ALLEGHENY COUNTY SANITARY AUTHORITY

February 24, 2021

CONTRACT NO. 1735 G, E, H, P

ALCOSAN PARKING GARAGE

ADDENDUM NO. 1

All bidders bidding Contract No. 1735 G, E, H, P shall read and take note of this Addendum No. 1. The Contract Documents for **Contract No. 1735 G, E, H, P – ALCOSAN Parking Garage** are hereby revised and/or clarified as stated below.

Acknowledgement of Contract No. 1735 G, E, H, P; Addendum No. 1
The Acknowledgement attached to Addendum No. 1 is to be signed and returned immediately via email to Kathleen Uniatowski at contract.clerks@alcosan.org and acknowledged with the Bidder's Proposal.

Kimberly Kennedy, P.E.
Director – Engineering and Construction

ACKNOWLEDGEMENT OF

CONTRACT NO. 1735 G, E, H, P – ALCOSAN PARKING GARAGE

ADDENDUM NUMBER 1

FIRM NAME: _____

SIGNATURE: _____

TITLE: _____

DATE: _____

FEBRUARY 24, 2021

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ALCOSAN PARKING GARAGE

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ALCOSAN PARKING GARAGE

ADDENDUM NO. 1

A. Contract Documents – Volume 1

Article 1, Section 1-3G: REVISE Unit Price Table footer to read "Sum of Extended Total Amount for 01-07"

Article 1, Section 1-3G: REVISE Unit Price Table item 06 to read "Contingent Unsuitable Subgrade Excavation"

Article 3, Section 3.21: DELETE "Accordingly, the Owner shall issue to Contractor one or more exemption certificates in the form attached hereto as Exhibit D so that Contractor may avail itself of the said sales and use tax exemption."

Article 3, Exhibit A-5: DELETE Boiler and Machinery insurance paragraph in its entirety.

B. Contract Specifications – Volume 2

1. Spec Section 000110 Table of Contents: Revised and Reissued.

2. Spec Section 011100 Summary of Work: Paragraph 1.9.A Last Paragraph – REPLACE "Paragraph 7.08. of the General Conditions Section 00 72 13" with "Volume 1".

3. Spec Section 01 22 00 3.1.F: CHANGE "CONTINGENT UNCLASSIFIED EXCAVATION" to read "Contingent Unsuitable Subgrade Excavation"

4. Spec Section 015000 Construction Facilities, Temporary Controls and Utilities: Paragraph 1.6.A.6. – REPLACE "This payment is approximately 20% of the Engineers estimate. This amount will be credited to the toward the Building Permit amount." with "This payment is approximately 40% of the Engineers estimate. This amount will be credited to the toward the Building Permit amount. The amounts paid by ALCOSAN are as follows: Building Permit - $25,500, Electrical Permit - $2,210, Fire Alarm Permit - $400, Fire Suppression Permit- $220, and Mechanical Permit- $220."

5. Spec Section 015000 Attachment A: REVISE paragraph 1) a. “Initially each Prime Contractor (Contractor) is allowed **two** autos or pick-ups (vehicles) onto the project site. The vehicles shall be registered with ALCOSAN **two** Contractor personnel who will be issued card-reader (access) Cards for access to the Plant through the right gate at the ALCOSAN Security (Security) Station off of Preble Avenue. These access passes shall not be shared for security reasons. Use of Gates GVE001 and GVE002 require manual operation by ALCOSAN Security and will only be opened with prior coordination with the Construction Manager.”

6. Spec Section 015200 Maintenance of Plant Operations 1.1 B: ADDED sentence 5. “No electrical outage in Sludge Processing Building is to take place until after 12:00 noon. Normal notifications will still apply.”

7. Spec Section 03 30 00 Cast-In-Place Concrete: DELETE paragraph 2.2, I (Under-slab Vapor Retarder Membrane) and REPLACE with:

   Slip Sheet: 2 layers of polyethylene sheet, 6 mil minimum thickness, complying with ASTM C171. Prior to installation, when delivered in sheets or rolls, drill a rectangular 12”x12” grid of holes with a 1/8” minimum to 1/4” maximum regular drill bit. Unroll and install over compacted granular backfill. Overlap adjacent sheets by 12” and prevent from slipping by intermittently installed segments of plastic tape 12” to 24” long. Stagger overlaps in plan by at least 2 feet in either direction.

   a. In paragraph 2.4, A Concrete Mix Design Matrix, Mix No. 4 Columns:
      i. DELETE: (* See Column Schedule on drawings for locations)
      ii. DELETE: 6.0*

   b. In paragraph 2.4, A CONCRETE MIX DESIGN MATRIX NOTES, REPLACE Note (5) in its entirety with:

      (5) For the maximum coarse aggregate size indicated in the Matrix above, use the following aggregate size numbers per ASTM C33:

      ½” - #7 aggregate
      ¾” - #67 aggregate
      1" - #57 aggregate

      For Mix No. 5, nominal aggregate size shall be 3/4” or higher for the air entrainment range indicated.

8. Spec Section 08 70 00 Finish Hardware: There are two sections included in the bid set for this spec section. DELETE the second specification 0870000 with five hardware sets in its entirety. The Section 087000 with seven hardware sets is to remain.

9. Spec Section 09 24 00 Portland Cement Plastering: ADD this spec section in its entirety.

10. Spec Section 14 21 20 Machine-Roomless Electric Traction Elevators: REPLACE paragraph 1.2, C in its entirety with:

C. Non-proprietary Components

1. Insofar as practicable, the Owner desires that the electric traction elevators are comprised of non-proprietary components that will allow service and maintenance by whomever the Owner determines, not necessarily the elevator contractor for this project.
    a. Contractors are expected to clarify what, if any, proprietary components are included, along with procedures for obtaining spare parts and maintaining the elevators.
2. Special tools: Any special tools required to service the elevator shall be included in the base bid and become the property of the owner upon contract completion.
3. Diagnostic capabilities must be integral with the controls. Any diagnostic devices necessary to adjust, troubleshoot and change parameters must be a part of the control system and become the Owner's property upon completion of the job. If a separate diagnostic device is required, it shall be included in the bid at no additional cost to the Owner and become the Owner's property upon completion of the job.
4. The Owner must have ready access to software revisions and any technical support required to maintain the elevator in its originally installed functional state after completion of the installation.

Additionally, General Contractor is to provide attached Elevator Compliance Letter signed by Elevator Vendor with their bid.

C. Contract Specifications – Volume 3

1. Spec Section 000110 Table of Contents: Revised and Reissued.

2. Spec Section 31 00 00 Earthwork:
    a. REVISED to incorporate the following modifications:
        i. In paragraph 1.1.C, second sentence, contained within the Geotechnical Report are incorporated into the construction contract as a Contract Document. Replace "incorporated into the construction contract as a Contract Document." with "for information only."
        ii. In paragraph 1.3.B.1, replace the entirety with…"All tests and inspections will be performed by Independent Owner Testing Agency per Section 01 45 00."
        iii. In paragraph 3.6.B.1, replace the entirety with… "The Independent Owner Testing Agency shall perform all necessary Quality Control tests and procedures for the performance of the work, in accordance with Section 014500 and this section, to produce the end results specified. The Independent Owner Testing Agency shall maintain clear and orderly records of such tests and procedures and make them available for field review and approval of the Professional and ALCOSAN."

3. Spec Section 31 23 00 Management Handling Disposal:

    a. Two spec sections 31 23 00 were included in the specifications and one can be deleted.

    b. REVISED to incorporate the following modifications:
        i. Paragraph 1.3.F.6 has been updated to follow up as the next line item under paragraph 1.3.F.5. All follow numberings have been updated accordingly.

4. Spec Section 32 13 13 Concrete Paving: In paragraph 2.2.A, at the end of the paragraph, ADD "galvanized."

5. Spec Section 33 11 16: Two spec sections 33 11 16 were included in the bid documents. The first section can be deleted in its entirety.

6. Spec Section 31 63 29: DELETE Section 4.3 in its entirety.

D. Contract Drawings

1. Drawing 210-C-13 Phase I Grading Plan:
    a. DELETE this drawing and REPLACE with the attached drawing 210-C-13.
    b. Updated grading to keep all disturbed area within the sawcut boundary.

2. Drawing 210-L-101:
    a. DELETE this drawing and REPLACE with the attached drawing 210-L-101.

3. Drawing 210-A-41 Stair 1/Elevator – Enlarged Plans:
    a. ADD:

        General Note: Limits of plaster and paint are the following elevator core walls, from floor up to slab soffit (excluding area of elevator doors and frames):
        Level 1: 10'-2" width of south wall only
        Level 2: 10'-2" width of south wall + 8'-8" width of east wall + 1' return on north wall to face brick.

4. Drawing 210-A-42 Stair 1/Elevator – Enlarged 3rd & 4th Level Plans:
    a. ADD:

        General Note: Limits of plaster and paint are the following elevator core walls, from floor up to slab soffit (excluding area of elevator doors and frames):
        Levels 3 and 4: 10'-2" width of south wall + 8'-8" width of east wall + 1' return on north wall to face brick.

5. Drawing 210-A-43 Stair 1/Elevator – Enlarged 5th Level & Roof Plans:
    a. ADD:

        General Note: Limits of plaster and paint are the following elevator core walls, from floor up to slab soffit (excluding area of elevator doors and frames):
        Level 5: 10'-2" width of south wall only

6. Drawing 210-AS-50 Room / Door Schedules and Details:
    a. REPLACE with the attached drawing 210-AS-50.
    b. Elevator door details 5, 6 and 7 have been added.

7. Drawing 210-S-10 Caisson Plan (Drilled Piers):
    a. REPLACE with the attached drawing 210-S-10.
    b. Caisson 2.5 has been added between gridlines 8 and 9.

8. Drawing 210-S-11 Foundation Plan:
    a. REPLACE with the attached drawing 210-S-11.
    b. Caisson 2.5 has been added between gridlines 8 and 9.

c. Proposed electrical and telecom line for parking garage has been shifted slightly south to avoid added caisson.

9. Drawing 210-S-12 Ground Level Plan:
    a. REPLACE with the attached drawing 210-S-12.
    b. Caisson C2.5 has been added between gridlines 8 and 9.
    c. Extent of geofoam lightweight fill has been clarified.
    d. Slab on grade note has been modified.

10. Drawing 210-S-13 Level 2 Framing Plan:
    a. At slab on grade note, ADD: “See drawing 210-SD-01 for typical slab on grade details.”

11. Drawing 210-S-22 Foundation Wall Elevations:
    a. REPLACE with the attached drawing 210-S-22.
    b. Elevations 4 and 5 are modified to show the added C2.5 caisson.

12. Drawing 210-S-23 Foundation Sections:
    a. REPLACE with the attached drawing 210-S-23.
    b. Section 4 is modified to show the added C2.5 caisson.

13. Drawing 210 S-34 Stair 1/ Elevator Foundation Sections 2:
    a. In section 5:
        i. DELETE waterproofing and foundation drain tile. Neither are required in this project.
        ii. DELETE notes:

            See Arch for waterproofing.
            Drain Tile if req’d. (See Arch.)

14. Drawing 210-SS-01 Post-Tensioned Beam Schedule:
    a. REVISE girder concrete strength to 5 ksi.

15. Drawing 210-SS-02 Post-Tensioned Beam Schedule:
    a. REVISE girder concrete strength to 5 ksi.

16. Drawing 210-SD-01 Typical Slab on Grade Details:
    a. In details 1, 2, 3, 4, 5, 6, 7 and 9, DELETE:
    “or vapor retarder (barrier) as appl.,”

17. Drawing 210-SS-03 Column Schedule: REVISE all column concrete strength to 5 ksi.

18. Drawing 210-P-01: DELETE this drawing and REPLACE with the attached drawing 210-P-01 to include the floor drain detail removal.

19. Drawing 210-ESL-01: DELETE this drawing and REPLACE with the attached revised drawing 210-ESL-01.

E. Questions

Q1: General Contract Conditions Article 3 says there should be an Exhibit D, but this is not included.

A1: Exhibit D only pertains to bid items that are exempt from PA Use Tax. Because no bid items meet this criteria in this project, there is no Exhibit D attachment.

Q2: Spec 030130 is listed in the table of contents, but not included.

A2: This specification section is not required and has been removed from the Table of Contents.

Q3: There are two copies of spec 087000 included, and they are different.

A3: Specification 08 70 00 with seven hardware sets is applicable to this project. The duplicate specification will be deleted in the conformed document set.

Q4: Spec 312100 in the table of contents is numbered 312001 in the spec.

A4: The correct spec number is 31 21 01 and has been updated in the Table of Contents.

Q5: Spec 312000 in the table of contents is numbered 312100 in the spec, and there are two copies included. (they appear to be the same).

A5: 31 21 00 is the correct number. The Table of Contents will be updated per addendum and the redundant spec section will be removed in the conformed document set.

Q6: There are two copies of spec 312300 included. (they appear to be the same).

A6: One will be deleted in the conformed document set.

Q7: Spec 321123 in the table of contents has a different title and number at the footer of the pages in the spec.

A7: The footer will be revised to match the Table of Contents.

Q8: There are two copies of spec 331116 included, and they are different.

A8: Use the second specification in the volume. The other will be deleted in the conformed document set.

Q9: The report in Volume 3 has two drawings in Appendix F, while Appendix F in the separate report has nothing.

A9: The Geotech Report in Volume 3 Spec should be used. It has both the Appendix F drawings and Addendum 1.

Q10: The report in Volume 3 has an Addendum 1 at the end, dated 12/13/20, while the separate report does not.

A10: The Geotech Report in Volume 3 Spec should be used. It has both the Appendix F drawings and Addendum 1.

Q11: Geotechnical report, boring log B-5: Remark column has a notation “soil is contaminated.” There is no definition of what this means. May we assume any work related to this will be covered under the $100,000 allowance?

A11: Geotechnical report notation that “soil is contaminated” is an anecdotal field observation that was not confirmed by any testing. Specification 31 23 00 provides the definitions of wastes and how they are to be handled in this contract. Management of all residual waste is to be included in the lump sum. The force account only covers “other contaminated waste” as defined in 31 23 00.

Q12: Drawing A-42, Note 1 (for example): Indicates a “skim coat of plaster.” Please provide a specification for this product and please define the limits of this plaster. For example, the note points to surfaces where the details (such as 1 & 3/AD-71) show masonry with no plaster coating.

A12: See attached section 092400- Portland Cement Plastering. See new details 5, 6 and 7 clouded on attached drawing 210-AS-50.

Limits of plastering are the following elevator core walls, from floor up to slab soffit (excluding area of elevator doors and frames):

Levels 1 and 5: 10’-2” width of south wall only

Levels: 2, 3 and 4: 10’-2” width of south wall + 8’-8” width of east wall + 1’ return on north wall to face brick.

Q13: Drawing SD-01, details 1 & 2 (for example): Indicate “slip sheet or vapor barrier, as appl., see plan.” We see no notations on the structural or architectural plans for either. Please define any areas where a slip sheet or vapor barrier are required. Also, if a slip sheet, please provide a specification.

A13: Provide slip sheet at all slab on grade areas as shown in the details on SD-01. Vapor retarder is not required at any location and has been deleted.

In section 033000 Cast in Place Concrete, delete paragraph, 2.2, I (Under-slab vapor retarder) and replace with:

Slip Sheet: 2 layers of polyethylene sheet, 6 mil minimum thickness, complying with ASTM C171. Prior to installation, when delivered in sheets or rolls, drill a rectangular 12”x12” grid of holes with a 1/8” minimum to 1/4” maximum regular drill bit. Unroll and install over compacted granular backfill. Overlap adjacent sheets by 12” and prevent from slipping by intermittently installed segments of plastic tape 12” to 24” long. Stagger overlaps in plan by at least 2 feet in either direction.

Q14: Bid Form, 1-3G: The last line refers to summing the lines 01 through 04, but it seems like it should be the sum of lines 01 through 07. Please confirm.

A14: Numbering 01-07 is correct. The Unit Price Table will be corrected in the conformed document set.

Q15: Bid Form, 1-3G: Please confirm the quantities given are the total quantities we are to include for this project. For example, that lines 05 and 06 are the total excavation and backfill to be included…for bulk grading, foundations, etc….and that there would be none in the 8.1 Base Bid on 1-2G. This is how it seems to be described in spec 012200, 3.1.F and G.

A15: Unit Price items 05 and 06 cover below grade excavation only per 31 21 00 3.4.C.1 where unsuitable in-situ fill material is encountered. The unit prices cover removing unsuitable fill below grade and replacing it with an equal amount back up to the grade line. Excepting this circumstance of unsuitable subgrade fill (as determined by the Engineer), all excavation and fill to grade lines shown on drawings shall be included in the lump sum bid price. Excavation associated with caissons shall be included in the caisson unit prices. Unit Price item 06 has been renamed "Contingent Unsuitable Subgrade Excavation" to more accurately reflect this intent.

Q16: Bid Form, 1-3G: Please confirm that the material for line 05 is to be considered "residual waste" as for all other excavated materials on site.

A16: Material for Unit Price line 05 is to be classified per Spec Section 31 23 00 Section 1.5. As stated in 31 23 00, 1.5.A.1, "All other excavated soils and other excavated material shall be presumed as, and managed as, Residual Waste in accordance with all applicable federal, state and local laws."

Q17: Bid Form, 1-3G: Please clarify if the caisson unit prices are to include hauling and disposal of the caisson spoils as "residual waste" or if this is to be accounted for elsewhere. If so, where?

A17: Caisson unit price should be inclusive of spoils disposal. Spoils shall be assumed residual waste for unit pricing. If it is found after boring that another waste classification applies, spoils shall be managed in accordance with 31 23 00.

Q18: Bid Form, 1-21G: Is this entire qualification statement required with the bid? On public bids we typically see this type of detailed information being required only of the apparent low bidder, post-bid. Article 2.05.B.2 refers to information required on the bid form…could this be some of what that is referencing?

A18: Qualification statement and financial statement are required. Failure to provide these will result in the bid being considered non-responsive. Article 2.05.B.2 states that Article 6 specifications may have additional information requirements and that requirements of Article 2.05 should not be considered all-inclusive.

Q19: Bid Form, 1-21G: If this qualification statement must be provided with the bid, how is it to be presented? There is quite a lot of information required, and we are cautioned elsewhere in these documents not to take apart the bid form or we risk rejection of our bid. Can this be included as a separate bound document?

A19: There is no set format to the qualification statement because what is appropriate varies from project to project. On a project of this scale, a separate, bound document would be appropriate.

Q20: Bid Form, 1-16G: Is this signed certificate all that is required for the actual bid, or are the following pages 1-4 also required at bid time? On public bids we typically see this type of detailed information being required only of the apparent low bidder, post-bid. At bid time, bidders would simply be required to acknowledge and commit to using best efforts to meet the established goals. It is practically impossible to actually commit to subs and vendors at bid time without having performed a thorough scope review. Article 2.05.B.2 refers to information required on the bid form…could this be some of what that is referencing?

A20: Pages 1-4 shall be included in the bid and filled out or the bid will be considered non-responsive. The solicitation statement does not require the contractor to secure a commitment by the time of bid- just to initiate the solicitation. Per 1-16G, the contractor is required to submit a proposal to comply with the 10%-25% requirement and is not required to have firm commitments at the time of bid. A commitment is expected to be obtained by time of award.

Q21: Bid Form: Is the letter of assent for the project labor agreement to be submitted with the bid? Article 2.33 in the Information for Bidders says it is, but the bid form does not indicate this.

A21: The Letter of Assent is to be submitted by successful low bidder prior to contract award, not with the bid.

Q22: Article 3, Exhibit A, A-5: In the middle of page A-5 there is an article referring to boiler and machinery insurance. This article references a different contract number, and this type of insurance does not seem applicable to the construction of a parking garage. Can this coverage be eliminated?

A22: Boiler and Machinery Insurance requirement to be struck from Contract.

Q23: 011100, 1.2.A.1.a3: Indicates that the GC owns excavation for utility trenches, pipelines and ductbanks. This is typically done by the prime responsible for the utility.

A23: Bid item to remain as written.

Q24: 011100, 1.2.A.1.a.17: Indicates that the GC owns site water and sanitary systems outside the garage. Being that in Allegheny County this work must be performed by a licensed plumber, it would be more appropriate to assign this scope of work to the plumbing prime contractor. Typically, on public jobs this is what we see.

A24: Plumbing Contractor shall perform plumbing work for water and fire protection from inside garage to the 6" isolation valve connecting to the relocated 12" water line. Water piping beyond this point will be performed by the General Contractor. The Plumbing Contractor will perform work for the sanitary drain piping from inside the garage to the first manhole, and the General Contractor will perform the remainder of the sanitary piping.

Q25: 011100, 1.9: Refers to spec 007213, which doesn't exist.

A25: Reference to spec 007213 will be deleted and paragraph 1.9 will be revised.

Q26: 011100, 1.13.A.2: Can the QC representative be the project manager or site superintendent? Is this person on-site or in the home office?

A26: Yes. Per 01 11 00, they must be onsite.

Q27: 013316, 1.8.C: Indicates we are responsible for the costs of eBuilder. Typically, we would be given access to a Client's eBuilder system for a particular project. What costs are involved?

A27: "Costs associated with using" refers to man-hours spent uploading and processing submittals/RFIs into e-builder. This section states that construction administration activities in e-builder cannot be considered a discrete payment item in the schedule of values.

Q28: 015000, 1.6.A.6: Please identify the cost of the 20% payment so that we can properly account for the remaining permit cost in our proposal. Also please confirm the 20% since the City of Pittsburgh requires 40% of the cost at the time of permit application.

A28: Amount paid by ALCOSAN is actually 40%. Please note that due to minimum permit fees not all exactly 40% of the estimated values. The amounts to be paid by ALCOSAN for plan review are:

a. Building Permit - $25,500
b. Electrical Permit - $2,210
c. Fire Alarm Permit - $400
d. Fire Suppression - $220
e. Mechanical - $220

Q29: 015013, 1.1.A: Please confirm the intent of this would be that the CM takes over all rental charges for the trailer at completion, and that it is not the intent that the GC is expected to purchase the trailer outright. Also, 1.1.A says to turn over all furnishings with the trailer, but 1.2.A.4 says the furnishings remain the property of the GC. Please clarify.

A29: The intent is for the GC to provide a field office for the duration of the contract, which can be accomplished through rental or purchase. The Owner does not intend to take possession of the field office or its furnishings in this contact. The GC is to remove the field office at contract completion.

Q30: 017839, 1.3.B.1: Indicates a professional land surveyor is to be employed to assemble the record documents. Please confirm this is not required.

A30: This is required.

Q31: On drawing C-13 there are new contours indicated beyond the limits of the sawcut indicated on drawing C-11. Please modify the sawcut line on C-11 to accommodate the required grading.

A31: Drawing C-11 has been updated.

Q32: 310000, 1.3.B.1 & 3.6.B.1: Indicate the contractor engages the testing lab. Spec 014500 and all other division 31 spec's indicate testing is by Owner. Please confirm.

A32: Testing to be performed by Owner's agent per 01 45 00.

Q33: 310000, 1.1.C: Indicates portions of the geotech report are a contract document, and portions are not. All other division 31 spec's indicate the geotech is informational only. And it was included in the folder that indicated it was not a contract document. Please clarify.

A33: The geotech report is for information only.

Q34: 321623 "Sidewalks", 2.3.B & 2.6.A: Calls for galvanized and epoxy-coated reinforcement. But spec 321313, which also includes sidewalks, calls for plain steel. Please clarify if any coatings are required, and where.

A34: Sidewalks to have galvanized and epoxy-coated reinforcement per 321623.

Q35: Drawing 210-C-14 Detail 2 shows a 7.5' dimension to nothing.

A35: The Detail 2 showing dimension of 7.5' is the distance from center of tee to the edge of hydrant valve box pad.

F. Clarifications

Attachments:

Specifications:

00-01-10 Table of Contents

09-24-00 Portland Cement Plastering

Drawings:

210-A-41 - STAIR 1-ELEVATOR - ENLARGED PLANS

210-A-42 - STAIR 1 - ELEVATOR - ENLARGED 3RD & 4TH LEVEL PLANS

210-A-43 - STAIR 1-ELEVATOR - ENLARGED 5TH LEVEL & ROOF PLANS

210-AS-50 - ROOM - DOOR SCHEDULES AND DETAILS

210-C-13 – PHASE 1 GRADING PLAN

210-ESL-01 - ELECTRICAL ONE-LINE AND RISER DIAGRAMS

210-L-101- LANDSCAPE PLANS AND PLANTINGS

210-P-01 - PLUMBING SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

210-S-10 - CAISSON PLAN (DRILLED PIERS)

210-S-11 - FOUNDATION PLAN

210-S-12 - GROUND LEVEL PLAN

210-S-13 - LEVEL 2 FRAMING PLAN

210-S-22 - FOUNDATION WALL ELEVATIONS

210-S-23 - FOUNDATION SECTIONS

210-S-34 - STAIR 1- ELEVATOR FOUNDATION SECTIONS 2

210-SD-01 - TYPICAL SLAB ON GRADE DETAILS

210-SS-01 - POST-TENSIONED BEAM SCHEDULE

210-SS-02 - POST-TENSIONED BEAM SCHEDULE

210-SS-03 - COLUMN SCHEDULE

Pre-Bid Documents:

1735 Pre-Bid Agenda
1735 Pre-Bid Meeting Minutes
1735 Pre-Bid Attendees
1735 Pre-Bid Power Point

Other Contract Documents:

Elevator Compliance Statement (to be signed by Elevator Vendor and submitted with bid)

*** * * * END OF ADDENDUM NO. 1 * * * ***

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ATTACHMENT A - (FOR REFERENCE ONLY)

Preliminary Subsurface Exploration Report – Sci-Tek Consultants, Inc. October 19,2020

SECTION 092400 – PORTLAND CEMENT PLASTERING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes:

1. The extent of Portland cement plaster work is shown on the drawings and includes the following:
   a. Elevator shaft door frame surrounds (over masonry).

