGE OF W12 TO TOP FLANGE W14 WITH 4" GAGE.

**SHEET LEGEND**

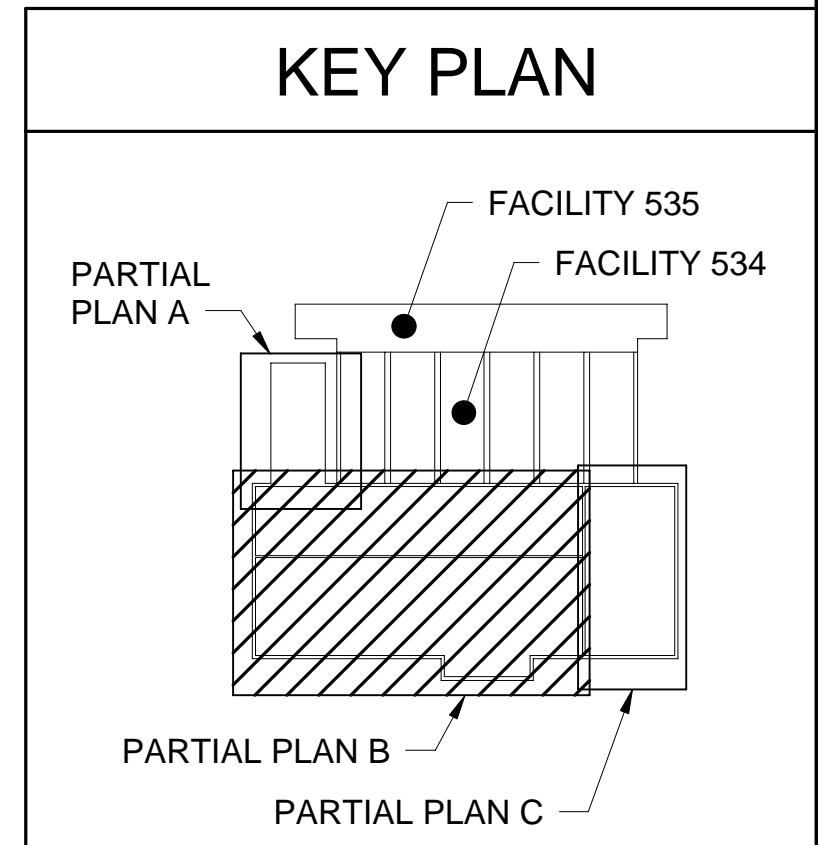
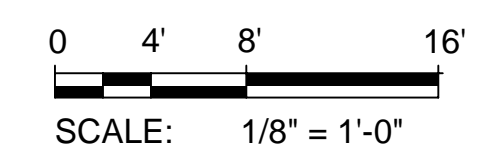
SPAN INDICATES THE SPAN DIRECTION OF METAL DECK.

**STEEL BEAM LEGEND**



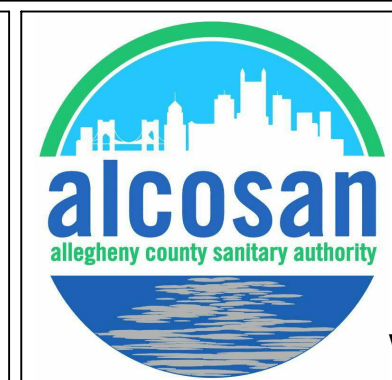
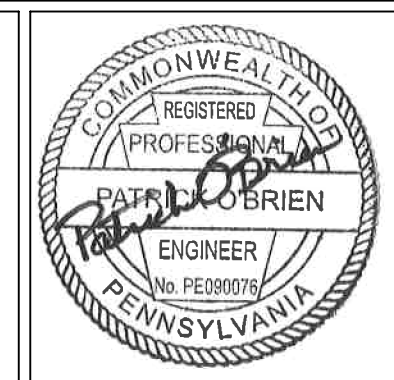
V INDICATES VERTICAL SHEAR IN KIPS (SEE SCHEDULE IF OMITTED)  
M INDICATES STRONG AXIS MOMENT IN KIP-Feet  
A INDICATES AXIAL (TENSION AND COMPRESSION FORCE) IN KIPS.

**EAST HEADWORKS - SECOND FLOOR PARTIAL PLAN - B**  
SCALE: 1/8" = 1'-0" 530-S-17



Designed by: KEC  
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REV No.	DATE	DESCRIPTION	APPV
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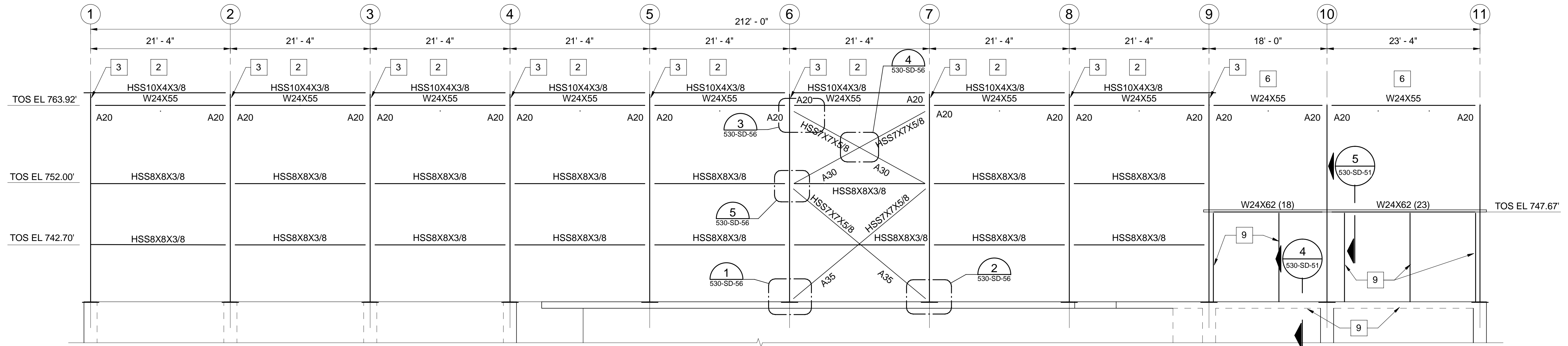
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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

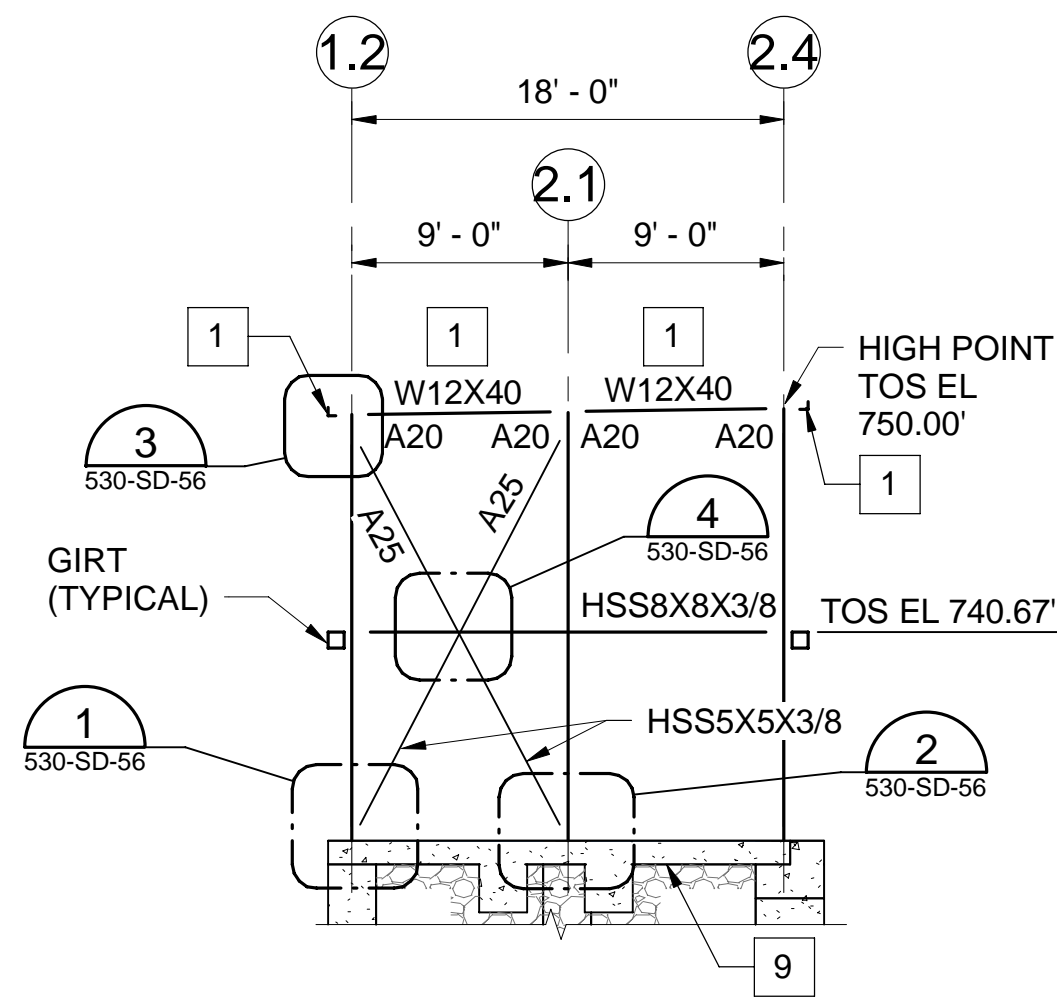
**530-S-18  
EAST HEADWORKS  
SECOND FLOOR FRAMING PARTIAL PLAN - B**

Contract: 1729  
CAD File Name: 530-S-18.DGN  
Date: OCTOBER 2020  
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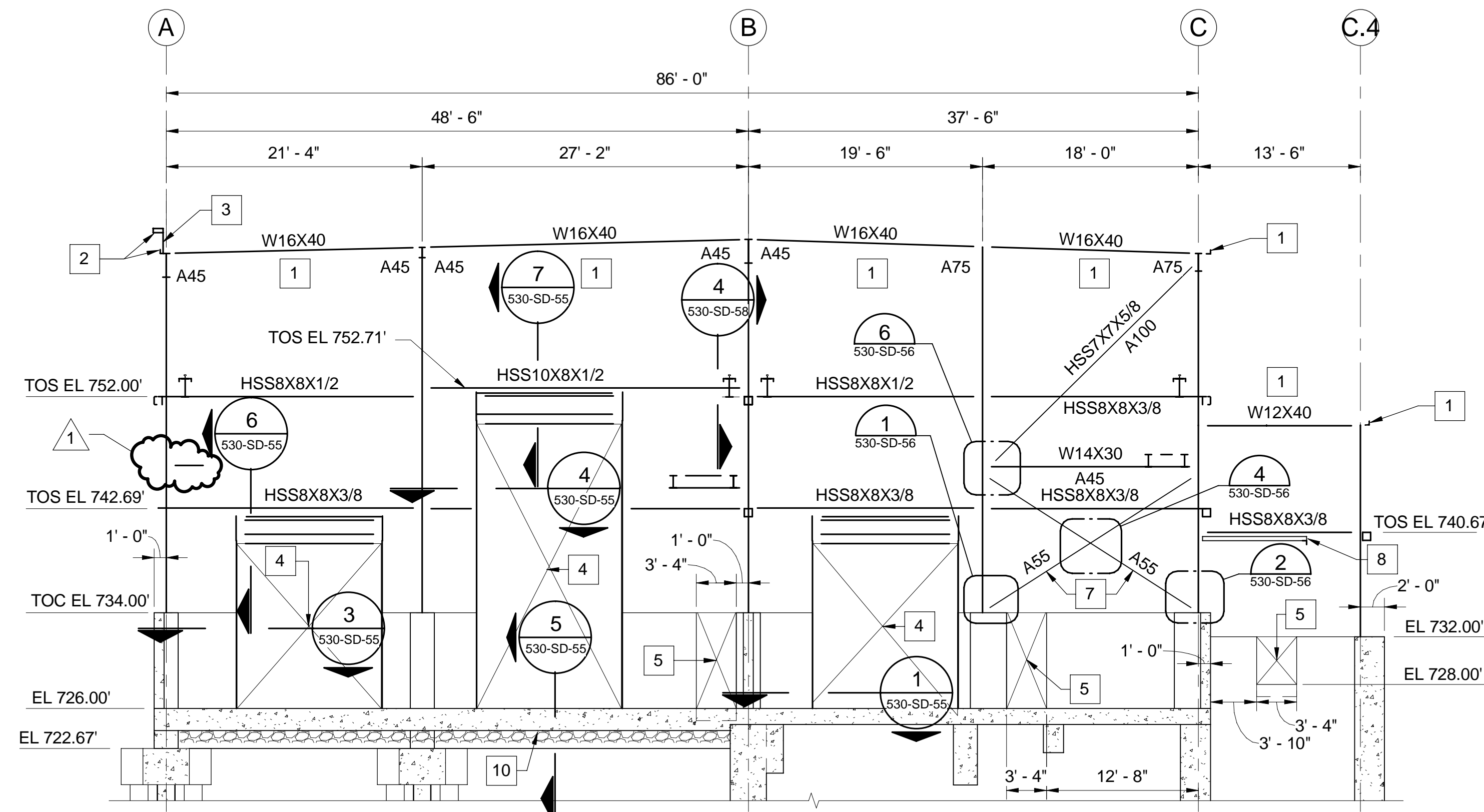
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FRAMING ELEVATION - GRID A 1  
SCALE: 1/8" = 1'-0"



FRAMING ELEVATION - GRID E 2  
SCALE: 1/8" = 1'-0"



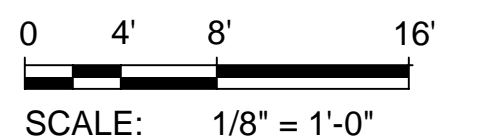
FRAMING ELEVATION - GRID 1 3  
SCALE: 1/8" = 1'-0"

**GENERAL SHEET NOTES**

1. REFER TO SHEET 530-S-22 FOR STEEL BEAM LEGEND.
2. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF CONCRETE MASONRY WALLS NOT SHOWN. FOR CONCRETE MASONRY WALLS NOT SPECIFICALLY DETAILED, REFER TO TYPICAL STRUCTURAL DETAILS.

**SHEET KEYNOTES**

1. PROVIDE CONTINUOUS L4X4X5/16 EDGE ANGLE AND L4X4X5/16 OUTRIGGERS TO SUPPORT THE CONTINUOUS L4 EDGE ANGLE.
2. PROVIDE L4X4X5/16 EDGE ANGLE AT ROOF DECK LEVEL. ADDITIONALLY, PROVIDE HSS 10X4X3/8 GIRT AND CONTINUOUS PLATE 1/4"X6" TO SUPPORT THE CHANNEL GLASS AT PARAPET.
3. PROVIDE HSS6X6X3/8 POST TO SUPPORT THE HSS10 GIRTS.
4. OPENING FOR COILING DOOR.
5. OPENING FOR MAN DOOR.
6. PROVIDE L4X4X5/16 EDGE ANGLE WITH SPANDREL BEAM.
7. HSS7X7X5/8
8. 4" THICK CONCRETE COMPOSITE METAL DECK.
9. HSS 6X4X3/8. SEE CONNECTION DETAILS ON 530-S-51.
10. PROVIDE VAPOR RETARDER UNDER THE FLOOR SLAB.



Designed by:	KEC			
Drawn by:	SLJ			
Checked by:	WC			
	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
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	1	04/02/21	ADDENDUM NO. 11	

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EXECUTIVE DIRECTOR, ALCOSAN

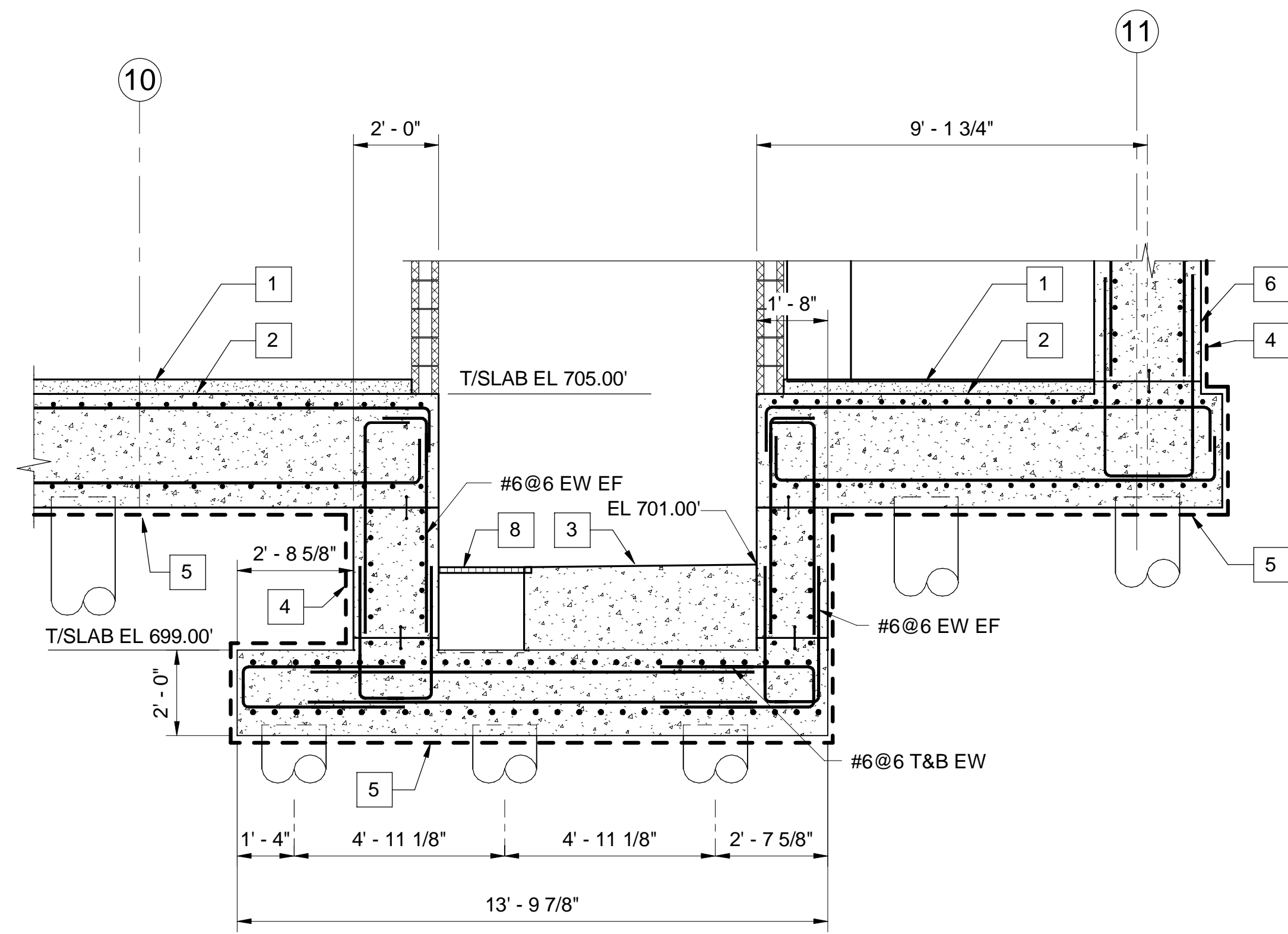
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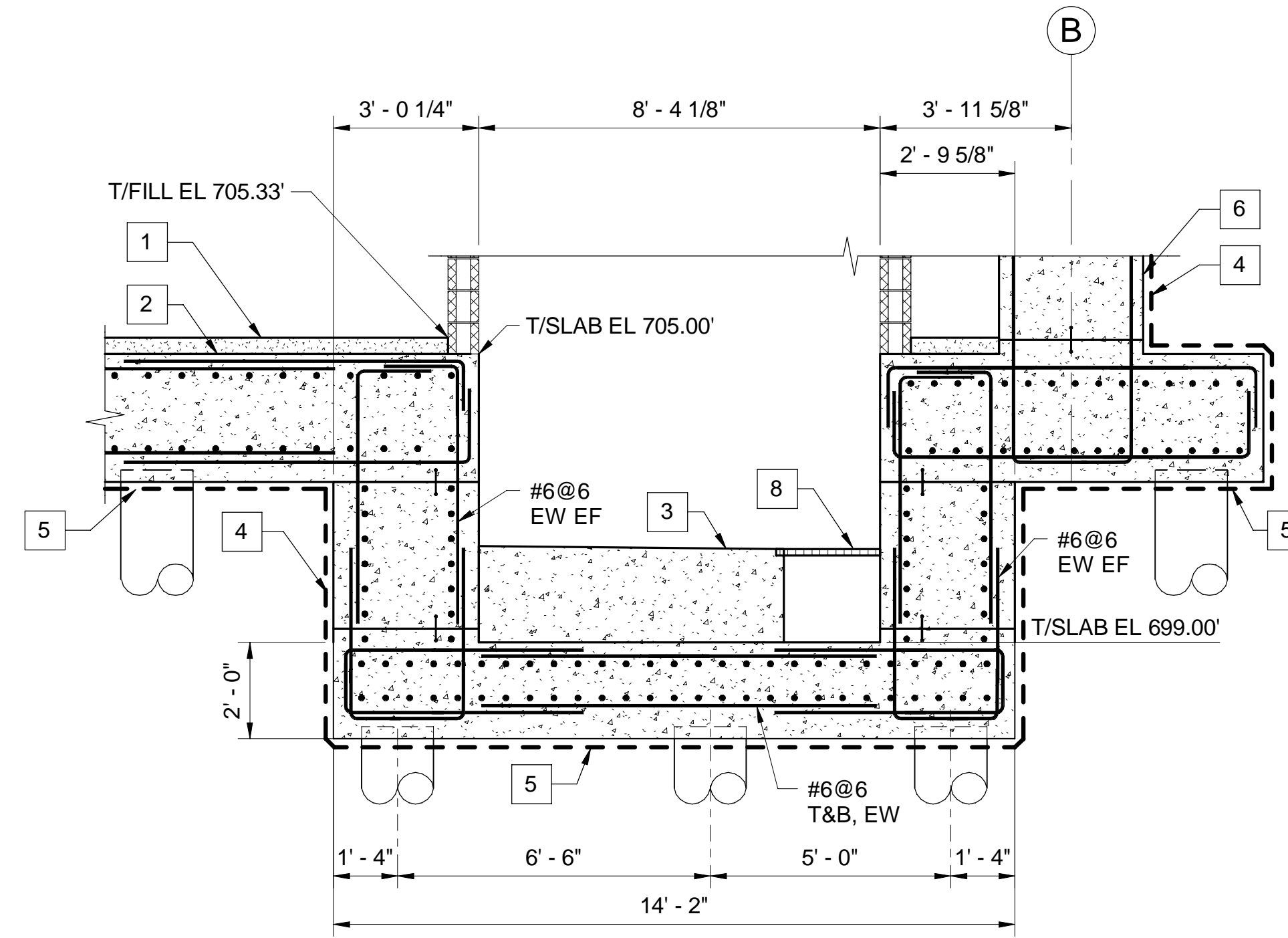
ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

**530-S-36  
EAST HEADWORKS  
FRAMING ELEVATIONS**

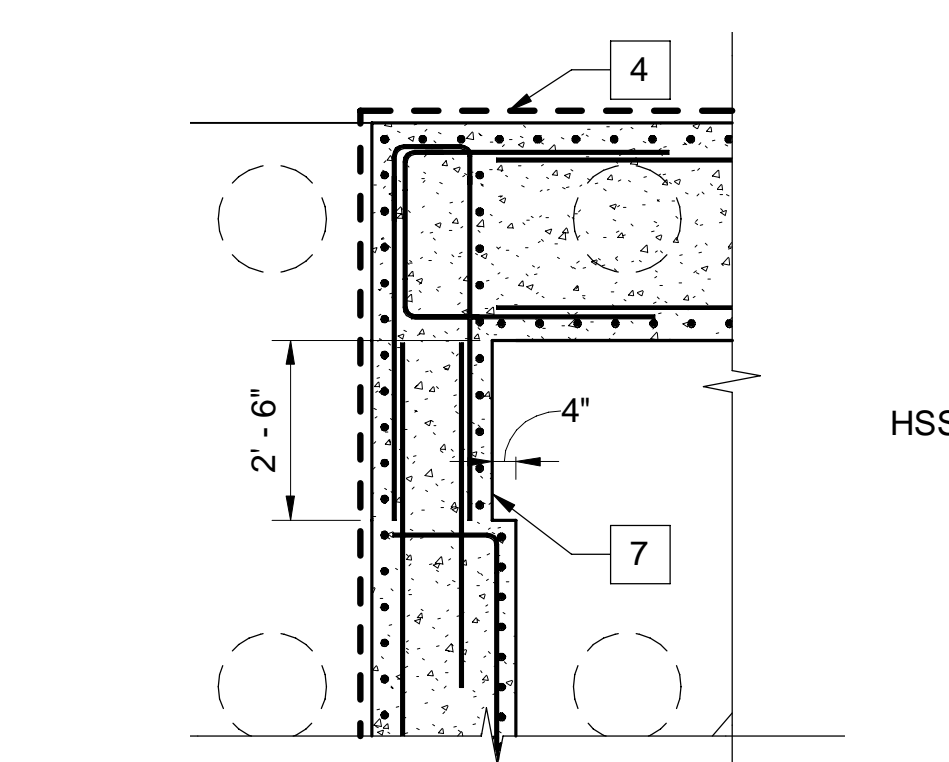
Contract:	1729
CAD File Name:	530-S-36.DGN
Date:	OCTOBER 2020
Sheet:	236 of 645



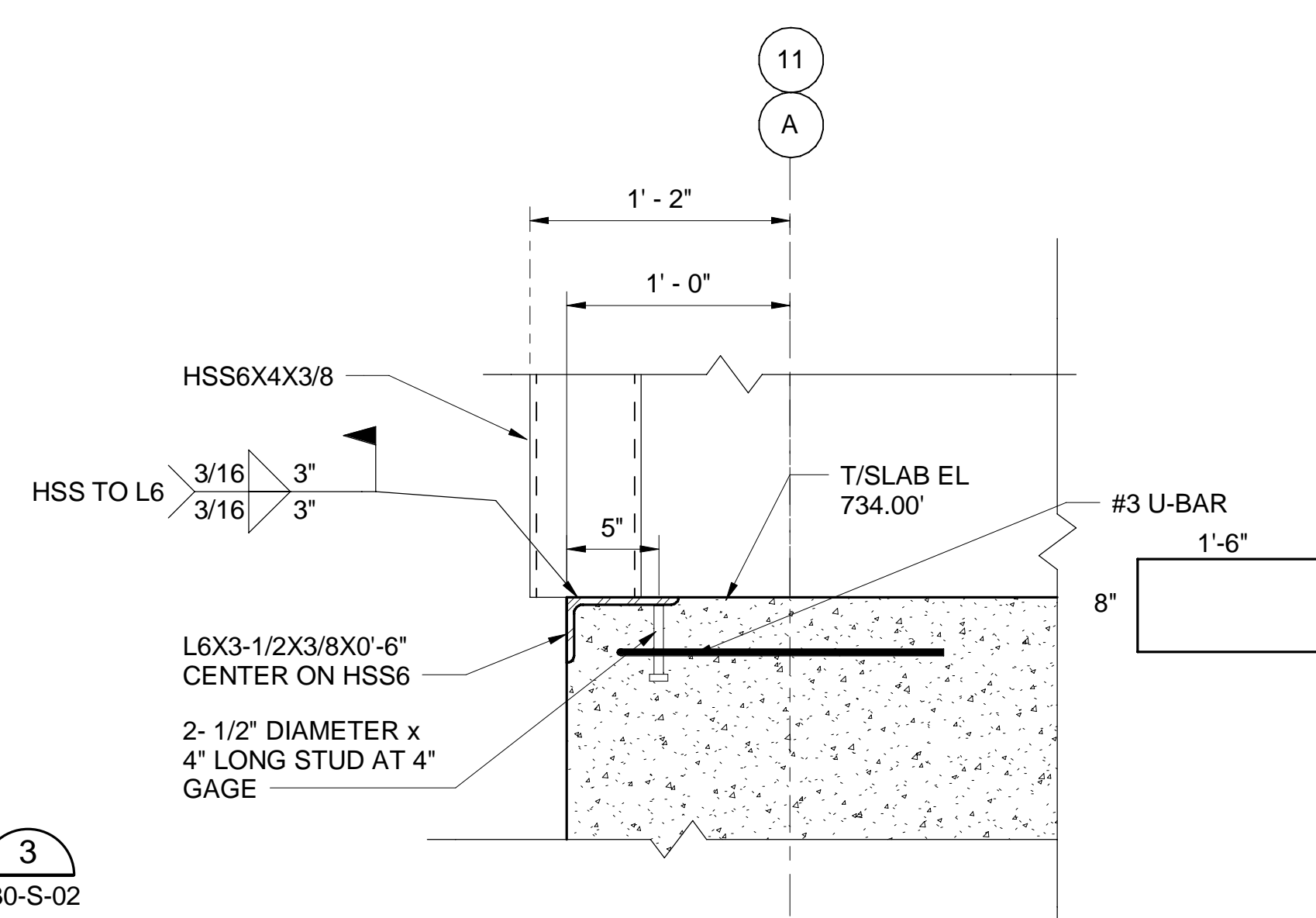
SECTION 1  
SCALE: 3/8" = 1'-0" 530-S-08



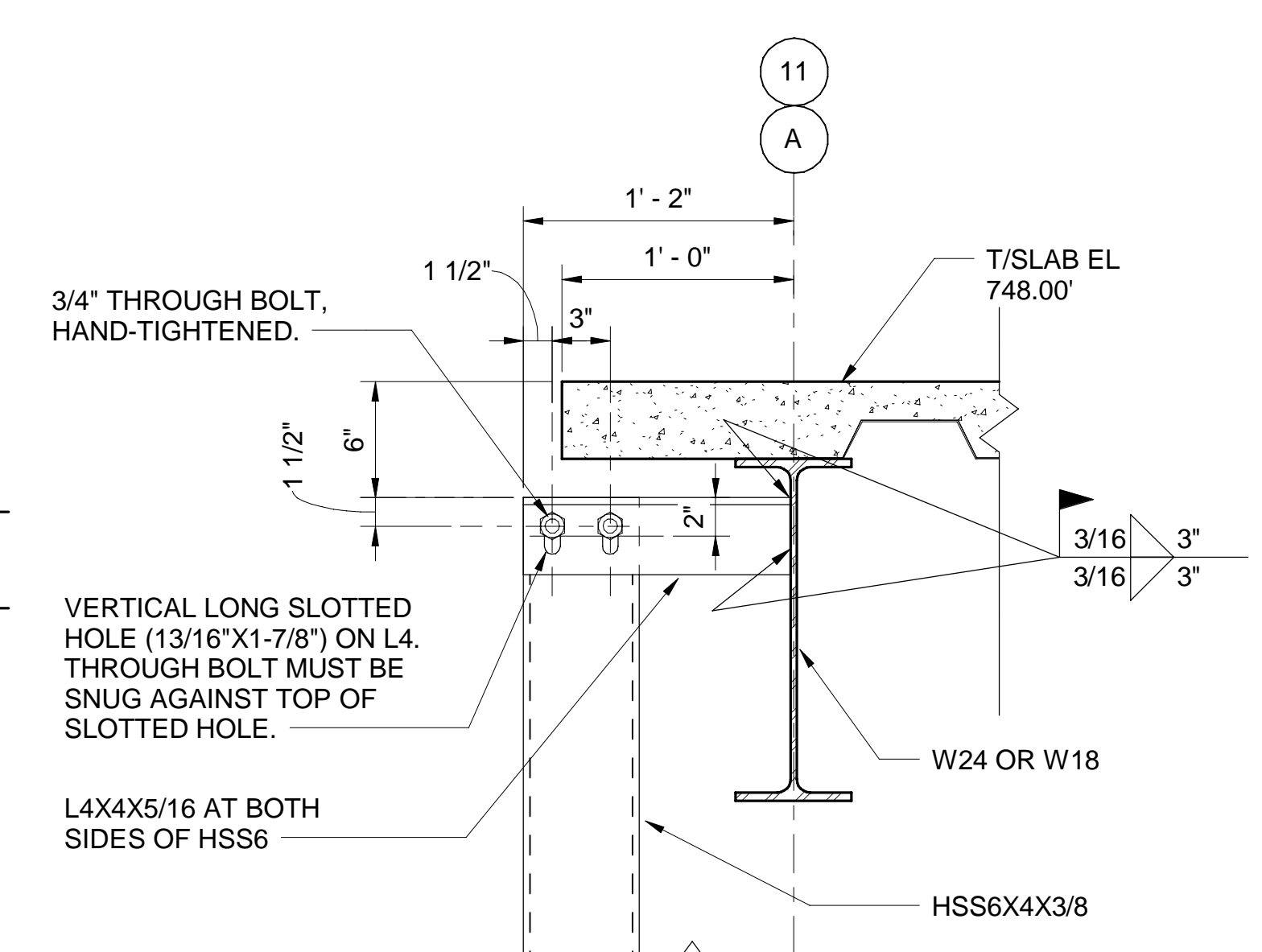
SECTION 2  
SCALE: 3/8" = 1'-0" 530-S-08



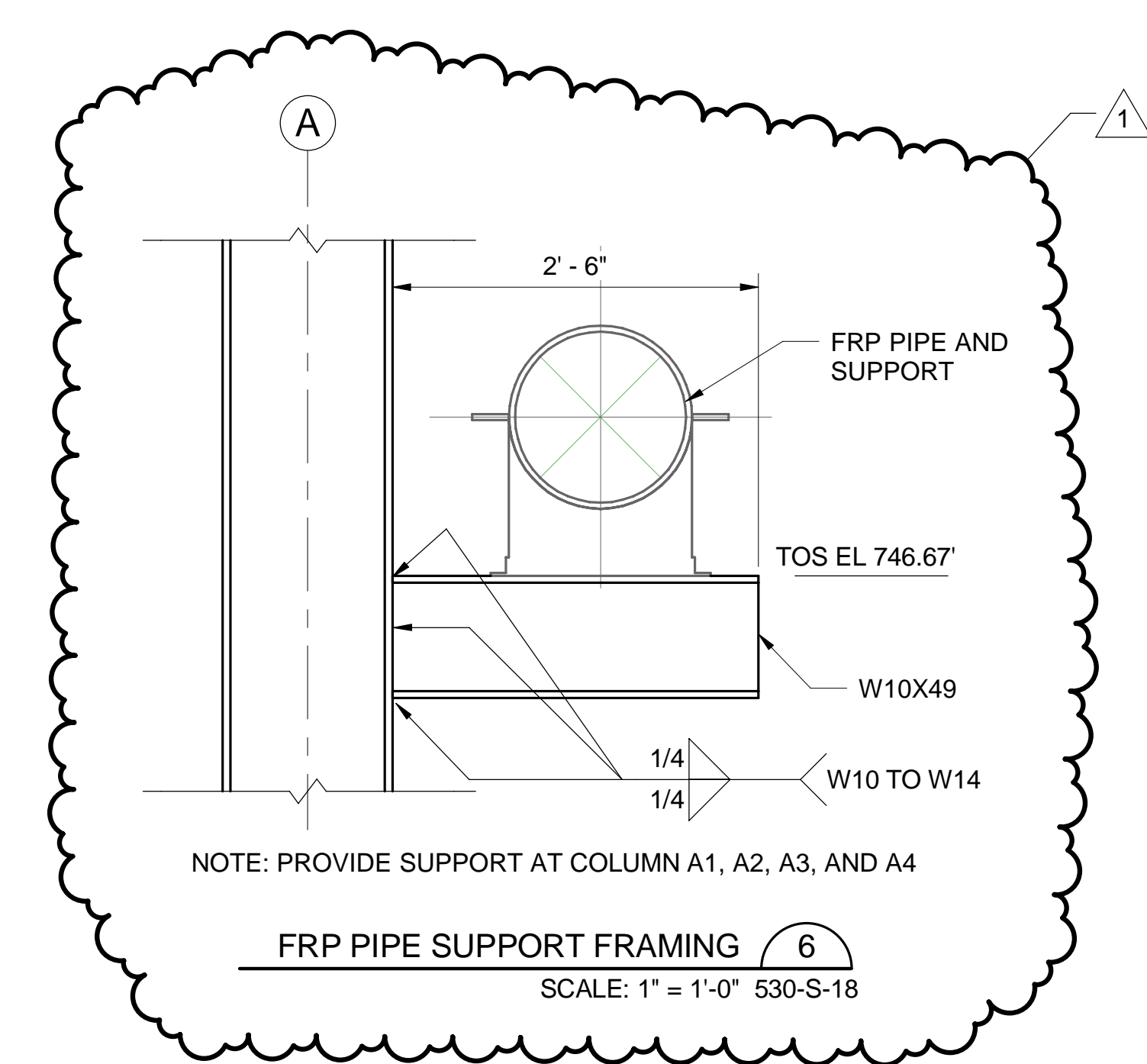
ELEVATOR PIT ENLARGED PLAN  
SCALE: 3/8" = 1'-0" 530-S-02



SECTION 4  
SCALE: 1 1/2" = 1'-0" 530-S-36



SECTION 5  
SCALE: 1 1/2" = 1'-0" 530-S-36



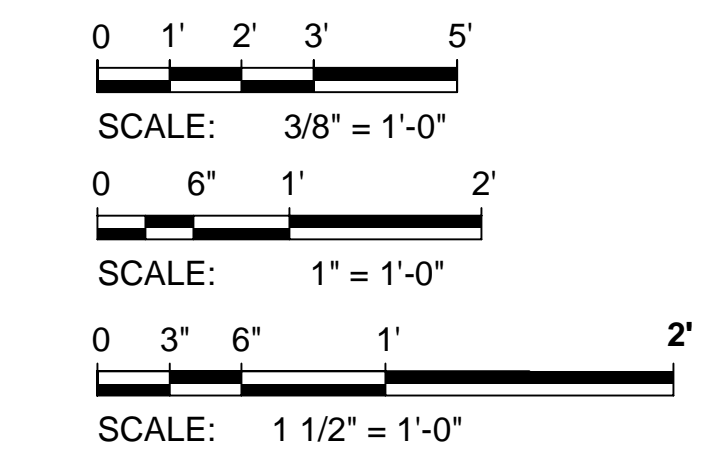
FRP PIPE SUPPORT FRAMING 6  
SCALE: 1" = 1'-0" 530-S-18

**GENERAL SHEET NOTES**

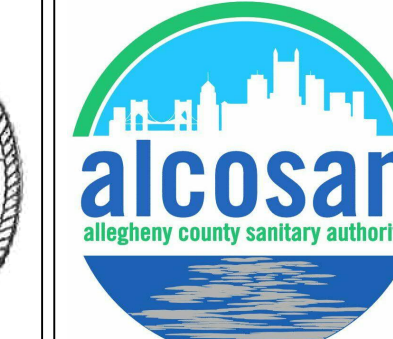
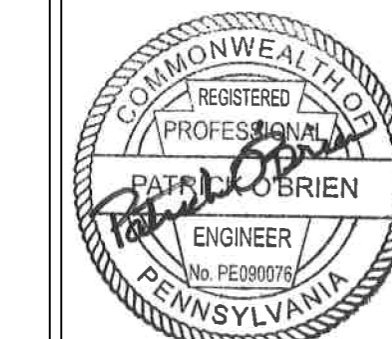
- REBAR ARRANGEMENT SHOWN PARTIALLY. REFER TO SCHEDULES AND TYPICAL DETAILS

**SHEET KEYNOTES**

- CONCRETE TOPPING. SEE PLAN FOR ELEVATION.
- SCHEDULE SLAB.
- CONCRETE FILL. SLOPE TO 2'-0"X2'-0" SUMP PIT.
- PROVIDE SELF-ADHERED WATERPROOFING MEMBRANE AND PROTECTION BOARD ON EXTERIOR SURFACES.
- PROVIDE BLIND-SIDE WATERPROOFING MEMBRANE AND CONCRETE MUD MAT AT THE UNDERSIDE OF BASE SLAB.
- SCHEDULE WALL.
- ELEVATOR PIT LADDER POCKET.
- 1-1/2" THICK, 1-1/2" SQUARE MESH FRP GRATING WITH TYPE B AND TYPE C GALVANIZED GRATING ANGLES. GRATING EDGE ANGLES NOT SHOWN FOR CLARITY.



Designed by: KEC	REVISION				Contract: 1729
	REV No.	DATE	DESCRIPTION	APPV	
Drawn by: SLJ	0	10/28/20	ISSUED FOR BIDS		CAD File Name: 530-SD-51.DGN
	1	04/02/21	ADDENDUM NO. 11		
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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS  
  
**530-SD-51  
EAST HEADWORKS  
SECTIONS AND DETAILS**

4/2/2021 7:36:32 AM




VALVE SCHEDULE					
TAG	ROOM	SERVICE	VALVE TYPE	SIZE	OPERATOR TYPE
BFV013-420	420 ODOR CONTROL CHEMICAL BUILDING	SRC DISCHARGE PUMP 3A	BUTTERFLY VALVE	8	HANDWHEEL
BFV014-420	420 ODOR CONTROL CHEMICAL BUILDING	SRC DISCHARGE PUMP 3A	BUTTERFLY VALVE	8	HANDWHEEL
BFV015-420	420 ODOR CONTROL CHEMICAL BUILDING	SRC SUCTION PUMP 3A	BUTTERFLY VALVE	10	HANDWHEEL
BFV016-420	420 ODOR CONTROL CHEMICAL BUILDING	SRC DISCHARGE PUMP 3B	BUTTERFLY VALVE	8	HANDWHEEL
BFV017-420	420 ODOR CONTROL CHEMICAL BUILDING	SRC DISCHARGE PUMP 3B	BUTTERFLY VALVE	8	HANDWHEEL
BFV018-420	420 ODOR CONTROL CHEMICAL BUILDING	SRC SUCTION PUMP 3B	BUTTERFLY VALVE	10	HANDWHEEL
BLV005-420	420 ODOR CONTROL CHEMICAL BUILDING	SCRUBBER DRAIN	BALL VALVE	4	HANDWHEEL
BLV006-420	420 ODOR CONTROL CHEMICAL BUILDING	SCRUBBER DRAIN	BALL VALVE	4	HANDWHEEL
CSV005-420	420 ODOR CONTROL CHEMICAL BUILDING	SRC DISCHARGE PUMP 3A	CHECK VALVE	8	CHECK
CSV006-420	420 ODOR CONTROL CHEMICAL BUILDING	SRC DISCHARGE PUMP 3B	CHECK VALVE	8	CHECK
BFV019-420	420 ODOR CONTROL PIPE BRIDGE	SCRUBBER DRAIN	BUTTERFLY VALVE	14	EXTENTION BONNET W/ CHAINWHEEL
BFV020-420	420 ODOR CONTROL PIPE BRIDGE	SCRUBBER DRAIN	BUTTERFLY VALVE	14	EXTENTION BONNET W/ CHAINWHEEL
BFV101-500	500 MPS FIRST FLOOR	PUMP 1 SIPHON AIR PIPE	BUTTERFLY VALVE	8	MO
BFV201-500	500 MPS FIRST FLOOR	PUMP 2 SIPHON AIR PIPE	BUTTERFLY VALVE	8	MO
BFV501-500	500 MPS FIRST FLOOR	PUMP 5 SIPHON AIR PIPE	BUTTERFLY VALVE	8	MO
BFV601-500	500 MPS FIRST FLOOR	PUMP 6 SIPHON AIR PIPE	BUTTERFLY VALVE	8	MO
CSV001-510	500 MPS FIRST FLOOR	SAMPLING DISCHARGE	CHECK VALVE	3	CHECK
KGV501-500	500 MPS FIRST FLOOR	PRIMARY DISCHARGE 5	COMPACT BONNET KNIFE GATE VALVE	42	MO
KGV502-500	500 MPS FIRST FLOOR	ALTERNATE DISCHARGE 5	BONNET KNIFE GATE VALVE	42	MO
KGV601-500	500 MPS FIRST FLOOR	PRIMARY DISCHARGE 6	COMPACT BONNET KNIFE GATE VALVE	42	MO
KGV602-500	500 MPS FIRST FLOOR	ALTERNATE DISCHARGE 6	BONNET KNIFE GATE VALVE	42	MO
BLV101-510	510 BASEMENT	SAMPLING SUCTION	BALL VALVE	2	HANDWHEEL
BLV102-510	510 BASEMENT	SAMPLING DISCHARGE	BALL VALVE	3	HANDWHEEL
BLV201-510	510 BASEMENT	SAMPLING SUCTION	BALL VALVE	2	HANDWHEEL
BLV202-510	510 BASEMENT	SAMPLING DISCHARGE	BALL VALVE	3	HANDWHEEL
CSV002-510	510 BASEMENT	SAMPLING DISCHARGE	CHECK VALVE	3	CHECK
KGV001-510	510 BASEMENT	SAMPLING SUCTION	KNIFE GATE VALVE	4	HANDWHEEL
KGV002-510	510 BASEMENT	SAMPLING SUCTION	KNIFE GATE VALVE	4	HANDWHEEL
KGV003-510	510 BASEMENT	SAMPLING SUCTION	KNIFE GATE VALVE	4	HANDWHEEL
KGV004-510	510 BASEMENT	SAMPLING SUCTION	KNIFE GATE VALVE	4	HANDWHEEL
KGV005-510	510 BASEMENT	SAMPLING SUCTION	KNIFE GATE VALVE	4	HANDWHEEL
BLV001-520	520 PIPE GALLERY SUMP	SUMP DISCHARGE	BALL VALVE	3	HANDWHEEL
CSV001-520	520 PIPE GALLERY SUMP	SUMP DISCHARGE	CHECK VALVE	3	CHECK
BFV001-530	530 EH BASEMENT	EFFLUENT WATER TIE IN PRW	BUTTERFLY VALVE	6	HANDWHEEL
BFV101-530	530 EH BASEMENT	GRIT TANK SUMP 1	BUTTERFLY VALVE	4	MOTOR OPERATED
BFV102-530	530 EH BASEMENT	GRIT TANK EFF WATER 1	BUTTERFLY VALVE	4	CHAINWHEEL
BFV201-530	530 EH BASEMENT	GRIT TANK SUMP 2	BUTTERFLY VALVE	4	MOTOR OPERATED
BFV202-530	530 EH BASEMENT	GRIT TANK EFF WATER 2	BUTTERFLY VALVE	4	CHAINWHEEL
BFV301-530	530 EH BASEMENT	GRIT TANK SUMP 3	BUTTERFLY VALVE	4	MOTOR OPERATED
BFV302-530	530 EH BASEMENT	GRIT TANK EFF WATER 3	BUTTERFLY VALVE	4	CHAINWHEEL
BFV401-530	530 EH BASEMENT	GRIT TANK SUMP 4	BUTTERFLY VALVE	4	MOTOR OPERATED
BFV402-530	530 EH BASEMENT	GRIT TANK EFF WATER 4	BUTTERFLY VALVE	4	CHAINWHEEL
BFV501-530	530 EH BASEMENT	GRIT TANK SUMP 5	BUTTERFLY VALVE	4	MOTOR OPERATED
BFV502-530	530 EH BASEMENT	GRIT TANK EFF WATER 5	BUTTERFLY VALVE	4	CHAINWHEEL
BFV601-530	530 EH BASEMENT	GRIT TANK SUMP 6	BUTTERFLY VALVE	4	MOTOR OPERATED
BFV602-530	530 EH BASEMENT	GRIT TANK EFF WATER 6	BUTTERFLY VALVE	4	CHAINWHEEL
BLV001-530	530 EH BASEMENT	SUMP PUMP NO. 10 DISCHARGE HEADER	BALL VALVE	3	HANDWHEEL
BLV002-530	530 EH BASEMENT	SUMP PUMP NO. 11 DISCHARGE HEADER	BALL VALVE	3	HANDWHEEL
BLV003-530	530 EH BASEMENT	SUMP PUMP NO. 12 DISCHARGE HEADER	BALL VALVE	3	HANDWHEEL

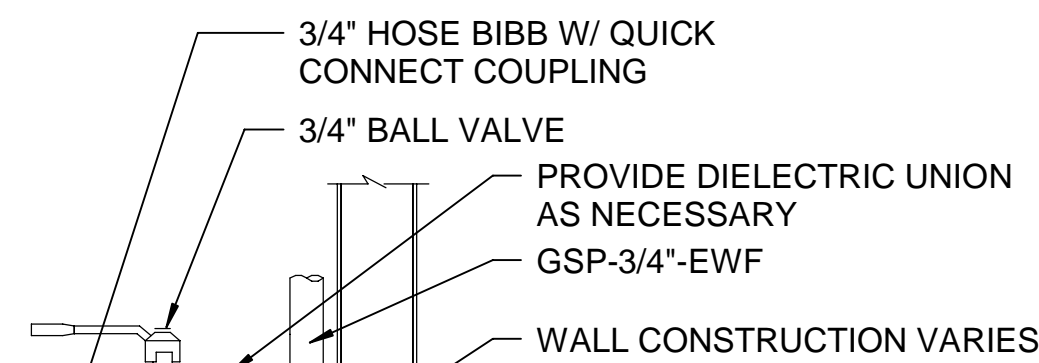
VALVE SCHEDULE					
TAG	ROOM	SERVICE	VALVE TYPE	SIZE	OPERATOR TYPE
BLV004-530	530 EH BASEMENT	SUMP PUMP NO. 13 DISCHARGE HEADER	BALL VALVE	3	HANDWHEEL
BLV005-530	530 EH BASEMENT	SUMP PUMP NO. 14 DISCHARGE HEADER	BALL VALVE	3	HANDWHEEL
BLV006-530	530 EH BASEMENT	AIR RELEASE DISCHARGE	BALL VALVE	2	HANDWHEEL
BLV012A-530	530 EH BASEMENT	SUMP PUMP NO. 12A DISCHARGE	BALL VALVE	3	HANDWHEEL
BLV012B-530	530 EH BASEMENT	SUMP PUMP NO. 12B DISCHARGE	BALL VALVE	3	HANDWHEEL
BLV013A-530	530 EH BASEMENT	SUMP PUMP NO. 13A DISCHARGE	BALL VALVE	3	HANDWHEEL
BLV013B-530	530 EH BASEMENT	SUMP PUMP NO. 13B DISCHARGE	BALL VALVE	3	HANDWHEEL
CSV012A-530	530 EH BASEMENT	SUMP PUMP NO. 12A DISCHARGE	CHECK VALVE	3	CHECK
CSV012B-530	530 EH BASEMENT	SUMP PUMP NO. 12B DISCHARGE	CHECK VALVE	3	CHECK
CSV013A-530	530 EH BASEMENT	SUMP PUMP NO. 13A DISCHARGE	CHECK VALVE	3	CHECK
CSV013B-530	530 EH BASEMENT	SUMP PUMP NO. 13B DISCHARGE	CHECK VALVE	3	CHECK
CSV101-530	530 EH BASEMENT	GRIT PUMP 1 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV102-530	530 EH BASEMENT	GRIT PUMP 2 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV201-530	530 EH BASEMENT	GRIT PUMP 3 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV202-530	530 EH BASEMENT	GRIT PUMP 4 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV301-530	530 EH BASEMENT	GRIT PUMP 5 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV302-530	530 EH BASEMENT	GRIT PUMP 6 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV401-530	530 EH BASEMENT	GRIT PUMP 7 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV402-530	530 EH BASEMENT	GRIT PUMP 8 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV501-530	530 EH BASEMENT	GRIT PUMP 9 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV502-530	530 EH BASEMENT	GRIT PUMP 10 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV601-530	530 EH BASEMENT	GRIT PUMP 11 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
CSV602-530	530 EH BASEMENT	GRIT PUMP 12 DISCHARGE	CHECK VALVE	6	LEVER & WEIGHT
GTV001-530	530 EH BASEMENT	STEAM	GATE VALVE	6	HANDWHEEL
GTV002-530	530 EH BASEMENT	STEAM	GATE VALVE	6	HANDWHEEL
GTV003-530	530 EH BASEMENT	STEAM INTERCONNECT	GATE VALVE	8	HANDWHEEL
GTV004-530	530 EH BASEMENT	EFFLUENT WATER HEADER	GATE VALVE	12	CHAINWHEEL
GTV005-530	530 EH BASEMENT	EFFLUENT WATER HEADER	GATE VALVE	12	CHAINWHEEL
KGV001-530	530 EH BASEMENT	EFFLUENT WATER HEADER	KNIFE GATE VALVE	8	CHAINWHEEL
KGV101-530	530 EH BASEMENT	GRIT PUMP 1 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV102-530	530 EH BASEMENT	GRIT PUMP 4 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV103-530	530 EH BASEMENT	GRIT PUMP 2 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV104-530	530 EH BASEMENT	GRIT PUMP 2 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV108-530	530 EH BASEMENT	BAR SCREEN CHANNEL DRAIN 1	KNIFE GATE VALVE	8	CHAINWHEEL
KGV201-530	530 EH BASEMENT	GRIT PUMP 3 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV202-530	530 EH BASEMENT	GRIT PUMP 3 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV203-530	530 EH BASEMENT	GRIT PUMP 4 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV204-530	530 EH BASEMENT	GRIT PUMP 4 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV208-530	530 EH BASEMENT	BAR SCREEN CHANNEL DRAIN 2	KNIFE GATE VALVE	8	CHAINWHEEL
KGV301-530	530 EH BASEMENT	GRIT PUMP 5 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV302-530	530 EH BASEMENT	GRIT PUMP 5 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV303-530	530 EH BASEMENT	GRIT PUMP 6 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV304-530	530 EH BASEMENT	GRIT PUMP 6 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV308-530	530 EH BASEMENT	BAR SCREEN CHANNEL DRAIN 3	KNIFE GATE VALVE	8	CHAINWHEEL
KGV401-530	530 EH BASEMENT	GRIT PUMP 7 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV402-530	530 EH BASEMENT	GRIT PUMP 7 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV403-530	530 EH BASEMENT	GRIT PUMP 8 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV404-530	530 EH BASEMENT	GRIT PUMP 8 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV408-530	530 EH BASEMENT	BAR SCREEN CHANNEL DRAIN 4	KNIFE GATE VALVE	8	CHAINWHEEL
KGV501-530	530 EH BASEMENT	GRIT PUMP 9 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV502-530	530 EH BASEMENT	GRIT PUMP 9 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV503-530	530 EH BASEMENT	GRIT PUMP 10 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV504-530	530 EH BASEMENT	GRIT PUMP 10 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV508-530	530 EH BASEMENT	BAR SCREEN CHANNEL DRAIN 5	KNIFE GATE VALVE	8	CHAINWHEEL
KGV601-530	530 EH BASEMENT	GRIT PUMP 11 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL

VALVE SCHEDULE					
TAG	ROOM	SERVICE	VALVE TYPE	SIZE	OPERATOR TYPE
KGV602-530	530 EH BASEMENT	GRIT PUMP 11 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV603-530	530 EH BASEMENT	GRIT PUMP 12 SUCTION	KNIFE GATE VALVE	6	HANDWHEEL
KGV604-530	530 EH BASEMENT	GRIT PUMP 12 DISCHARGE	KNIFE GATE VALVE	6	CHAINWHEEL
KGV608-530	530 EH BASEMENT	BAR SCREEN CHANNEL DRAIN 6	KNIFE GATE VALVE	8	CHAINWHEEL
BLV014-530	530 EH BASEMENT TUNNEL	SUMP PUMP NO. 14 DISCHARGE	BALL VALVE	3	HANDWHEEL
CSV014-530	530 EH BASEMENT TUNNEL	SUMP PUMP NO. 14 DISCHARGE	CHECK VALVE	3	CHECK
KGV105-530	530 EH FIRST FLOOR	GRIT CLASSIFIER DRAIN 1	KNIFE GATE VALVE	4	HANDWHEEL
KGV106-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 1	KNIFE GATE VALVE	6	HANDWHEEL
KGV107-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 1	KNIFE GATE VALVE	12	HANDWHEEL
KGV109-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 1A	KNIFE GATE VALVE	6	CHAINWHEEL
KGV110-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 1B	KNIFE GATE VALVE	6	CHAINWHEEL
KGV205-530	530 EH FIRST FLOOR	GRIT CLASSIFIER DRAIN 2	KNIFE GATE VALVE	4	HANDWHEEL
KGV206-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 2	KNIFE GATE VALVE	6	HANDWHEEL
KGV207-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 2	KNIFE GATE VALVE	12	HANDWHEEL
KGV209-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 2A	KNIFE GATE VALVE	6	CHAINWHEEL
KGV210-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 2B	KNIFE GATE VALVE	6	CHAINWHEEL
KGV305-530	530 EH FIRST FLOOR	GRIT CLASSIFIER DRAIN 3	KNIFE GATE VALVE	4	HANDWHEEL
KGV306-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 3	KNIFE GATE VALVE	6	HANDWHEEL
KGV307-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 3	KNIFE GATE VALVE	12	HANDWHEEL
KGV309-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 3A	KNIFE GATE VALVE	6	CHAINWHEEL
KGV310-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 3B	KNIFE GATE VALVE	6	CHAINWHEEL
KGV405-530	530 EH FIRST FLOOR	GRIT CLASSIFIER DRAIN 4	KNIFE GATE VALVE	4	HANDWHEEL
KGV406-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 4	KNIFE GATE VALVE	6	HANDWHEEL
KGV407-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 4	KNIFE GATE VALVE	12	HANDWHEEL
KGV409-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 4A	KNIFE GATE VALVE	6	CHAINWHEEL
KGV410-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 4B	KNIFE GATE VALVE	6	CHAINWHEEL
KGV505-530	530 EH FIRST FLOOR	GRIT CLASSIFIER DRAIN 5	KNIFE GATE VALVE	4	HANDWHEEL
KGV506-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 5	KNIFE GATE VALVE	6	HANDWHEEL
KGV507-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 5	KNIFE GATE VALVE	12	HANDWHEEL
KGV509-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 5A	KNIFE GATE VALVE	6	CHAINWHEEL
KGV510-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 5B	KNIFE GATE VALVE	6	CHAINWHEEL
KGV605-530	530 EH FIRST FLOOR	GRIT CLASSIFIER DRAIN 6	KNIFE GATE VALVE	4	HANDWHEEL
KGV606-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 6	KNIFE GATE VALVE	12	HANDWHEEL
KGV607-530	530 EH FIRST FLOOR	GRIT CLASSIFIER OVERFLOW 6	KNIFE GATE VALVE	12	HANDWHEEL
KGV609-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 6A	KNIFE GATE VALVE	6	CHAINWHEEL
KGV610-530	530 EH FIRST FLOOR	GRIT CLASSIFIER CROSSOVER 6B	KNIFE GATE VALVE	6	CHAINWHEEL
BFV101-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 1	BUTTERFLY VALVE	6	HANDWHEEL
BFV102-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 1	BUTTERFLY VALVE	6	HANDWHEEL
BFV201-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 2	BUTTERFLY VALVE	6	HANDWHEEL
BFV202-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 2	BUTTERFLY VALVE	6	HANDWHEEL
BFV301-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 3	BUTTERFLY VALVE	6	HANDWHEEL
BFV302-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 3	BUTTERFLY VALVE	6	HANDWHEEL
BFV401-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 4	BUTTERFLY VALVE	6	HANDWHEEL
BFV402-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 4	BUTTERFLY VALVE	6	HANDWHEEL
BFV501-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 5	BUTTERFLY VALVE	6	HANDWHEEL
BFV502-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 5	BUTTERFLY VALVE	6	HANDWHEEL
BFV601-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 6	BUTTERFLY VALVE	6	HANDWHEEL
BFV602-534	534 GRIT TANK ROOF	GRIT TANK PROCESS AIR 6	BUTTERFLY VALVE	6	HANDWHEEL
BFV000-700	700 PST ROOF	PROCESS AIR HEADER	BUTTERFLY VALVE	16	HANDWHEEL
BFV001-700	700 PST ROOF	PROCESS AIR HEADER	BUTTERFLY VALVE	12	HANDWHEEL
BFV002-700	700 PST ROOF	PROCESS AIR HEADER	BUTTERFLY VALVE	12	HANDWHEEL

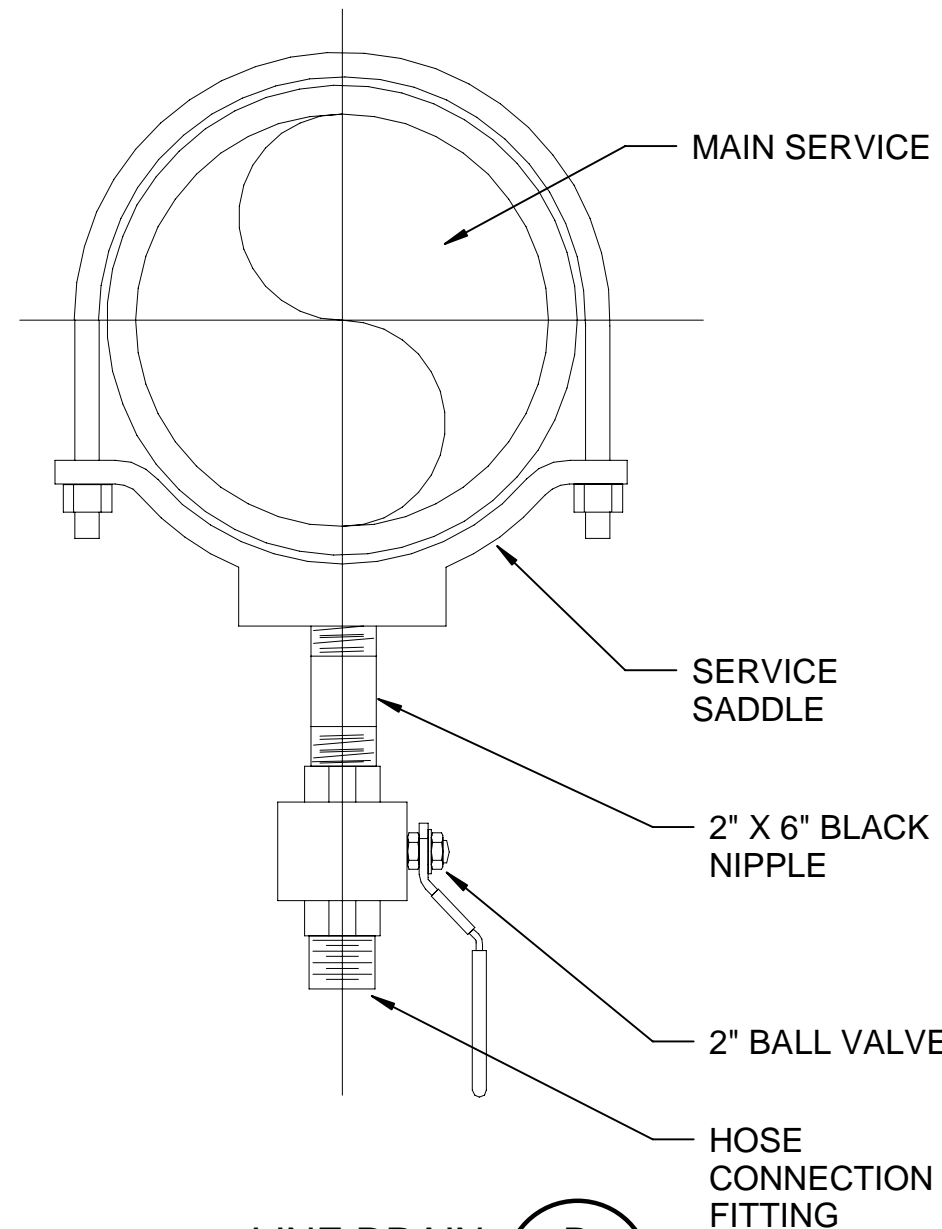
GENERAL SHEET NOTES

1. VALVE SCHEDULE INDICATES VALVE SIZE 3-INCH AND LARGER WITH SPECIFIC TAG NUMBER. CONTRACTOR SHALL COORDINATE QUANTITIES OF ALL VALVES REGARDLESS OF THE VALVE SIZE.

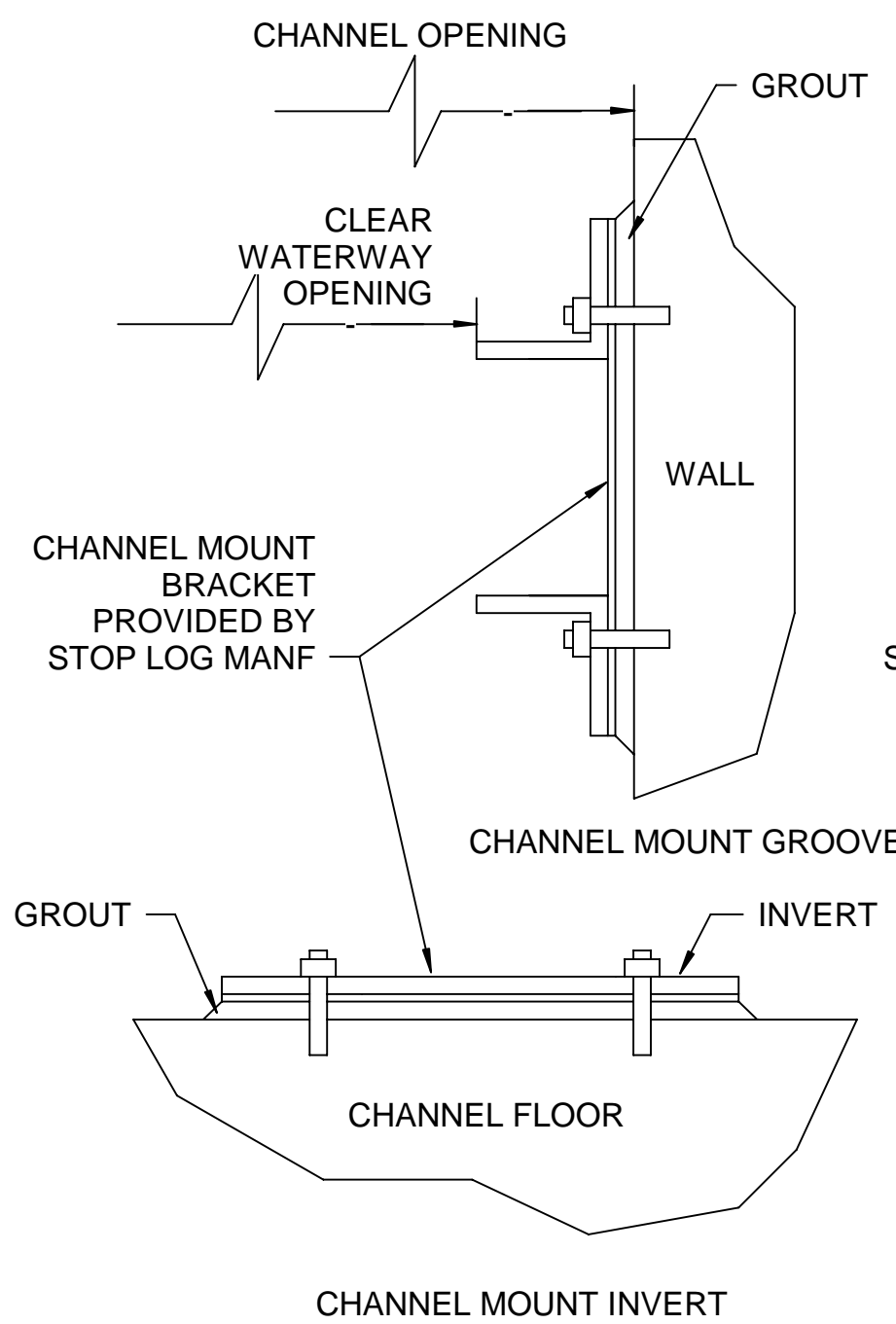
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	REV No.	DATE	DESCRIPTION								CAD File Name: MS-02.DGN
Drawn by: MH	0	10/28/20	ISSUED FOR BIDS					3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810			Date: OCTOBER 2020
Checked by: DRN	1	4/2/21	ADDENDUM NO. 11					www.alcosan.org			Sheet: 296 of 645



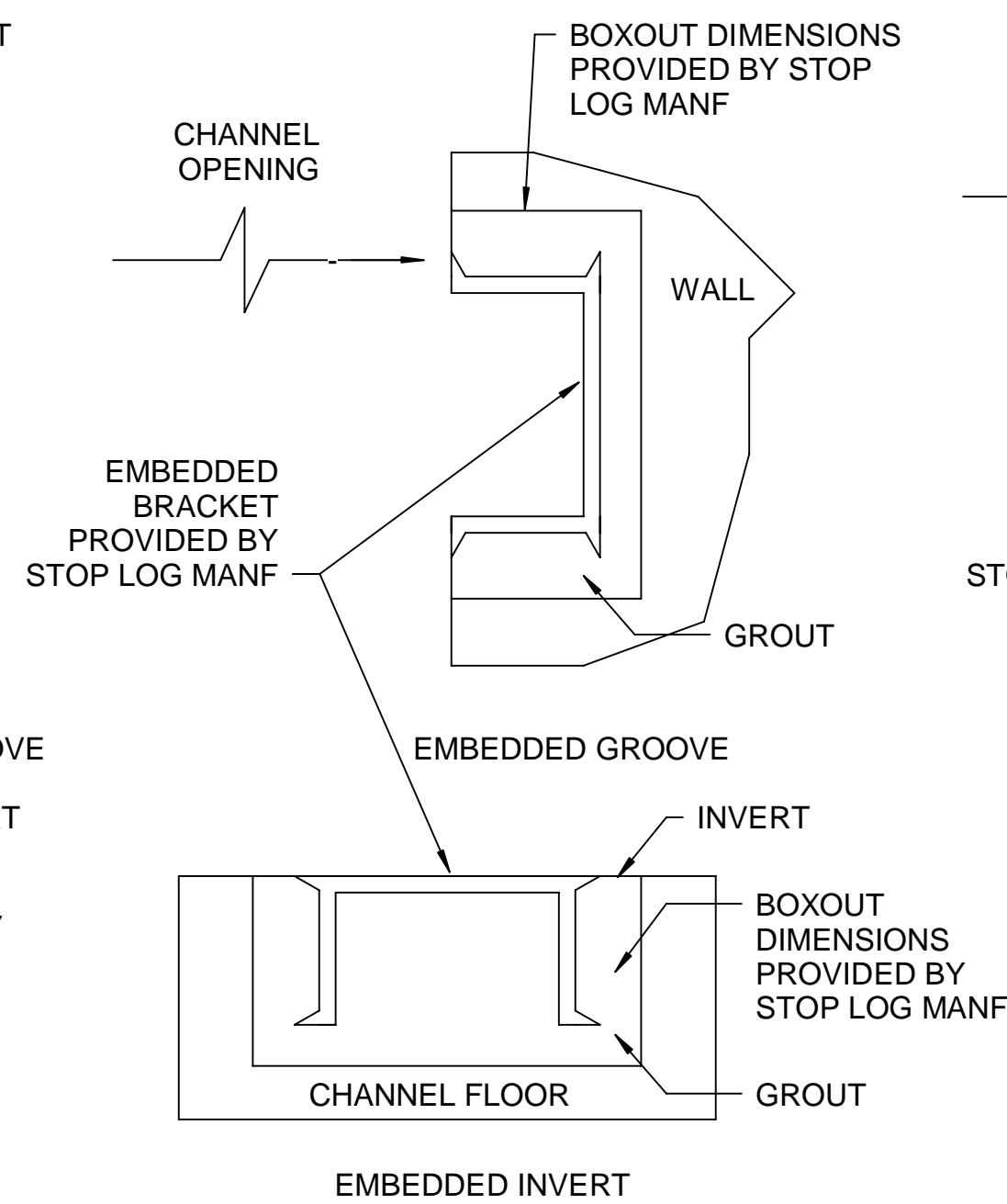
**HOSE BIBB A**  
SCALE: NTS



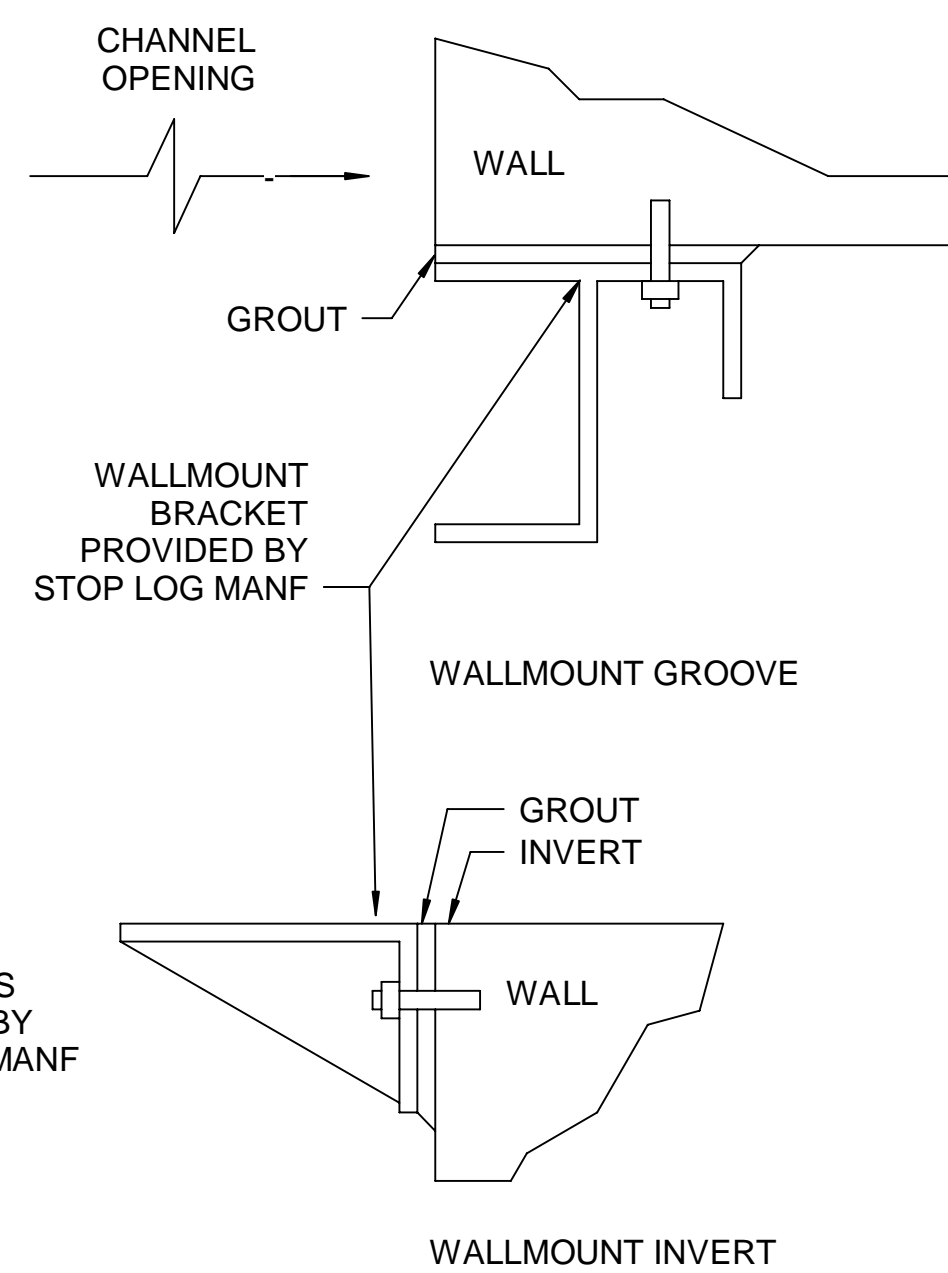
**LINE DRAIN B**  
SCALE: NTS



CHANNEL MOUNT INVERT

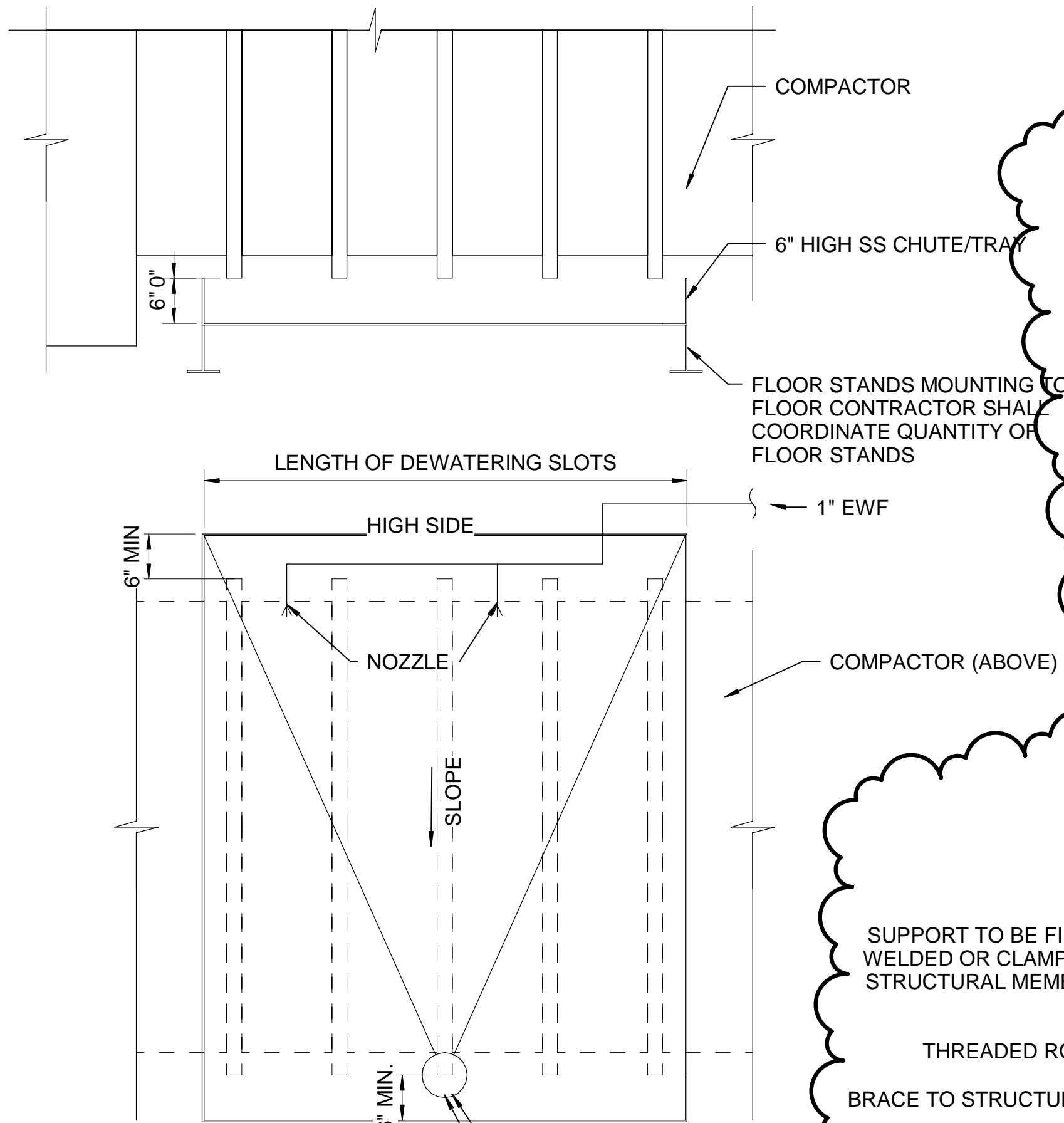


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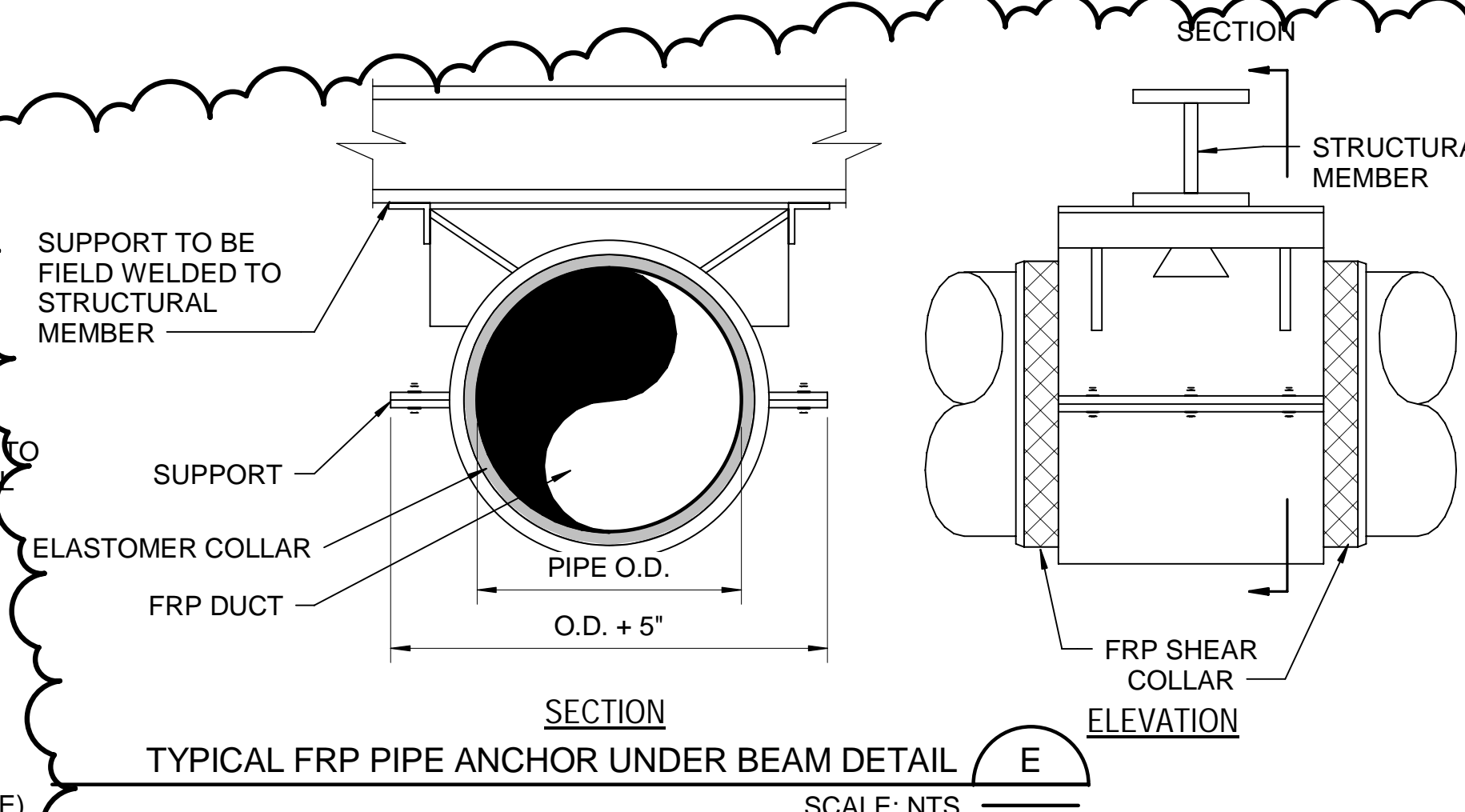