1.2 PERFORMANCE CRITERIA

A. General:

1. No attachments shall be made to Portland Cement Plaster Assemblies of any component not indicated in the Drawings without prior approval by the Architect.

B. Joints

1. Provide two piece expansion joints where building movement is anticipated: at joints in the substrate or supporting construction, where the system is to be installed over dissimilar construction or substrates, at changes in building height, at floor lines, at columns and cantilevered areas. Provide one piece expansion/control joints every 100 SF . Do not exceed length to width ratio of 2-1/2:1 in expansion joint layout and do not exceed more than 12 feet in any direction without an expansion joint. Cut and wire tie lath to the expansion/control joint accessory so lath is discontinuous beneath the accessory.
2. Provide one piece expansion/control joints at through wall penetrations, for example, above and below doors or windows.
3. Provide minimum ⅜ inch wide joints where the system abuts windows, doors and other through wall penetrations.
4. Indicate location of joints, accessories and accessory type on Shop Drawings.

C. Plaster Thickness: Provide plaster thicknesses as indicated in code compliance reports.

1.3 SUBMITTALS

A. Manufacturer's Data: Submit manufacturer's data, code compliance reports, recommendations and standard details for all items specified in this Section including accessories and other components of the work.

B. Calculations: Provide calculations, as prepared by metal support framing manufacturer, showing how all design loads and performance requirements have been met. Submittal shall be sealed by a professional engineer registered in the state of the project.

1. Description of design criteria.

2. Engineering analysis depicting stress and deflection (stiffness) requirements for each framing application.
3. Selection of framing components, accessories and welded connection requirements.
4. Verification of attachments to structure and adjacent framing components.

C. Shop Drawings: Indicate joint layout patterns including dimensions.

1. Detail drawings of joints, flashing, openings, penetrations, attachment to supporting structure, drainage and weep components and locations, and terminations at windows.
2. Detail drawings of special accessory components not included in manufacturer's product data.
3. Indicate minimum fastener spacings on all Shop Drawings.

D. Samples: Submit three 12 by 12 inches in size for each finish, color, and texture indicated.

1. Prepare samples using same tools, techniques, and system components intended for actual work.

E. Informational Submittals: Submit following packaged separately from other submittals:

1. Certifications specified in Quality Assurance article.
2. Manufacturer's instructions.

1.4 QUALITY ASSURANCE

A. Source Quality Control: Provide Cementitious Sheathing from one source, produced by a manufacturer.

B. Fire-Resistance Rated Assembly Characteristics: Provide materials and construction identical to those tested in accordance to ASTM E 119 by an independent testing and inspection agency acceptable to authorities having jurisdiction.

1. Fire Resistance Ratings: Indicated by design designations from UL Fire Resistance Directory.

C. ANSI Standards: Comply with applicable requirements of ANSI A42.2 "Portland Cement and Portland Cement-Lime Plastering, Exterior (Stucco) and Interior", except where more detailed or more stringent requirements are indicated.

D. Allowable Tolerances: For flat surfaces, do not exceed 1/4 inch in 8 feet-0 inches for bow or warp of surface, and from plumb or level.

1. Where brown-coat plaster is indicated to receive adhesively applied finish (tile, etc.), comply with specified tolerances for finish-coat plastering.

E. Industry Standard: Comply with the recommendations of the "Plasterer's Manual", by the Portland Cement Association, except where more stringent requirements are indicated.

F. Mock-up Installation: Prior to installation of Portland cement plaster work, provide sample mock-up panel using materials specified for final work. Construct sample panel at the site, as directed, and of full thickness and approximately 4 feet square, unless otherwise shown.

1. Demonstrate the proposed range of color, texture and workmanship to be expected in the completed work. Obtain Architect's acceptance of visual qualities of the sample panel before start of the Portland cement plaster work. Retain sample panel during construction as a standard for judging completed work. Do not alter, move or destroy sample panel until work is completed. Provide sample panel for each type of exposed Portland cement plaster.

1.5 DELIVERY, STORAGE AND HANDLING

A. Delivery and Storage of Materials: Except for stone aggregate (if any) sand and water, deliver materials to the site in sealed containers or bags fully identified with manufacturer's name, brand, type, and grade. Store materials in a dry, well-ventilated space, under cover and off the ground.

1.6 PROJECT CONDITIONS

A. Protect contiguous work from moisture deterioration and soiling which might result from plastering operations. Provide temporary covering and whatever other provisions may be necessary to minimize harmful spattering of plaster on other work.

B. Cold Weather Requirements: Provide heat and protection (temporary or permanent) as required to protect each coat of plaster from freezing for a period of not less than 24 hours after application. Distribute heat uniformly to prevent concentration of heat on plaster near heat sources; provide deflection or protective screens.

1. Exterior Plaster Work: Do not apply plaster when ambient temperature is less than 32 degrees F., and when 40 degrees F. or less and falling.

C. Warm Weather Requirements: Protect plaster against uneven and excessive evaporation and from strong flows of dry air, both natural and artificial. Apply and cure plaster as required by climatic and job conditions to prevent dryout during cure period. Provide suitable coverings, moist curing, barriers to deflect sunlight and wind, combinations of these, as required.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Metal Supports, Expanded Metal Lath:

1. Subject to compliance with requirements, manufacturers offering products that may be incorporated in the work include but are not limited to the following:
   a. CEMCO (California Expanded Metal Company).
   b. ClarkDietrich.
   c. DALE/INCOR.
   d. Phillips Manufacturing Co.

B. Plastering Accessories:

1. Subject to compliance with requirements, manufacturers offering products that may be incorporated in the work include but are not limited to the following:
   a. CEMCO (California Expanded Metal Company).
   b. ClarkDietrich.
   c. DALE/INCOR.
   d. National Gypsum Co.
   e. Phillips Manufacturing Co.
   f. U.S. Gypsum Association.

C. Gypsum Lath

1. Available Manufacturers:
   a. G-P Gypsum Corporation, "Dens-Glass Gold".
   b. National Gypsum Co., “Gold Bond e2XP”.
   c. U.S. Gypsum Association, “Securock”.
   d. CertainTeed, “GlasRoc”.

D. Portland Cement Plasters

1. Available Manufacturers:
   a. National Gypsum Co.
   b. Sto Corp.
   c. U.S. Gypsum Association.

2.2 NONSTRUCTURAL STEEL FRAMING MEMBERS, GENERAL

A. MATERIALS

1. Cold-Formed Steel Sheet: Complying with ASTM A 1003/A 1003M; unless indicated otherwise.
2. Galvanized Coating: G60 coating weight minimum, complying with ASTM C 955.
3. Touch-Up Paint: Zinc rich, containing 95-percent metallic zinc, ZRC 350 as manufactured by ZRC Worldwide, Marshfield, MA.

B. COMPONENTS

1. General: Comply with ASTM C 1063. For steel sheet components not included in ASTM C 1063, comply with ASTM C 645 requirements for metal, unless otherwise indicated.
2. Framing Component Accessories: Provide the following accessories as required for a complete system in conformance with AISI Specifications for Design of Cold Formed Steel Structural Members.
   a. Studs (ASTM C645; Cold formed galvanized steel sheet C-studs).
   b. Channel Runners.

c. Bridging.

d. Flat Strapping.

e. Angles, Plates, Sheets.

f. Custom Brake-Formed Shapes.

3. Cold-Rolled Channels: Base metal thickness of 0.0538 inch with ASTM A 653, G60, hot-dip galvanized zinc coating.

4. Wire: ASTM A 641, Class 1 zinc coating, soft temper, not less than 0.0475-inch diameter, unless otherwise indicated.

5. Fasteners: Self-drilling, self-tapping screws; Steel, complying with ASTM C1002; Galvanized coating, plated or oil-phosphate coated complying with ASTM B 633 as needed for required corrosion resistance.

2.3 LATH

{Note: Select applicable types of lath for the project.}

A. Expanded-Metal Lath: ASTM C 847 with ASTM A 653, G60, hot-dip galvanized zinc coating.

1. Diamond-Mesh Lath: Self-furring.

a. Weight: 3.4 lb/sq. yd.

B. Gypsum Lath: Glass-Mat Faced Gypsum Sheathing Board: ASTM C 1177, type and thicknesses as indicated below, in length standard with manufacturer for thickness indicated.

1. Thickness: 5/8", unless otherwise indicated.

2. Type: Type X for fire-resistance rated assemblies and where indicated.

C. Lath Attachment Devices: Devices of material and type required by referenced standards and recommended by manufacturer for secure attachment of lath to framing members and of lath to lath.

1. Provide resilient clips for attachment of gypsum lath to steel at locations indicated.

2.4 ACCESSORY MATERIALS

A. Fasteners: Steel drill screws, in length recommended by sheathing manufacturer for thickness of sheathing board to be attached, with organic-polymer or other corrosion protective coating having a salt-spray resistance of more than 800 hours according to ASTM B 117.

1. For steel framing less than 0.0329 inch thick, attach sheathing with steel drill screws complying with ASTM C 1002.

2.5 PLASTERING ACCESSORIES

A. General

1. Comply with ASTM C 1063 and coordinate depth of trim and accessories with thicknesses and number of plaster coats required.

2. Provide the type of accessories indicated or, if not otherwise indicated, provide the types recommended by the plaster manufacturer for the applications indicated. Include fasteners, corner beads, casing beads, base screed, and expansion/control joints as required to produce a complete installation of plaster complying with industry standards. Coordinate depth of accessories with depth of plaster required. Except as otherwise indicated provide standard gage galvanized accessories.

B. Plaster Accessories for Portland Cement Plaster

1. Metal Corner Reinforcement: Expanded large mesh diamond mesh lath fabricated from zinc-alloy or welded wire mesh fabricated from 0.0475" diameter zinc-coated (galvanized) wire, and specially formed to reinforce external corners of Portland cement plaster on exterior exposures while allowing full plaster encasement.
2. Metal Corner Beads: Small nose corner beads fabricated from zinc alloy, with expanded flanges of large mesh diamond lath to allow full encasement by plaster.
3. Casing Beads: Square-edged style, with expanded flanges and removable protective tape, of the zinc-coated (galvanized) steel.
4. Control Joints: Prefabricated, of material and type indicated below:
   a. Material: 26 gage (minimum).
   b. One-Piece Type: Folded pair of non-perforated screeds in M-shaped configuration, with expanded flanges.
   c. Two-Piece Type (Expansion Joint): Pair of casing beads with back flanges formed to provide slip joint action, adjustable for joint widths from 1/8" to 5/8".
5. Finish: All plastering accessories shall be Zinc or Zinc-Coated (Galvanized) unless noted otherwise.

2.6 PLASTERING MATERIALS

A. General: Except as otherwise indicated, provide standard products recommended by the manufacturer for the application indicated complying with ANSI A42.2, and provide either neat or ready-mixed (where available) at installer's option. Where more than one choice of plastering material is indicated, selection is installer's option.

B. Base Coat Cement: Provide one of the following cements, or mixtures thereof where recommended by cement manufacturer (at installer's option).

1. Portland Cement: ASTM C150, Type I or IA.
2. Masonry Cement: ASTM C91.
3. Blended Hydraulic Cement: ASTM C595, Type IS, IS-A, IP, or IP-A.

C. Base-Coat Lime: ASTM C206, special finishing hydrated lime, known as Type S.

1. At the installer's option, lime complying with ASTM C6 or ASTM C207 may be provided, where unhydrated oxide content does not exceed 8% by weight when tested in accordance with ASTM C25, as shown by either label on bags or submitted certification.

D. Base-Coat Aggregate: Sand (ANSI A42.2).

E. Prepared Finish-Coat: Factory-prepared finish for Portland cement plaster base-coat, recommended by the manufacturer for the application indicated, ready for mixing with water at time of application.

1. Color and Texture: Provide product(s) as required to produce finish coat(s) matching the final mock-up installation.

F. Job-Mixed Finish-Coat Materials: Products recommended by the manufacturer of job-mixing to produce the finish-coats indicated on Portland cement plaster base-coats.

1. Cement: Waterproof white Portland cement, ASTM C150, Types I or IA.
2. Aggregate: Sand (ANSI A42.2), except 100% passing the No. 16 sieve.
3. Lime: ASTM C206, special finishing hydrated lime. Known as Type S.

2.7 PORTLAND CEMENT PLASTER MIXES

A. General: Except as otherwise indicated, comply with ANSI A42.2 for the proportioning of materials and manner of mixing the plaster for each required application (options therein are installer's option unless otherwise indicated); comply with the plaster manufacturer's instructions which are more stringent than ANSI A42.2.

B. Scratch Coats: Include hair or fiber in mix for the scratch coat on metal lath or reinforcement.

C. Bonding Additive: Where the use of bonding additive is indicated, or as required by substrate conditions, proportion and mix in accordance with additive manufacturer's instructions.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine surfaces to receive Portland cement plaster, including grounds and other accessories which act as grounds or screeds. Do not proceed until unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Clean plaster bases and substrates to be plastered, removing loose materials, coatings and other substances which might impair the work.

3.3 INSTALLATION, GENERAL

3.4 INSTALLING METAL LATH

A. Expanded-Metal Lath: Install according to ASTM C 1063.

3.5 PREPARATIONS FOR PLASTERING

A. Clean plaster bases, and substrates for direct application of Portland cement plaster, removing loose material and substances which might impair the work.

B. Install metal reinforcement on exterior substrates indicate for application of Portland cement plaster, except for concrete and masonry surfaces where direct plastering without reinforcement is specifically indicated. Stretch and fasten to substrate in accordance with industry standards and manufacturer's instructions, using self-furring type fasteners. Comply with ANSI A42.3.

1. Install one course (minimum) of organic felt under metal reinforcement.
2. Where Portland cement plaster is shown over open frame construction without solid sheathing, install stretched "line wire" supports 6 inches on center at right angles to framing, and under felt and metal reinforcement. Comply with industry standards for installation.
3. Install corner reinforcement at external corners of exterior work, except where metal plastering beads or other metal accessories are shown.

C. Install temporary grounds and screeds as necessary to ensure accurate rodding of plaster to true surface; coordinate with scratch-cost work.

D. Plastering Accessories: Where thick-cost plaster is indicated, install plastering accessories. Anchor to substrates by nailing 8 inches on center along each flange. Miter corners and spline joints of exposed accessories, to form tight joints without offsets. 1/8 inches in 10 feet-0 inches.

1. Install metal corner beads at external corners of interior work.
2. Install metal casing beads where shown and at the following locations:
   a. At openings and terminations of plaster finish where otherwise edge of plaster would be exposed.
   b. Where plaster abuts other finish, and termination is not lapped by other finish. Leave 3/8-inch wide pocket for sealant on exterior work, unless otherwise indicated.
   c. Where plaster abuts exterior window and door frames. Install resilient-edged casing beads on interior work, and leave 3/8-inch wide pocket for sealant on exterior work.
3. Install one-piece control joints where shown as "Control Joint", and elsewhere as required in Part 1 of this Section.

3.6 INSTALLATION OF PORTLAND CEMENT PLASTER

A. General:

1. Standard: Except as otherwise indicated, comply with ANSI A42.2 for plastering (options therein are installer's options unless otherwise indicated); comply with plaster manufacturer's instructions which are more stringent than ANSI A42.2; and comply with the recommendations of the "Plasterer's Manual" by PCA where not otherwise indicated.
2. Do not use materials which are frozen, caked or lumpy or which are dirty or contaminated by foreign materials. Use only clean water, free from impurities which might impair the plaster work; do not use water which as been used to clean tools.
3. Do not use excessive water in the mixing and application of plaster materials.

4. Sequence plastering applications with other work in accordance with recognized industry practices.
    a. Delay application finish-coatplastering until adjoining work has been completed, wherever possible.
5. Plaster flush with metal frames and other built-in metal items or accessories which act as a plaster ground, unless otherwise shown. Where interior plaster is not terminated at metal by casing beads, cut basecoat free from metal before plaster sets and groove finish coat at the junctures with metal.
6. Corners: Make internal corners and angles square; finish external corners flush with corner beads on interior work square and true with stucco faces on exterior work.
7. Use mechanical mixing equipment, except small applications requiring less than one bag of plastering material may be hand mixed. Machine or hand application of plaster and stucco is installer's option.

B. Plaster Applications:

1. Apply 3-coat plaster over metal lathed and metal reinforced substrates (scratch/level, brown, and finish coats); and apply either 3-coat or 2-coat (scratch/level/brown, and finish coats) over direct-plastered concrete and masonry substrates (at installer's option), except do not apply 3-coat plaster on horizontal masonry substrates.
    a. Back-plaster exterior metal lath and plaster where indicated, and where lath is neither over solid base nor fabricated with integral paper backing. Apply base-coat plaster to a thickness of 1/2 inch from back-free of lath.
    b. Float finish topcoat of base-coat work (do not scratch) for bond with finish-coat.
2. Plaster Thicknesses: Apply total plaster thicknesses as shown or, if not shown, comply with ANSI A42.2 and recognized industry standards, except as otherwise indicated.
    a. On metal reinforcing, apply minimum scratch-coat of 1/2 inch, except where not on solid backing apply minimum of 3/8 inch.
    b. Where "skim-coat" plastering is indicated, apply base-coat in minimum thickness practical for bonding and leveling, and apply finish-coat in minimum normal thickness.
    c. Apply finish-coat plaster not less than 1/8 inch thick, and increase thickness as required to achieve required texture, pattern, embedment of exposed aggregate, or other finish requirements as indicated.

C. Finish-Coat Texture/Pattern:

1. Smooth Plaster Finish: Except as otherwise indicated, trowel finish-coat applications to smooth, dense finish.
2. Dash Plaster Finish: Where indicated, dash finish-coat application, to a uniform dash finish matching mock-up or, if none, provide normal medium-textured dash finish.

D. Curing Portland Cement Plaster:

1. Protect each coat of Portland cement plaster work from dry-out for a period of 20 to 24 hours after placement (or until curing operation will not damage surface), and moisture-cure not less than 48 hours after time of placement. Moisture-cure by maintaining in a moist condition, by frequent fog-spraying with water and by protecting from fast dry-out with covering of polyethylene film or similar enclosure. Dry each coat to

a uniform moisture content before installing succeeding coat, and do not install finish-coat until base-coat has been dried at least 5 days.

3.7 CUTTING AND PATCHING

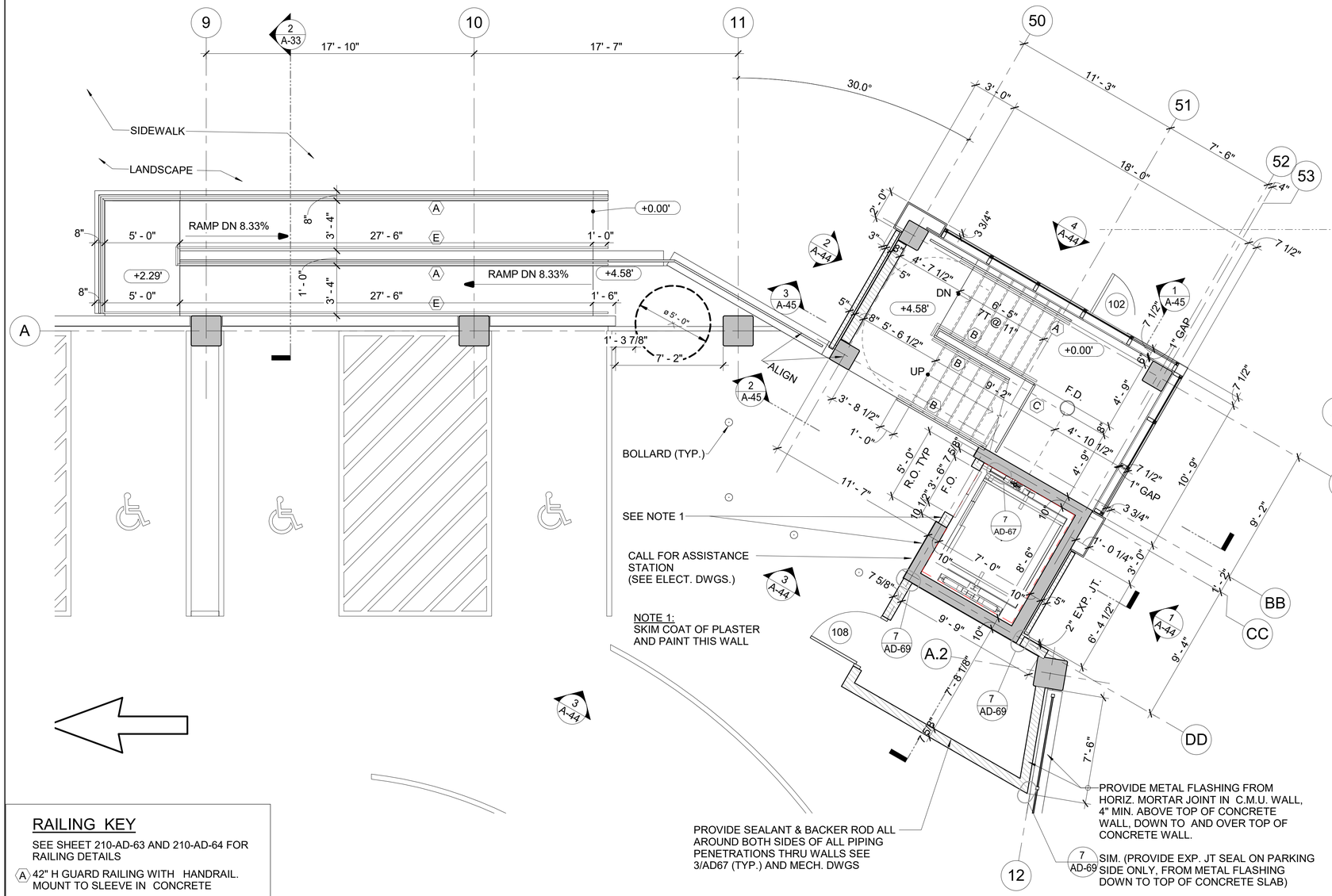
A. Cut, patch, repair and point-up Portland cement plaster as required and as necessary to accommodate other work. Repair cracks and indented surfaces. Point-up finish plaster surfaces around items which are built into or penetrate plaster surfaces. Repair or replace the work to eliminate blisters, buckles, check cracking, dry outs, efflorescence, excessive pinholes, and similar imperfections. Repair or replace the work as necessary to comply with specified tolerances and required visual effects.

3.8 CLEANING AND PROTECTION

A. Remove temporary covering and whatever other provisions were made to minimize spattering of plaster on other work. Promptly remove plaster from door frames, windows and other surfaces which are not to be plastered. Repair surfaces which have been stained, marred or otherwise damaged during the plastering work. When plastering work is completed, remove unused materials, containers and equipment and plaster debris.

B. Advise Contractor of requirements for protection of Portland cement plaster from deterioration and damage during remainder of construction period.

END OF SECTION 09 24 00



RAILING KEY

SEE SHEET 210-AD-63 AND 210-AD-64 FOR RAILING DETAILS

- (A) 42" H GUARD RAILING WITH HANDRAIL. MOUNT TO SLEEVE IN CONCRETE
- (B) 42" H GUARD RAILING WITH HANDRAIL. MOUNT TO SIDE OF CONCRETE STAIR STRINGER.
- (C) 42" H GUARD RAILING. MOUNT TO SLEEVE IN CONCRETE.
- (D) 42" H GUARD RAILING. MOUNT TO TO SIDE OF CONCRETE SLAB.
- (E) HANDRAIL. MOUNT TO WALL WITH BRACKETS.
- (F) GUARD RAILING. MOUNT TO SLEEVE ON TOP OF CONCRETE BUMPER WALL.

2 A-41 **STAIR 1/ELEVATOR - GROUND LEVEL PLAN**
SCALE: 1/4" = 1'-0"

1 A-41 **STAIR 1/ELEVATOR - LEVEL 2 PLAN**
SCALE: 1/4" = 1'-0"

1 GENERAL NOTE:
LIMITS OF PLASTER AND PAINT ARE THE FOLLOWING ELEVATOR CORE WALLS, FROM FLOOR UP TO SLAB SOFFIT (EXCLUDING AREA OF ELEVATOR DOORS AND FRAMES):
LEVEL 1: 10'-2" WIDTH OF SOUTH WALL ONLY
LEVEL 2: 10'-2" WIDTH OF SOUTH WALL + 8'-8" WIDTH OF EAST WALL + 1' RETURN ON NORTH WALL TO FACE BRICK.