WALLMOUNT INVERT

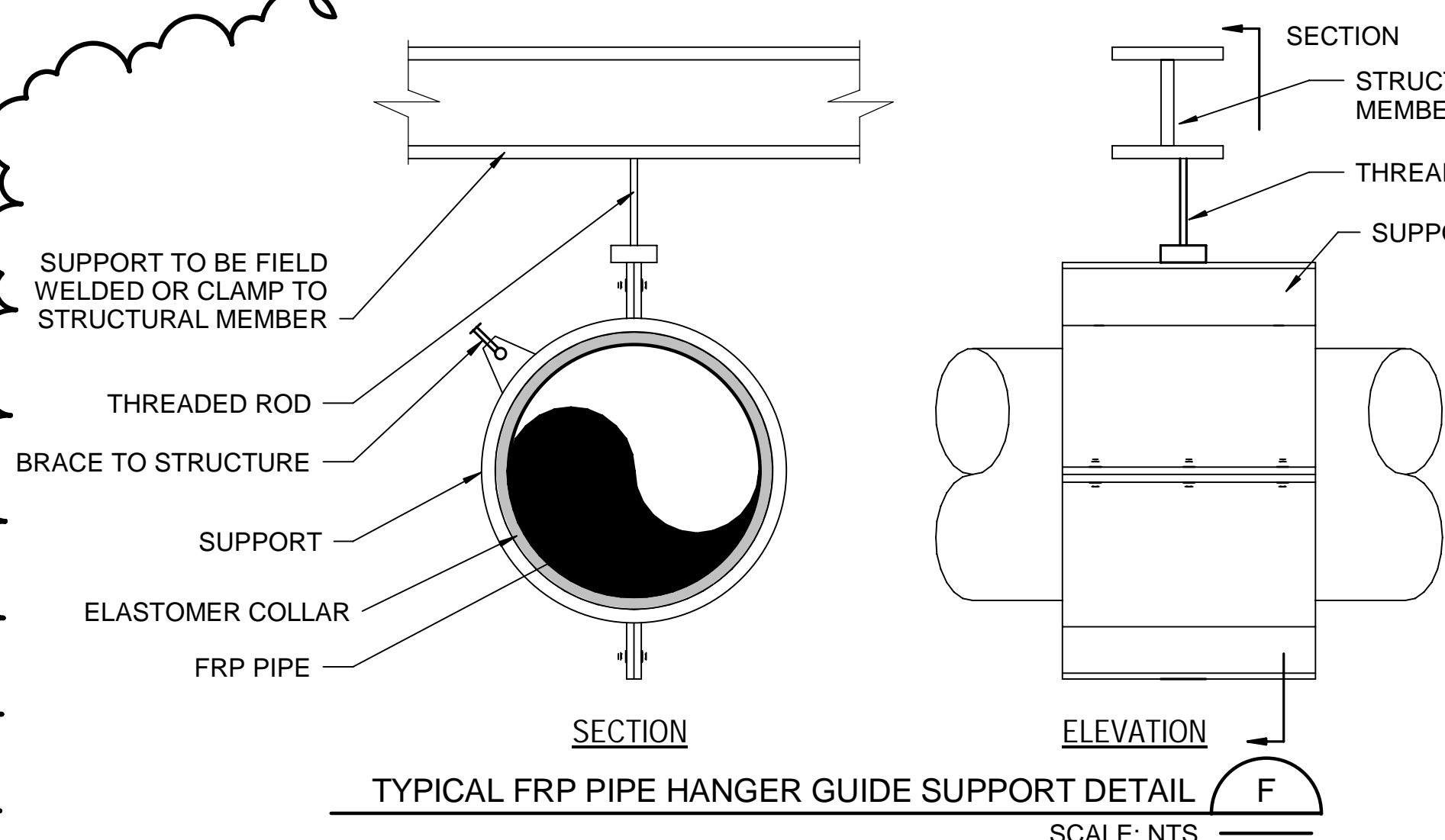
**STOP LOG MOUNTING DETAILS D**  
SCALE: NTS



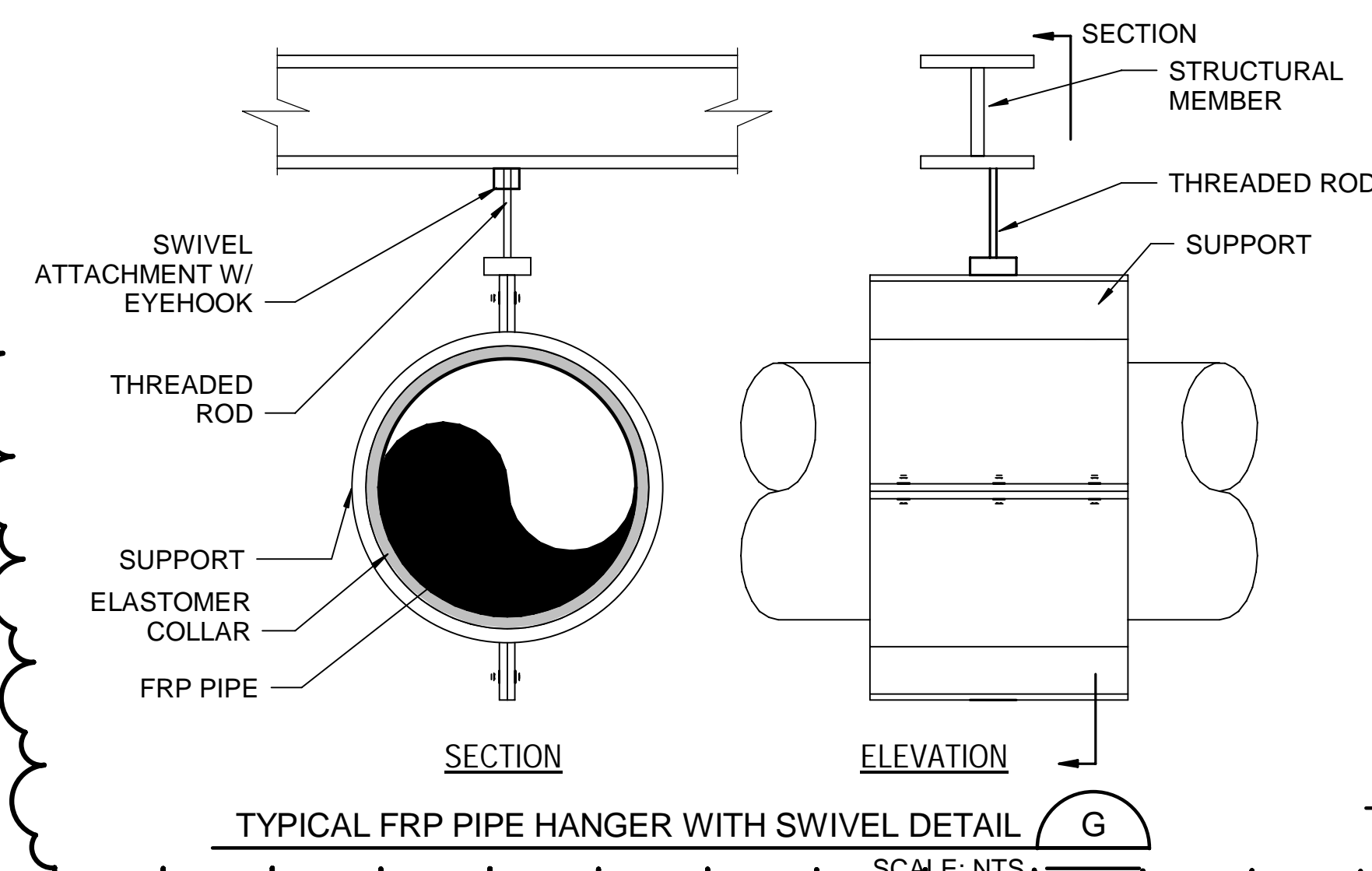
**DEWATERING COMPACTOR CHUTE C**  
SCALE: NTS



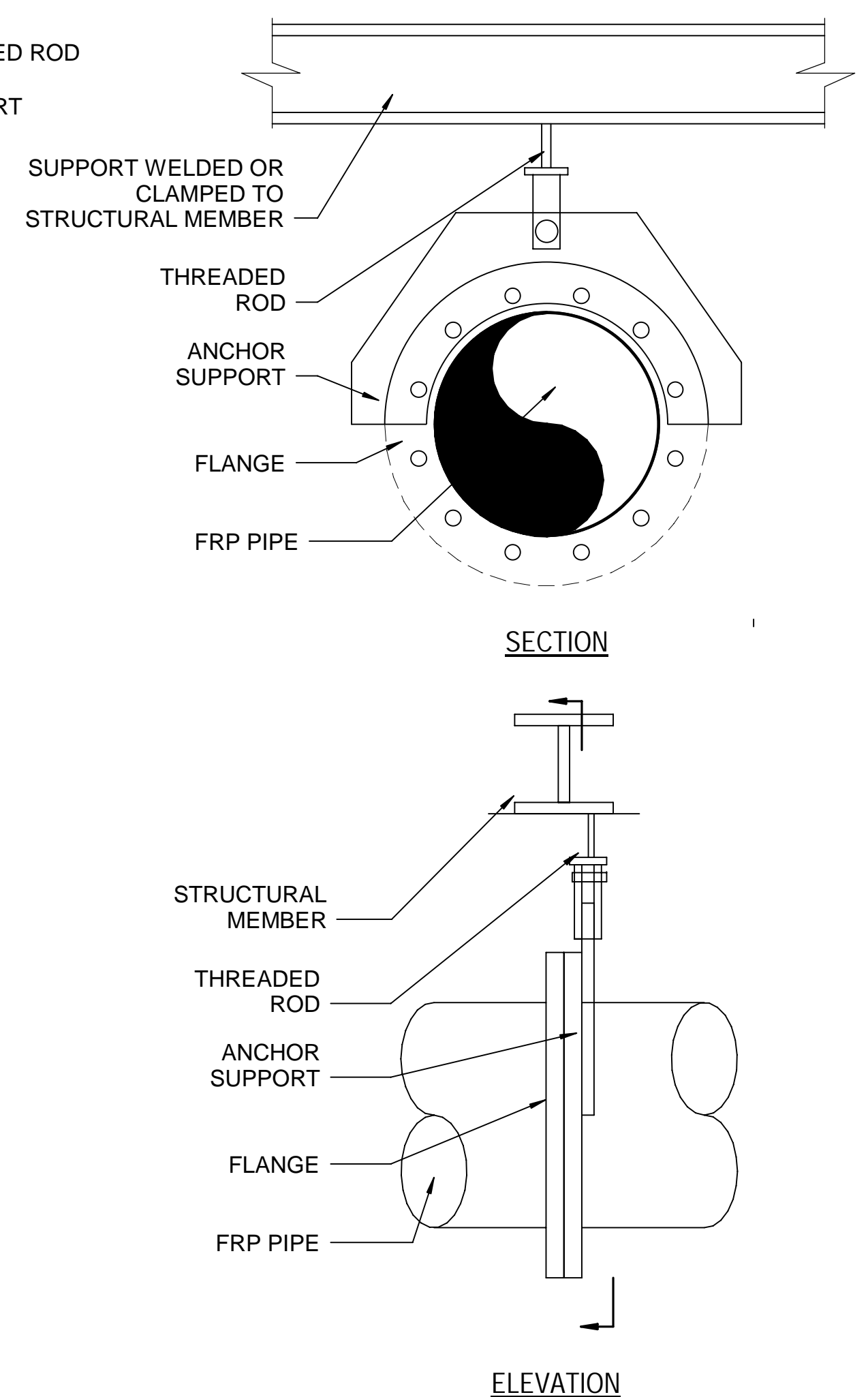
**TYPICAL FRP PIPE ANCHOR UNDER BEAM DETAIL E**  
SCALE: NTS



**TYPICAL FRP PIPE HANGER GUIDE SUPPORT DETAIL F**  
SCALE: NTS



**TYPICAL FRP PIPE HANGER WITH SWIVEL DETAIL G**  
SCALE: NTS

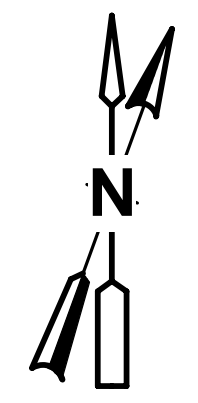


**TYPICAL FRP PIPE HANGING FLANGED SUPPORT DETAIL I**  
SCALE: NTS

**GENERAL SHEET NOTES**  
1. SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

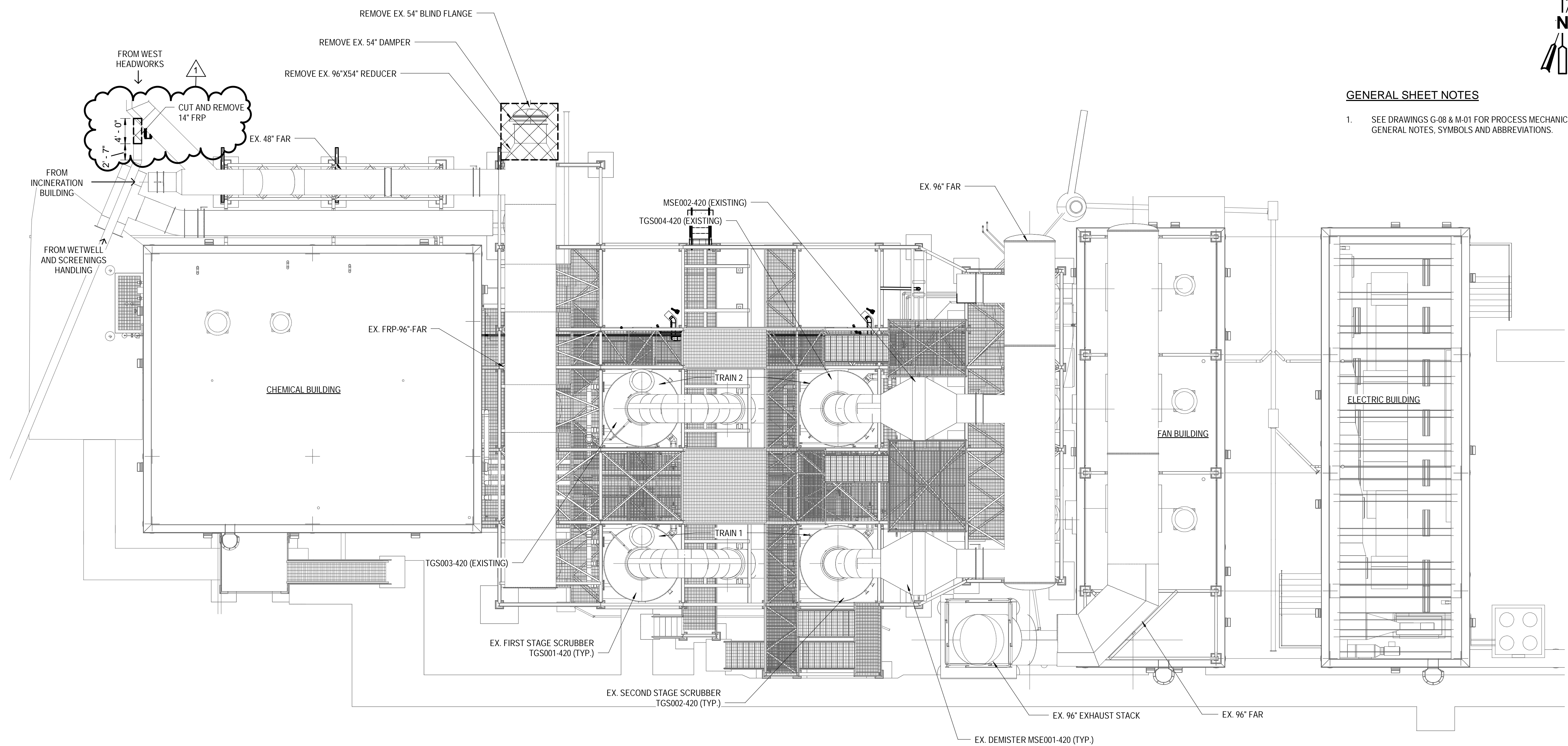
Designed by: LAQ Drawn by: LAQ Checked by: DRN	REVISION REV No. DATE DESCRIPTION APPV						ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN  3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810 www.alcosan.org	ALLEGHENY COUNTY SANITARY AUTHORITY WASTEWATER TREATMENT PLANT EAST HEADWORKS  MD-04 <b>TYPICAL MECHANICAL DETAILS</b>	Contract: 1729 CAD File Name: MD-04.DGN Date: OCTOBER 2020 Sheet: 300 of 645	
	0	10/28/20	ISSUED FOR BIDS							
	1	4/2/21	ADDENDUM NO. 11							

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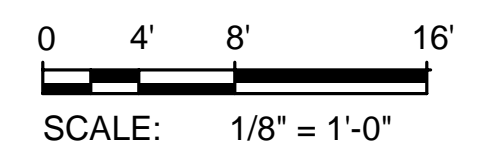


**GENERAL SHEET NOTES**

- 1. SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.



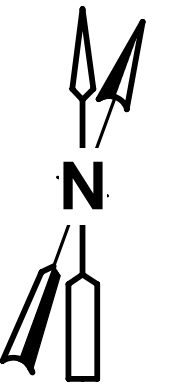
**UPPER LEVEL PLAN - DEMOLITION** 1  
 SCALE: 1/8" = 1'-0"



4/5/2021 2:58:31 PM

Designed by: Drawn by: Checked by:	BK EMS JPR	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">REVISION</th> </tr> <tr> <th>REV No.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>APPV</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>10/28/20</td> <td>ISSUE FOR BIDS</td> <td></td> </tr> <tr> <td>1</td> <td>4/2/21</td> <td>ADDENDUM NO. 11</td> <td></td> </tr> </tbody> </table>	REVISION				REV No.	DATE	DESCRIPTION	APPV	0	10/28/20	ISSUE FOR BIDS		1	4/2/21	ADDENDUM NO. 11		 <b>Whitman, Requardt &amp; Associates, LLP</b> <small>801 South Caroline Street, Baltimore, MD 21231</small>	 <b>WEBSTER ASSOCIATES, INC.</b>	 <b>BRUCE KOETZEL</b> <small>ENGINEER        PE079009        PENNSYLVANIA</small>	 <b>alcosan</b> <small>allegheny county sanitary authority</small>	<b>ARLETTA SCOTT WILLIAMS</b> <small>EXECUTIVE DIRECTOR, ALCOSAN</small>  3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810  <a href="http://www.alcosan.org">www.alcosan.org</a>	<b>ALLEGHENY COUNTY SANITARY AUTHORITY</b> WASTEWATER TREATMENT PLANT EAST HEADWORKS  <b>420-MDM-11</b> <b>HEADWORKS ODOR CONTROL FACILITY</b> <b>UPPER LEVEL PLAN - DEMOLITION</b>	Contract: 1729 CAD File Name: 420-MDM-11.DWG Date: OCTOBER 2020 Sheet: 302 of 645
REVISION																									
REV No.	DATE	DESCRIPTION	APPV																						
0	10/28/20	ISSUE FOR BIDS																							
1	4/2/21	ADDENDUM NO. 11																							



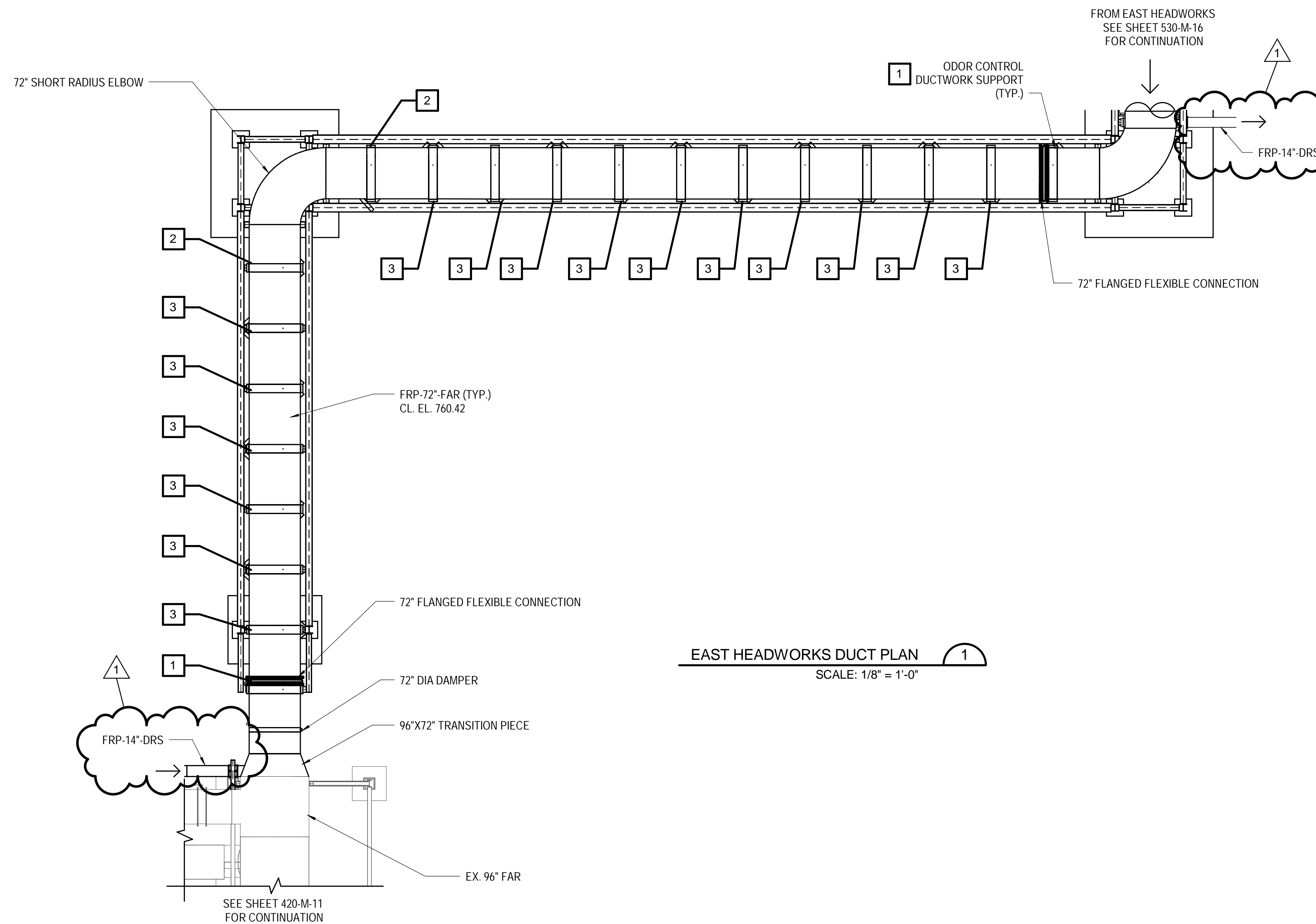


**GENERAL SHEET NOTES**

1. SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

**X SHEET KEYNOTES**

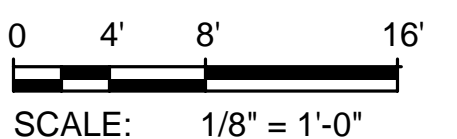
1. PROVIDE FLANGED ANCHOR SUPPORTS FOR ODOR CONTROL DUCTWORK. SEE DETAIL GMD-01 FOR DETAILS.
2. PROVIDE ANCHOR SUPPORTS FOR ODOR CONTROL DUCTWORK. SEE DETAIL HMD-01 FOR DETAILS.
3. PROVIDE GUIDE SUPPORTS FOR ODOR CONTROL DUCTWORK. SEE DETAIL F/MD-01 FOR DETAILS.



**EAST HEADWORKS DUCT PLAN**

SCALE: 1/8" = 1'-0"

1



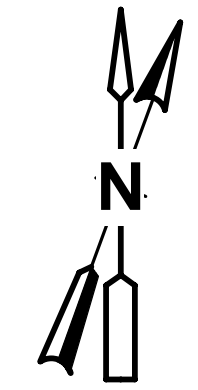
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Drawn by:	0	10/28/20	ISSUE FOR BIDS	
EMS	1	4/2/21	ADDENDUM NO. 11	
Checked by:				
JPR				

ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

**420-M-15**  
**HEADWORKS ODOR CONTROL FACILITY**  
**EAST HEADWORKS DUCT PLAN**

Contract:	1729
CAD File Name:	420-M-15.DWG
Date:	OCTOBER 2020
Sheet:	313 of 645

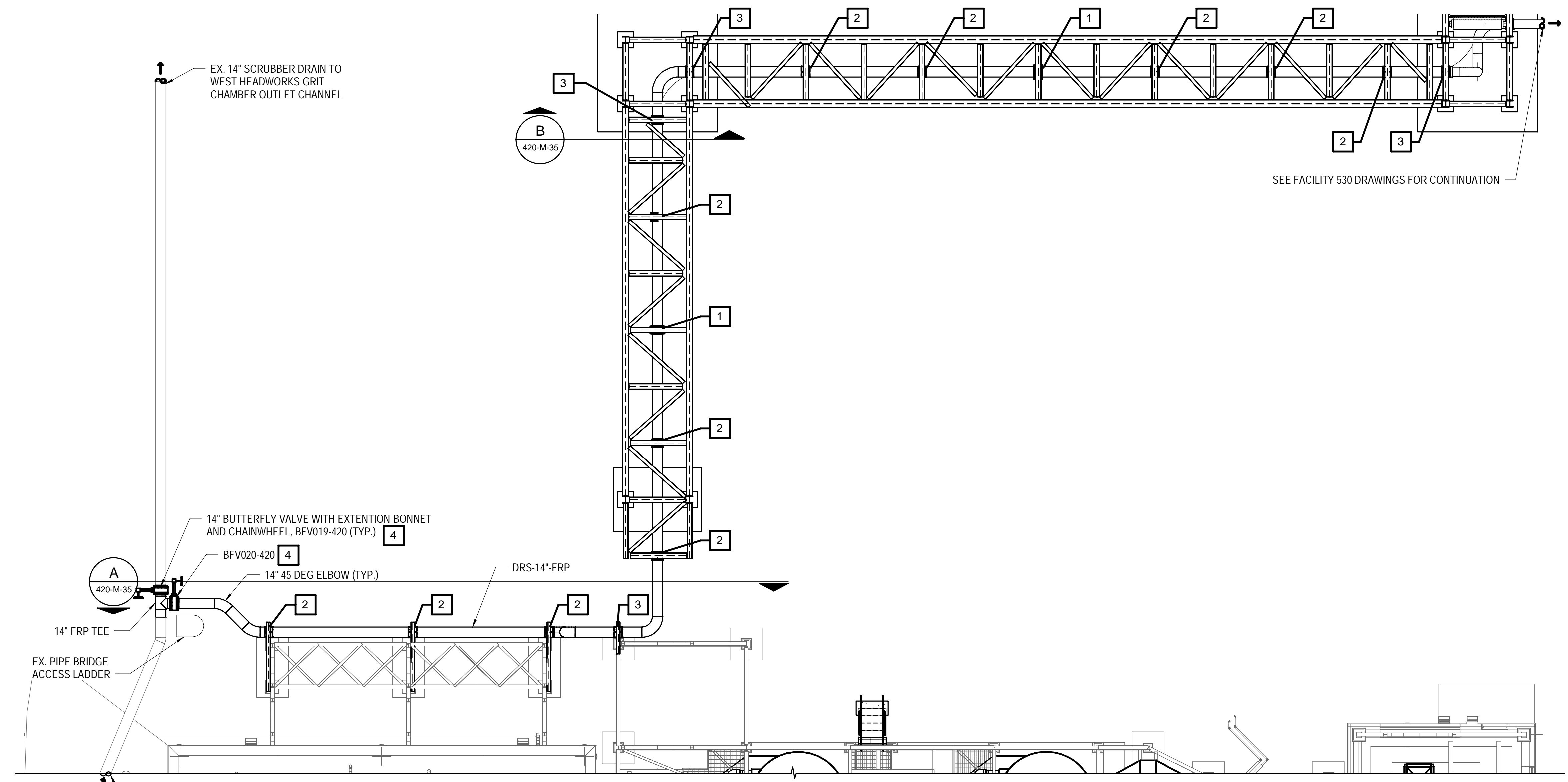


**GENERAL SHEET NOTES**

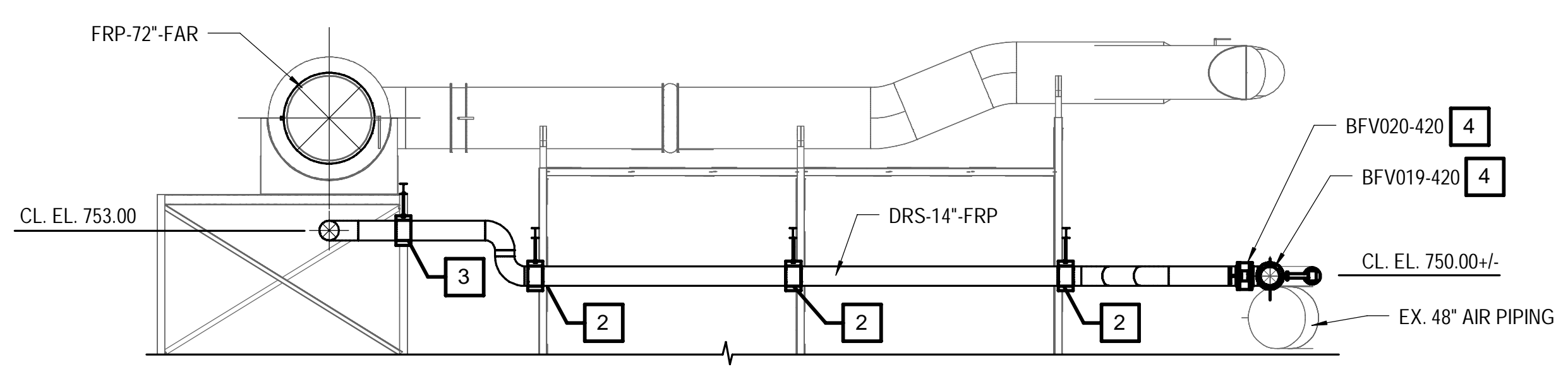
- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