TRUE NORTH N 22° 24'-00" W PROJECT NORTH

SCALE: 1/4" = 1'-0"
4' 0' 2' 4' 8' 16'

Designed by:	REVISION			
R LUTZ	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	2/19/21	ADDENDUM 1	
R MANZO				
Checked by:				
P HUTCHISON				

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WASTEWATER TREATMENT PLANT
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210-A-41
STAIR 1/ELEVATOR - ENLARGED PLANS

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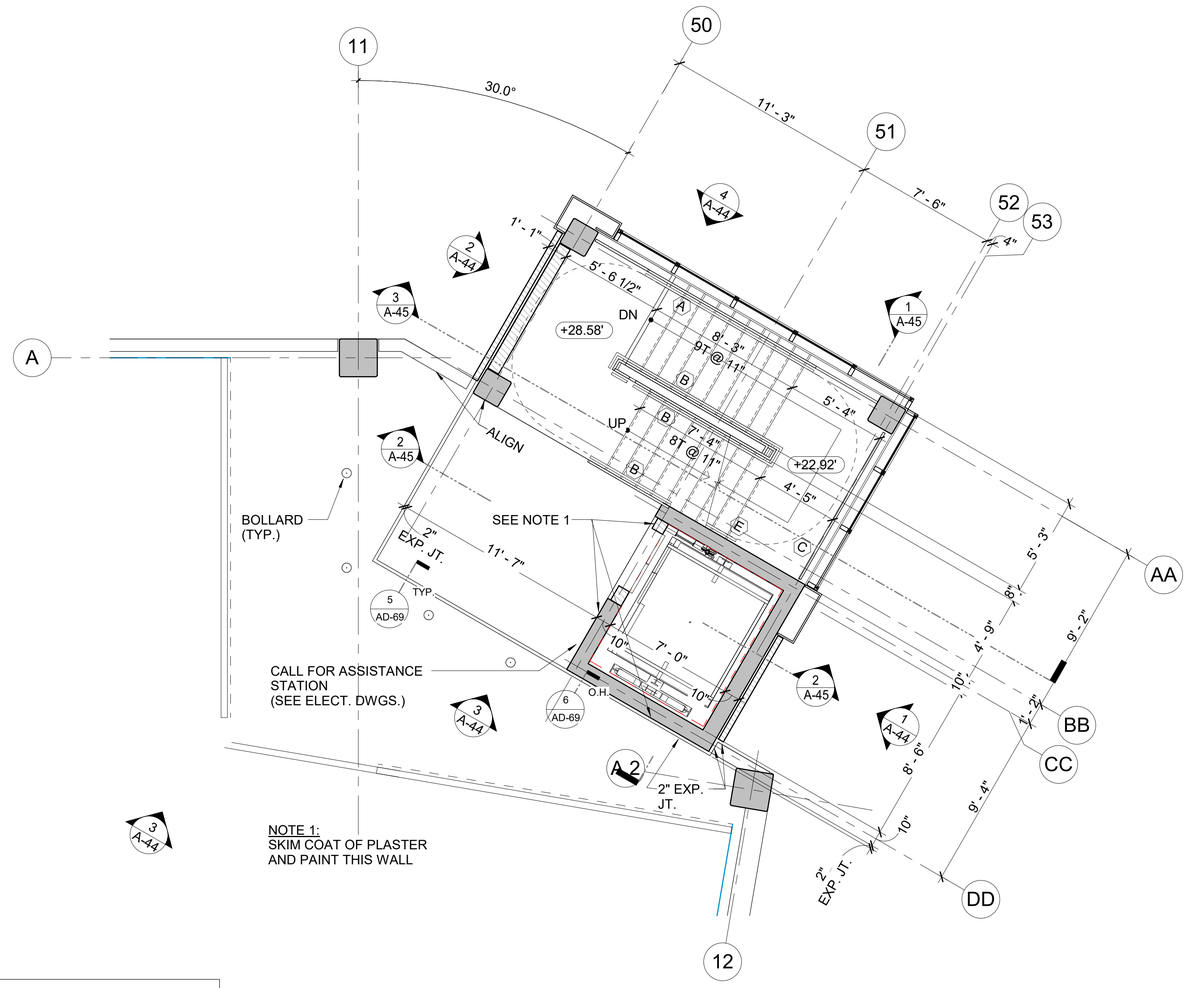

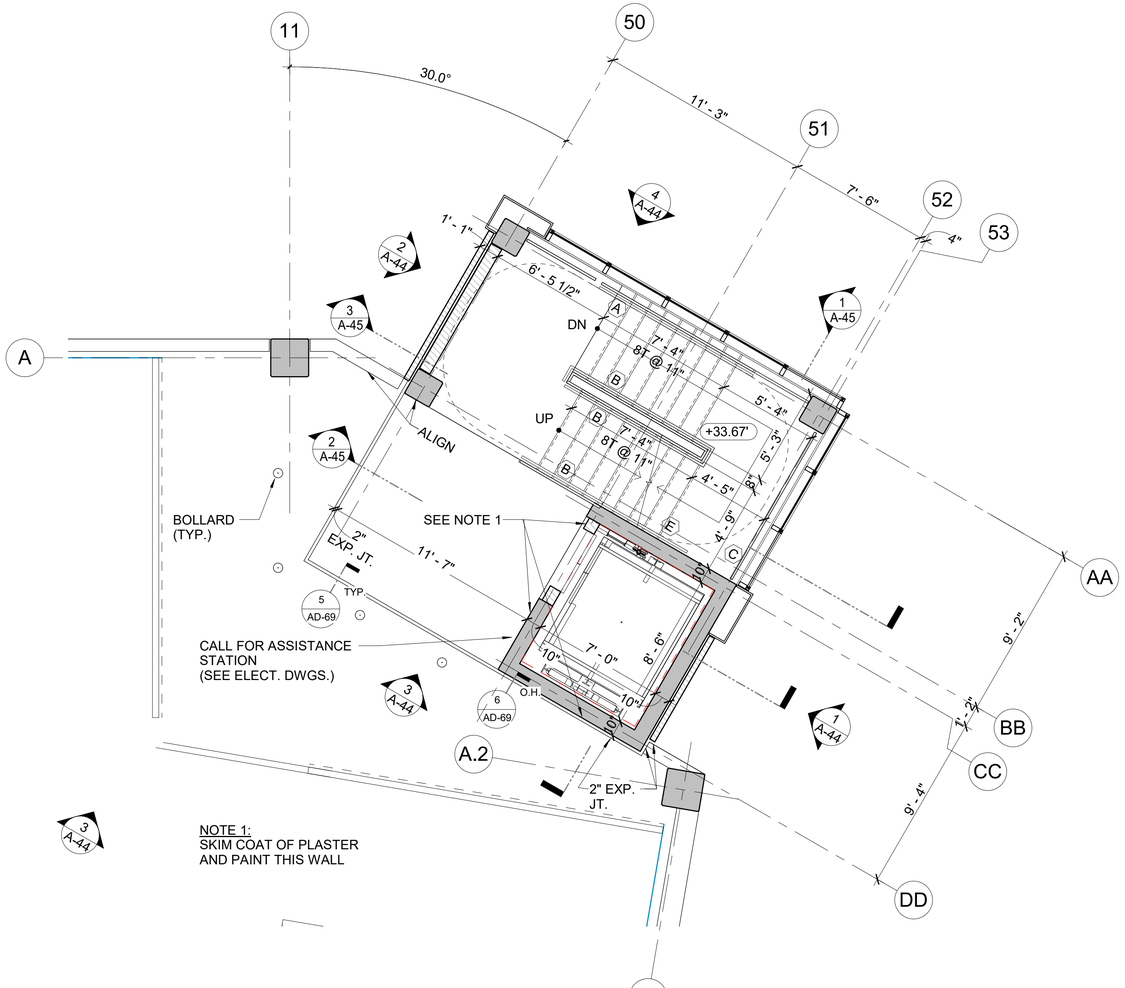

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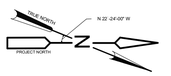
- (F) GUARD RAILING. MOUNT TO SLEEVE ON TOP OF CONCRETE BUMPER WALL.

1 / A-42 STAIR 1/ELEVATOR - LEVEL 3 PLAN
SCALE: 1/4" = 1'-0"

2 / A-42 STAIR 1/ELEVATOR - LEVEL 4 PLAN
SCALE: 1/4" = 1'-0"

1

GENERAL NOTE:
LIMITS OF PLASTER AND PAINT ARE THE FOLLOWING ELEVATOR CORE WALLS, FROM FLOOR UP TO SLAB SOFFIT (EXCLUDING AREA OF ELEVATOR DOORS AND FRAMES):
LEVELS 3 & 4: 10'-2" WIDTH OF SOUTH WALL + 8'-8" WIDTH OF EAST WALL + 1' RETURN ON NORTH WALL TO FACE BRICK.



SCALE: 1/4" = 1'-0"
4' 0' 2' 4' 8' 16'

Designed by:	REVISION			
Designer	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	2/19/21	ADDENDUM 1	
Author				
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REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA

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210-A-42
STAIR 1 / ELEVATOR - ENLARGED 3RD & 4TH LEVEL PLANS

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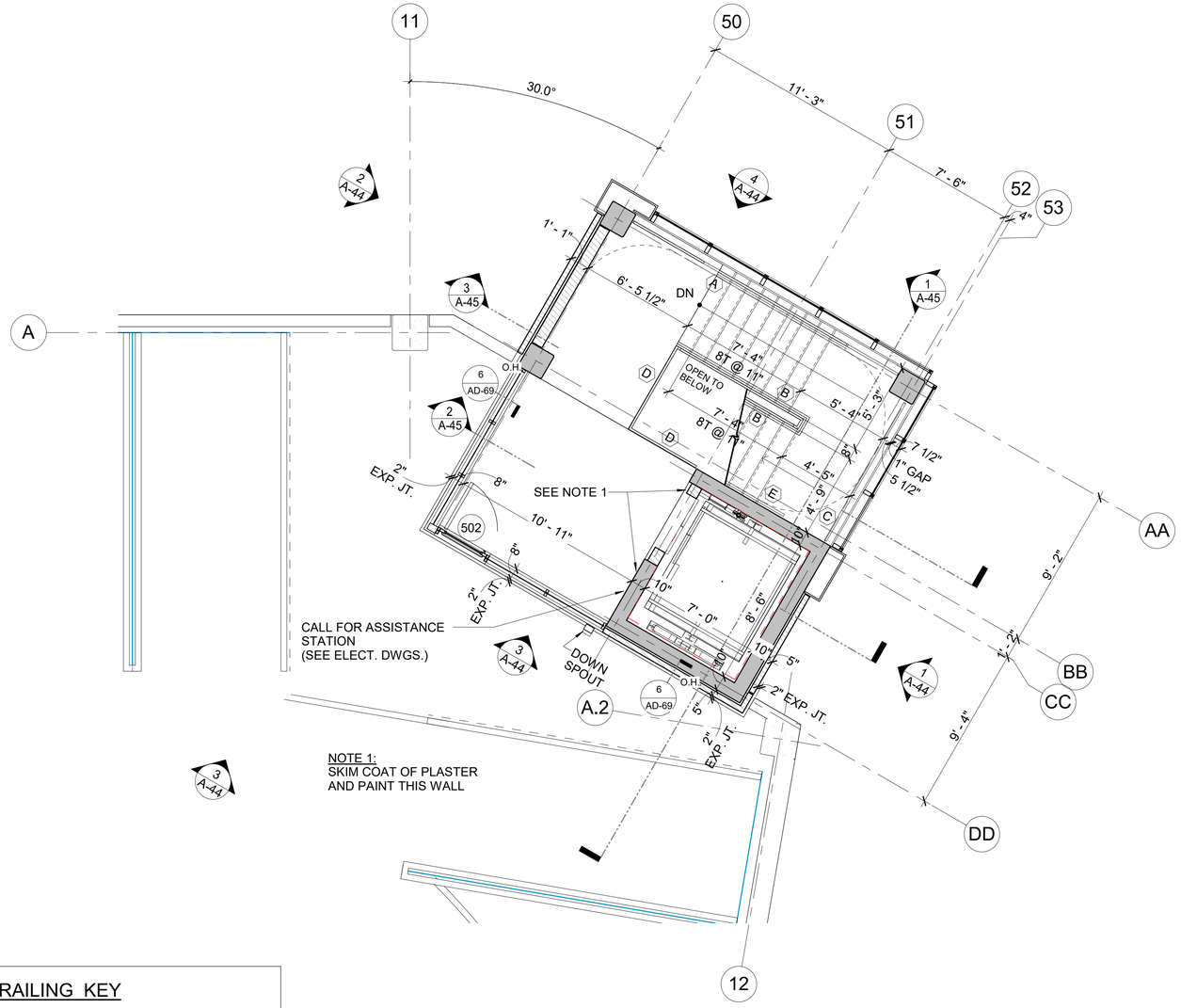

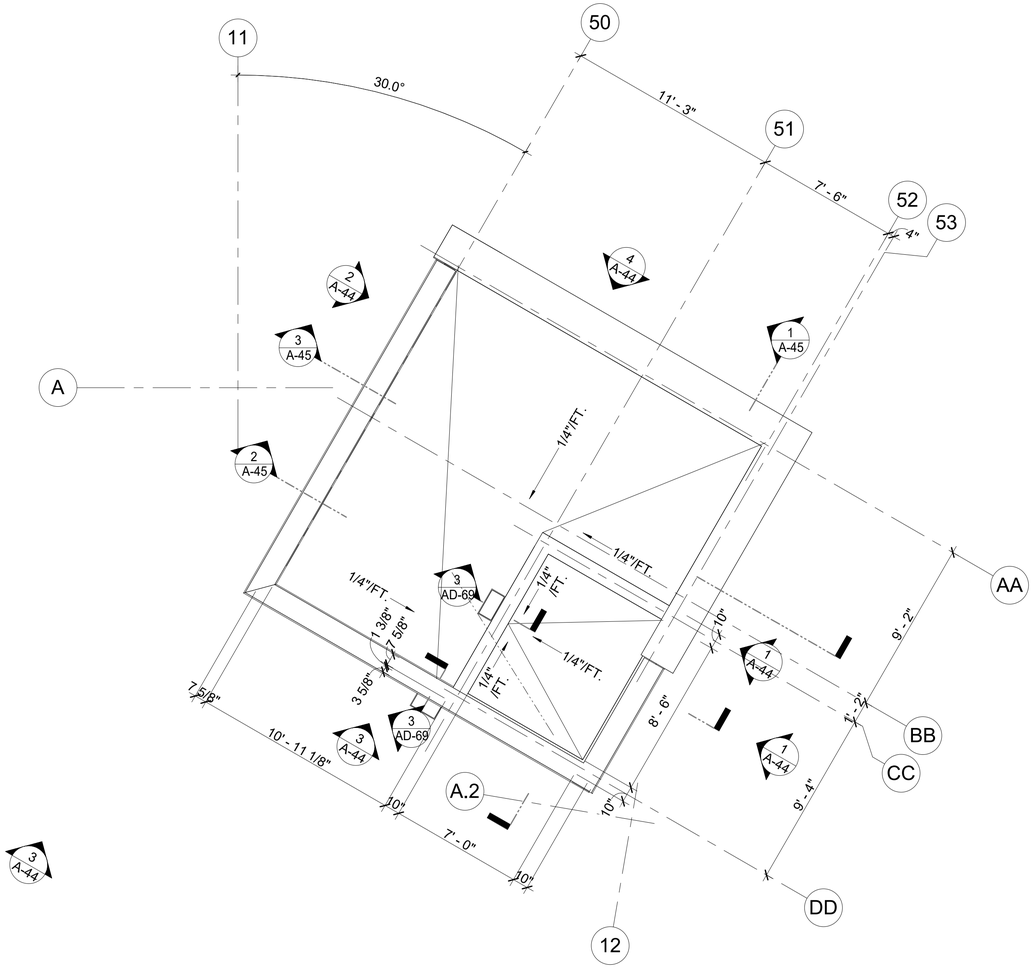

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- (F) GUARD RAILING. MOUNT TO SLEEVE ON TOP OF CONCRETE BUMPER WALL.

2 / A-43 STAIR 1/ELEVATOR - LEVEL 5 PLAN
SCALE: 1/4" = 1'-0"

3 / A-43 STAIR 1/ELEVATOR - ROOF PLAN
SCALE: 1/4" = 1'-0"

1

GENERAL NOTE:
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LEVEL 5: 10'-2" WIDTH OF SOUTH WALL ONLY

SCALE: 1/4" = 1'-0"
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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-A-43
STAIR 1/ELEVATOR - ENLARGED 5TH LEVEL & ROOF PLANS

Contract: 1735
CAD File Name: 210A43.DWG
Date: 01 / 13 / 2021
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DOOR SCHEDULE

MARK	LOCATION ROOM NUMBER	LOCATION ROOM NAME	DOOR WIDTH	DOOR HEIGHT	DOOR THICK-NESS	DOOR TYPE	DOOR MATERIAL	DOOR RATING (MINUTES)	FRAME TYPE	FRAME MATERIAL	FRAME DETAIL SECTION MARKS HEAD	FRAME DETAIL SECTION MARKS JAMB	FRAME DETAIL SECTION MARKS SILL	HARD-WARE SET	COMMENTS
102	102	STAIR 1	3' - 4"	7' - 0"	0' - 0"	E	AL	-	F1	AL	15/A611	8/A611	3/A601	HS001	
104	105	TBD - BIKE PARKING AND WATER SERVICE ENTRY	6' - 4"	7' - 0"	0' - 2"	D	STL	1 Hour	F1	HM	1/A601	2/A601	3/A601	HSFR102	
105	105	TBD - BIKE PARKING AND WATER SERVICE ENTRY	6' - 4"	7' - 0"	0' - 2"	D	STL	1 Hour	F1	HM	1/A601	2/A601	3/A601	HSFR102	
106	106	CLOSET	6' - 4"	7' - 0"	0' - 2"	D	STL	-	F1	HM	1/A601	2/A601	3/A601	HS101	
107	107	ELECTRICAL ROOM	3' - 4"	7' - 0"	0' - 1 3/4"	A	STL	1 Hour	F1	HM	1/A601	2/A601	3/A601	HSFR101	
108	108	ELEVATOR CONTROL ROOM	3' - 4"	7' - 0"	0' - 1 3/4"	A	STL	1 Hour	F1	HM	1/A601	2/A601	3/A601	HSFR101	
109	100	UNION PARKING EAST	3' - 0"	7' - 0"	0' - 2 1/2"	H	STL	-		STL				HS102	SECURITY GRILLE DOOR
110	100	UNION PARKING EAST	3' - 0"	7' - 0"	0' - 2 1/2"	H	STL	-		STL				HS102	SECURITY GRILLE DOOR
502	502	STAIR 1	3' - 4"	7' - 0"	0' - 0"	E	AL	-	F1	AL	15/A611	8/A611	3/A601	-	
603	603	STAIR 2	3' - 4"	7' - 0"	0' - 0"	E	AL	-	F1	AL	15/A611	8/A611	3/A601	-	
112		NOT USED													
113	100	UNION PARKING EAST	12' - 8"	11' - 0"		G								-	OVERHEAD COILING GRILLE
114	100	UNION PARKING EAST	12' - 8"	11' - 0"		G								-	OVERHEAD COILING GRILLE
115	100	UNION /LAB PARKING	3'-0"	7'-0"		F								HS103	CHAIN LINK SWING DOOR
116	100	UNION /LAB PARKING	(2) 6'-0"	12'-0"		F								HS104	CHAIN LINK SWING GATE

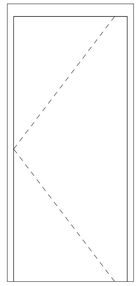
NOTE: REFER TO SPECIFICATIONS FOR FURTHER INFORMATION ON HARDWARE.

ROOM FINISH SCHEDULE

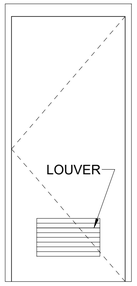
ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH	COMMENTS
100	UNION PARKING EAST	SOG	SEALED	CIP	CIP	
101	UNION PARKING WEST	SOG	SEALED	CIP	CIP	
102	STAIR 1	SOG	SEALED	GL/CM	CIP	INTERIOR FACING ELEV. SHAFT WALL TO BE PAINTED ONLY
103	STAIR 2	SOG	SEALED	CO/CM	CIP	
104	(AECF PARKING)	SOG	SEALED	CIP	CIP	
105	TBD - BIKE PARKING AND WATER SERVICE ENTRY	SOG	SEALED	CO/CM	CIP	
106	CLOSET	SOG	SEALED	CMU	CIP	
107	ELECTRICAL ROOM	SOG	SEALED	CMU	CIP	
108	ELEVATOR CONTROL ROOM	SOG	SEALED	CMU	CIP	
200	UNION PARKING EAST	CIP	SEALED	CIP	CIP	
201	UNION PARKING WEST	CIP	SEALED	CIP	CIP	
202	STAIR 1	CIP	SEALED	GL/CM	CIP	INTERIOR FACING ELEV. SHAFT WALL TO BE PAINTED ONLY
203	STAIR 2	CIP	SEALED	GL/CM	CIP	
300	UNION PARKING EAST	CIP	SEALED	CIP	CIP	
301	UNION PARKING WEST	CIP	SEALED	CIP	CIP	
302	STAIR 1	CIP	SEALED	GL/CM	CIP	INTERIOR FACING ELEV. SHAFT WALL TO BE PAINTED ONLY
303	STAIR 2	CIP	SEALED	GL/CM	CIP	
400	UNION PARKING EAST	CIP	SEALED	CIP	CIP	
401	UNION PARKING WEST	CIP	SEALED	CIP	CIP	
402	STAIR 1	CIP	SEALED	GL/CM	CIP	INTERIOR FACING ELEV. SHAFT WALL TO BE PAINTED ONLY
403	STAIR 2	CIP	SEALED	GL/CM	CIP	
500	UNION PARKING EAST	CIP	SEALED	CIP	CIP	
501	UNION PARKING WEST	CIP	SEALED	CIP	CIP	
502	STAIR 1	CIP	SEALED	GL/CM	CIP	
503	STAIR 2	CIP	SEALED	GL/CM	CIP	
600	UNION PARKING EAST	CIP	SEALED	CIP	CIP	
601	UNION PARKING WEST	CIP	SEALED	CIP	CIP	
602	STAIR 1	CIP	SEALED	GL/CM	CIP	
603	STAIR 2	CIP	SEALED	GL/CM	CIP	

DOOR TYPES

DOOR TYPE B IS NOT USED



TYPE A



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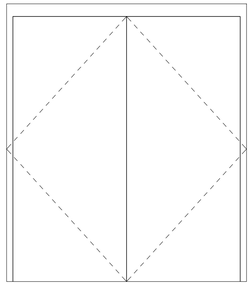
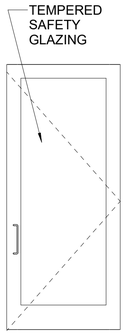


TYPE D



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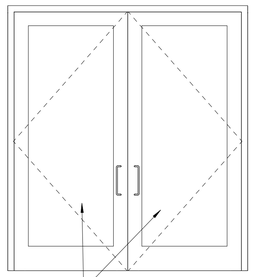
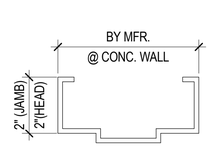


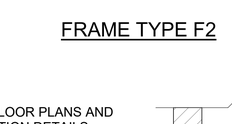
TYPE F

CHAIN LINK DOOR OR GATE

TYPE F



FRAME TYPE F1



FRAME TYPE F2

COILING GRILLE

TYPE G

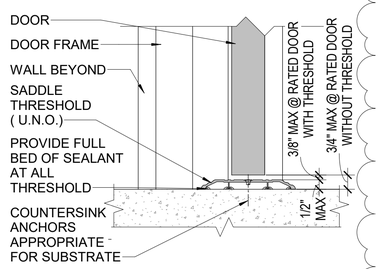
SECURITY GRILLE DOOR SEE 1/210-AD-66

TYPE H

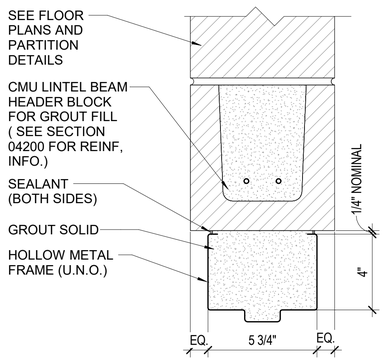
LEGEND

ALUM	ALUMINUM ASSEMBLIES	GL/CO	PARTIAL AL/GL AND CONC
AL/GL	ALUM & GLASS	GL/PC	PARTIAL AL/GL AND PCC
ANOD	ANODIZED	HM	HALLOW METAL
C.I.P.	CAST-IN-PLACE CONCRETE	PCC	PRECAST CONCRETE
CMU	CONCRETE MASONRY UNIT	PC/CM	PARTAIL PCC AND CMU
CO/CM	PARTIAL CONC AND CMU	PT	PAINTED
CO/PC	PARTIAL CONC AND PCC	SEA	SEALED
GB	FIBERGLASS REINFORCED GYP.BD.	SOG	SLAB ON GRADE
GL/CM	PARTIAL AL/GL AND CMU	T	TEMPERED