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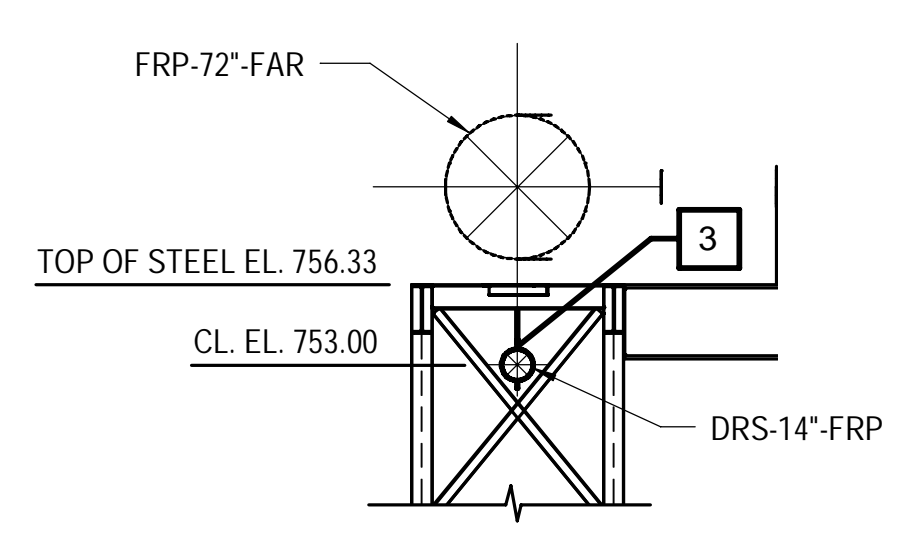
- PROVIDE ANCHOR SUPPORT FOR SCRUBBER DRAIN FRP PIPING. SEE DETAIL E/MD-04 FOR DETAILS.
- PROVIDE GUIDE SUPPORT FOR SCRUBBER DRAIN FRP PIPING. SEE DETAIL F/MD-04 FOR DETAILS.
- PROVIDE SWIVEL SUPPORT FOR SCRUBBER DRAIN FRP PIPING. SEE DETAIL G/MD-04 FOR DETAILS.
- PROVIDE FLANGED ANCHOR SUPPORTS FOR SCRUBBER DRAIN BUTTERFLY VALVE. SEE DETAIL H/MD-04 FOR DETAILS. EXTENSION BONNET SHALL BE AN ADEQUATE LENGTH THAT THE CHAINWHEELS EXTEND PAST THE 48" DUCT LOCATED DIRECTLY BELOW THE DRS PIPING.
- EXISTING PIPE BRIDGE, EXISTING ODOR CONTROL DUCTWORK, AND NEW ODOR CONTROL DUCTWORK NOT SHOWN FOR CLARITY.



**SCRUBBER DRAIN PIPING PLAN**  
SCALE: 1/8" = 1'-0"



**SECTION A**  
SCALE: 1/8" = 1'-0"



**SECTION B**  
SCALE: 1/8" = 1'-0"

Designed by: EMS  
Drawn by: EMS  
Checked by: DRN

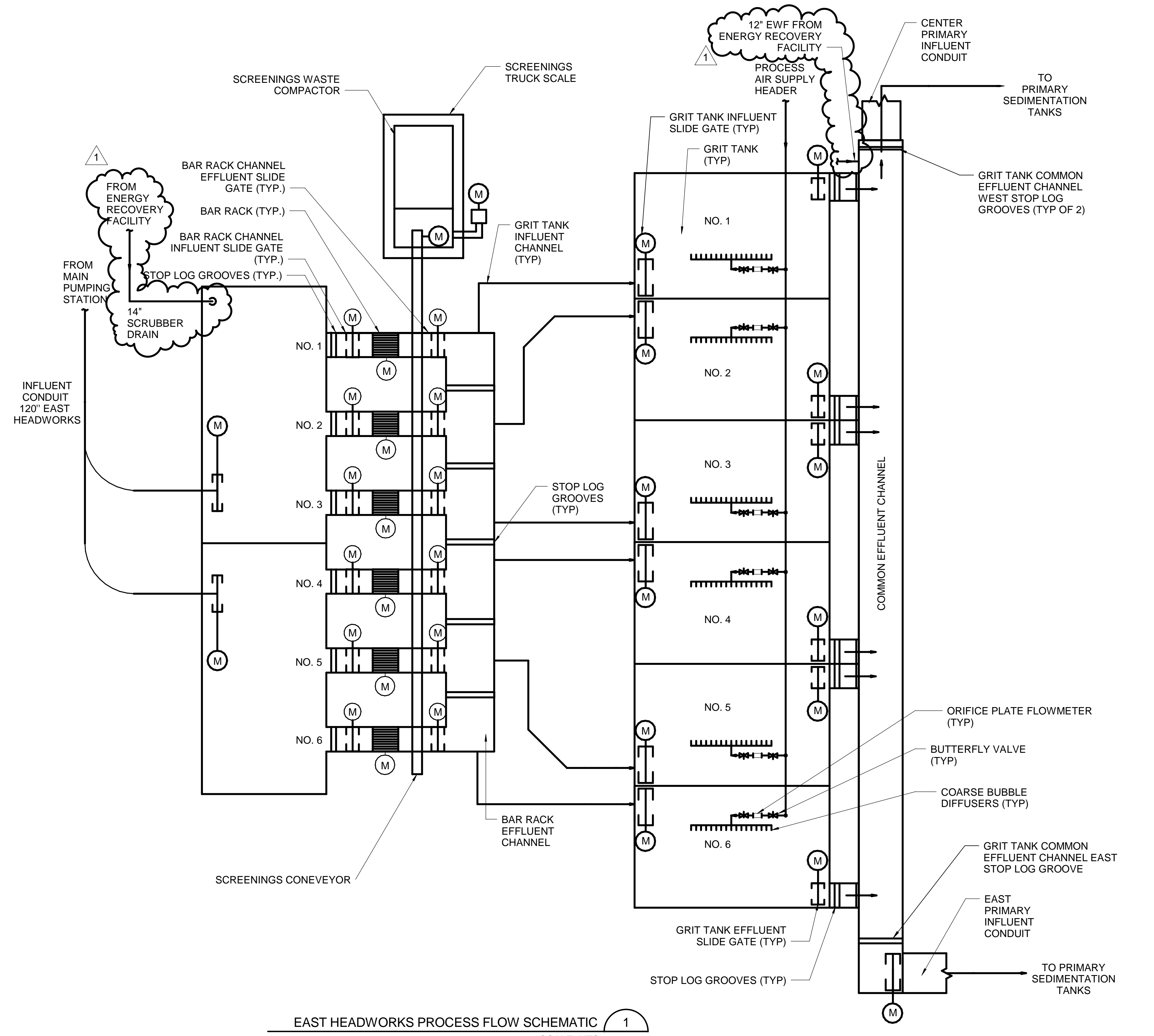
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		DESCRIPTION		
1	4/2/21	ADDENDUM NO. 11		

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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS  
  
420-M-35  
**HEADWORKS ODOR CONTROL FACILITY  
SCRUBBER DRAIN PIPING PLAN & SECTIONS**

Contract: 1729  
CAD File Name: 420-M-35.DGN  
Date: OCTOBER 2020  
Sheet: of 645

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- GENERAL SHEET NOTES**
- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
  - SEE DRAWINGS 530-M-01 THROUGH 530-M-08, 534-M-01 AND 535-M-01 FOR EQUIPMENT IDENTIFICATION NUMBERS.

**DESIGN CRITERIA**

**EAST HEADWORKS INFLUENT FLOW**

DIURNAL MINIMUM FLOW	95 MGD
ANNUAL AVERAGE DESIGN FLOW	210 MGD
PEAK FLOW	360 MGD

**SCREENINGS REMOVAL**

AVERAGE DAY SCREENINGS, UNCOMPACTED	3.5 CY/DAY
AVERAGE DAY SCREENINGS, COMPACTED	1.8 CY/DAY
PEAK DAY SCREENINGS, UNCOMPACTED	53.3 CY/DAY
PEAK DAY SCREENINGS, COMPACTED	26.7 CY/DAY

**INFLUENT BAR RACKS**

MULTI-RAKE BAR RACKS QUANTITY	5 + 1 STANDBY
CLEAR BAR SPACING	3/4 INCH
SCREEN HYDRAULIC CAPACITY, EACH	72 MGD

**SCREENINGS CONVEYOR**

SCREENINGS CONVEYOR QUANTITY	1
CONVEYOR TYPE	3 ROLLER TROUGHED BELT
CONVEYOR WIDTH	36 INCHES
CONVEYOR CAPACITY	13.9 CY/HR

**SCREENING COMPACTOR**

SCREENING COMPACTOR QUANTITY	1
COMPACTOR TYPE	HORIZONTAL
COMPACTOR BIN CAPACITY	4 CY

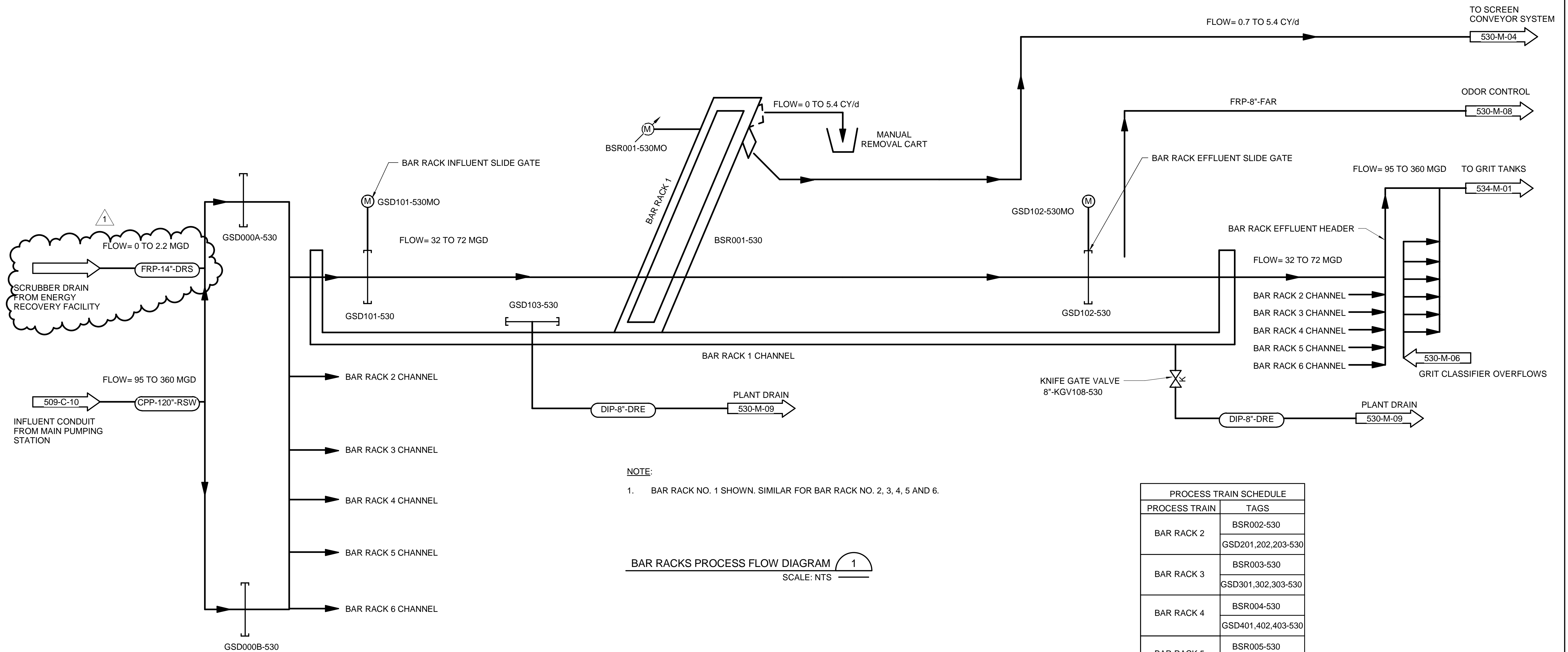
**EAST HEADWORKS PROCESS FLOW SCHEMATIC** 1  
SCALE: NTS

4/6/2021 6:45:49 AM

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REVISION																			
REV No.	DATE	DESCRIPTION																	
0	10/28/20	ISSUED FOR BIDS																	
1	4/2/21	ADDENDUM NO. 11																	

GENERAL SHEET NOTES

- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.



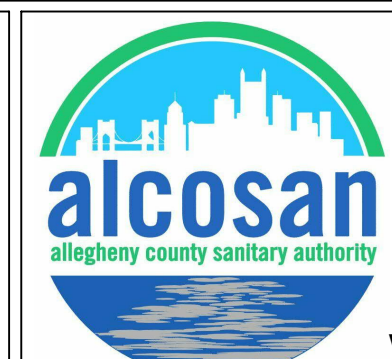
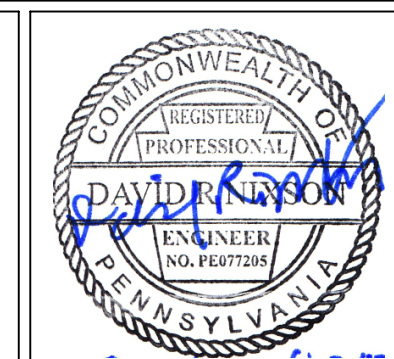
NOTE:  
1. BAR RACK NO. 1 SHOWN. SIMILAR FOR BAR RACK NO. 2, 3, 4, 5 AND 6.

BAR RACKS PROCESS FLOW DIAGRAM 1  
SCALE: NTS

PROCESS TRAIN SCHEDULE	
PROCESS TRAIN	TAGS
BAR RACK 2	BSR002-530
	GSD201,202,203-530
BAR RACK 3	BSR003-530
	GSD301,302,303-530
BAR RACK 4	BSR004-530
	GSD401,402,403-530
BAR RACK 5	BSR005-530
	GSD501,502,503-530
BAR RACK 6	BSR006-530
	GSD601,602,603-530

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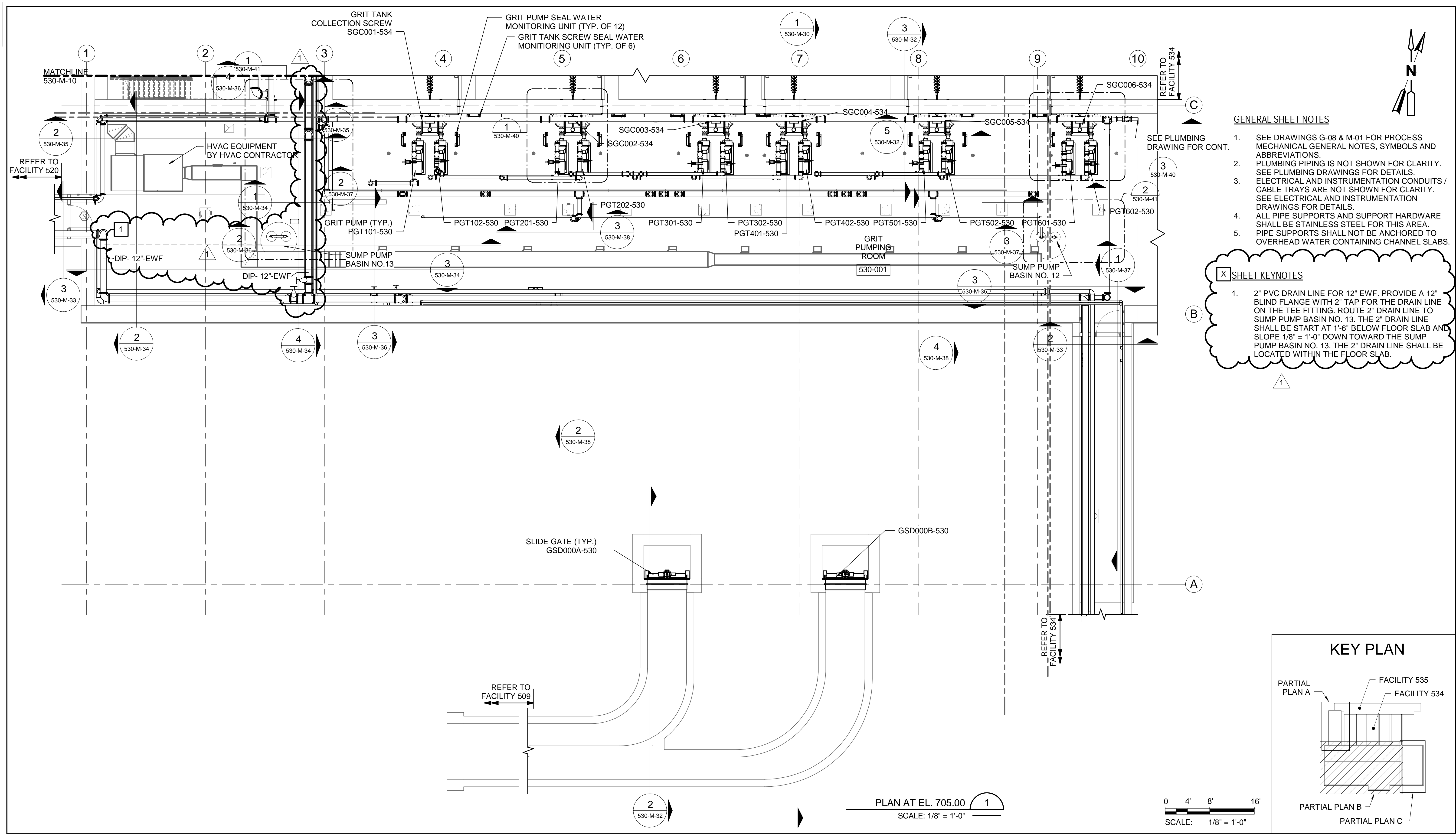
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Checked by:	CRM	1	4/2/21	ADDENDUM NO. 11	
	DRN				



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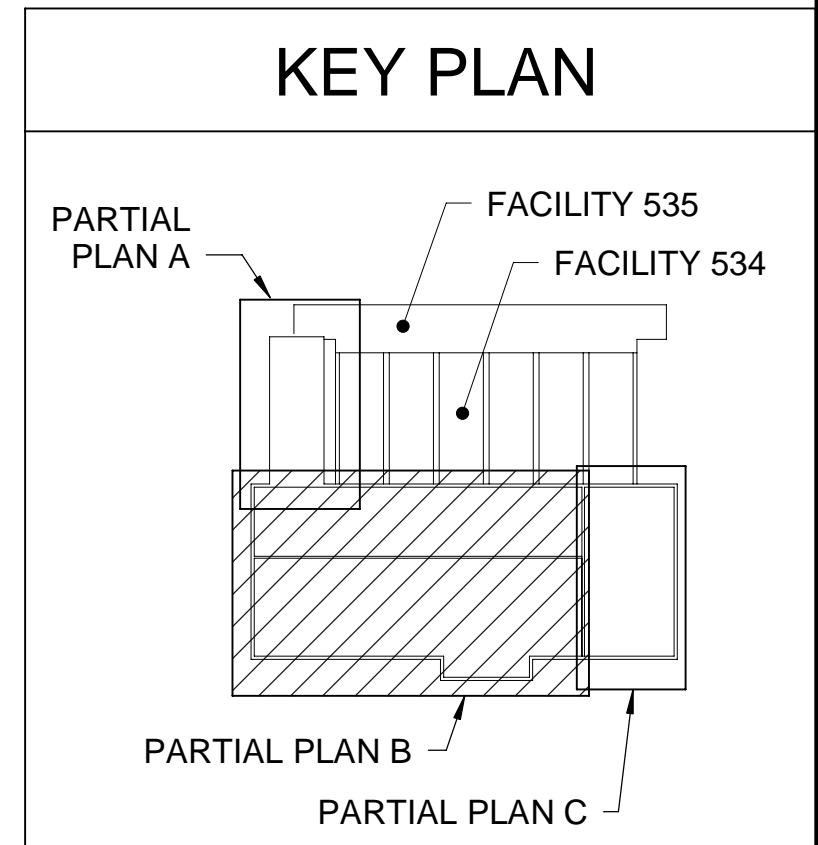
ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS  
  
530-M-03  
EAST HEADWORKS  
BAR RACKS PFD

Contract: 1729  
CAD File Name: 530-M-03.DGN  
Date: OCTOBER 2020  
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- GENERAL SHEET NOTES**
- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
  - PLUMBING PIPING IS NOT SHOWN FOR CLARITY. SEE PLUMBING DRAWINGS FOR DETAILS.
  - ELECTRICAL AND INSTRUMENTATION CONDUITS / CABLE TRAYS ARE NOT SHOWN FOR CLARITY. SEE ELECTRICAL AND INSTRUMENTATION DRAWINGS FOR DETAILS.
  - ALL PIPE SUPPORTS AND SUPPORT HARDWARE SHALL BE STAINLESS STEEL FOR THIS AREA.
  - PIPE SUPPORTS SHALL NOT BE ANCHORED TO OVERHEAD WATER CONTAINING CHANNEL SLABS.

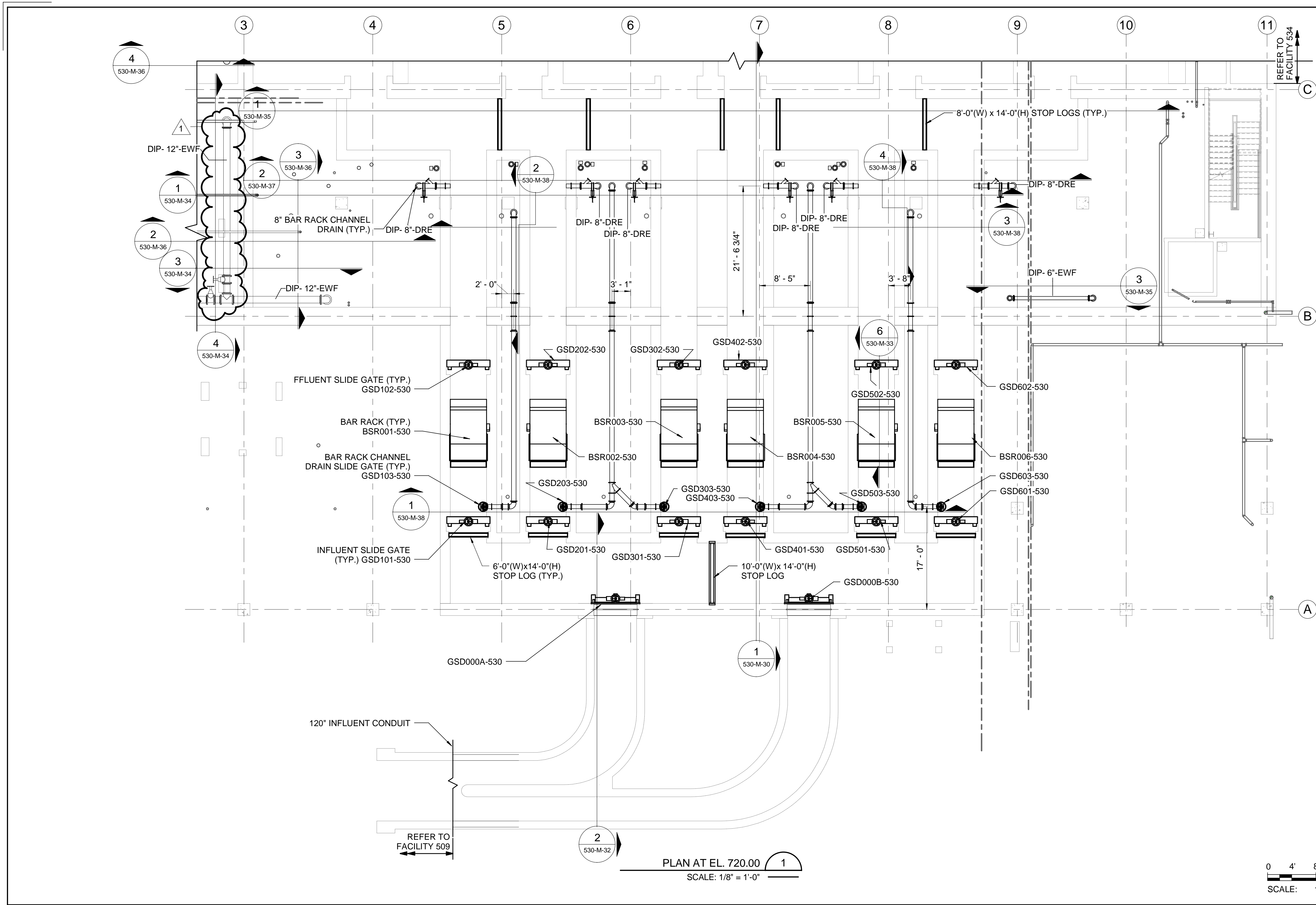
- SHEET KEYNOTES**
- 2" PVC DRAIN LINE FOR 12" EWF. PROVIDE A 12" BLIND FLANGE WITH 2" TAP FOR THE DRAIN LINE ON THE TEE FITTING. ROUTE 2" DRAIN LINE TO SUMP PUMP BASIN NO. 13. THE 2" DRAIN LINE SHALL BE START AT 1'-6" BELOW FLOOR SLAB AND SLOPE 1/8" = 1'-0" DOWN TOWARD THE SUMP PUMP BASIN NO. 13. THE 2" DRAIN LINE SHALL BE LOCATED WITHIN THE FLOOR SLAB.