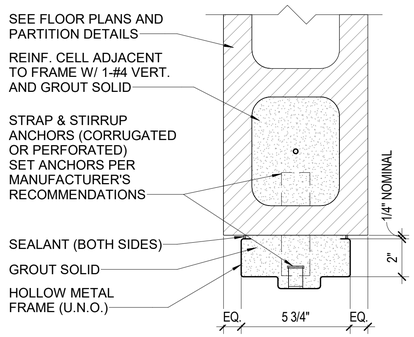
4 AS-50 DOOR HEAD DETAIL AT CONCRETE WALL
SCALE: 3" = 1'-0"



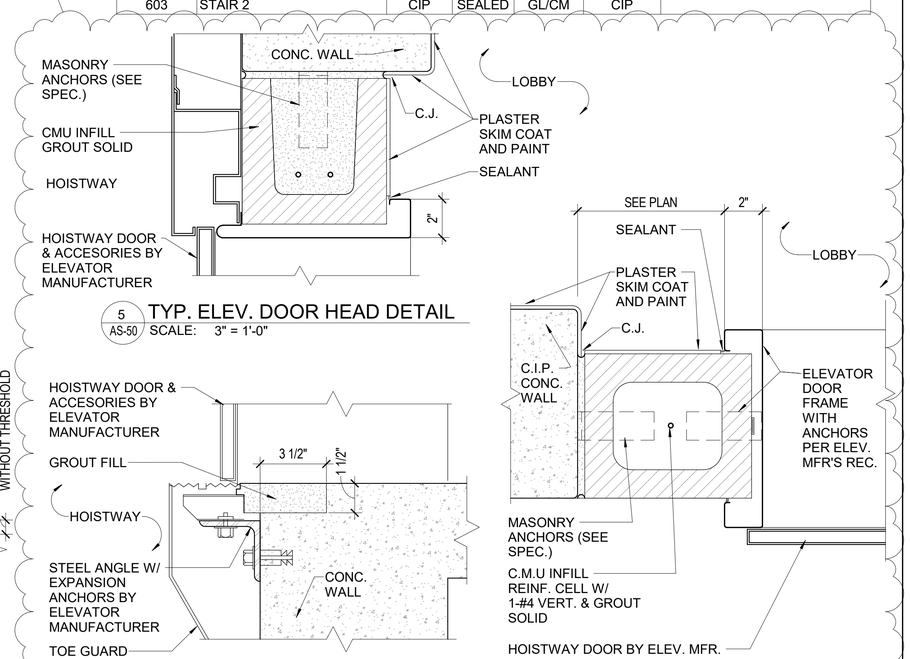
3 AS-50 DOOR SILL DETAIL
SCALE: 3" = 1'-0"



1 AS-50 H.M. DOOR HEAD DETAIL AT CMU WALL
SCALE: 3" = 1'-0"



2 AS-50 H.M. DOOR JAMB DETAIL AT CMU WALL
SCALE: 3" = 1'-0"



5 AS-50 TYP. ELEV. DOOR HEAD DETAIL
SCALE: 3" = 1'-0"

6 AS-50 TYP. ELEV. DOOR SILL DETAIL
SCALE: 3" = 1'-0"

7 AS-50 TYP. ELEV. DOOR JAMB DETAIL
SCALE: 3" = 1'-0"

Designed by:	REVISION			
Designer	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	2/19/21	ADDENDUM 1	
Author				
Checked by:				
Checker				

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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-AS-50
ROOM / DOOR SCHEDULES AND DETAILS

Contract:	1735
CAD File Name:	210AS50.DWG
Date:	01 / 13 / 2021
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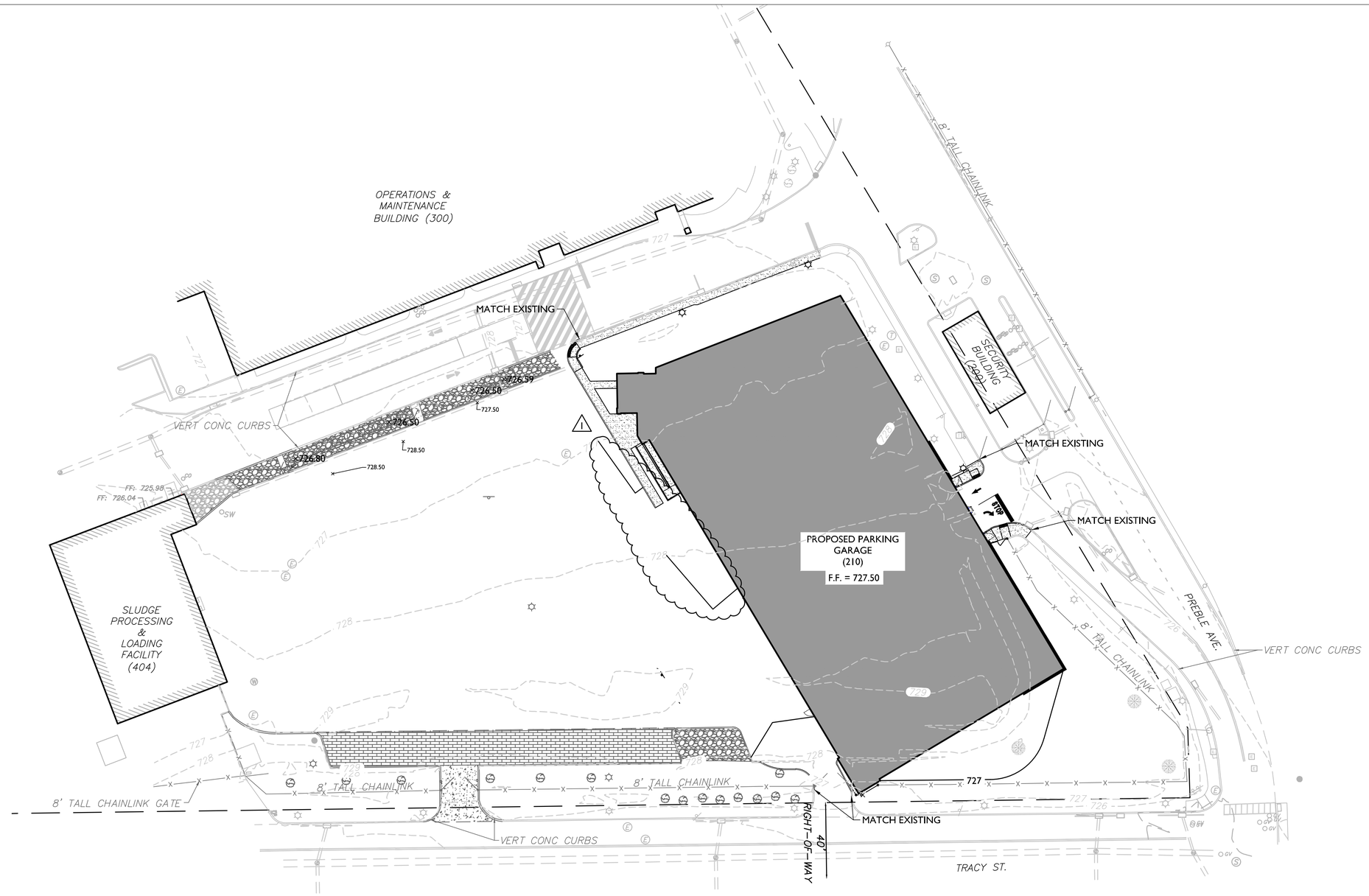

GRADING PLAN

SCALE: 1" = 30'

30' 0' 15' 30' 60' 120'

Designed by: J TAI	REVISION			
Drawn by: J TAI	REV No.	DATE	DESCRIPTION	APPV
Checked by: J THORNTON	1	2/19/21	ADDENDUM 1	

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WASTEWATER TREATMENT PLANT
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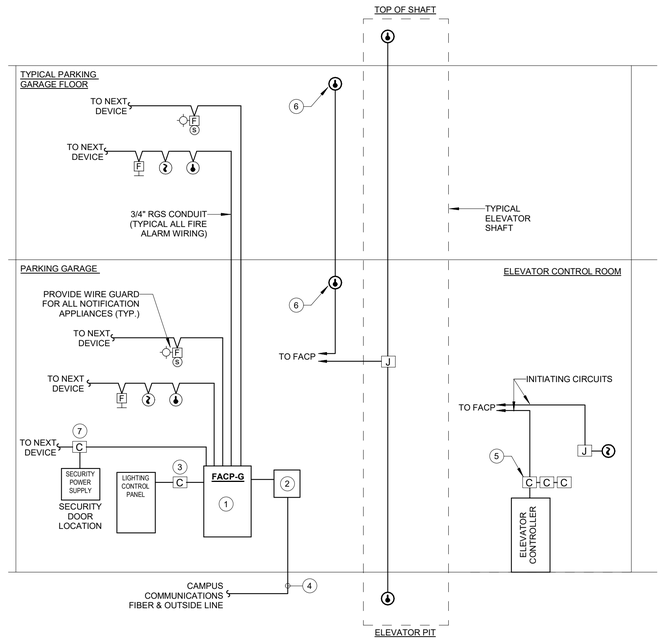
210-C-13
PHASE I GRADING PLAN

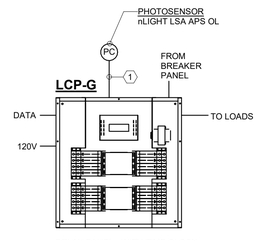
Contract:	1735
CAD File Name:	210C13.DWG
Date:	01 / 13 / 2021
Sheet:	12 of 158



1 **TYPICAL RISER DIAGRAM - FIRE ALARM**
NOT TO SCALE

FIRE ALARM KEYNOTES

1. ADDRESSABLE FIRE ALARM CONTROL PANEL. PROVIDE A MINIMUM OF 20% SPARE CAPACITY IN ALL PANELS AND POWER SUPPLIES.
2. FIRE ALARM COMMUNICATOR. TIE TO CAMPUS FIRE ALARM LOOP AND OUTSIDE TELEPHONE LINE.
3. PROVIDE A CONTROL MODULE FOR OVERRIDING LIGHTING CONTROLS DURING AN ALARM CONDITION.
4. INTERCEPT COPPER OR FIBER OPTIC FIRE ALARM NETWORK AND EXTEND TO FIRE ALARM COMMUNICATOR.
5. PROVIDE (3) CONTROL MODULES FOR THE ELEVATOR CONTROLLER, FOR PRIMARY RECALL, SECONDARY RECALL, AND ACTIVATION OF THE FIREMAN HELMET LIGHT.
6. LOBBY HEAT DETECTOR FOR ELEVATOR RECALL.
7. PROVIDE A CONTROL MODULE TO INTERFACE WITH SECURE DOOR CONTROL PANELS. DOORS SHALL FAIL SECURE UPON ACTIVATION OF THE FIRE ALARM.



RELAY PANEL - WITH TIME CLOCK AND PHOTOSENSOR CONTROLS

BASIS OF DESIGN: nLIGHT ARP
ARP INTENC16 NLT 12SRP MVLOT 1VB HLK SM DTC

(1) CAT6A CABLE WITH RJ45 CONNECTORS

LCP GENERAL NOTES

A. ON-SITE SYSTEM COMMISSIONING SHALL BE REQUIRED.

B. ELECTRICAL CONTRACTOR TO PROVIDE CAT-6A DATA CABLE. TEST ALL CABLE LENGTHS AND TERMINATION'S W/CAT-6A TESTER.

C. ALL LOW VOLTAGE COMMUNICATION CABLE & HARDWIRE LOW VOLTAGE CONTROL WIRING TO BE INSTALLED PER NATIONAL ELECTRICAL CODE FOR CLASS-2 LOW VOLTAGE WIRING.

D. CLASS-2 LOW VOLTAGE WIRING SHALL NOT BE MIXED WITH OR RUN IN LINE VOLTAGE RACEWAYS. SEPARATE LOW VOLTAGE RUNS FROM LINE VOLTAGE BY A MINIMUM DISTANCE OF 1-FOOT.

E. CAT-6A DATA CABLE RUNS TO BE INSTALLED IN A DAISY CHAIN FROM ONE PANEL OR DEVICE TO THE NEXT. NO "STAR" OR "T" CONFIGURATIONS ALLOWED WITHOUT POWER SUPPLY REPEATERS.

F. ALL CLASS-2 & CAT-6A DATA CABLE RUNS TO BE PROVIDED AND INSTALLED WITH THE APPROPRIATE JACKET TYPE OR CONDUIT FOR THE INSTALLATION ENVIRONMENT OR CONDITIONS ON SITE.

G. CONTROL PANEL SHALL BE PROVIDED WITH BATTERY BACKUP AND BE ABLE TO RETAIN PROGRAMMING FOR A MINIMUM OF 10HR.

2 **TYPICAL CONTROL DIAGRAM - LIGHTING CONTROLS**
NOT TO SCALE

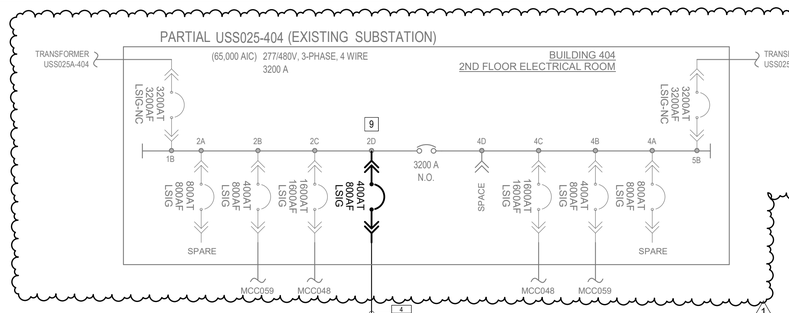
ONE-LINE GENERAL NOTES

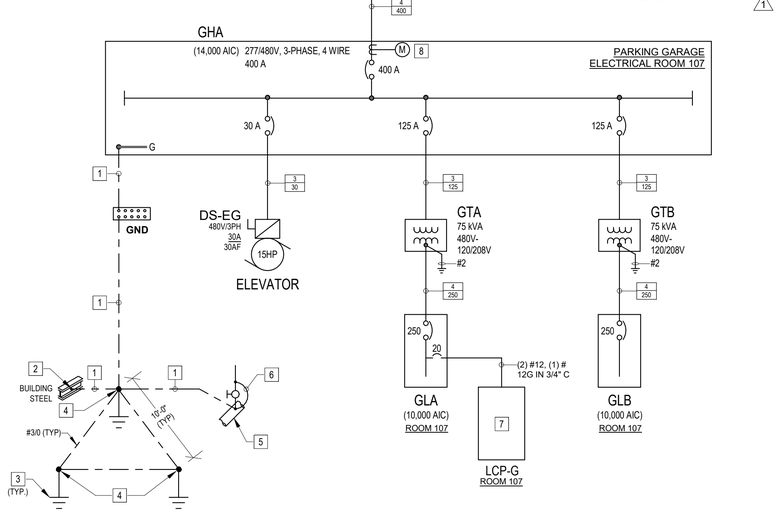
1. ALL EXTERIOR MOUNTED EQUIPMENT SHALL BE RATED NEMA 4X.
2. CONTRACTOR / VENDOR TO PROVIDE FULLY RATED / SELECTIVE COORDINATED SYSTEM.
3. REFER TO PANEL SCHEDULES AND EQUIPMENT CONNECTION SCHEDULE FOR ALL CIRCUITING AND SIZES.
4. ALL GROUNDING SHALL BE PROVIDED AND TESTED IN ACCORDANCE WITH NEC 250.56.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE ENGRAVED LABELS TO IDENTIFY ALL ELECTRICAL EQUIPMENT AND ELECTRICAL ROOMS. IN ADDITION, THE ELECTRICAL CONTRACTOR SHALL PROVIDE EACH SERVICE EQUIPMENT LOCATION A PERMANENT PLAQUE SHOWING ALL OTHER ELECTRICAL SERVICES IN THE BUILDING.
6. CONTRACTOR SHALL PROVIDE FAULT CURRENT, COORDINATION AND ARC FLASH POWER SYSTEM STUDIES PER SPECIFICATIONS PRIOR TO PLACING EQUIPMENT ORDERS. THE EQUIPMENT RATINGS SHALL BE ADJUSTED PER THE STUDY RESULTS. CONTRACTOR SHALL PROVIDE ARC FLASH AND SAFETY LABELS AND AFFIX ON EACH EQUIPMENT. CIRCUIT BREAKER TRIP SETTINGS SHALL BE ADJUSTED PER THE STUDY RESULTS.

ONE-LINE KEYED NOTES

1. (1) #3/0 GROUNDING ELECTRODE CONDUCTOR IN 1" SCHEDULE 40 PVC CONDUIT.
2. EXOTHERMIC CONNECTION. ELECTRICALLY CONTINUOUS STEEL REINFORCING BAR (25FT LENGTH) IN BOTTOM OF BUILDING FOUNDATION IN DIRECT CONTACT WITH EARTH.
3. 10 FT. LONG x 3/4" DIAMETER COPPER DRIVEN GROUND ELECTRODE. (TYPICAL)
4. EXOTHERMIC CONNECTION. PROVIDE GROUND TESTING WELL AT EACH LOCATION. (TYPICAL)
5. MAKE CONNECTION TO METALLIC COLD WATER ENTRANCE PIPE BEFORE FIRST VALVE WITH HEAVY DUTY BRONZE GROUND CLAMP.
6. PROVIDE (1) #3/0 BONDING JUMPER AROUND FIRST VALVE.
7. LCP - LIGHTING CONTROL PANEL - BASIS OF DESIGN - ACUITY CONTROLS BLUEBOX LTD GR1416 LTD. REFER TO DIAGRAM ON THIS SHEET AND LCP SCHEDULE ON 210-E-70.
8. PROVIDE WITH AN INTEGRAL DIGITAL METER.
9. INSTALL OWNER PROVIDED 400AT/800AF/3P CIRCUIT BREAKER IN USS025-404 SUBSTATION BUCKET #2D. POWER SHUTDOWN SHALL BE COORDINATED WITH ALCOSAN OPERATIONS. NO ELECTRICAL OUTAGE IN BUILDING 404 (SLUDGE PROCESSING BUILDING) SHALL OCCUR BEFORE NOON. (EXISTING SUBSTATION IS CUTLER-HAMMER G.O # PPG01496).

ALL CONDUCTORS, GROUND WIRES, RODS, BARS AND RELATED EQUIPMENT SHALL BE COPPER.





4 **ONE-LINE DIAGRAM - POWER**
NOT TO SCALE

ELECTRICAL FEEDER SCHEDULE

3		4	
AMPS	3PH, 3W, & GROUND	AMPS	3PH, 4W, & GROUND
20	(3) #12 & 1#12 G IN 3/4" C	20	(4) #12 & 1#12 G IN 3/4" C
30	(3) #10 & 1#10 G IN 3/4" C	30	(4) #10 & 1#10 G IN 3/4" C
40	(3) #8 & 1#10 G IN 1" C	40	(4) #8 & 1#10 G IN 1" C
50	(3) #6 & 1#10 G IN 1" C	50	(4) #6 & 1#10 G IN 1" C
60	(3) #4 & 1#10 G IN 1" C	60	(4) #4 & 1#10 G IN 1 1/2" C
70	(3) #4 & 1#8 G IN 1 1/2" C	70	(4) #4 & 1#8 G IN 1 1/2" C
80	(3) #3 & 1#8 G IN 1 1/2" C	80	(4) #3 & 1#8 G IN 1 1/2" C
90	(3) #2 & 1#8 G IN 1 1/2" C	90	(4) #2 & 1#8 G IN 1 1/2" C
100	(3) #1 & 1#8 G IN 1 1/2" C	100	(4) #1 & 1#8 G IN 2" C
125	(3) #1 & 1#6 G IN 1 1/2" C	125	(4) #1 & 1#6 G IN 2" C
150	(3) #1/0 & 1#6 G IN 2" C	150	(4) #1/0 & 1#6 G IN 2" C
175	(3) #2/0 & 1#6 G IN 2" C	175	(4) #2/0 & 1#6 G IN 2" C
200	(3) #3/0 & 1#6 G IN 2" C	200	(4) #3/0 & 1#6 G IN 2 1/2" C
225	(3) #4/0 & 1#4 G IN 2 1/2" C	225	(4) #4/0 & 1#4 G IN 2 1/2" C
250	(3) #250 KCMIL & 1#4 G IN 2 1/2" C	250	(4) #250 KCMIL & 1#4 G IN 3" C
400	(3) #500 KCMIL & 1#3 G IN 4" C	400	(4) #500 KCMIL & 1#3 G IN 4" C
600	2 SETS OF (3) #350 KCMIL & 1#1 G IN 3" C	600	2 SETS OF (4) #350 KCMIL & 1#1 G IN 4" C
800	3 SETS OF (3) #300 KCMIL & 1#1/0 G IN 3" C	800	3 SETS OF (4) #300 KCMIL & 1#1/0 G IN 3" C
1000	3 SETS OF (3) #500 KCMIL & 1#2/0 G IN 4" C	1000	3 SETS OF (4) #500 KCMIL & 1#2/0 G IN 4" C
1200	4 SETS OF (3) #350 KCMIL & 1#3/0 G IN 3" C	1200	4 SETS OF (4) #350 KCMIL & 1#3/0 G IN 4" C
1600	5 SETS OF (3) #500 KCMIL & 1#4/0 G IN 4" C	1600	5 SETS OF (4) #500 KCMIL & 1#4/0 G IN 4" C

NOTES:

1. CONDUIT SIZES FOR THHN/THWN COPPER CONDUCTORS ONLY. OTHER CONDUCTOR SIZES MAY REQUIRE INCREASED CONDUIT SIZE. CONTRACTOR TO MAKE ALL THE NECESSARY FIELD ADJUSTMENTS TO COMPENSATE FOR VOLTAGE DROP.
2. GROUND CONDUCTORS SPECIFIED IS FOR EQUIPMENT GROUND PER N.E.C. UNLESS NOTED OTHERWISE.
3. ALL 120V, 20A BRANCH CIRCUIT OVER 100'-0" AND 208V, 20A BRANCH CIRCUITS OVER 175' -0" IN LENGTH SHALL BE MINIMUM #10 AWG CU. CONDUCTORS MINIMUM TO ACCOMMODATE VOLTAGE DROP. WHERE A CONFLICT EXISTS BETWEEN THIS REQUIREMENT, CONDUCTOR SIZES SHALL TAKE PRECEDENCE.
4. IN GENERAL, VOLTAGE DROP FOR ANY BRANCH CIRCUIT SHALL NOT EXCEED 3%. VOLTAGE DROP FOR ANY FEEDER SHALL NOT EXCEED 2%. WHERE VOLTAGE DROP EXCEEDS THESE REQUIREMENTS, THE CONTRACTOR SHALL INCREASE THE SIZE OF THE CONDUCTORS AND RACEWAY AS REQUIRED.

3 TOP NUMBER REFERS TO COLUMNS
800 BOTTOM NUMBER REFERS TO ROWS (AMPS)

DATA/TELE OUTLET CONFIGURATION LEGEND

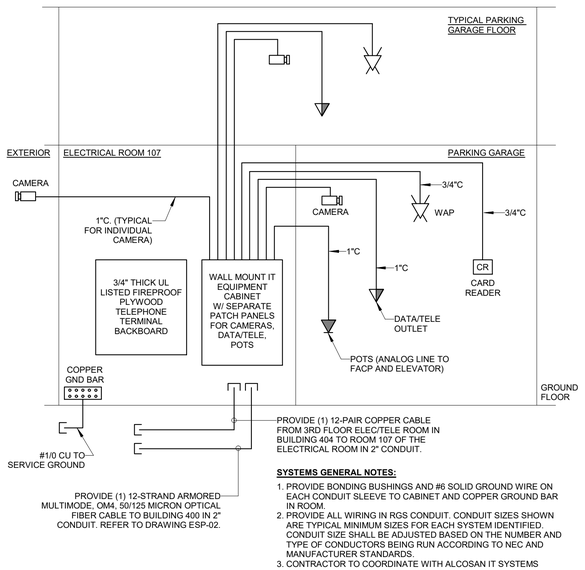
OUTLET CONFIG.	FUNCTION	MOUNTING HEIGHT A.F.F.
1	STANDARD OUTLET	18"
2	WALL PHONE OUTLET	42"
3	CEILING WAP OUTLET	CEILING
4	CEILING CAMERA OUTLET	CEILING
5	WALL CAMERA OUTLET	96"
6	LIGHT POLE CAMERA OUTLET	120"
7	EQUIPMENT OUTLET	48"
8	DOOR ACCESS CONTROL OUTLET	CEILING
9	BLUE (EM) PHONE OUTLET + PHONE (REFER TO KEYNOTE #3 ON FLOOR PLANS)	42"

(1)

CABLING CONFIGURATION LEGEND

CABLE CONFIG.	CAT6A QTY	RJ12 QTY	OTHER
A	1	-	-
B	2	-	-
C	-	1	-
D	-	2	-
E	1	1	-

(1)
EXAMPLE:
9B — CABLE CONFIGURATION TYPE
OUTLET CONFIGURATION TYPE



SYSTEMS GENERAL NOTES:

1. PROVIDE BONDING BUSHINGS AND #6 SOLID GROUND WIRE ON EACH CONDUIT SLEEVE TO CABINET AND COPPER GROUND BAR IN ROOM.
2. PROVIDE ALL WIRING IN RGS CONDUIT. CONDUIT SIZES SHOWN ARE TYPICAL MINIMUM SIZES FOR EACH SYSTEM IDENTIFIED. CONDUIT SIZE SHALL BE ADJUSTED BASED ON THE NUMBER AND TYPE OF CONDUCTORS BEING RUN ACCORDING TO NEC AND MANUFACTURER STANDARDS.
3. CONTRACTOR TO COORDINATE WITH ALCOSAN IT SYSTEMS MANAGER PRIOR TO INSTALLATION.