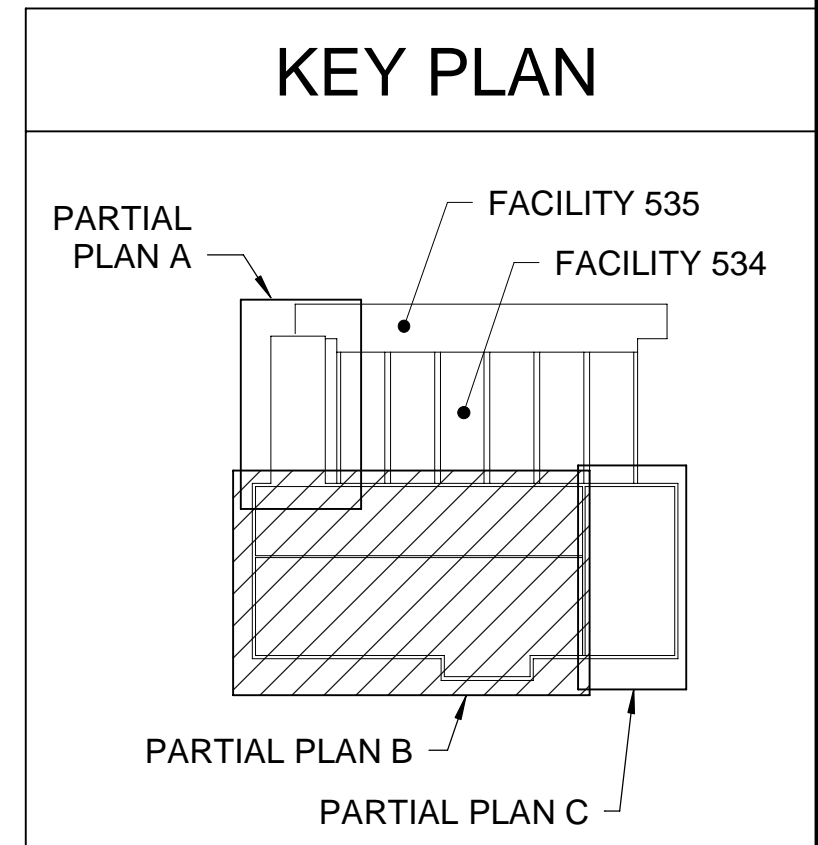
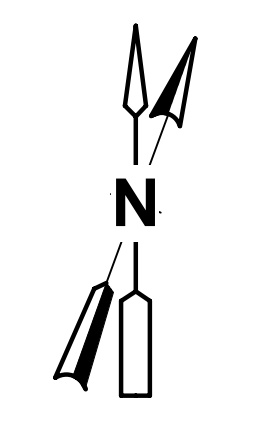
PLAN AT EL. 705.00  
SCALE: 1/8" = 1'-0"

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	0	10/28/20	ISSUED FOR BIDS							
	1	4/2/21	ADDENDUM NO. 11							

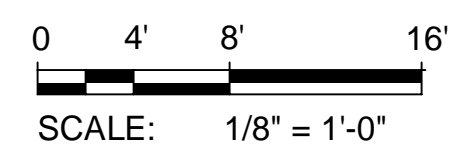
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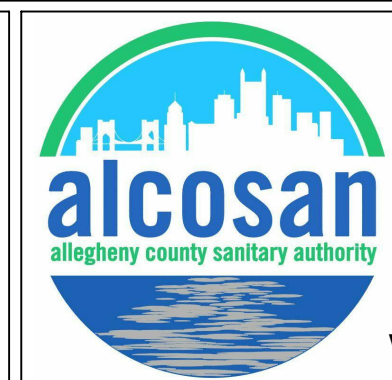
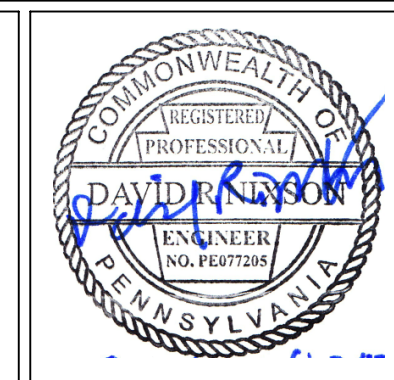
- GENERAL SHEET NOTES**
- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
  - ALL PIPE SUPPORTS AND SUPPORT HARDWARE SHALL BE STAINLESS STEEL FOR THIS AREA.
  - PIPE SUPPORTS SHALL NOT BE ANCHORED TO WATER CONTAINING CHANNEL SLABS.



PLAN AT EL. 720.00  
SCALE: 1/8" = 1'-0"



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	DRN	1	4/2/21	ADDENDUM NO. 11	



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EXECUTIVE DIRECTOR, ALCOSAN

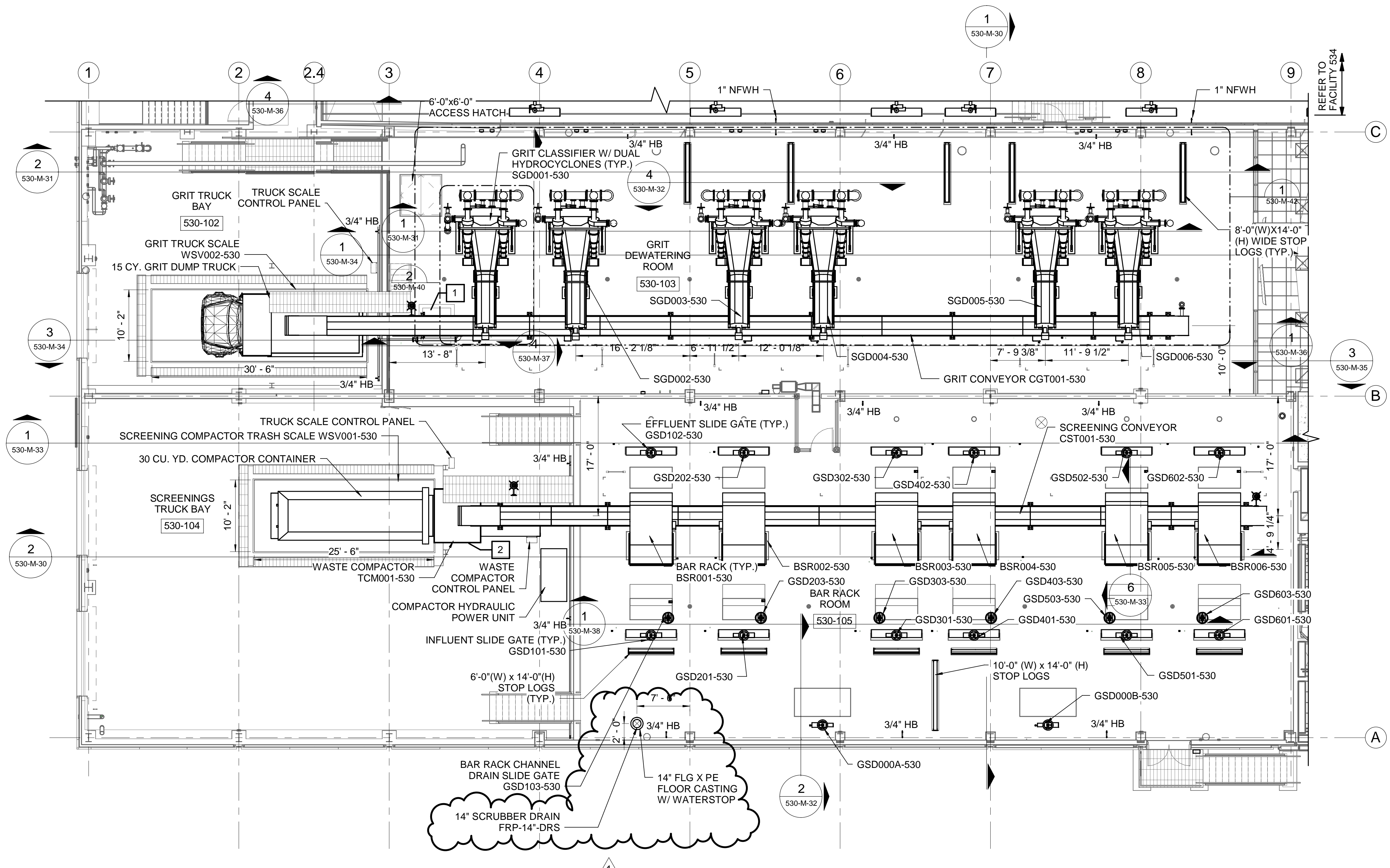
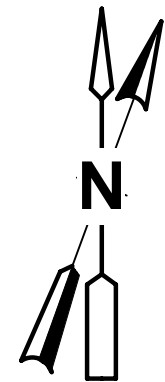
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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

**530-M-12  
EAST HEADWORKS  
INFLUENT CHANNEL - PARTIAL PLAN - B**

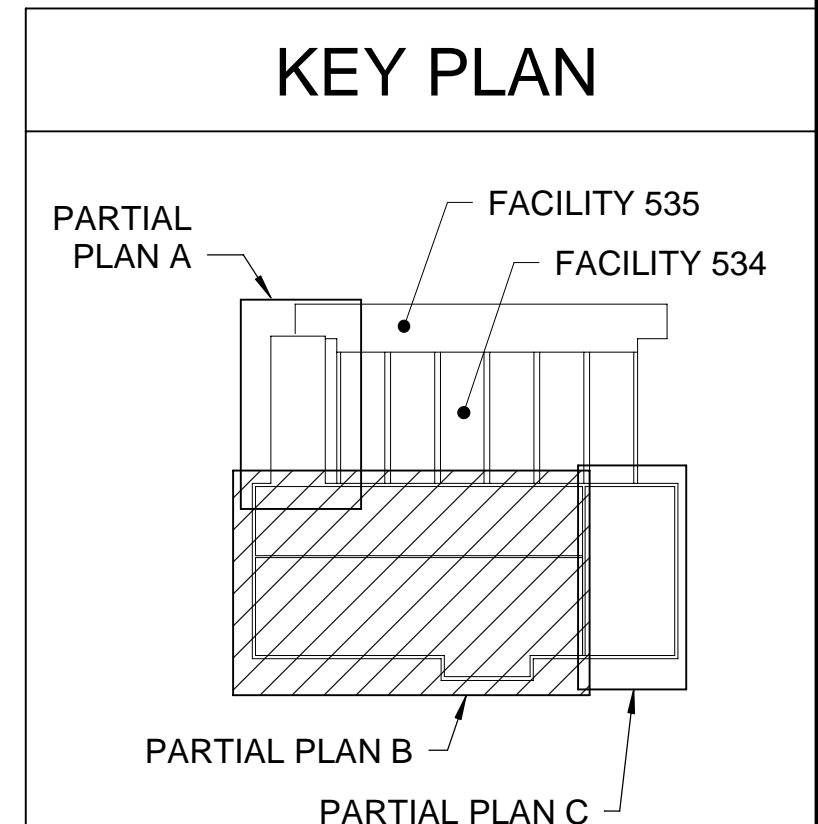
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Date: OCTOBER 2020  
Sheet: 375 of 645

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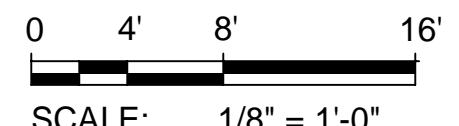


- GENERAL SHEET NOTES**
- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
  - PLATFORMS ARE NOT SHOWN FOR CLARITY. SEE STRUCTURAL DRAWINGS FOR DETAILS.
  - ALL PIPE SUPPORTS AND SUPPORT HARDWARE SHALL BE STAINLESS STEEL FOR THIS AREA.

- X SHEET KEYNOTES**
- SEE DETAIL D/530-MD-51 FOR GRIT CONVEYOR SPRAY HEADER DETAILS.
  - SEE DETAIL C/MD-04 FOR SCREENING DEWATERING COMPACTOR SPRAY HEADER DETAILS.

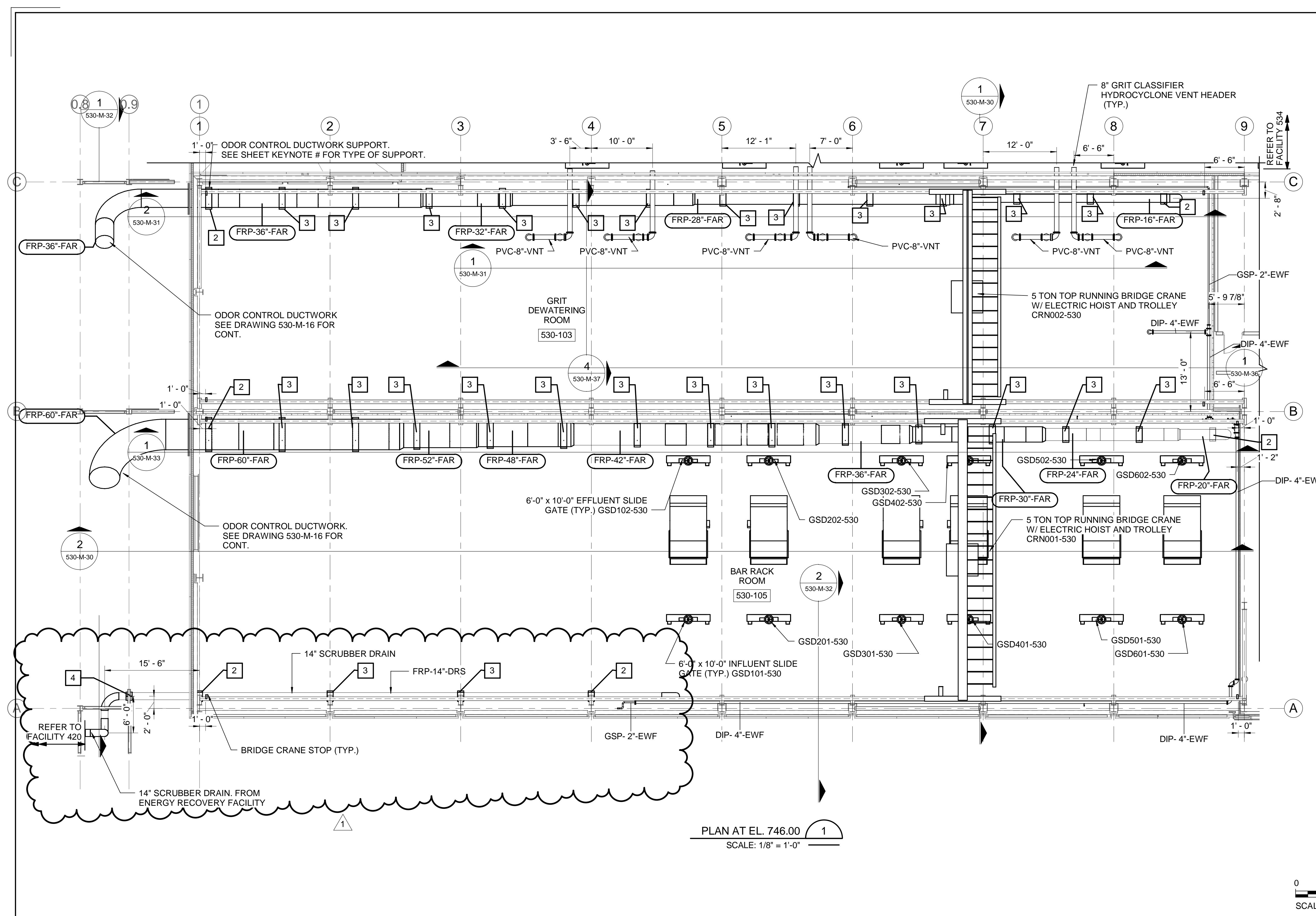
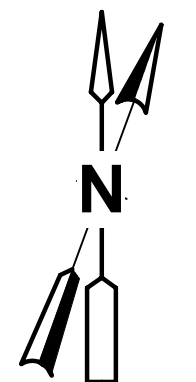


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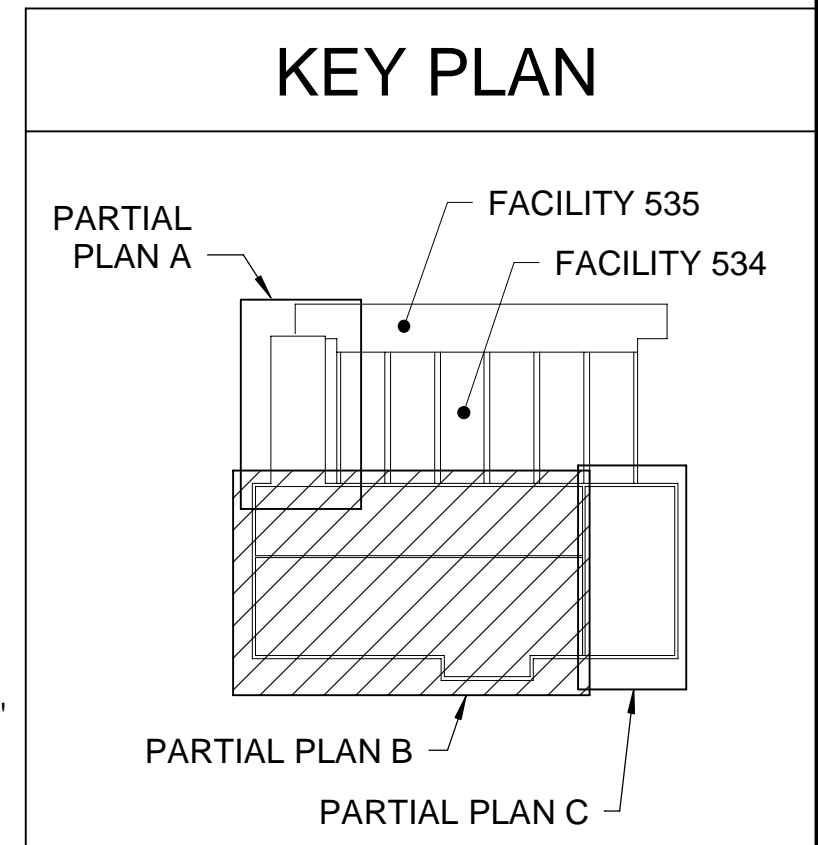
Designed by: LAQ	REVISION				ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN  3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810 www.alcosan.org	ALLEGHENY COUNTY SANITARY AUTHORITY WASTEWATER TREATMENT PLANT EAST HEADWORKS  <b>530-M-13</b> EAST HEADWORKS FIRST FLOOR - PARTIAL PLAN - B	Contract: 1729 CAD File Name: 530-M-13.DGN Date: OCTOBER 2020 Sheet: 376 of 645								
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REV No.	DATE	DESCRIPTION	APPV												
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1	4/2/21	ADDENDUM NO. 11													



- GENERAL SHEET NOTES**
- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
  - PLUMBING AND DUCTWORK ARE NOT SHOWN FOR CLARITY. SEE PLUMBING AND HVAC DRAWINGS FOR DETAILS.
  - ALL PIPE SUPPORTS AND SUPPORT HARDWARE SHALL BE STAINLESS STEEL FOR THIS AREA.

- X SHEET KEYNOTES**
- PROVIDE FLANGED ANCHOR SUPPORT FOR ODOR CONTROL DUCTWORK. SEE DETAIL G/MD-01 FOR DETAILS.
  - PROVIDE ANCHOR SUPPORT FOR ODOR CONTROL DUCTWORK OR SCRUBBER DRAIN PIPE. SEE DETAIL H/MD-01 FOR DETAILS.
  - PROVIDE GUIDE SUPPORT FOR ODOR CONTROL DUCTWORK OR SCRUBBER DRAIN PIPE. SEE DETAIL F/MD-01 FOR DETAILS.
  - PROVIDE HANGING GUIDE SUPPORT FOR SCRUBBER DRAIN PIPE. SEE DETAIL F/MD-04 FOR DETAILS.

PLAN AT EL. 746.00  
SCALE: 1/8" = 1'-0"



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				APPV

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ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

530-M-14  
EAST HEADWORKS  
INTERMEDIATE LEVEL - PARTIAL PLAN - B

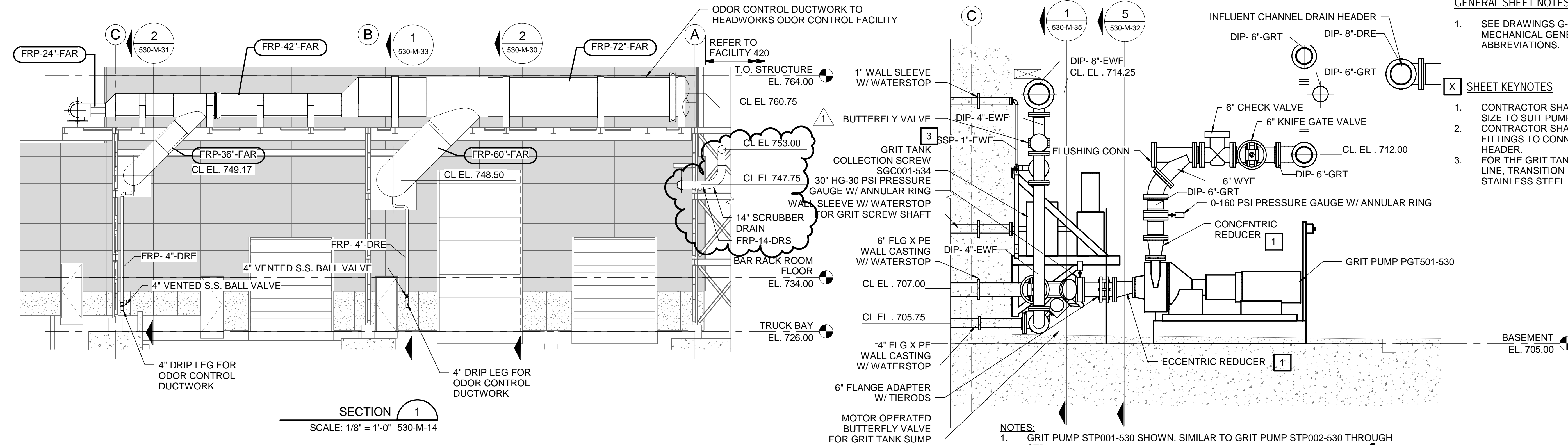
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Date:	OCTOBER 2020
Sheet:	377 of 645

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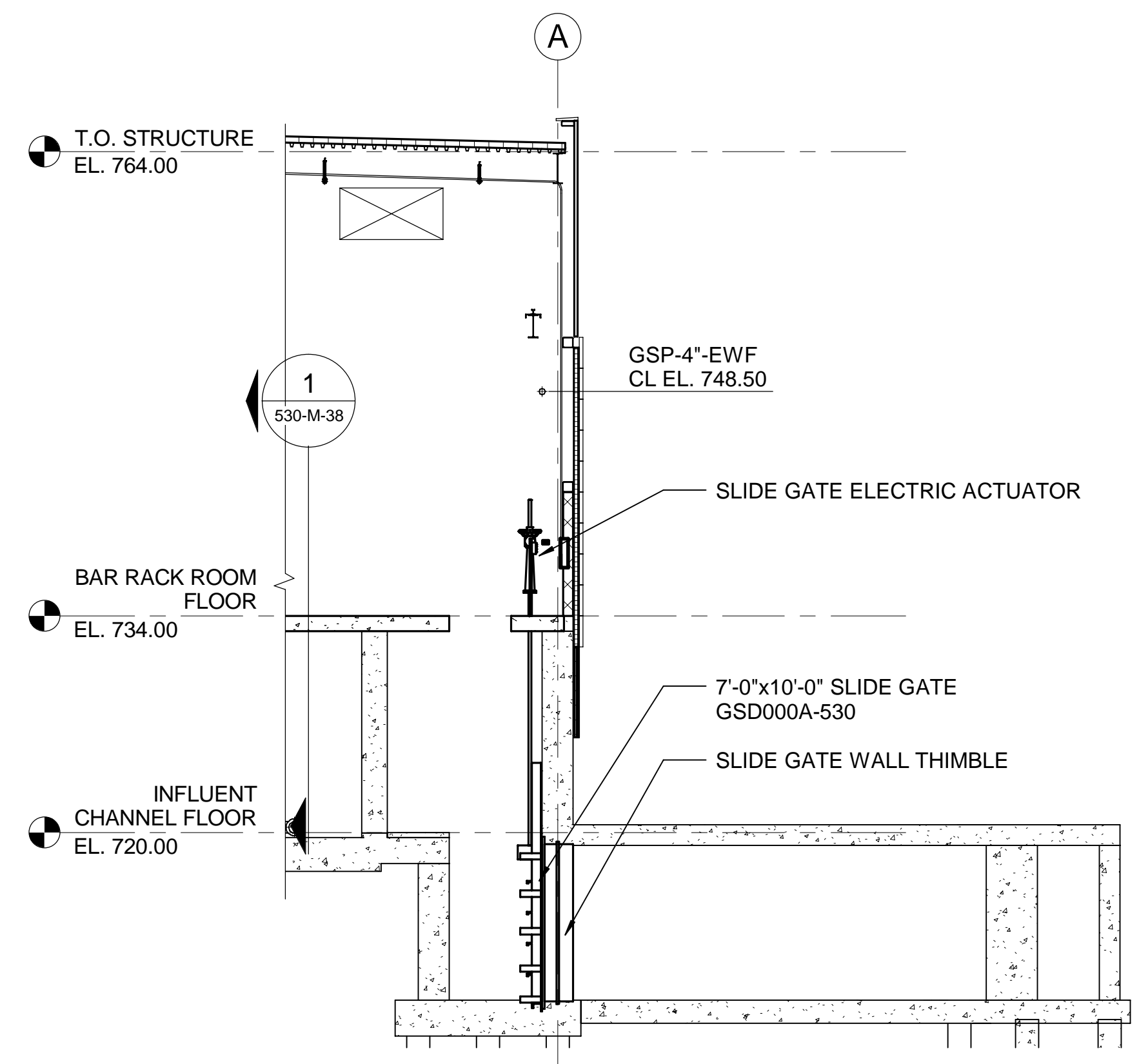


GENERAL SHEET NOTES

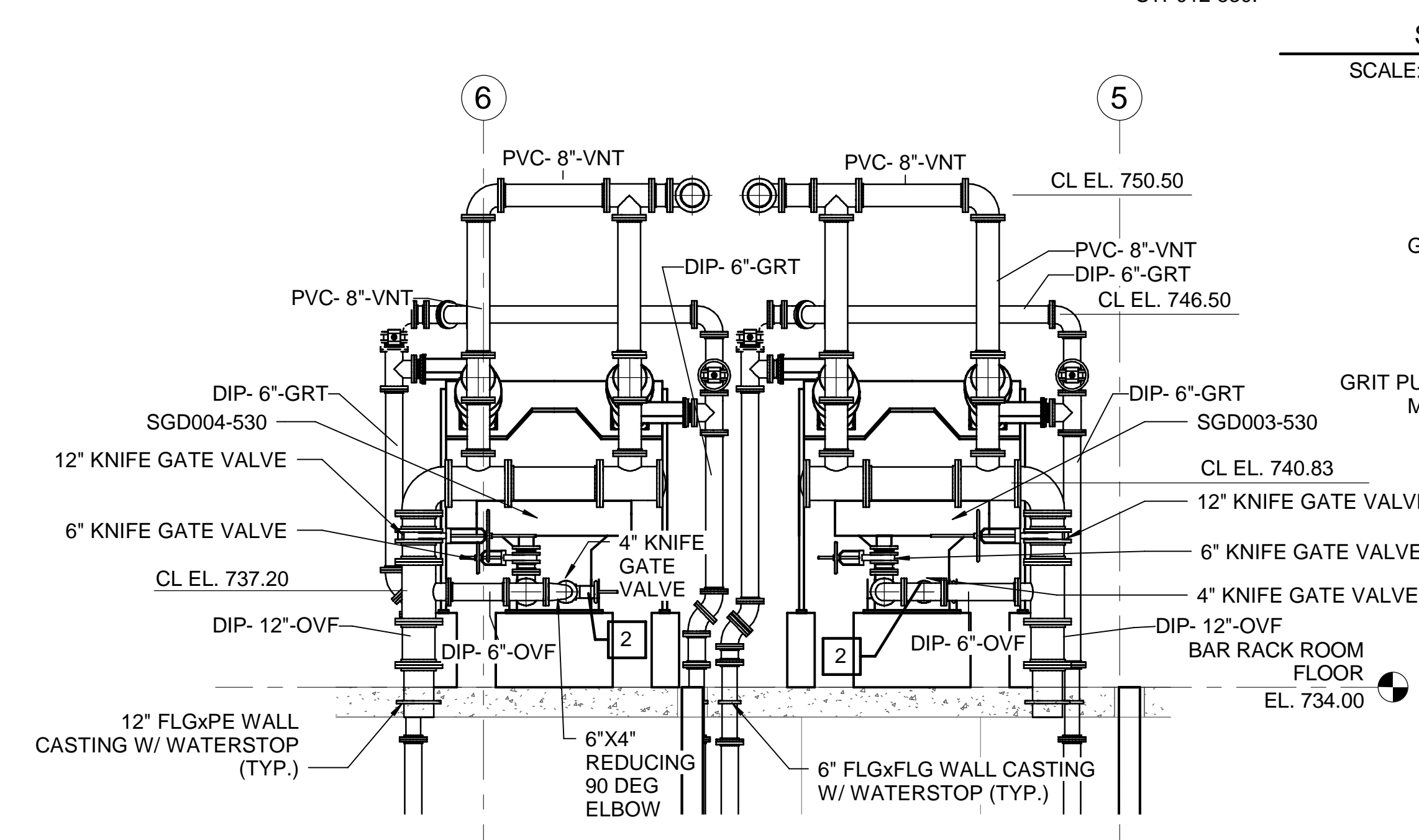
1. SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
- X SHEET KEYNOTES
1. CONTRACTOR SHALL COORINATE THE REDUCER SIZE TO SUIT PUMP FLANGE CONNECTION. CONTRACTOR SHALL COORDINATE THE PIPING FITTINGS TO CONNECT TANK DRAIN TO THE PIPE HEADER.
  2. FOR THE GRIT TANK HANGER BEARING 1" EWF LINE. TRANSITION FROM GALVANIZED STEEL TO STAINLESS STEEL AT THE SOLENOID VALVE.