3 **TYPICAL RISER DIAGRAM - SYSTEMS**
NOT TO SCALE

Designed by:	REVISION			
B, Kassahun	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	2/19/21	ADDENDUM 1	
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Checked by:				
M, Murphy				

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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-ESL-01
ELECTRICAL ONE-LINE AND RISER DIAGRAMS

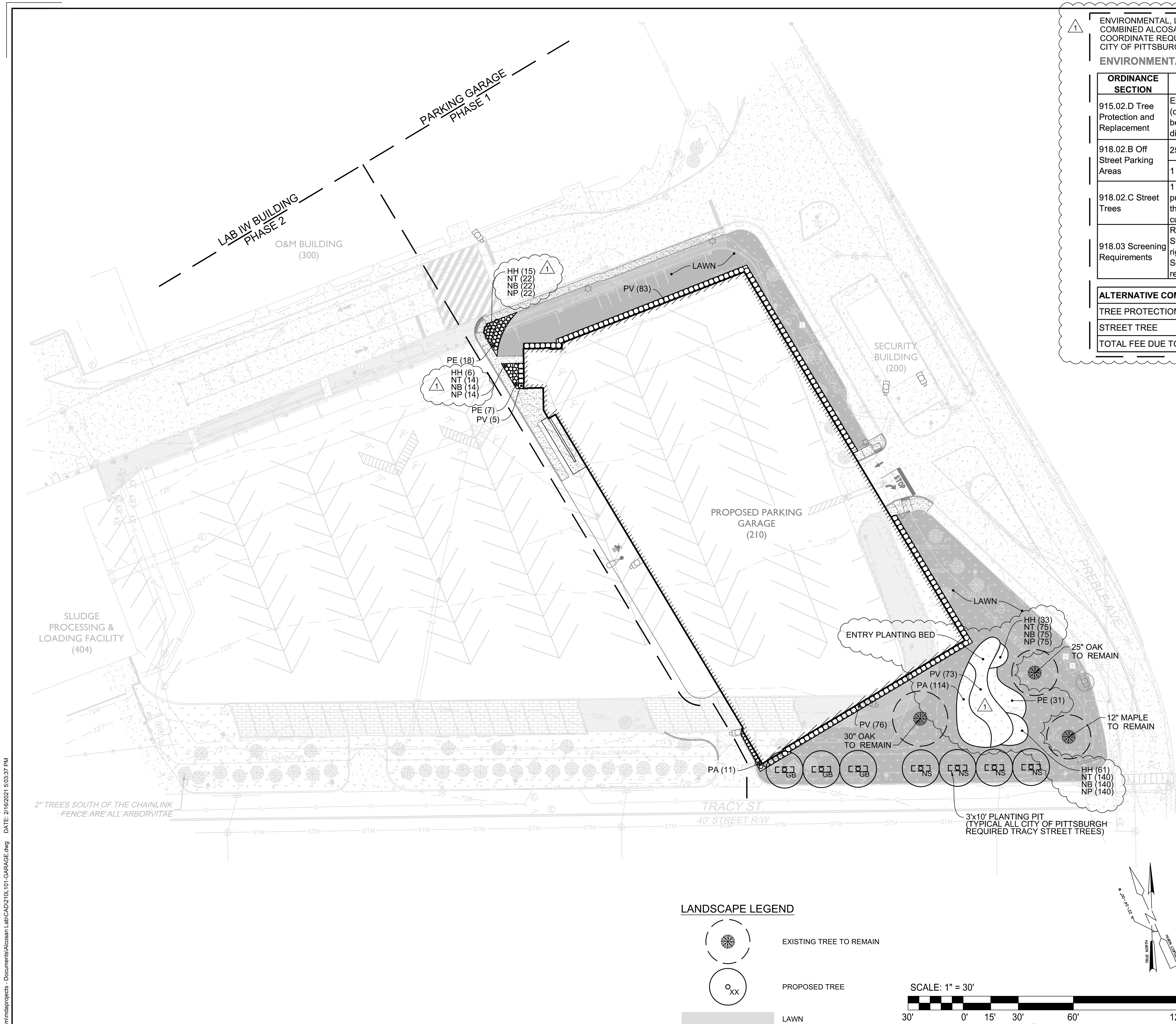
Contract:	1735
CAD File Name:	210ESL01.DWG
Date:	02/10/2021
Sheet:	154 of 158

ENVIRONMENTAL, LANDSCAPING AND SCREENING ZONING ORDINANCE REQUIREMENTS ARE A REQUIREMENT OF THE CITY OF PITTSBURGH APPROVAL FOR THE COMBINED ALCOSAN PROJECTS: THE PARKING GARAGE AND THE ENVIRONMENTAL COMPLIANCE FACILITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE REQUIRED SPECIAL INSTRUCTIONS FOR LANDSCAPING, INSTALLATION OF PLANTS AND PAYMENT IN LIEU OF INSTALLATION FEE DUE TO THE TREASURER CITY OF PITTSBURGH. FEE DUE TO THE CITY OF PITTSBURGH TO BE PAID BY ALCOSAN.

ENVIRONMENTAL, LANDSCAPING AND SCREENING ZONING ORDINANCE REQUIREMENTS

ORDINANCE SECTION	REQUIREMENT	BASIS OF CALCULATIO	REQUIRED	PROPOSAL TO MEET REQUIREMENTS
915.02.D Tree Protection and Replacement	Existing Trees with a diameter of 12" measured 4' above grade (or DBH) removed during site preparation or development shall be replaced, at a minimum, equal to the combined total diameter of removed trees.	24" oak and a 36" oak	New Trees with a total 60" Caliper	(6 Canopy Trees at 2.5" Caliper = 15" Caliper) + (4 Ornamental Trees at 2" Caliper = 8" of Caliper) = 23" Caliper
918.02.B Off Street Parking Areas	25 SF of landscaping for each parking space.	28 surface spaces	700 SF	5,000 SF+ of landscaping is provided adjacent to the parking areas.
	1 Tree with a 2" Caliper / 5 Parking Spaces.	28 surface spaces	6 Trees	6 Canopy Trees at 2.5" Caliper = 15" Caliper
918.02.C Street Trees	1 Street Tree with a 2" Caliper / 30 LF of property adjoining a public street planted between the sidewalk and the curb. If this is not possible, Street Trees shall be installed within 20' of curb.	508 LF of frontage on Tracy Street	17 Trees	11 CanopyTrees at 2.5" Caliper = 27.5" of Caliper
918.03 Screening Requirements	Refuse, Storage, Open Structures, Service Yards, and Off Street Parking shall be screened from adjacent property and rights-of-way with a visual barrier. Refuse, Storage and Service Yards that face a residential zone must have a removable screen.	Visual screen	Visual Screen	Visual Screening of the dumpster area and off-street parking is provided by evergreen shrubs 42" height at installation.

ALTERNATIVE COMPLIANCE	REQUIRED	PROPOSED	PAYMENT IN LIEU OF
TREE PROTECTION AND REPLACEMENT	60" Caliper	37" Caliper	18.5 Trees x $600 = $11,100
STREET TREE	17 Trees	11 Trees	6 Trees x $600 = $3,600
TOTAL FEE DUE TO THE TREASURER CITY OF PITTSBURGH			$14,700



LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL BE OF NURSERY STOCK QUALITY AS DEFINED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION AND GUARANTEED PER THE SPECIFICATIONS.
2. PROVIDE 6" MIN. TOPSOIL FOR ALL PLANTING AND SEEDED AREAS.
3. PLANTING MIXTURE BACKFILL AT BUILDING: REMOVE SOIL TO A MINIMUM DEPTH OF 12 INCHES BETWEEN THE BUILDING WALL AND SIDEWALK WHERE PLANTING AND LAWN IS TO BE INSTALLED. BACKFILL THIS AREA TO THE ENTIRE DEPTH WITH PLANTING MIXTURE.
4. ALL DISTURBED AREAS SHALL BE SEEDED AND PLANTED WITHIN 30 DAYS OF CONSTRUCTION COMPLETION.
5. FINISHED GRADE OF TOPSOIL SHALL BE ½ TO ¾ INCH BELOW TOP OF WALKS AND CURBS TO PROVIDE POSITIVE DRAINAGE OFF OF WALKS.
6. ALL NON-BIODEGRADABLE ROOT WRAPPING TO BE REMOVED COMPLETELY BEFORE PLANTING.
7. ALL DISTURBED AREAS TO BE GRADED SMOOTH AND RESTORED TOPSOIL AND LAWN SEEDING UNLESS NOTED WITH PLANTING BEDS.
8. REFER TO CIVIL PLANS FOR TEMPORARY EROSION CONTROL.
9. PROVIDE 3" DOUBLE SHREDDED NATURAL HARDWOOD MULCH FOR ALL PLANTING BEDS.
10. UNDERGROUND UTILITIES HAVE BEEN SHOWN ON THESE PLANS FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE CARE AND NOT DISRUPT ANY EXISTING UTILITY, ABOVE OR BELOW GROUND.
11. PROVIDE PLANTING MIXTURE 3:1 RATIO OF TOPSOIL / PEAT HUMUS IN ALL NEW PLANTING BEDS AND PLANTING PITS.
12. PROVIDE PROPER DRAINAGE AND INFILTRATION RATES TO ENSURE VIGOROUS PLANT HEALTH IN PLANTING BEDS. REMOVE FROM THE SITE ALL SOIL THAT DOES NOT PROVIDE ADEQUATE DRAINAGE. RESTORE INFILTRATION CAPACITY OF THE SOIL BY SPADING TO A DEPTH OF 16" DEPTH FOR DISTURBED AREAS.
13. PLACE THE ROOT BALLS OF THE PLANTS IN THE HOLE SO IT IS NO DEEPER THAN IT ORIGINALLY GREW IN THE NURSERY.
14. SHOULD DISCREPANCY ARISE BETWEEN THE LANDSCAPE PLAN AND PLANT SCHEDULE, THE PLAN SHALL GOVERN AS TO THE QUANTITY OF PLANT MATERIAL.
15. EDGE ALL PLANTING BEDS.
16. HAND WATER TO ESTABLISH PLANTINGS. NO PERMANENT IRRIGATION IS REQUIRED. WATER WELL AFTER PLANTING, SOAKING THE ENTIRE AREA. NEW PLANTS WILL REQUIRE AN INCH OF WATER PER WEEK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE HEALTH OF THE PLANTS.
17. TRIM AND PRUNE EXISTING PLANTS TO REMAIN ACCORDING THE STANDARDS SET BY THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1.
18. ALL AREAS ARE TO BE SEEDED UNLESS OTHERWISE SHOWN ON PLAN.

PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	QUAN	SIZE	SPACING
CANOPY TREES					
NS	NYSSA SYLVATICA	BLACK GUM	4	2.5" CAL; B&B	AS SHOWN
GB	GINKO BILOBA 'PRINCTON SENTRY' (MALE ONLY)	PRINCETON SENTRY GINKO (MALE ONLY)	3	2.5" CAL; B&B	AS SHOWN
PERENNIALS					
HH	HEMEROCALLIS 'HAPPY RETURNS'	LITTLE BUSINESS DAYLILY	59	# 1 CONT.; FULL	18" OC
	HEMEROCALLIS 'LITTLE BUSINESS'	HAPPY RETURNS DAYLILY	59	# 1 CONT.; FULL	18" OC
PE	PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	56	# 2 CONT.; FULL	36" OC
ORNAMENTAL GRASSES					
PA	PENNISETUM ALOPECUROIDES 'HAMELN'	HAMELN FOUNTAIN GRASS	125	# 2 CONT.; FULL	24" OC. 12" SETBACK TO BUILDING
PV	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCHGRASS	178	# 2 CONT.; FULL	36" OC. 18" SETBACK TO BUILDING
BULBS					
NT	CYCLAMINEUS NARCISSUS 'TETE-A-TETE'	EARLY BLOOMING DAFFODIL	251	TOP SIZE	RANDOMLY MIX DAFFODILS IN BETWEEN DAYLILLIES
NB	SMALL CUPPED NARCISSUS 'BARRETT BROWNING'	MID BLOOMING DAFFODIL	251	TOP SIZE	
NP	DOUBLE NARCISSUS 'YELLOW CHEERFULNESS'	LATE BLOOMING DAFFODIL	251	TOP SIZE	
SEED MIXES					
	LAWN - PENNDOT FORMULA B		APPLICATION RATE PER PENNDOT PUBLICATION 408		

Designed by:	M. Gelzhiser
Drawn by:	B. Bleicher
Checked by:	S. Moore

REVISION

REV No.	DATE	DESCRIPTION	APPV
1	2/19/21	ADDENDUM 1	

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PENNSYLVANIA REGISTERED LANDSCAPE ARCHITECT

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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-L-101
LANDSCAPE PLAN AND PLANTINGS

Contract: 1735
CAD File Name: 210L101.DWG
Date: 1/13/2021
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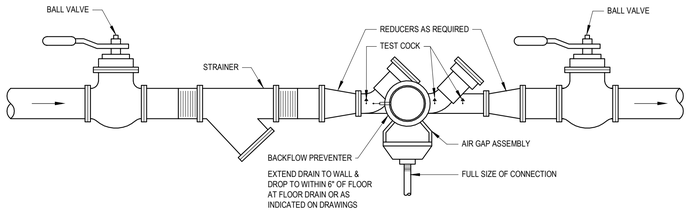
FILE: C:\Users\ben\mooredesignassociates.com\mdaprojects - Documents\Alcosan Lab\CAD\210L101-GARAGE.dwg DATE: 2/16/2021 5:03:37 PM

PLUMBING GENERAL NOTES

* FIELD VERIFY ALL NEW WATER, WASTE, AND VENT PIPING CONNECTIONS AND PROVIDE NEW CONNECTIONS AS REQUIRED FOR PROPERLY OPERATING SYSTEMS.
* PITCH UNDERFLOOR SANITARY WASTE AND STORM PIPING AT 1/4-IN PER FOOT UNLESS OTHERWISE NOTED.
* FIELD VERIFY LOCATION AND INVERTS OF SITE UTILITIES PRIOR TO INSTALLATION.
* ROUTE POTABLE CITY WATER, FIRE PROTECTION, SANITARY SEWER, AND STORM SEWER SERVICES TO SITE UTILITIES 5-FT, 0-IN FROM BUILDING UNLESS NOTED OTHERWISE. REFER TO CIVIL PLANS.
* WASTE AND VENT PIPING BELOW FLOOR AND THROUGH FLOOR SHALL BE 2-IN MINIMUM.
* PROVIDE CLEANOUT IN ACCESSIBLE LOCATION AT THE BASE OF ALL PLUMBING RISERS.



4 BACKFLOW PREVENTER DETAIL

NOT TO SCALE

PLUMBING FIXTURE SCHEDULE

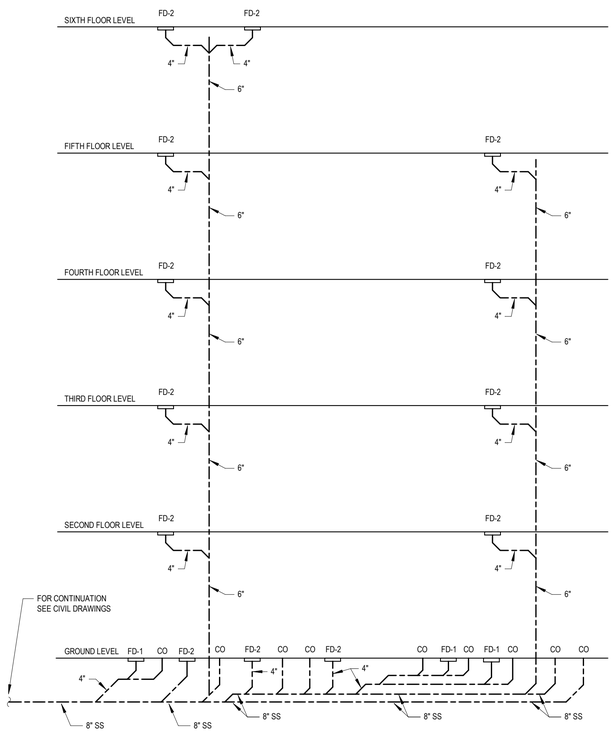
SEE SPECIFICATIONS FOR FIXTURE TYPE DESCRIPTION

TAG	DESCRIPTION	WASTE CONN	COLD WATER	REMARKS
FD-1	FLOOR DRAIN	4"	-	
FD-2	FLOOR DRAIN	4"	-	
HB	HOSE BIB	-	3/4"	

PLUMBING SYMBOLS LEGEND

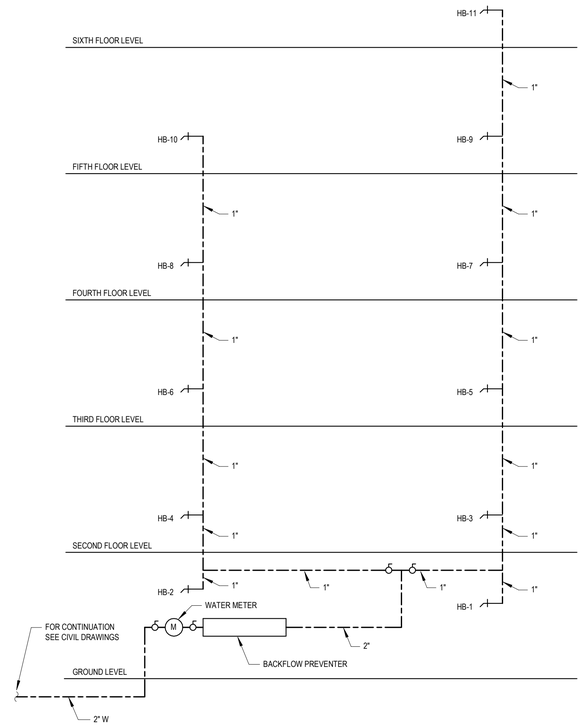
	BALL VALVE
	SHOCK ARRESTOR - SIZE AS MARKED
	BACKFLOW PREVENTER
CO	CLEANOUT AT CEILING OR WALL
CO	CLEANOUT AT FLOOR
	STRAINER
	DRAIN WITH P-TRAP
	UNION
	CHECK VALVE
PCW	POTABLE CITY WATER PIPING
SS	SANITARY PIPING
	DROP
	RISE
	CAP
F-1, F-2, ETC.	PLUMBING FIXTURE TYPE- SEE SPECIFICATION

1



3 SANITARY RISER DIAGRAM

NOT TO SCALE



2 COLD WATER RISER DIAGRAM

NOT TO SCALE

Designed by:	REVISION			
J, Snyder	REV No.	DATE	DESCRIPTION	APPV
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Checked by:				
Z, Solarczyk				

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17-FEB-21

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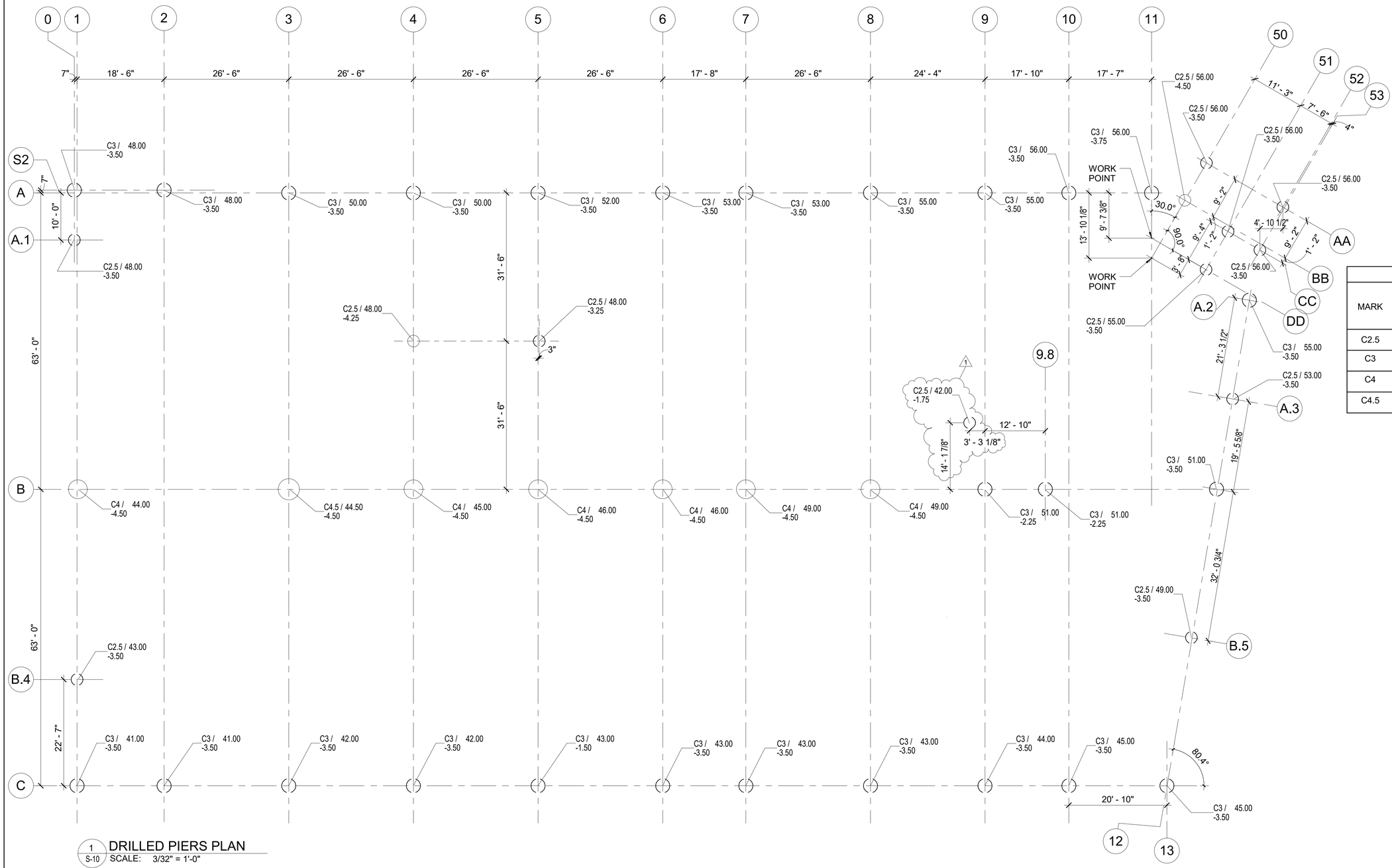
ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-P-01

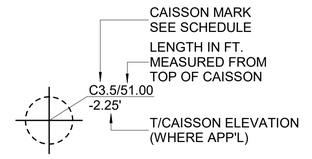
PLUMBING SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

Contract:	1735
CAD File Name:	210P01.DWG
Date:	02/10/2021
Sheet:	122 of 158



1 S-10 DRILLED PIERS PLAN
SCALE: 3/32" = 1'-0"

LEGEND



CAISSON

CAISSON SCHEDULE					
MARK	SHAFT DIAMETER, FT	REINFORCEMENT			
		VERT.	MIN. EMBED.	TIES	
				SIZE	SPACING
C2.5	2' - 6"	6 #7	FULL LENGTH	#3	1@2", 4@3", REM@12"
C3	3' - 0"	7 #8	FULL LENGTH	#3	1@2", 4@3", REM@15"
C4	4' - 0"	7 #10	FULL LENGTH	#4	1@2", 4@3", REM@18"
C4.5	4' - 6"	9 #10	FULL LENGTH	#4	1@2", 4@3", REM@18"

GENERAL NOTE

1. BOTTOM OF CAISSON ELEVATIONS SHOWN ARE AN ESTIMATION BASED ON FOUR, WIDELY SPACED TEST BORINGS. THE ESTIMATED BOTTOM OF CASSION ELEVATIONS ARE PROVIDED AS A BASIS FOR BIDDING.
2. DUE TO THE NATURE OF THE ROCK AND GEOLOGIC SETTING, THE ACTUAL DEPTHS TO SUITABLE BEARING WILL VARY FROM THIS DRAWING AND WILL NEED TO BE DETERMINED DURING CAISSON DRILLING.
3. BIDDERS SHALL INCLUDE AN ADD/DEDUCT UNIT COST PER FOOT OF CAISSON INSTALLATION FOR FINAL LENGTHS THAT DEVIATE FROM THE ESTIMATED LENGTHS USED FOR DESIGN AND BIDDING.
4. ALL CAISSONS ARE CENTERED ON COLUMN GRID LINESUNLESS OTHERWISE NOTED.
5. AS BOTTOM OF CAISSON ELEVATIONS ARE ESTIMATED, THE ACTUAL LENGTH OF VERTICAL REBAR AND QUANTITIES OF TIES SHALL BE DETERMINED IN THE FIELD.

SCALE: 3/32" = 1'-0"
8' 0' 4' 8' 16' 32'

Designed by: G. ABDALLAH
Drawn by: G. ABDALLAH
Checked by: G. ABDALLAH

REVISION			
REV No.	DATE	DESCRIPTION	APPV
1	2/19/21	ADDENDUM 1	

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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-S-10
CAISSON PLAN (DRILLED PIERS)

Contract: 1735
CAD File Name: 210S10.DWG
Date: 01 / 13 / 2021
Sheet: 74 of 158

PROPOSED TELECOMMUNICATION LINE FOR PARKING GARAGE (SEE ELECTRICAL DWGS.)

PROPOSED ELECTRICAL LINE FOR PARKING GARAGE (SEE ELECTRICAL DWGS.)

EXISTING ELECTRICAL CONDUIT TO STREET LAMPS APPROX. 48" BELOW GRADE

0 1 2 3 4 5 6 7 8 9 9.8 10

7" 18' - 6" 26' - 6" 26' - 6" 26' - 6" 26' - 6" 17' - 8" 26' - 6" 24' - 4" 17' - 10" 17' - 7"

PROPOSED SANITARY SEWER FOR NEW PARKING FACILITY
INV EL -6.20'
(SEE PLUMBING & CIVIL DWGS.)

WRAP PIPE IN 1" COMPRESSABLE FILLER WHERE IT CROSSES UNDER FOOTING

PROPOSED WATER LINE FOR NEW PARKING FACILITY
TOP OF PIPE EL -6.50', BOT. OF PIPE EL. -7.42'
(SEE CIVIL DWGS.)

EXISTING WATER MAIN TO REMAIN
T/PIPE EL -6.50'
B/PIPE EL. -7.42'

RELOCATED 10" D.I.P. WATER LINE

SUSPECTED EXISTING ELECTRICAL CONDUIT APPROX. 24" BELOW GRADE

EXISTING 20" D.I.P. SEWER PROCESS LINE TO REMAIN
TOP OF PIPE EL -7.23", BOT. OF PIPE EL. -9.03"

S2 A A.1 B B.4 C

63' - 0"

10' - 0" 22' - 7" 1' - 0"

5' - 1 3/8" 2' - 11 1/8" 1' - 9 1/8"

1' - 5" 1' - 4" 1' - 4"

PC1

5' - 3"

6' - 10" 2' - 0" TYP.

T/GRADE BEAM -2.00'

T/GRADE BEAM -1.00'

T/GRADE BEAM +0.25'

PROPOSED ELECTRICAL AND TELECOMMUNICATION LINE FOR PARKING GARAGE (SEE ELECTRICAL DWGS.)

12' - 10" 5' - 0"

6' - 0 1/2" V.I.F.

4' - 6 1/2" +/- CLR. (V.I.F.)

4' -6" +/- V.I.F.

3'-0" +/- CLR. (V.I.F.)

2' - 3 3/8" TO CAISSON

1' - 7 1/4" TO CAP

7' - 5 3/8" +/- V.I.F.

4' - 5 1/2" +/- V.I.F.

2' - 11 1/2" +/- CLR. (V.I.F.)

1' - 0" CLR. MIN.

2' - 0" CLR. MIN.

20' - 10 1/8"

EXISTING ELECTRICAL DUCT BANK TO REMAIN
TOP OF DUCT BANK EL -3.12',
BOT. OF DUCT BANK EL. -4.87'
(ASSUMES 21" H DUCT BANK)

ABANDON EXISTING 10" D.I.P. WATER LINE APPROX. 66" BELOW GRADE

EXISTING STORM SEWER TO REMAIN APPROX. 36" BELOW GRADE

EXIST. THRUST BLOCK

RELOCATED 10" D.I.P. WATER LINE (SEE CIVIL DWGS.)

EXISTING WATER MAIN TO REMAIN
T/PIPE EL -6.50'
B/PIPE EL. -7.41'

1 2 3 4 5 11 12 13

A.2 A.3 B.5

1 S-40 3 S-21 4 S-21 3 S-22 2 S-22 5 S-22 4 S-22 2 S-23 1 S-22 1 S-30 2 S-21 1 S-21

LEGEND

PC# OR GB# - PIER CAP OR GRADE BEAM MARK
XX.XX' - TOP OF PIER CAP OR GRADE BEAM ELEVATION

PIER CAP /GRADE BEAM

GENERAL NOTES

1. ALL COLUMNS, DRILLED PIERS, AND PILE CAPS SHALL BE CENTERED ON GRIDLINES U.N.O.
2. ALL GRADE BEAMS REINFORCEMENT ARE CONTINUOUS. aLL END BARS SHALL BE ANCHORED WITH ACI 318 STD. 90° HOOK AT SUPPORTS. ALL SPLICE ARE CLASS B TENSION SPLICE.
3. ALL VERTICAL REINF. OF PIERS WITH CAP OR GRADE BEAM SHALL FULLY DEVELOP INTO CAP OR GRADE BEAM WITH ACI 318 STD 90° HOOK. REFER TO DWG 210-S-20 FOR CAISSON DETAILS AND REINFORCEMENT.
4. FOR CAISSON CAP DETAILS, SEE DRAWING 210-S-20.

EXISTING UTILITIES NOTE:
THE EXISTING UTILITIES AND LOCATIONS SHOWN ARE BASED ON THE INFORMATION AVAILABLE AT THE TIME OF DESIGN.

PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY IN FIELD THE LOCATIONS AND EXTENTS OF EXISTING UTILITIES AND THE APPROXIMATE CLEARANCES SHOWN TO NEW CONSTRUCTION. IF THERE ARE ANY CONFLICTS AFFECTING CONSTRUCTABILTY OF THE NEW FOUNDATIONS, NOTIFY ARCHITECT/ENGINEER IMMEDIATELY.

1 S-11 FOUNDATION PLAN
SCALE: 3/32" = 1'-0"

SCALE: 3/32" = 1'-0"
8' 0' 4' 8' 16' 32'

Designed by:	REVISION			
G. ABDALLAH	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	2/19/21	ADDENDUM 1	
G. ABDALLAH				
Checked by:				
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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-S-11
FOUNDATION PLAN

Contract:	1735
CAD File Name:	210S11.DWG
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1 S-12 GROUND LEVEL PLAN
SCALE: 3/32" = 1'-0"

Designed by:	G. ABDALLAH
Drawn by:	G. ABDALLAH
Checked by:	G. ABDALLAH

REV No.	DATE	DESCRIPTION	APPV
1	2/19/21	ADDENDUM 1	

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PROFESSIONAL ENGINEER

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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-S-12
GROUND LEVEL PLAN

Contract: 1735
CAD File Name: 210S12.DWG
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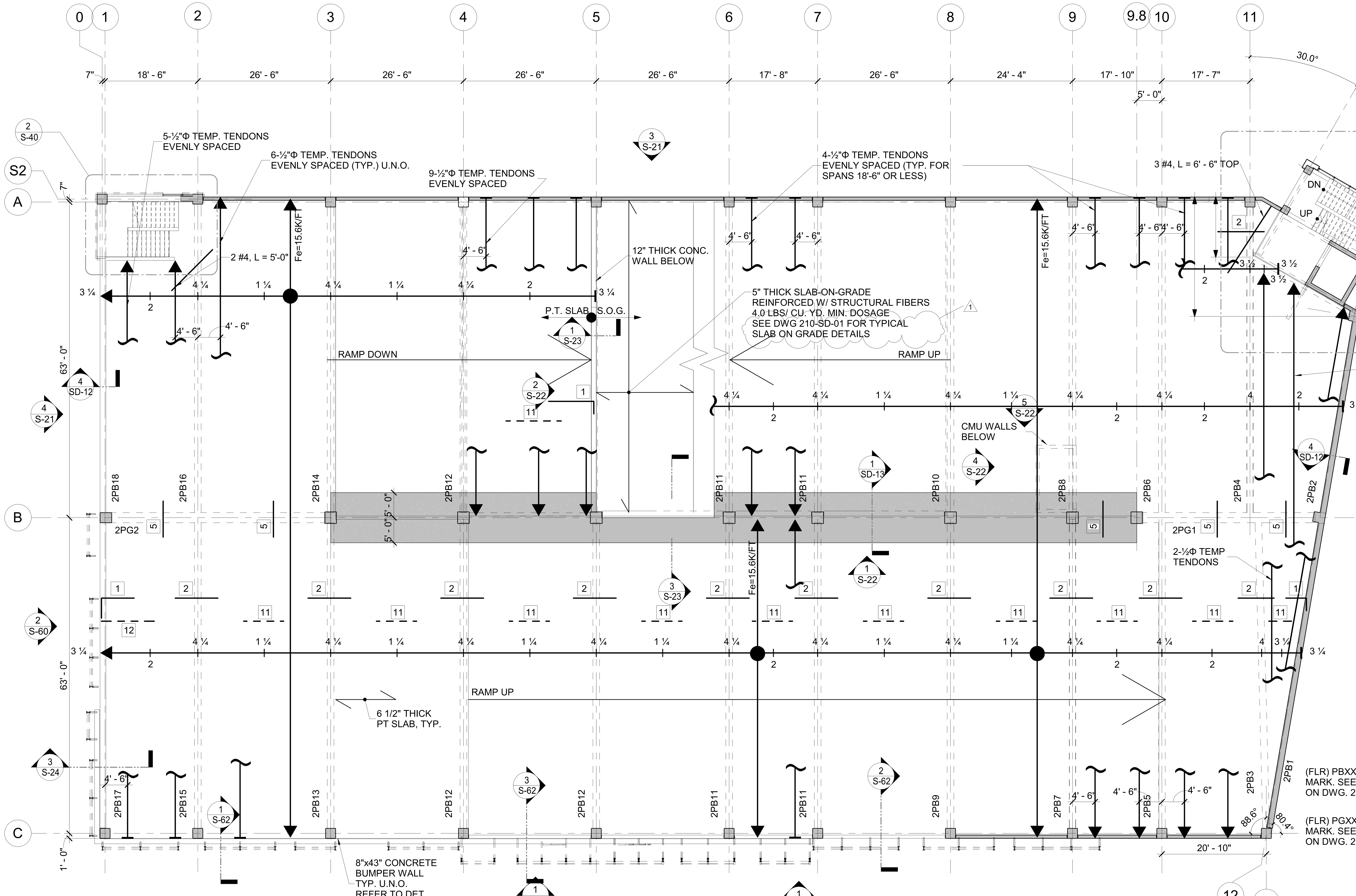


LEVEL 2 FRAMING PLAN

1 / S-13 SCALE: 3/32" = 1'-0"

SLAB REINFORCING SCHEDULE:
(OVER ENTIRE BAY)

TOP REBAR

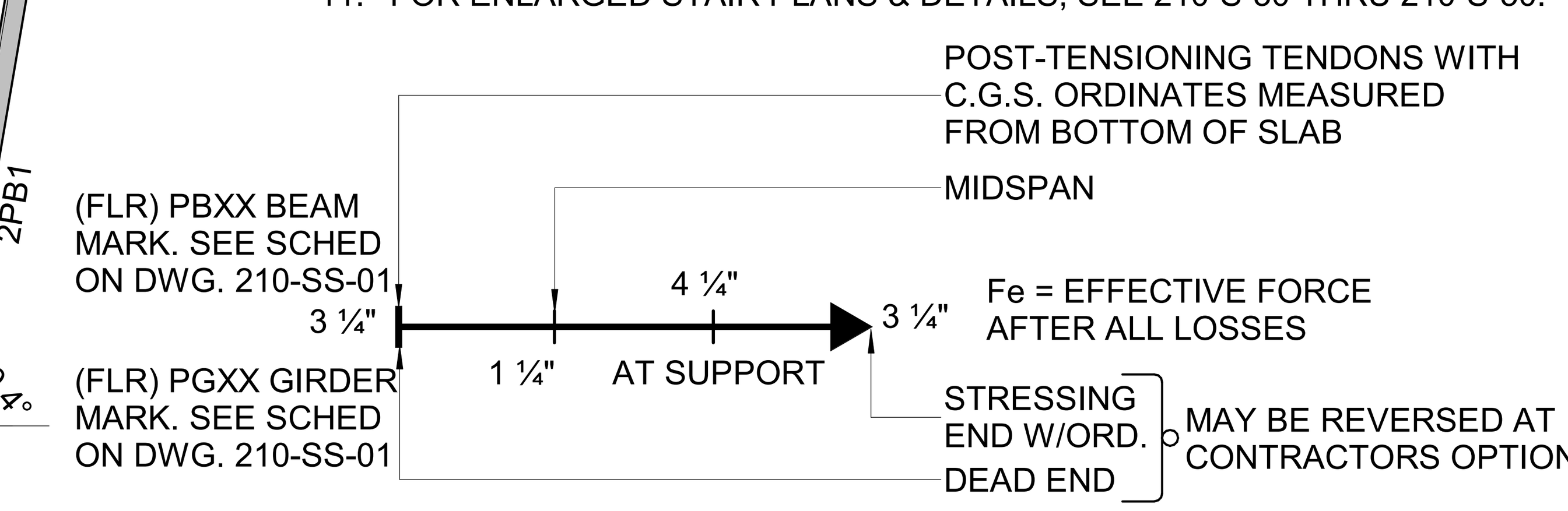
1	#4 @12" HOOKED. L = 4' - 6"
2	#4 @1' -2"
3	#4 @12"
4	#4 @9", HOOKED, L = 9' - 0"
5	#5 @12" TOP. L = 20' - 0"

BOTTOM REBAR

11	#4 @1' - 2"
12	#4 @ 12"

SHEET NOTES:

1. ALL POST TENSIONED PARKING STRUCTURE ELEVATED SLAB SHALL BE 6 ½" THICK, U.N.O.
2. MINIMUM (2) SLAB TENDONS SHALL PASS THROUGH COLUMNS ALONG GRIDS A&C. MINIMUM (1) SLAB MAIN TENDON SHALL PASS THROUGH COLUMN ON EACH SIDE OF COLUMN ALONG GRID B.
3. ALL HOOKS SHOWN ON PLANS, SECTIONS, AND DETAILS SHALL BE STANDARD HOOKS IN ACCORDANCE WITH ACI318. LENGTH OF HOOKED BARS SHOWN ON THIS DRAWING DO NOT INCLUDE HOOKS.
4. ALL COLUMNS CENTERED ON GRID LINE U.N.O.
5. BEAM MARKS SHOWN ON THE DRAWING INDICATE THE LEFT HAND SIDE OF THE BEAM AND SHOULD BE READ FROM THE STARTING POSITION OF THE BEAM MARK.
6. WITHIN THE SHADED AREAS ALONG GRID LINE B, PROVIDE CONTINUOUS TOP & BOTTOM MILD REINFORCEMENT IN LIEU OF SHORT BAR ARRANGEMENT PER DETAILS 9&10 ON 210-SD-13. SPLICE TOP BARS AT MID SPAN AND BOTTOM BARS AT BEAM CENTERLINE WITH CLASS "B" TENSION LAP SPLICE. IN ADDITION, PROVIDE 1-#5 TOP AND 1-#5 BOTTOM CONTINUOUS BARS ALONG EDGE OF SLAB EACH SIDE OF COLUMN ALONG GRIDS A, B, & C.
7. AT "RAMP DOWN" BEND CONTINUOUS SHORT TOP BARS TO FOLLOW RAMP SLOPE PER DETAIL 1A/210-SD-11. AT "RAMP UP" PLACE CONTINUOUS TOP BARS PER DETAIL 1C/210-SD-11 AND PLACE SHORT TOP BARS PER DETAIL 4B/210-SD-11.
8. FOR COLUMN SCHEDULE & DETAILS REFER TO 210-SS-03, 210-SD-20, 210-SD-21.
9. FOR SLAB & BEAM DETAILS, SEE DWG 210-SD-10 THRU 210-SD-17.
10. FOR BEAM SCHEDULESEE DWGS. 210-SS-01 AND 210-SS-02.
11. FOR ENLARGED STAIR PLANS & DETAILS, SEE 210-S-30 THRU 210-S-50.



PT SLAB LEGEND

SCALE: 3/32" = 1'-0"

8' 0' 4' 8' 16' 32'

Designed by:	REVISION				
G. ABDALLAH	REV No.	DATE	DESCRIPTION	APPV	
Drawn by:	1	2/19/21	ADDENDUM 1		
G. ABDALLAH					
Checked by:					
G. ABDALLAH					

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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-S-13
LEVEL 2 FRAMING PLAN

Contract: 1735
CAD File Name: 210S13.DWG
Date: 01 / 13 / 2021
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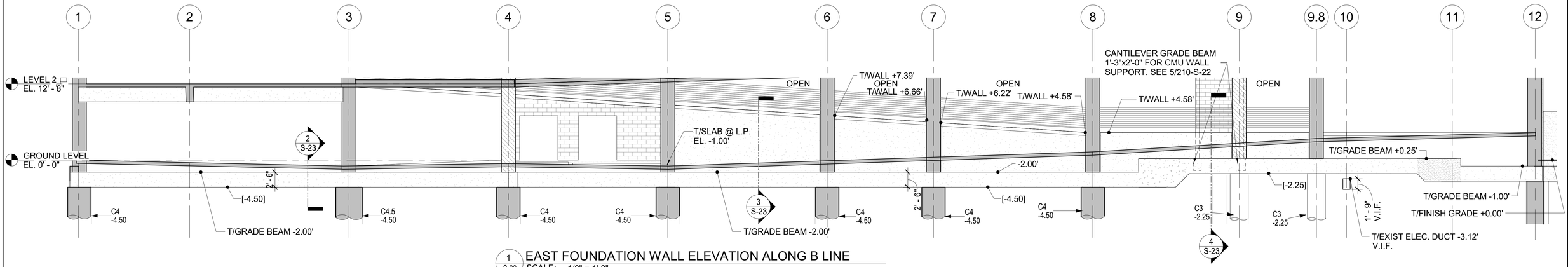
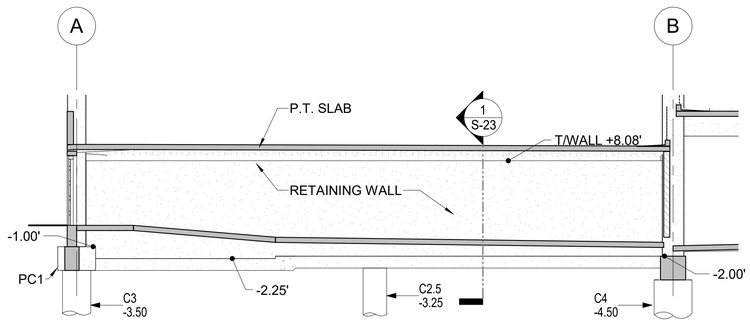
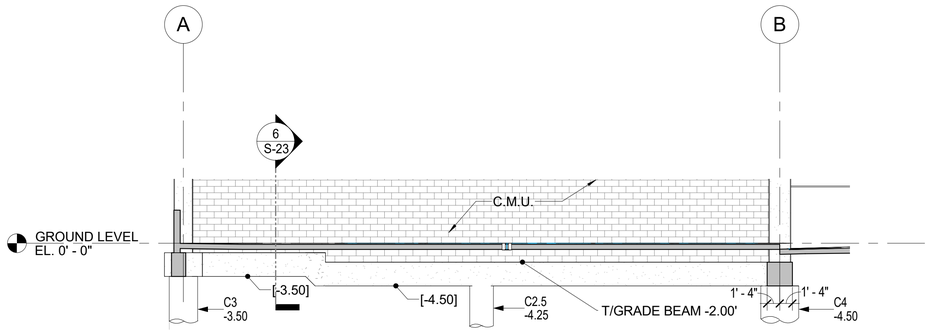


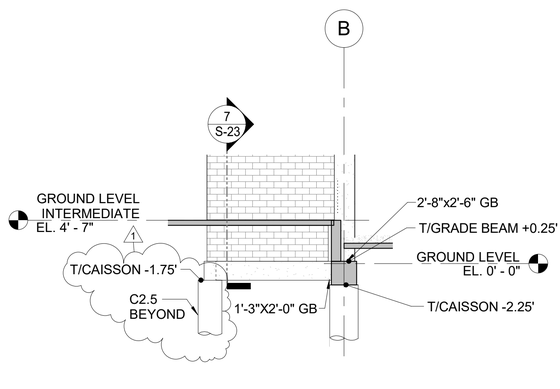
1 S-22 EAST FOUNDATION WALL ELEVATION ALONG B LINE
SCALE: 1/8" = 1'-0"



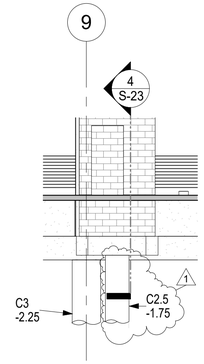
2 S-22 SOUTH FOUNDATION WALL ELEVATION ALONG 5 LINE
SCALE: 1/8" = 1'-0"



3 S-22 SOUTH FOUNDATION WALL ELEVATION ALONG 4 LINE
SCALE: 1/8" = 1'-0"



4 S-22 SOUTH FOUNDATION WALL ELEVATION AT ELECTRICAL ROOM
SCALE: 1/8" = 1'-0"



5 S-22 WEST FOUNDATION WALL ELEVATION AT ELECTRICAL ROOM
SCALE: 1/8" = 1'-0"

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

Designed by:	REVISION			
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Checked by:				
G. ABDALLAH				

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ALLEGHENY COUNTY SANITARY AUTHORITY
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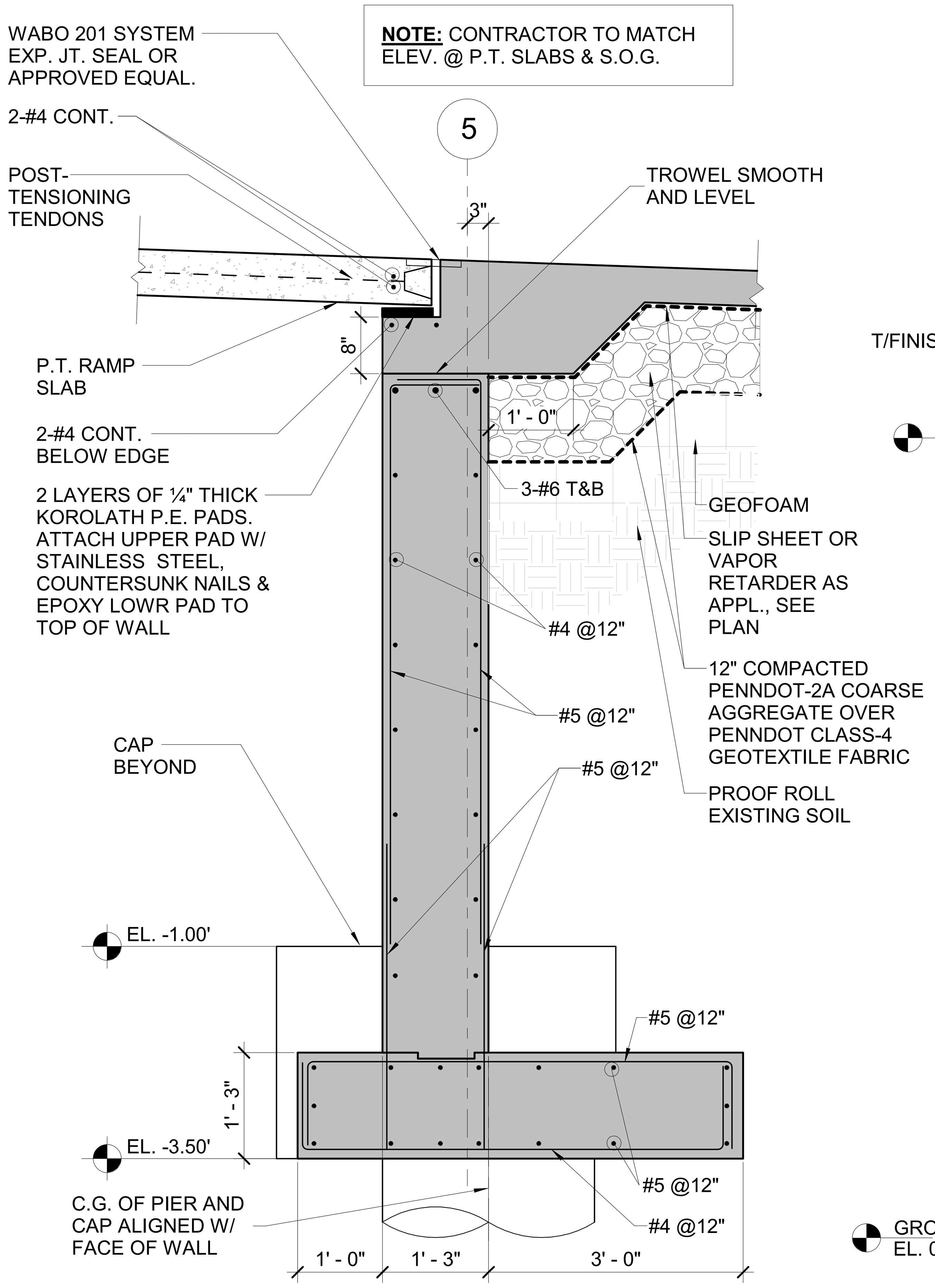
ALCOSAN PARKING GARAGE