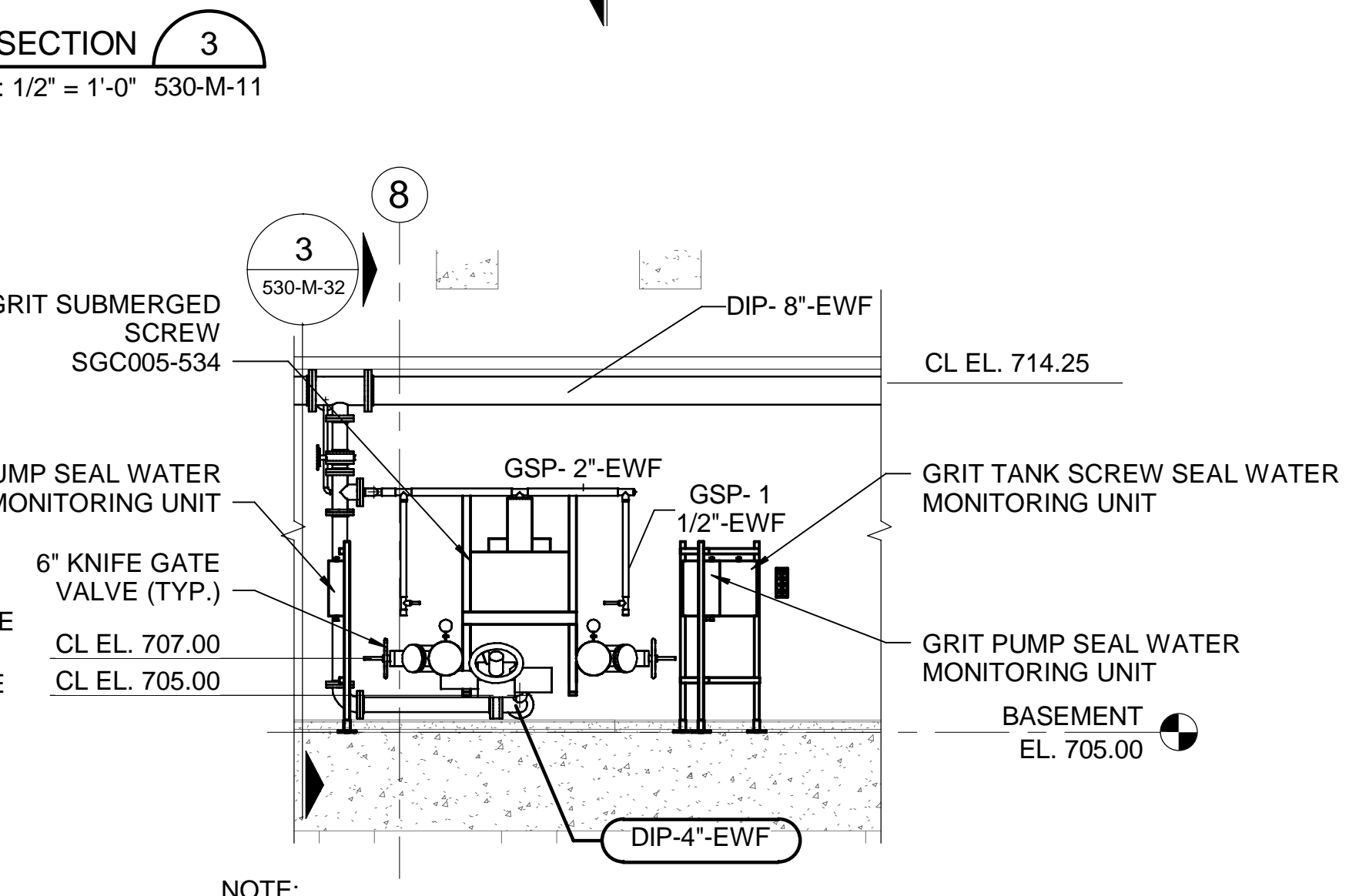
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SECTION 2  
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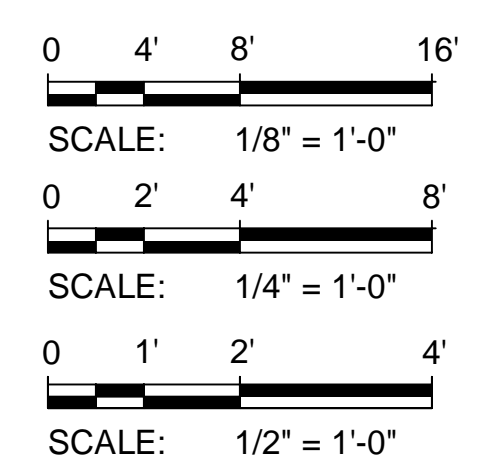


SECTION 4  
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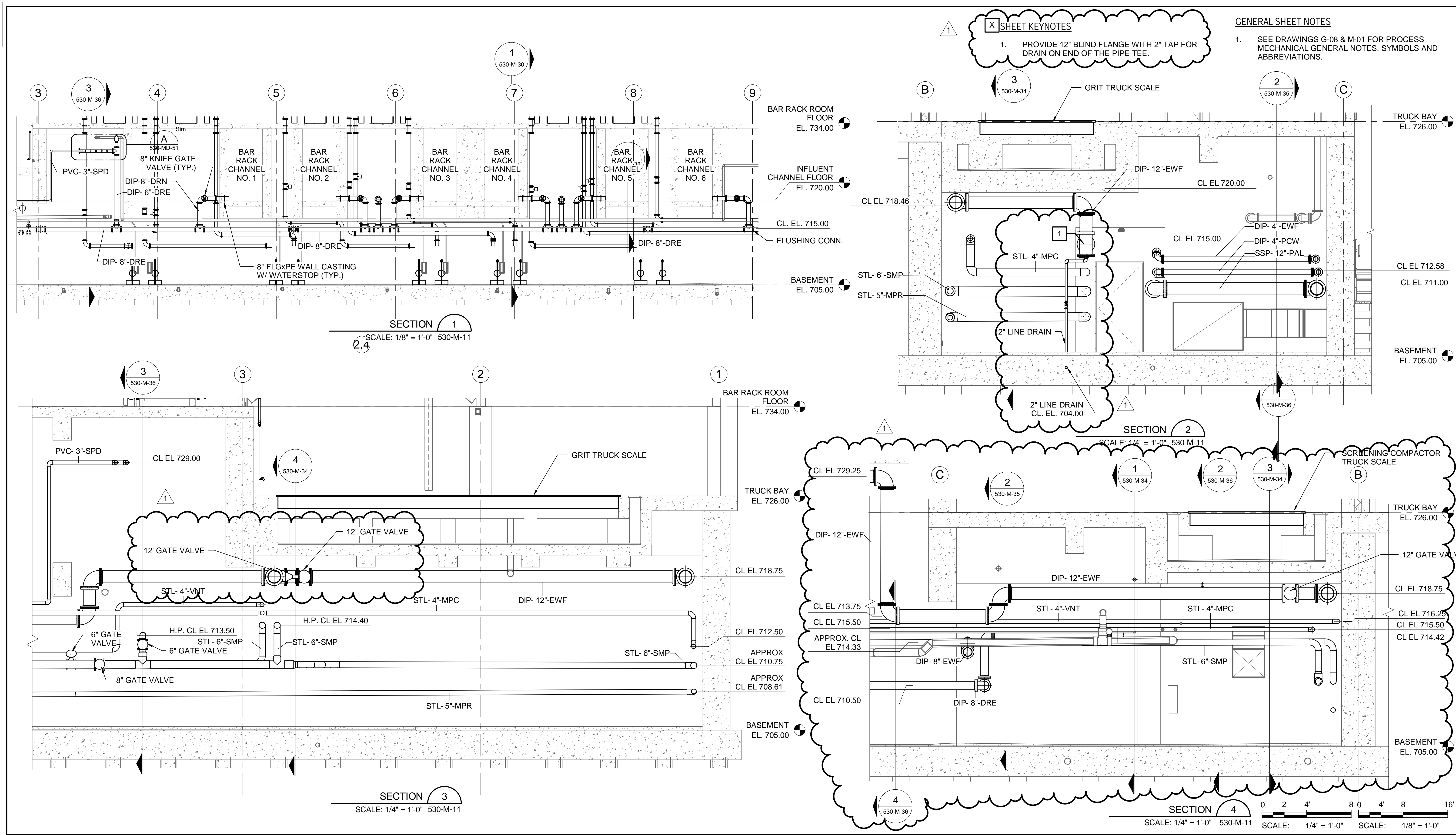
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SECTION 3  
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	1	4/2/21	ADDENDUM NO. 11							Date: OCTOBER 2020
										Sheet: 382 of 645

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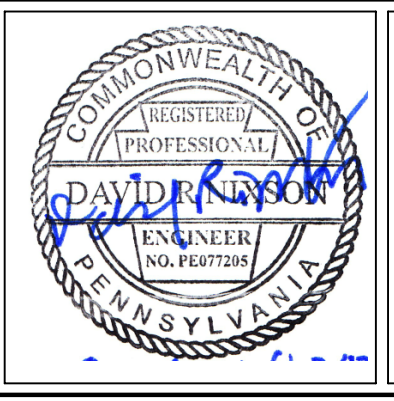
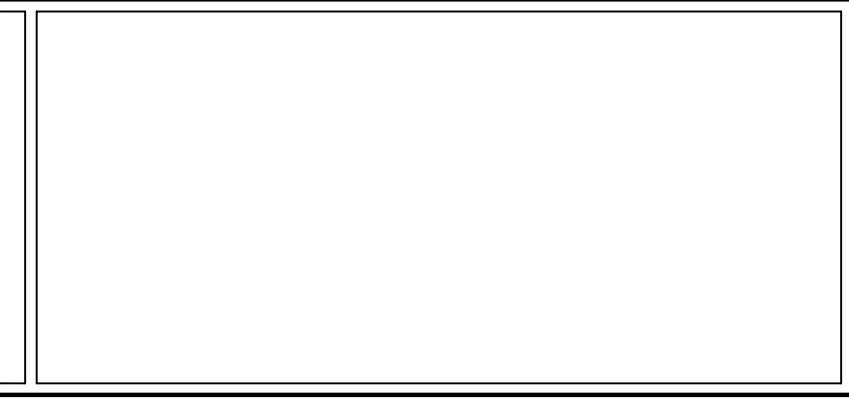
**SHEET KEYNOTES**

1. PROVIDE 12" BLIND FLANGE WITH 2" TAP FOR DRAIN ON END OF THE PIPE TEE.

**GENERAL SHEET NOTES**

1. SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

Designed by:	LAQ	REV No.	DATE	REVISION DESCRIPTION	APPV
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EAST HEADWORKS

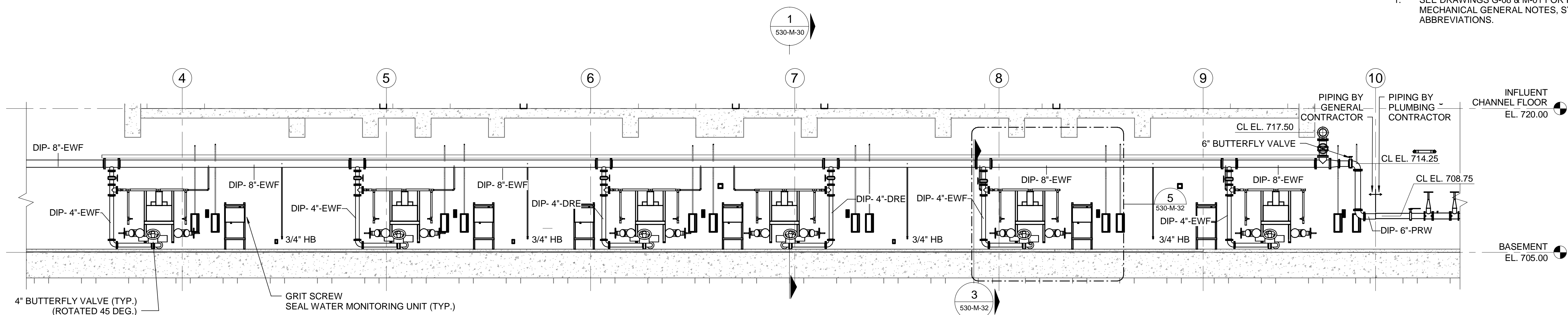
**530-M-34  
EAST HEADWORKS  
SECTIONS**

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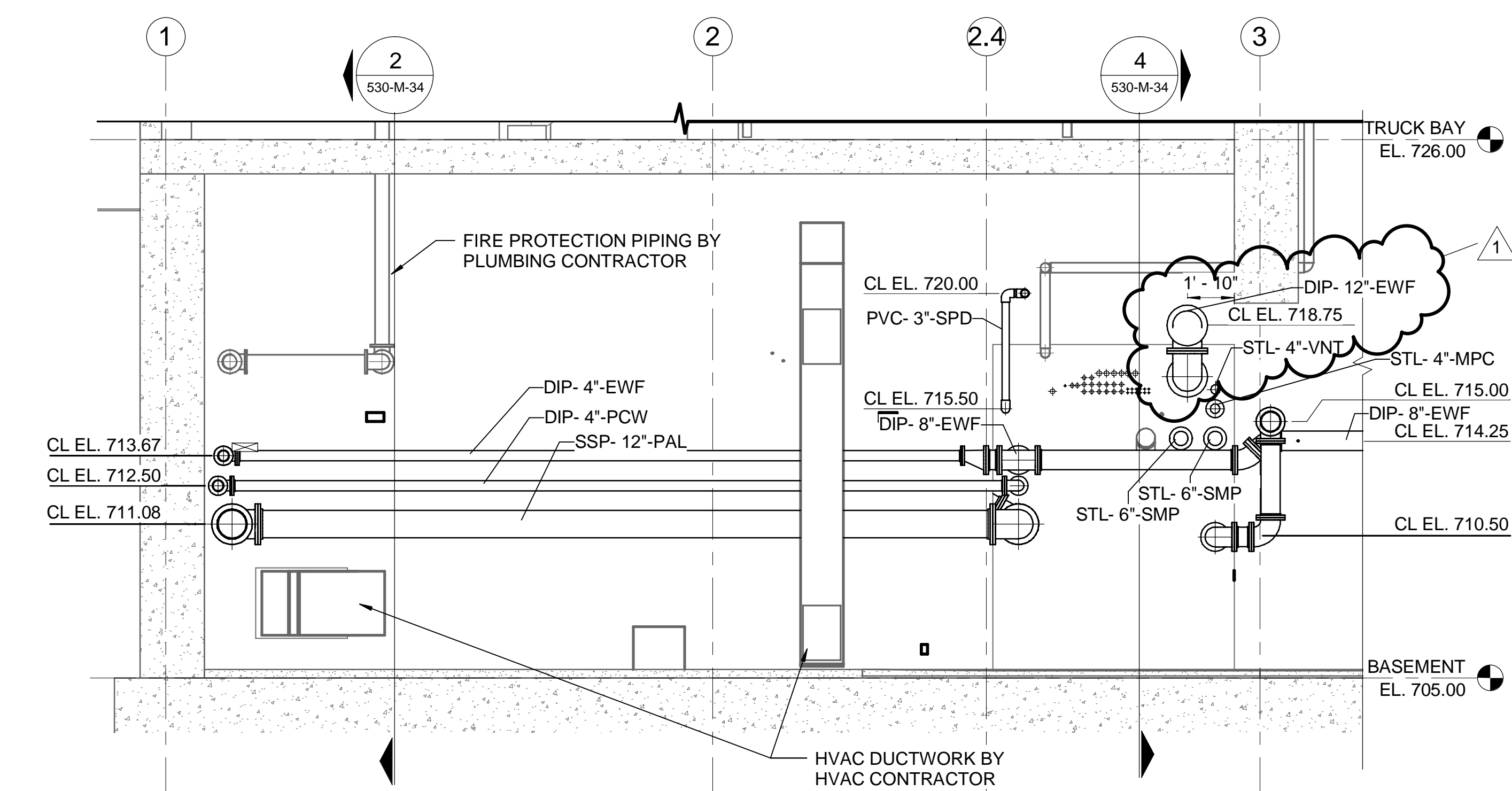
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**GENERAL SHEET NOTES**

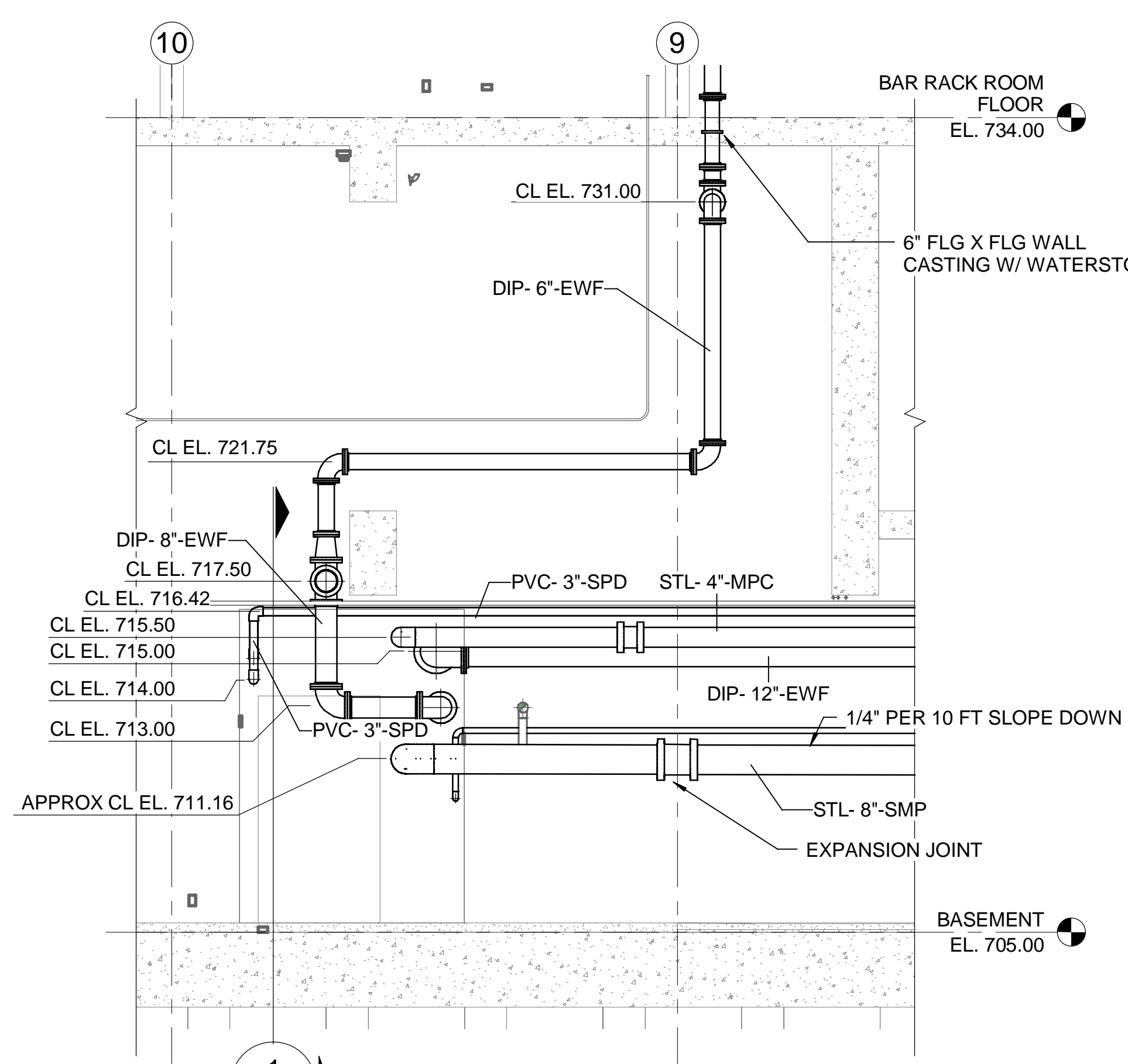
- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.



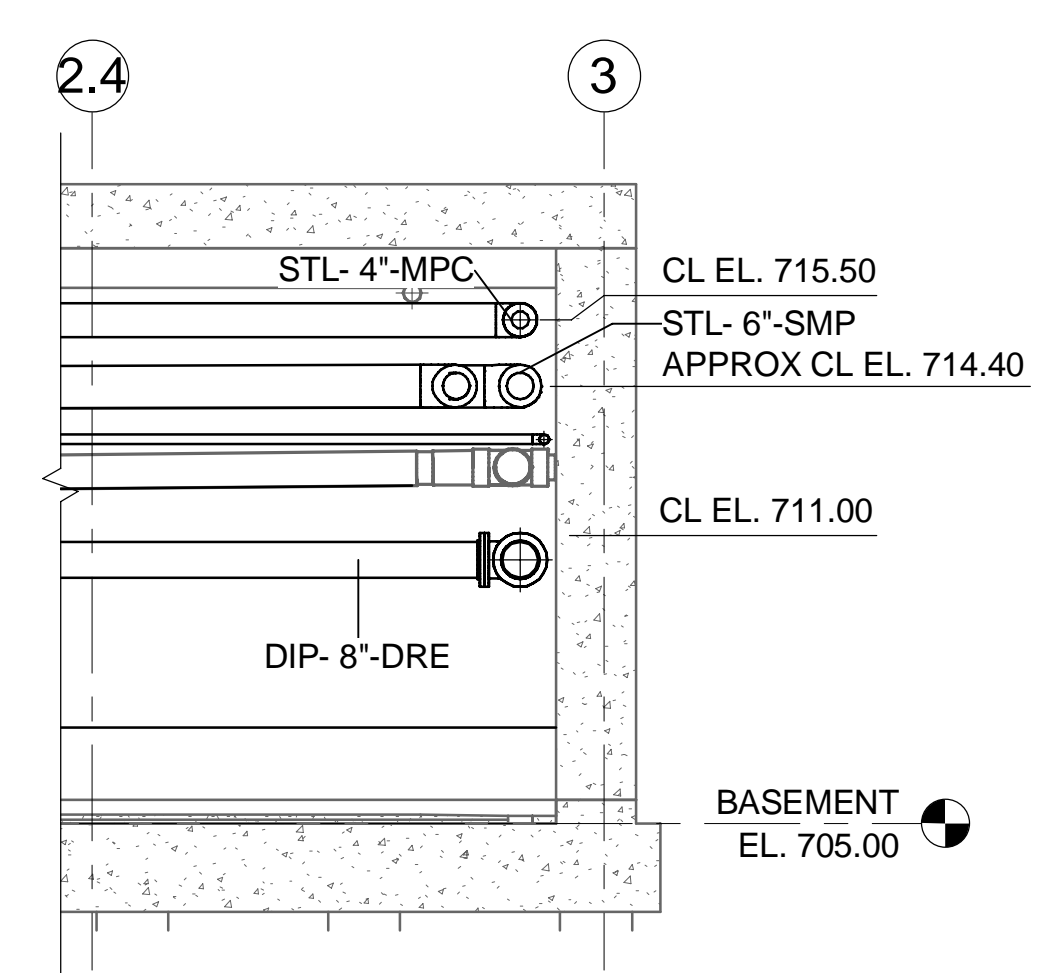
**SECTION 1**  
SCALE: 3/16" = 1'-0" 530-M-11



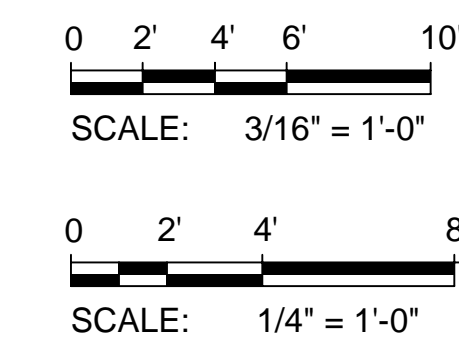
**SECTION 2**  
SCALE: 1/4" = 1'-0" 530-M-11



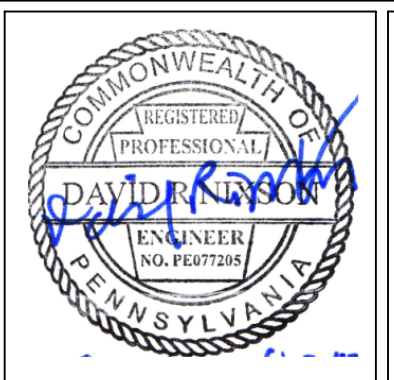
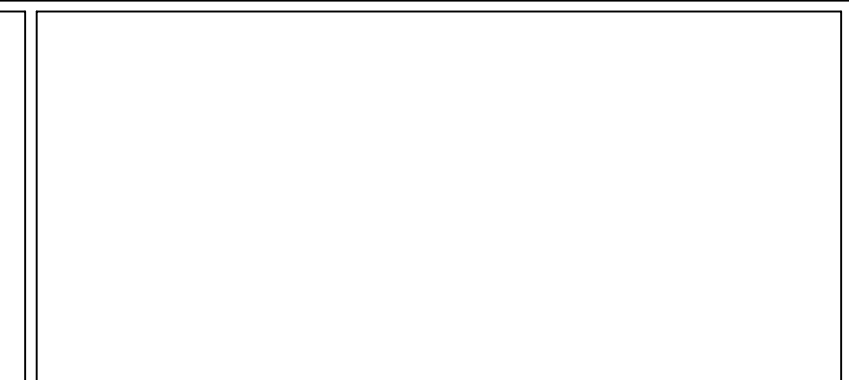
**SECTION 3**  
SCALE: 1/4" = 1'-0" 530-M-11



**SECTION 4**  
SCALE: 1/4" = 1'-0" 530-M-10



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**530-M-35  
EAST HEADWORKS  
SECTIONS**