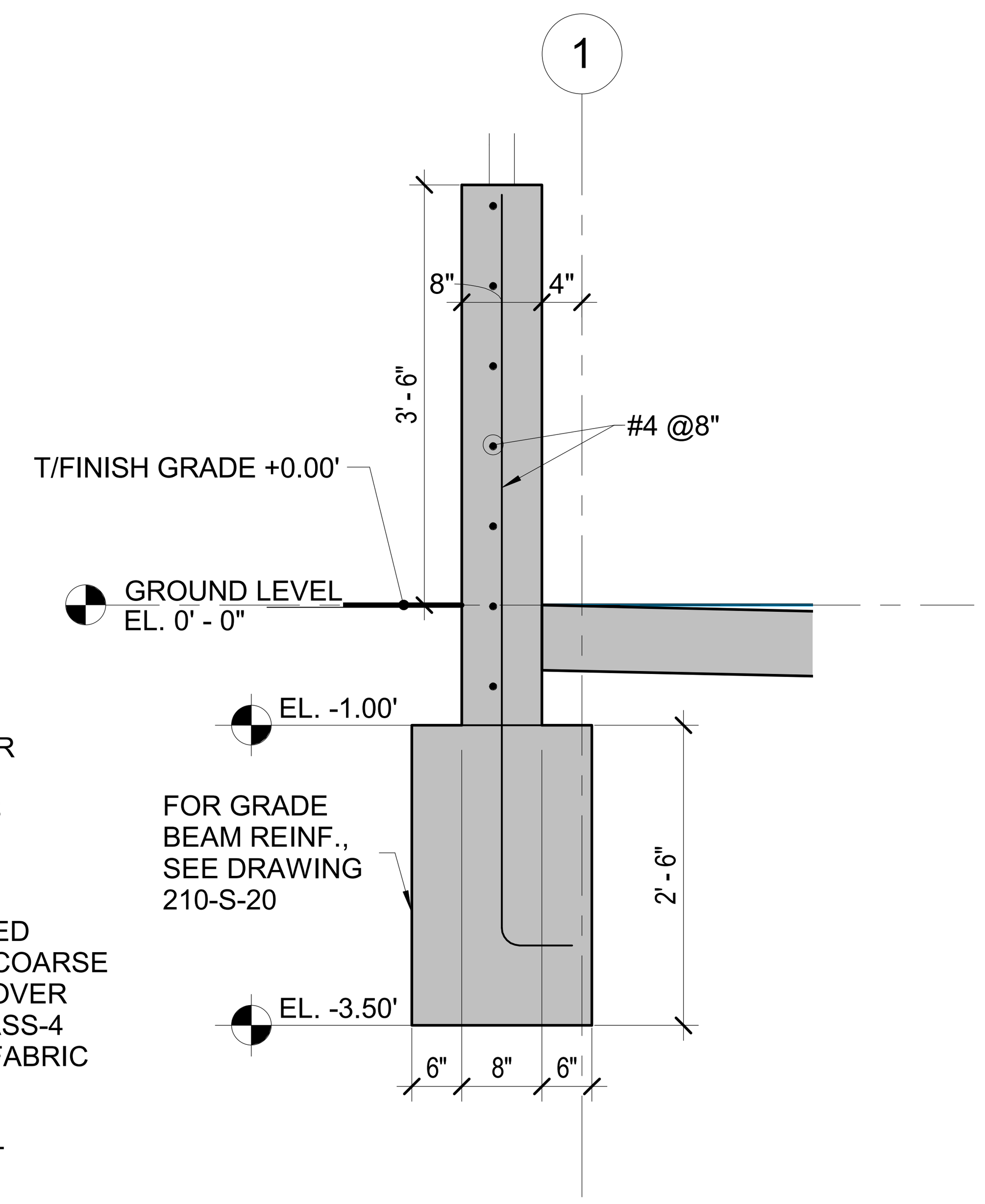
210-S-22
FOUNDATION WALL ELEVATIONS

Contract: 1735
CAD File Name: 210S22.DWG
Date: 01 / 13 / 2021

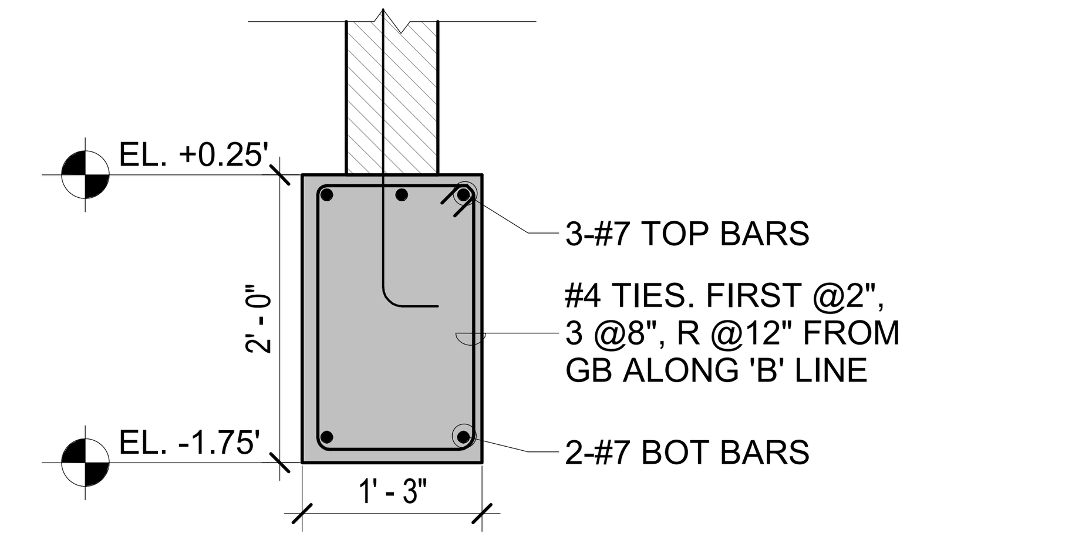
NOTE: CONTRACTOR TO MATCH ELEV. @ P.T. SLABS & S.O.G.



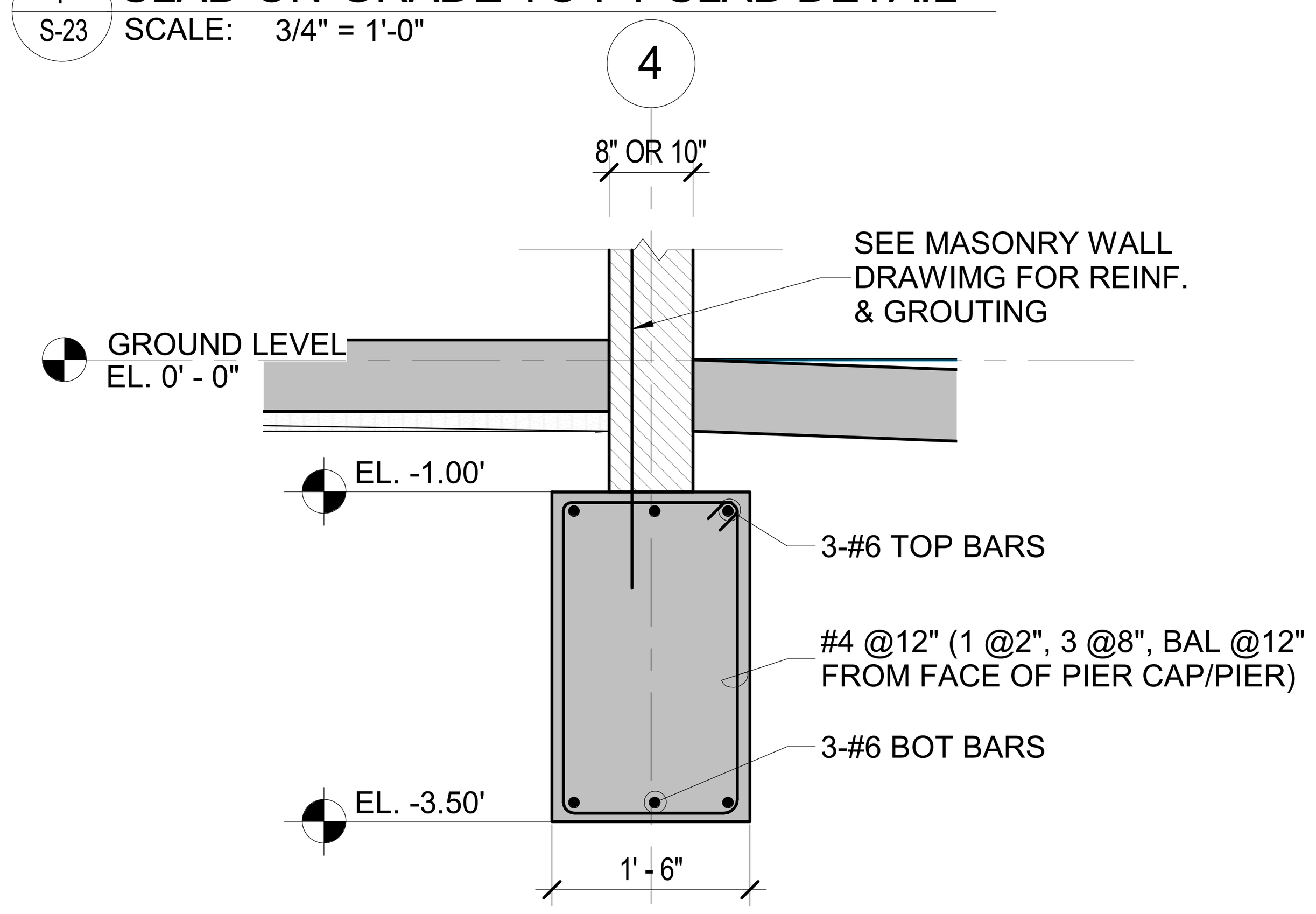
1 S-23 SLAB-ON-GRADE TO PT SLAB DETAIL
SCALE: 3/4" = 1'-0"



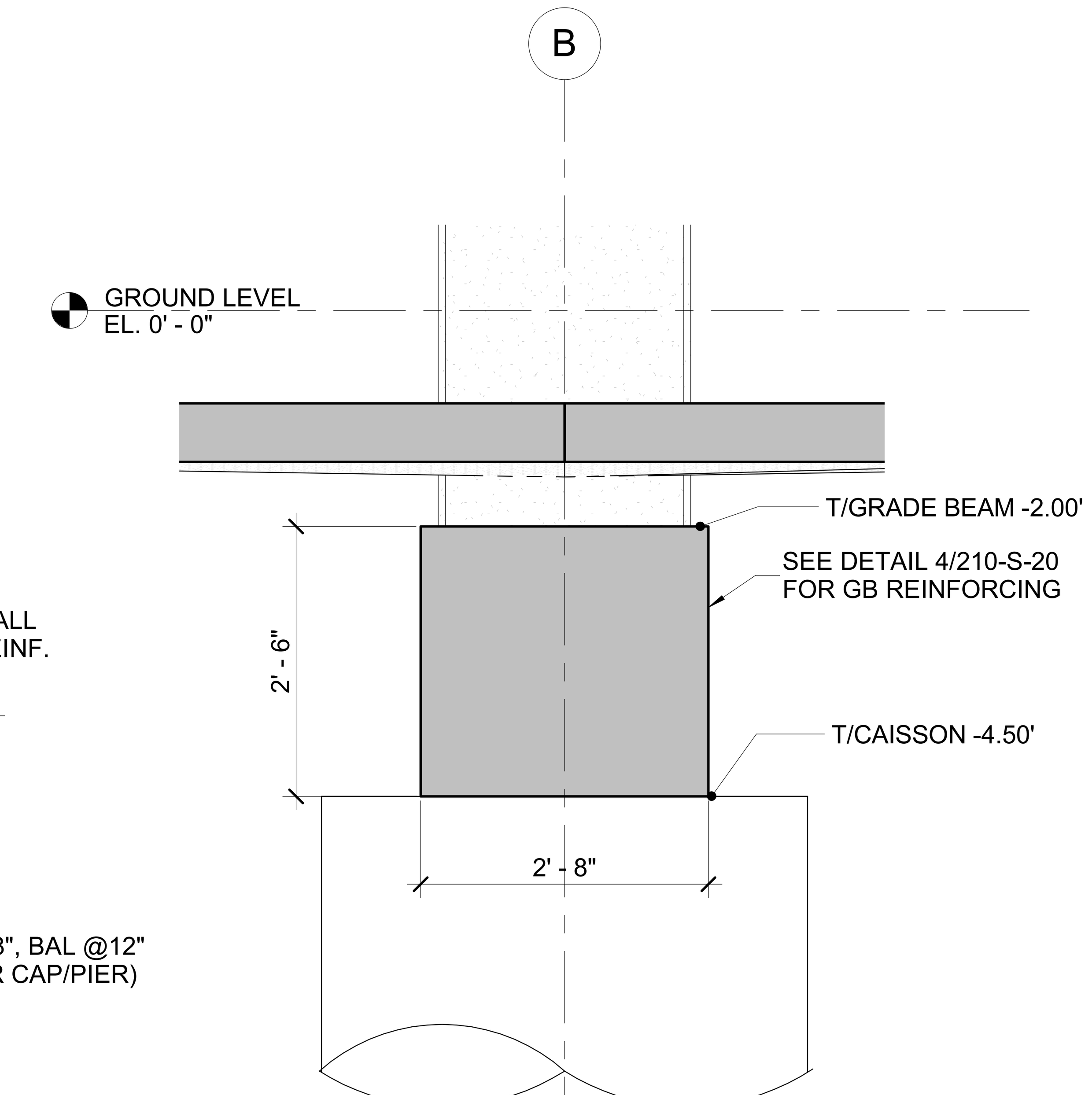
5 S-23 SHALLOW FOUNDATION SECTION
SCALE: 3/4" = 1'-0"



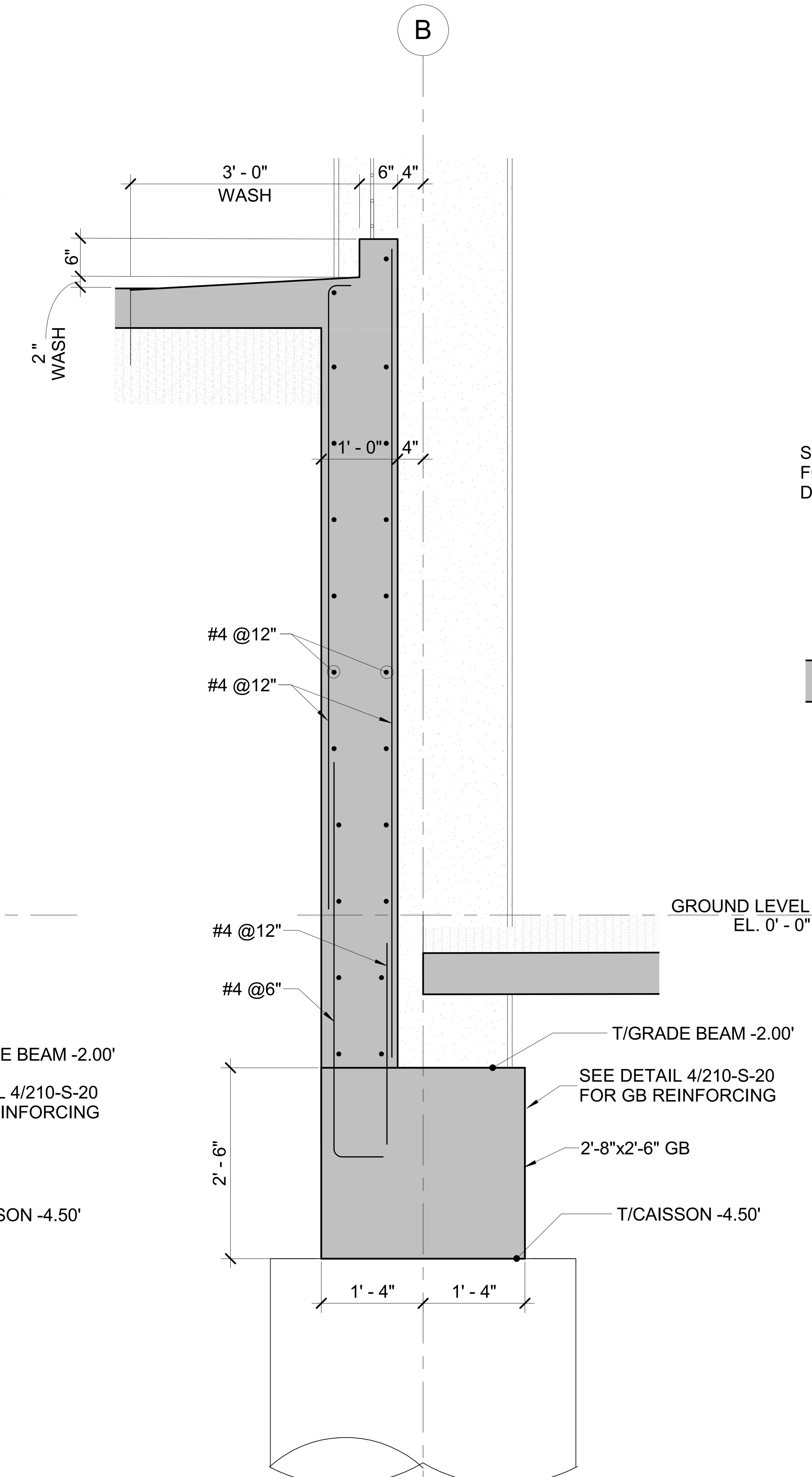
7 S-23 ELECTRICAL ROOM FOUNDATION SECTION
SCALE: 3/4" = 1'-0"



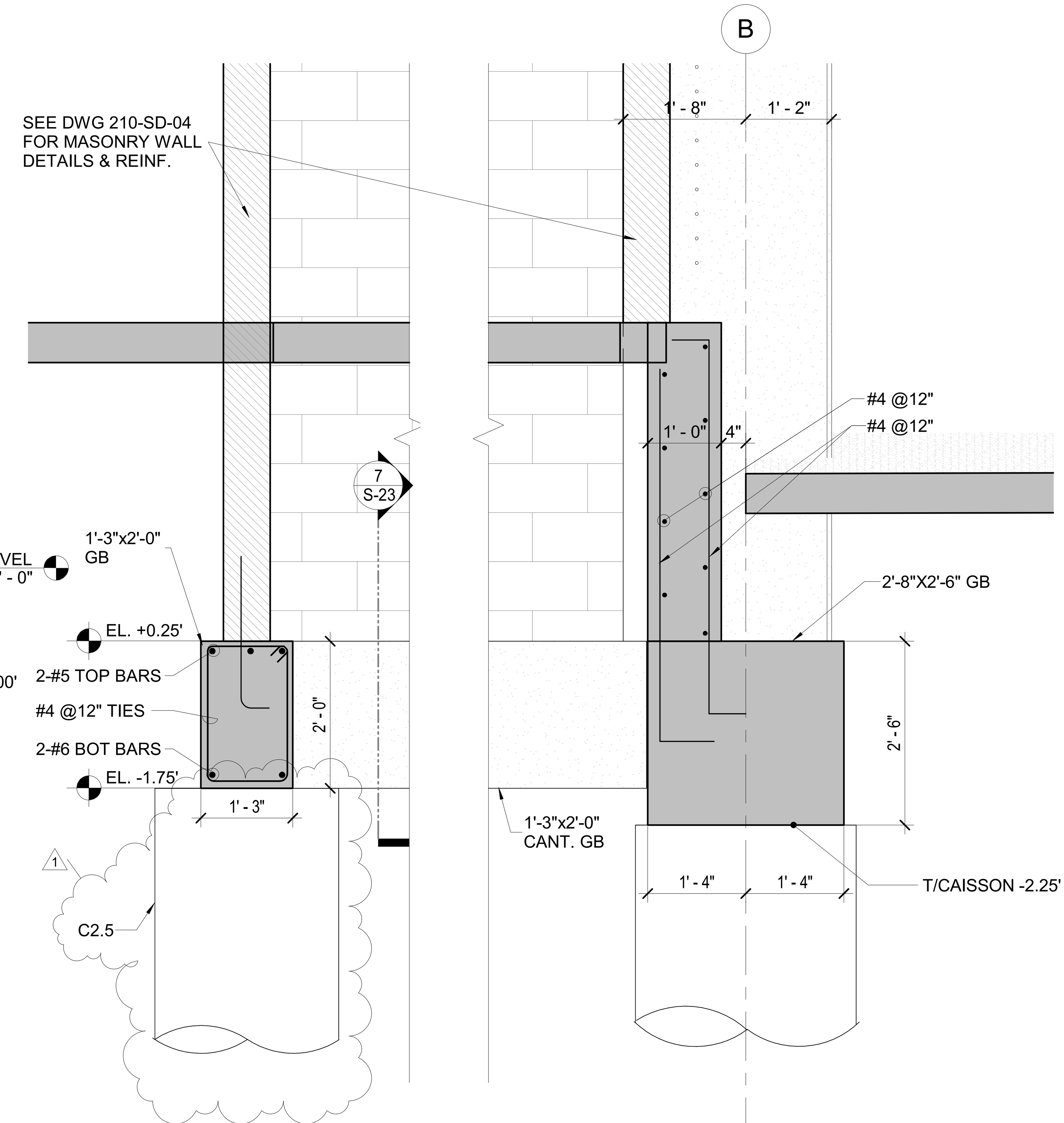
6 S-23 FOUNDATION SECTION ALONG 4 LINE
SCALE: 3/4" = 1'-0"



2 S-23 GRADE BEAM SECTION ALONG B LINE
SCALE: 3/4" = 1'-0"



3 S-23 FOUNDATION SECTION ALONG B LINE
SCALE: 3/4" = 1'-0"



4 S-23 FOUNDATION SECTION ALONG B LINE AT ELEC. RM.
SCALE: 3/4" = 1'-0"

SCALE: 3/4" = 1'-0"
0 1' 2' 3'

Designed by:	REVISION			
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G. ABDALLAH				
Checked by:				
G. ABDALLAH				