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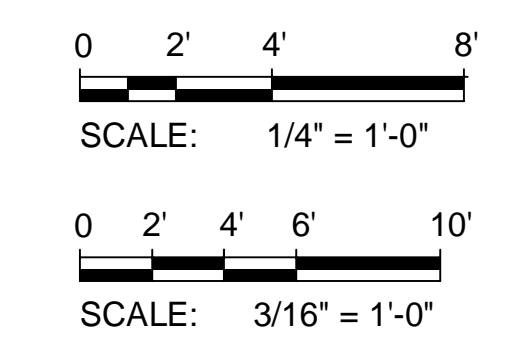
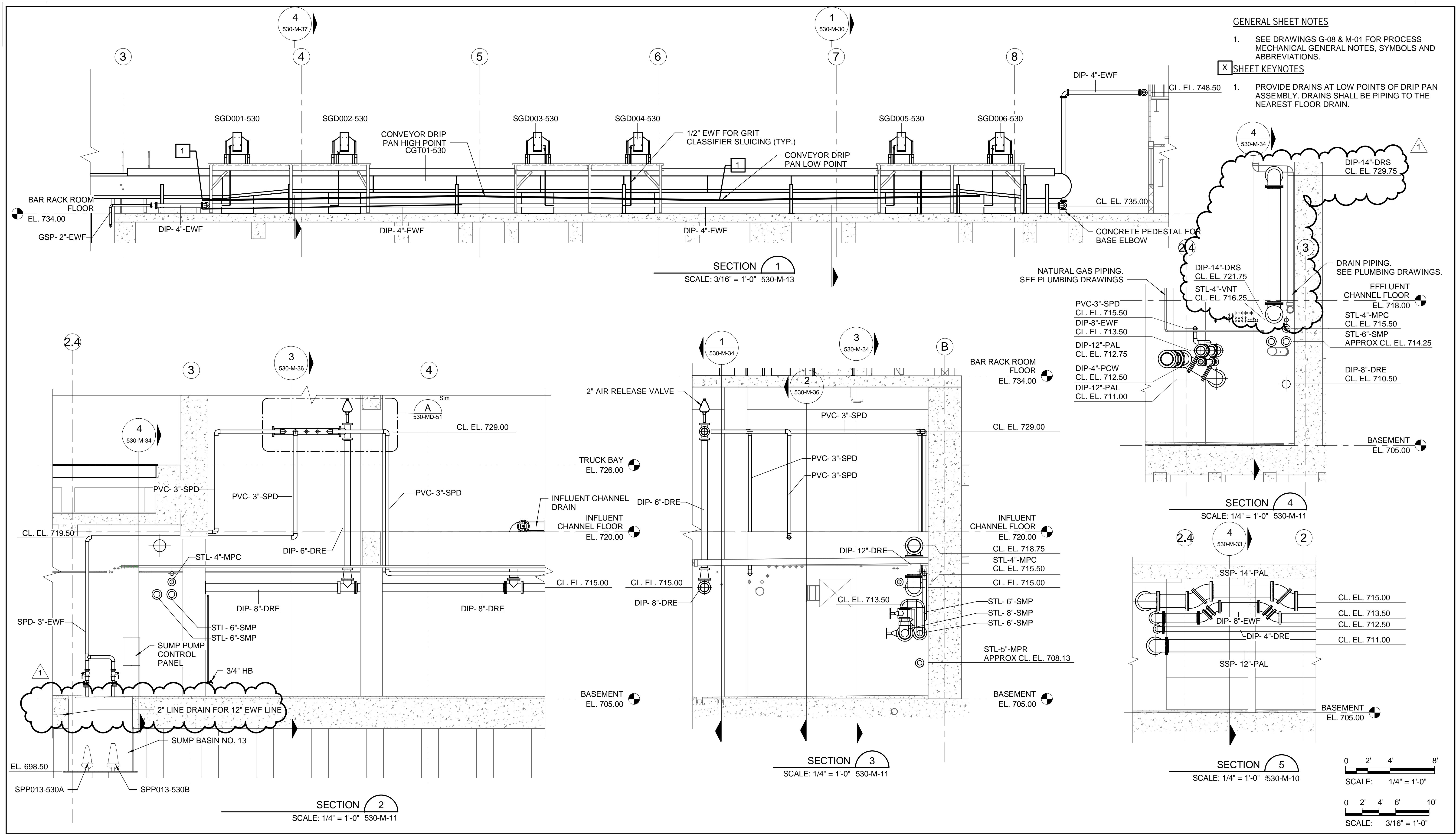
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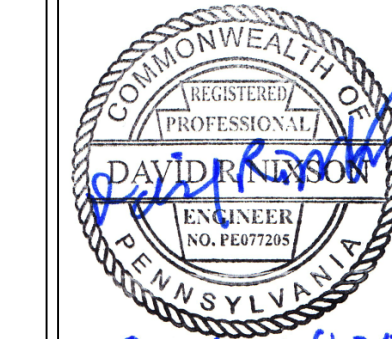

**GENERAL SHEET NOTES**

- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

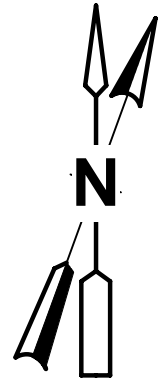
**SHEET KEYNOTES**

- PROVIDE DRAINS AT LOW POINTS OF DRIP PAN ASSEMBLY. DRAINS SHALL BE PIPING TO THE NEAREST FLOOR DRAIN.



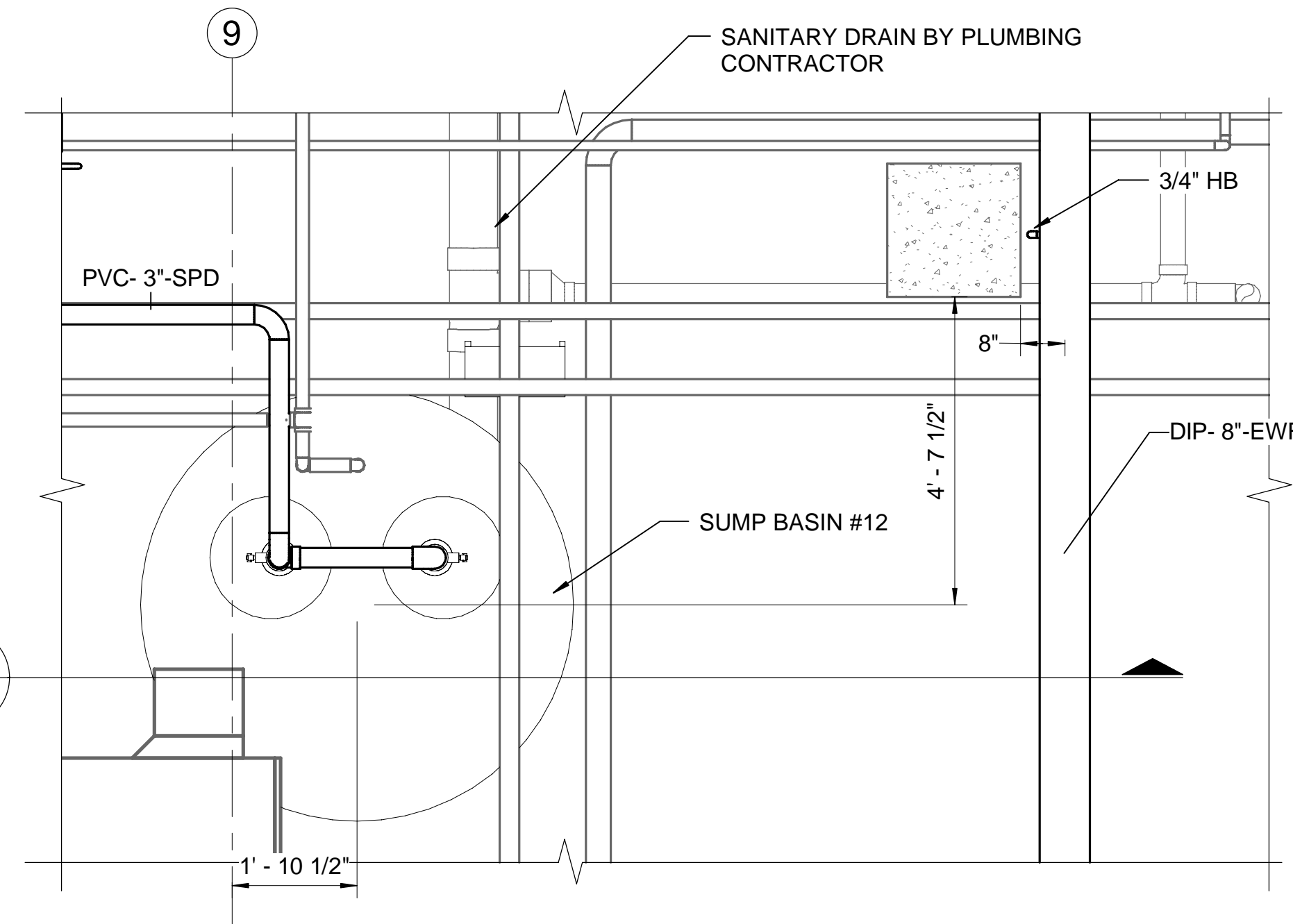
Designed by: LAQ	REVISION	 <p><b>Whitman, Requardt &amp; Associates, LLP</b> 801 South Caroline Street, Baltimore, MD 21231</p>		 <p><b>alcosan</b> allegheeny county sanitary authority</p>	ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN  3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810 www.alcosan.org	ALLEGHENY COUNTY SANITARY AUTHORITY WASTEWATER TREATMENT PLANT EAST HEADWORKS  <b>530-M-36</b> <b>EAST HEADWORKS</b> <b>SECTIONS</b>	Contract: 1729							
Drawn by: LAQ	<table border="1"> <thead> <tr> <th>REV No.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>APPV</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>10/28/20</td> <td>ISSUED FOR BIDS</td> <td></td> </tr> <tr> <td>1</td> <td>4/2/21</td> <td>ADDENDUM NO. 11</td> <td></td> </tr> </tbody> </table>						REV No.	DATE	DESCRIPTION	APPV	0	10/28/20	ISSUED FOR BIDS	
REV No.	DATE	DESCRIPTION	APPV											
0	10/28/20	ISSUED FOR BIDS												
1	4/2/21	ADDENDUM NO. 11												
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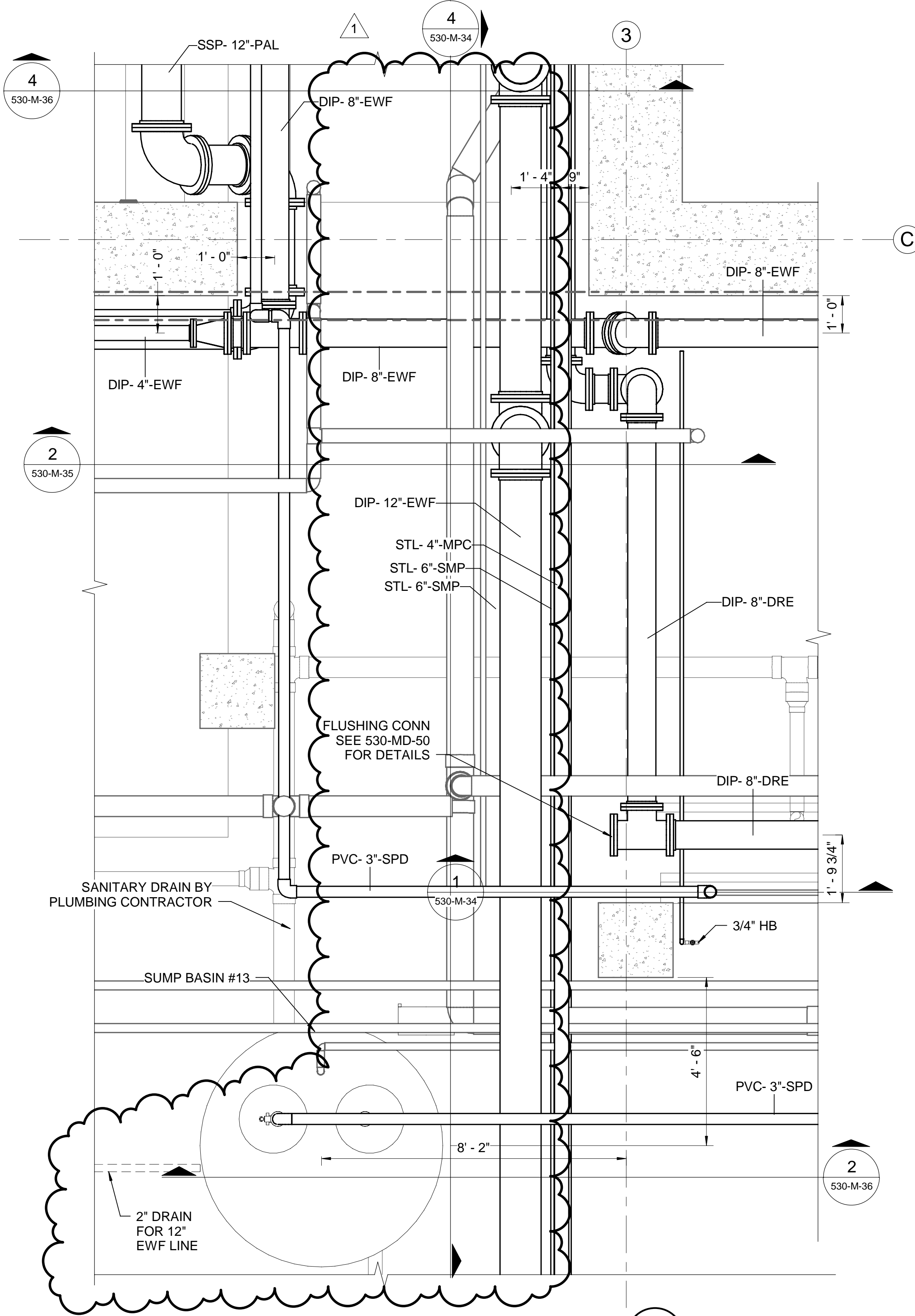


**GENERAL SHEET NOTES**

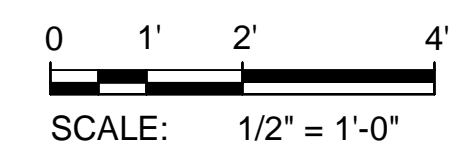
1. SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.



**BASEMENT EAST SIDE - ENLARGED PLAN 2**  
SCALE: 1/2" = 1'-0" 530-M-11

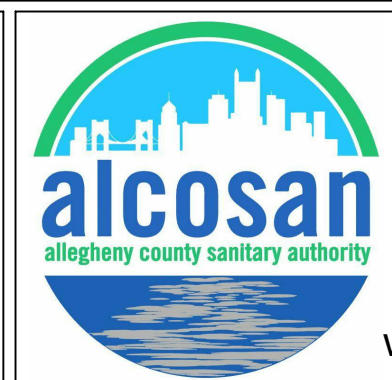
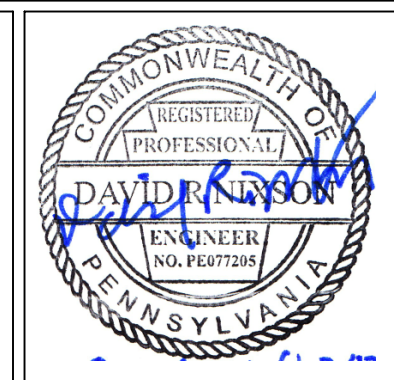


**BASEMENT WEST SIDE - ENLARGED PLAN 1**  
SCALE: 1/2" = 1'-0" 530-M-11



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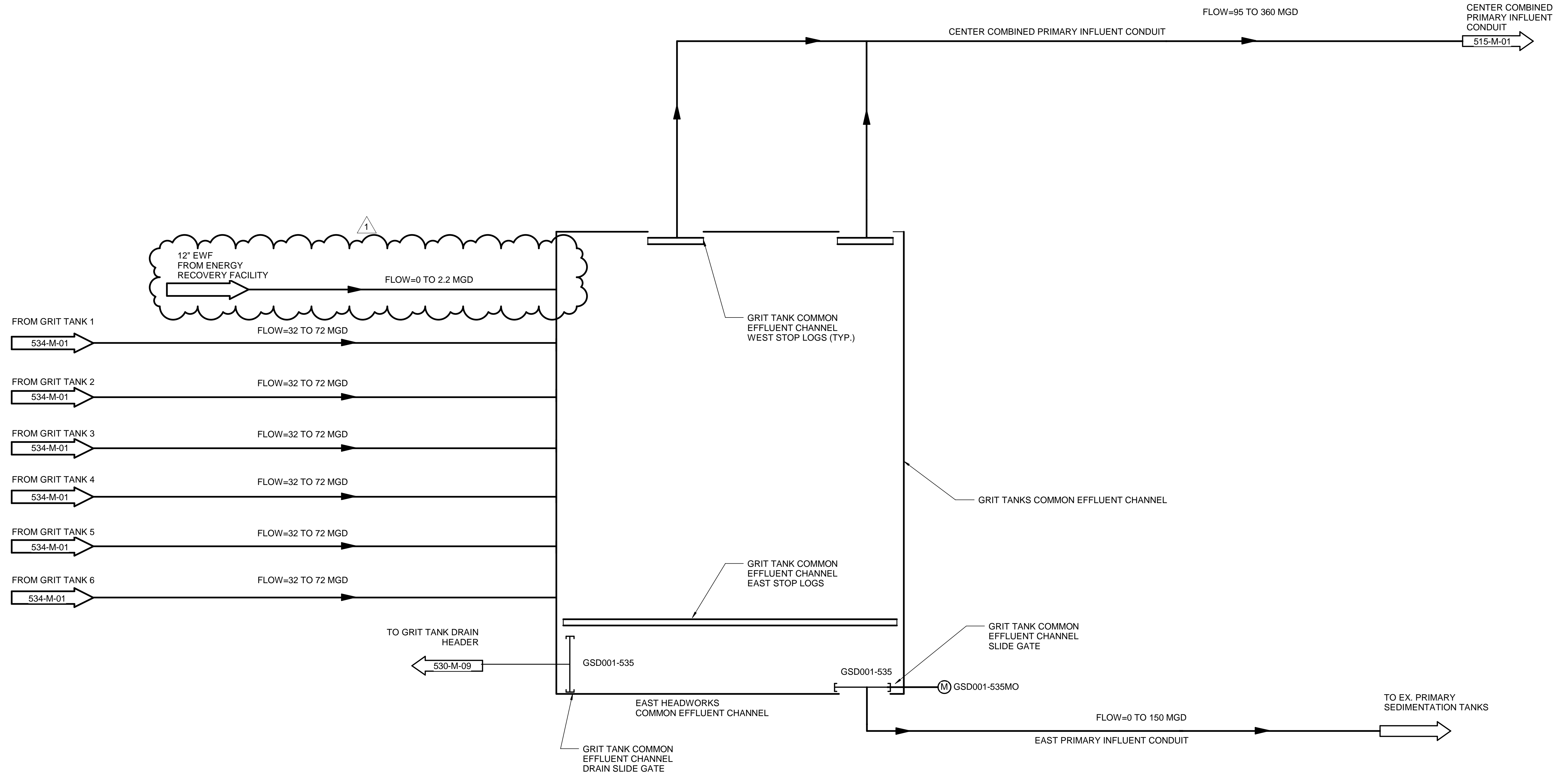
ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

**530-M-41  
EAST HEADWORKS  
ENLARGED PLANS**

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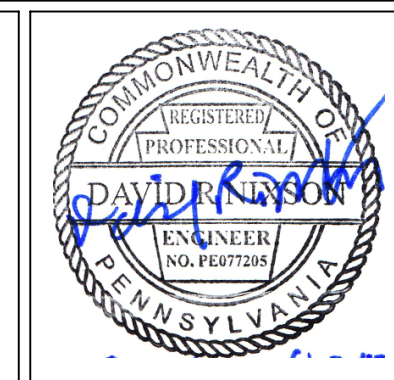
GENERAL SHEET NOTES

- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.



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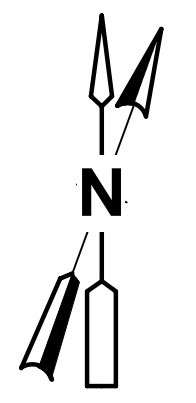
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Drawn by:	CRM	0	10/28/20	ISSUED FOR BIDS	
Checked by:	CRM	1	4/2/21	ADDENDUM NO. 11	
	DRN				



ALLEGHENY COUNTY SANITARY AUTHORITY  
WASTEWATER TREATMENT PLANT  
EAST HEADWORKS

535-M-01  
GRIT TANKS COMMON EFFLUENT CHANNEL  
PROCESS FLOW DIAGRAM

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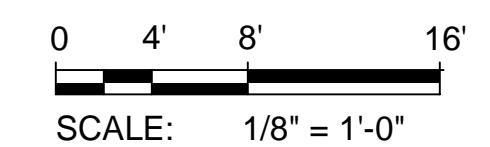
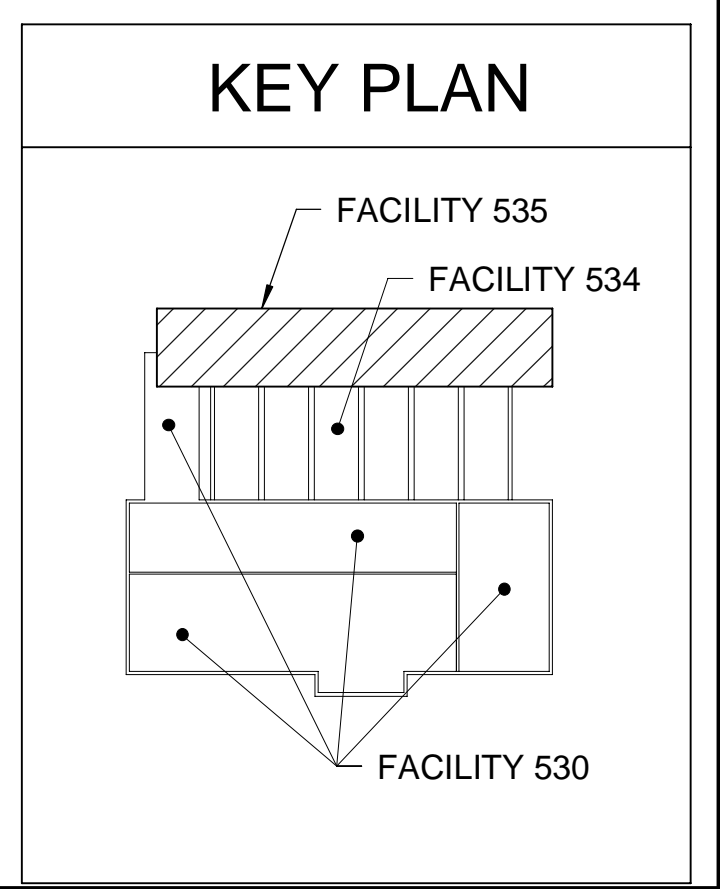
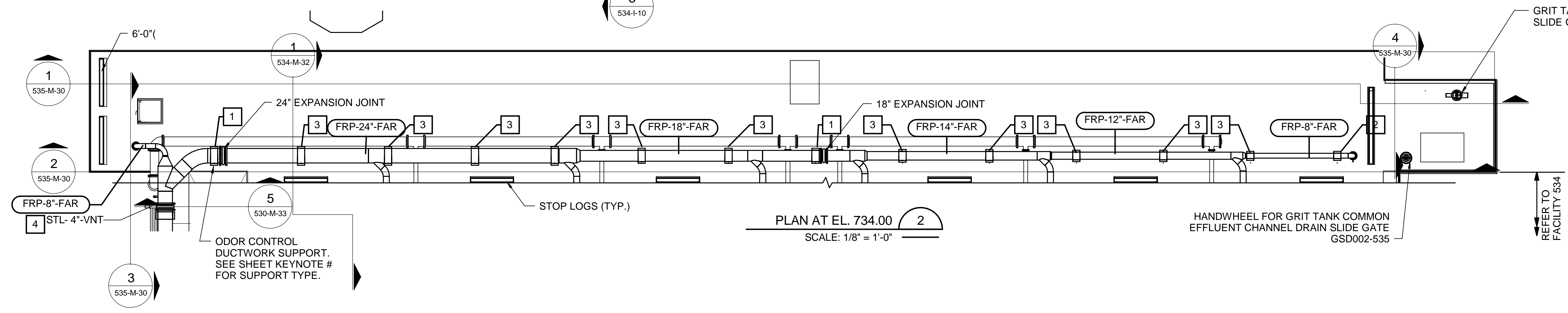
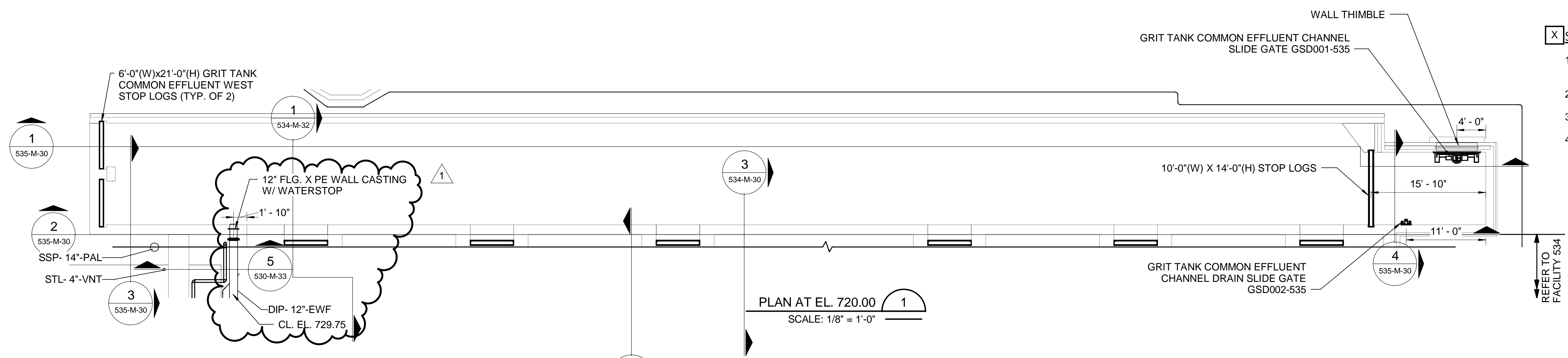


**GENERAL SHEET NOTES**

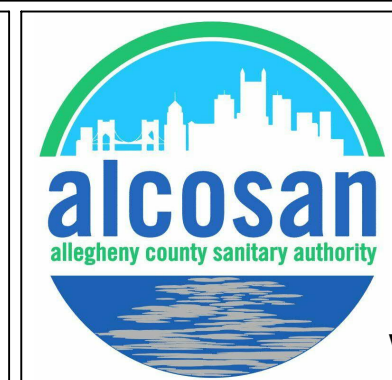
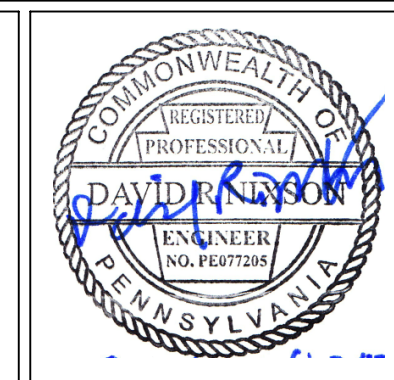
- SEE DRAWINGS G-08 & M-01 FOR PROCESS MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

**X SHEET KEYNOTES**

- PROVIDE FLANGED ANCHOR SUPPORT FOR ODOR CONTROL DUCTWORK. SEE DETAIL G/MD-01 FOR DETAILS.
- PROVIDE ANCHOR SUPPORT FOR ODOR CONTROL DUCTWORK. SEE DETAIL H/MD-01 FOR DETAILS.
- PROVIDE GUIDE SUPPORT FOR ODOR CONTROL DUCTWORK. SEE DETAIL F/MD-01 FOR DETAILS.
- VENT FOR STEAM PROCESS. TERMINATION VENT WITH GOOSENECK AT 6'-0" ABOVE GRADE. PROVIDE INSULATION AROUND VENT LINE.



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EAST HEADWORKS

**535-M-10**  
**GRIT TANKS COMMON EFFLUENT CHANNEL PLANS**

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