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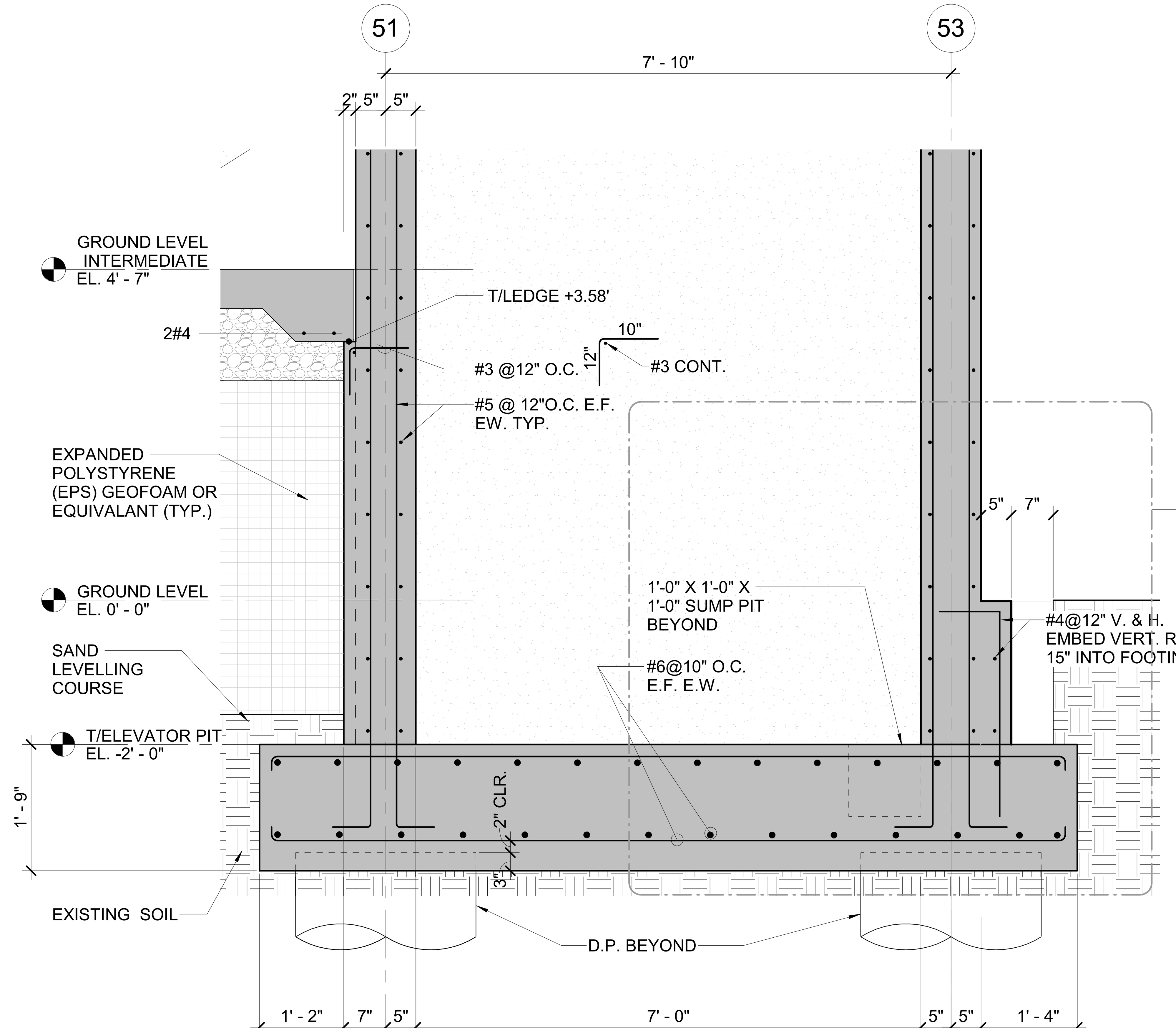
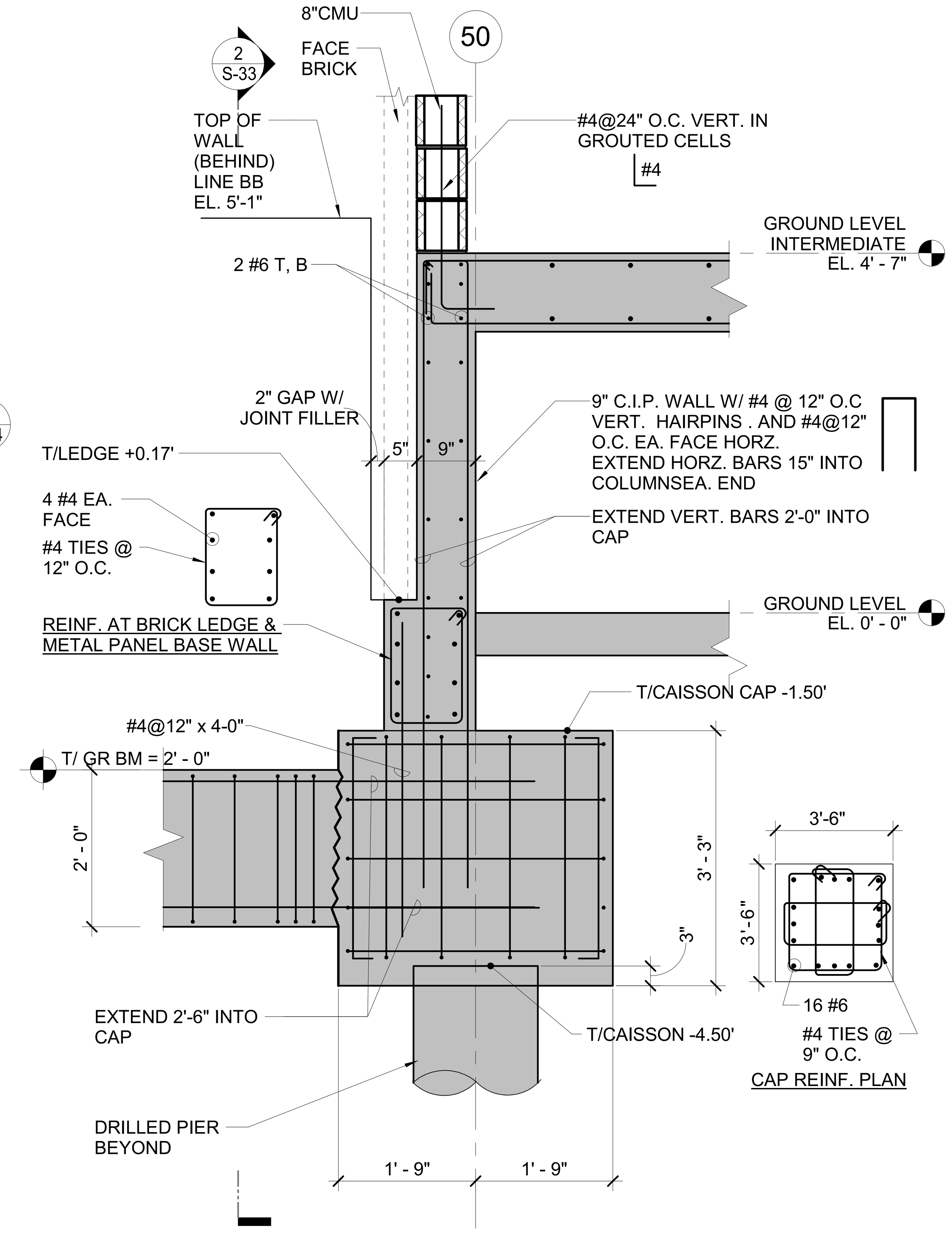
210-S-23
FOUNDATION SECTIONS

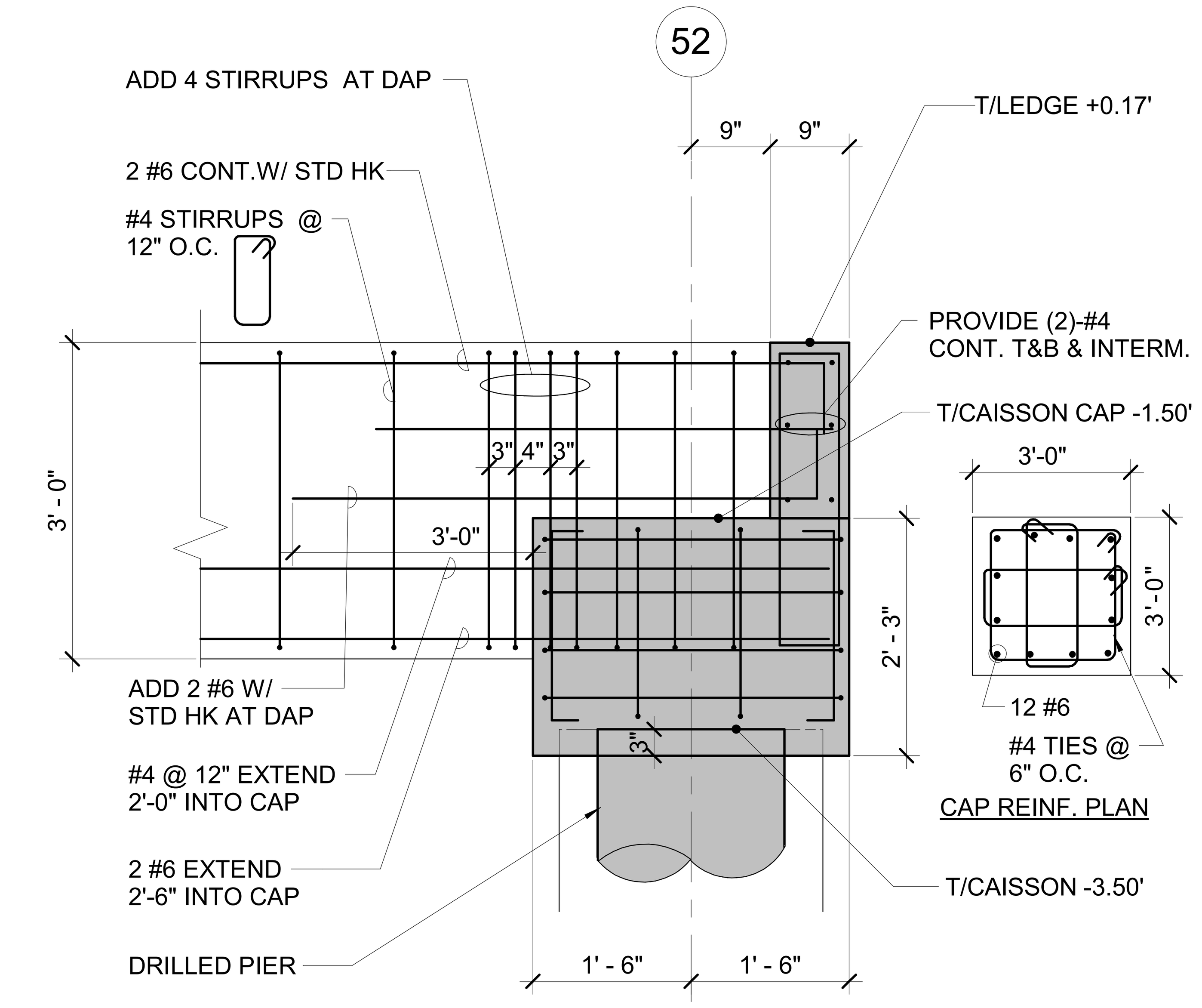
Contract: 1735
CAD File Name: 210S23.DWG
Date: 01 / 13 / 2021
Sheet: 85 of 158



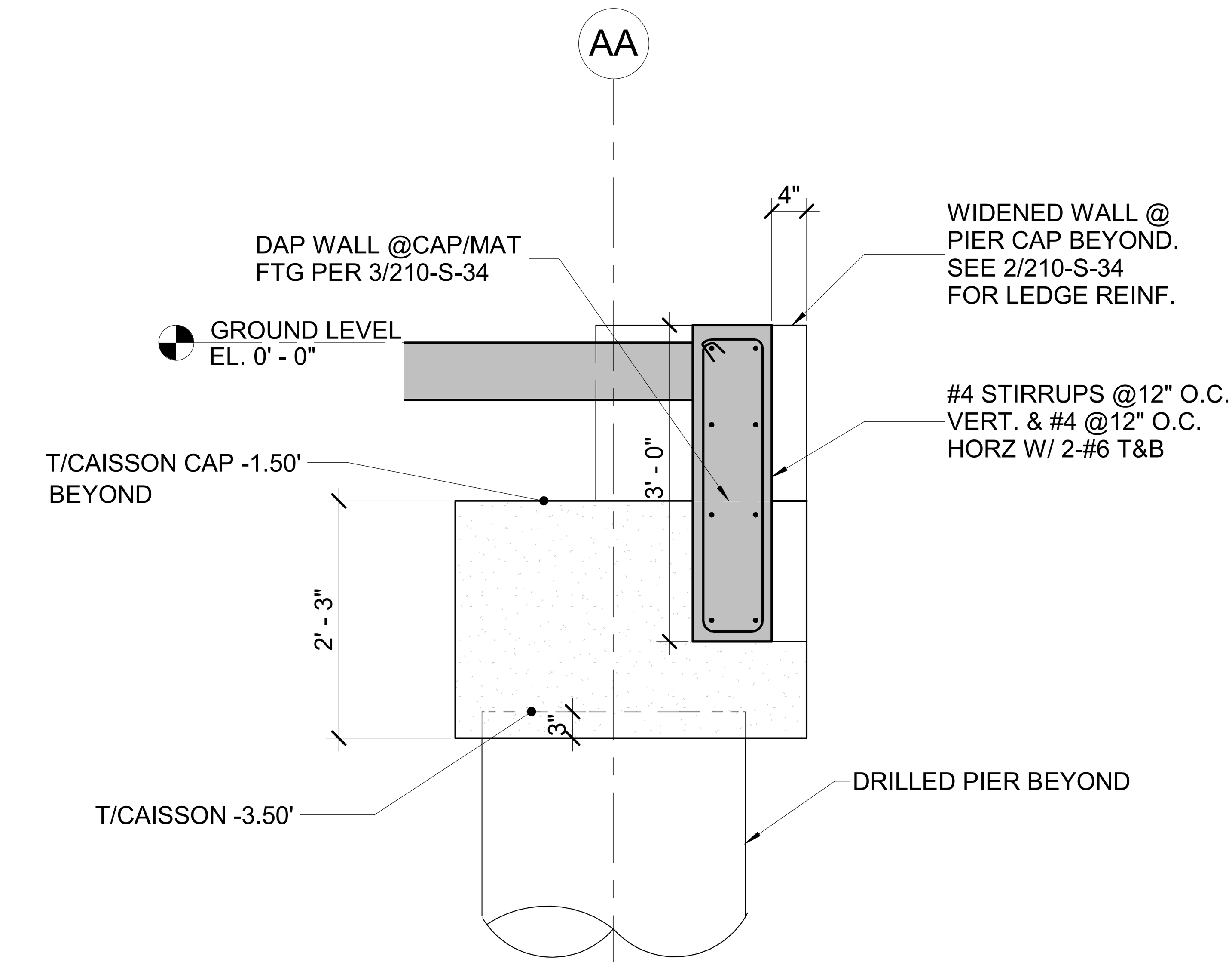
1 S-34 ELEVATOR PIT SECTION
SCALE: 3/4" = 1'-0"



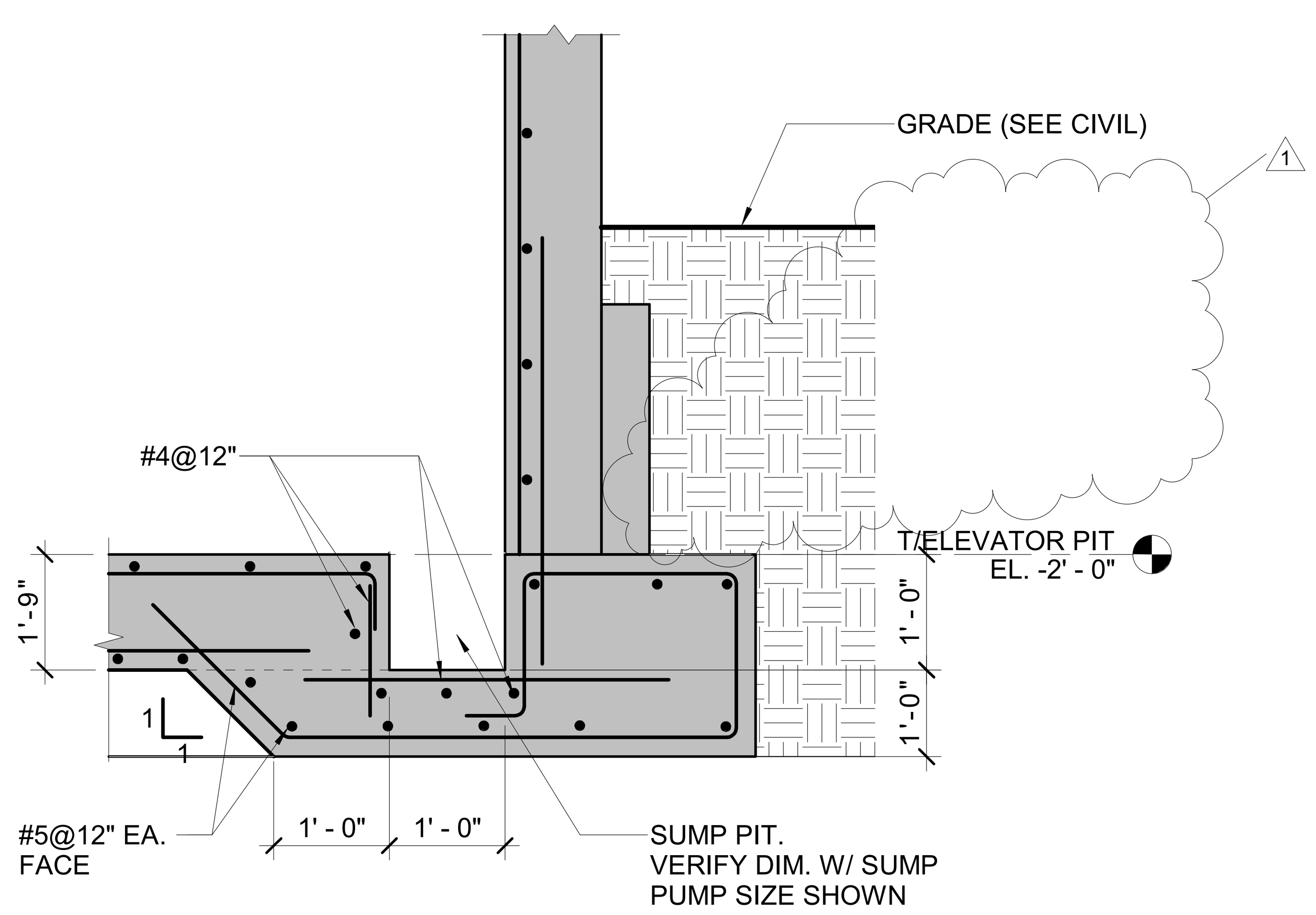
2 S-34 PIER CAP DETAIL AT GRID 50/BB
SCALE: 3/4" = 1'-0"



3 S-34 STEM WALL SECTION
SCALE: 3/4" = 1'-0"



4 S-34 STEM WALL SECTION (BETWEEN PIER CAPS)
SCALE: 3/4" = 1'-0"



5 S-34 SECTION AT SUMP PIT
SCALE: 3/4" = 1'-0"

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G. ABDALLAH	REV No.	DATE	DESCRIPTION	APPV
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G. ABDALLAH				
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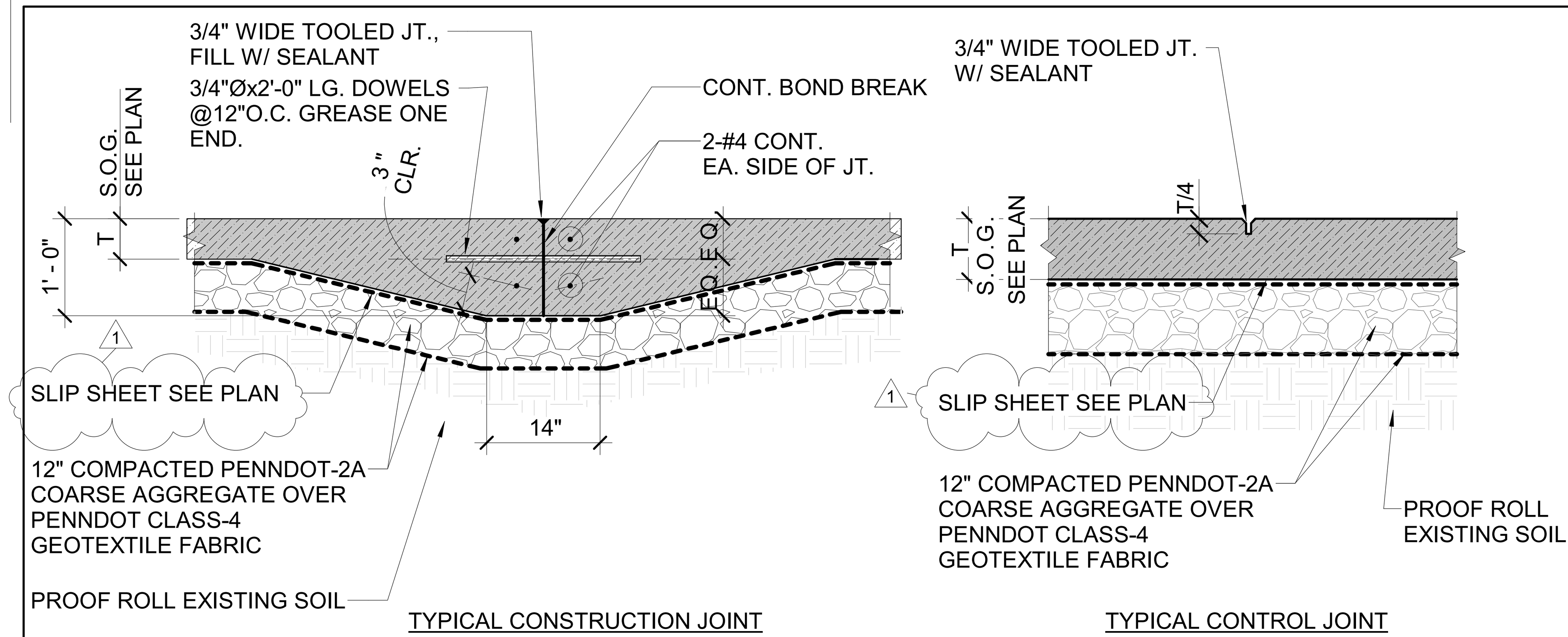
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

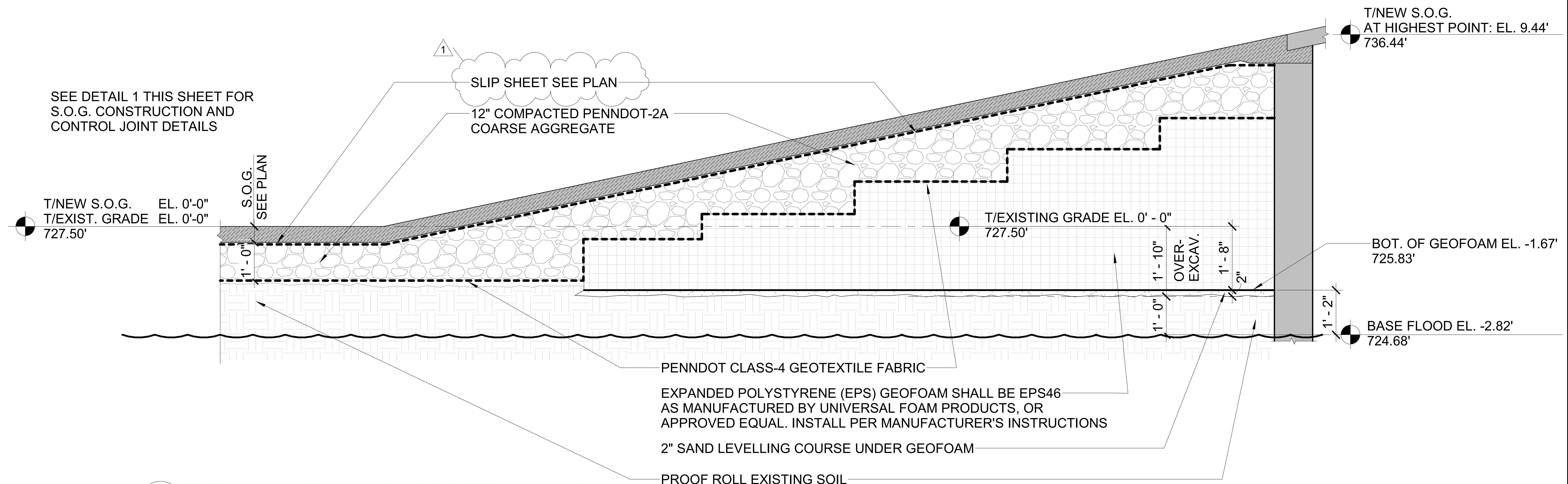
210-S-34
STAIR 1/ ELEVATOR FOUNDATION SECTIONS 2

Contract: 1735
CAD File Name: 210S34.DWG
Date: 01 / 13 / 2021
Sheet: 91 of 158

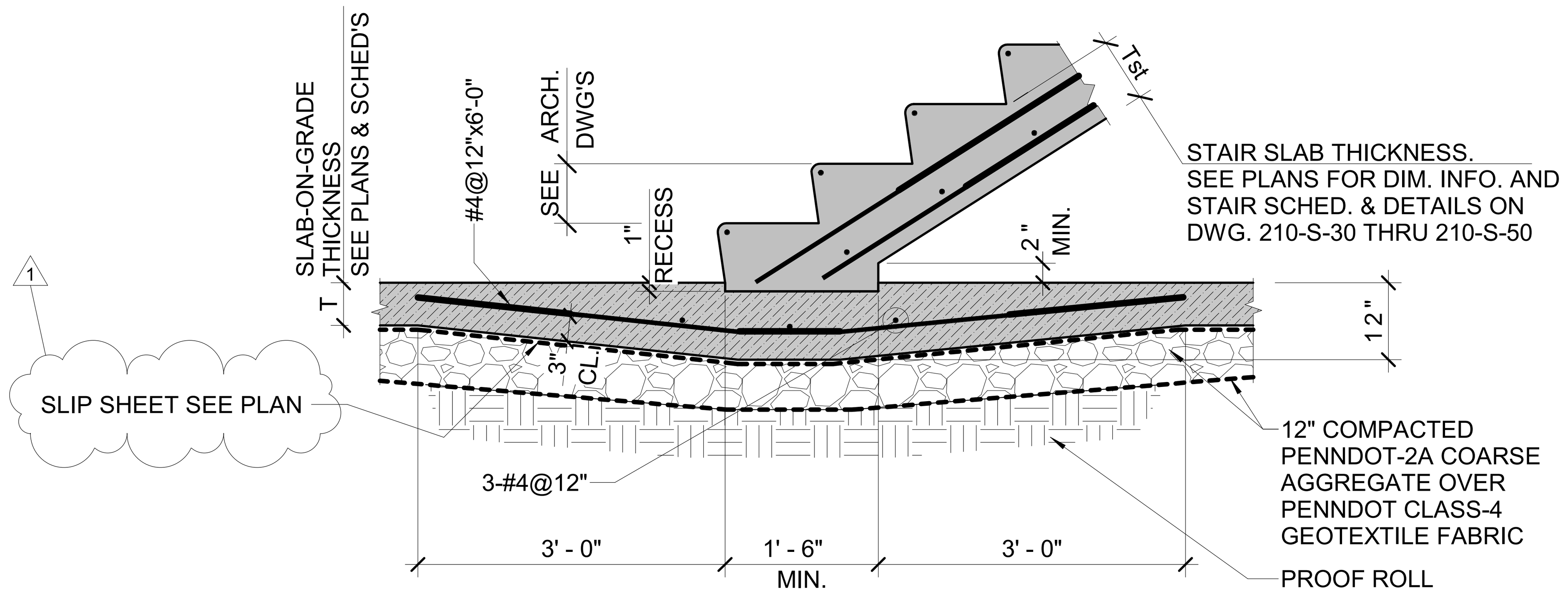


NOTES:
CONSTRUCTION AND CONTROL JOINTS ARE INTERCHANGEABLE AT CONTRACTOR'S OPTION. JOINTS LOCATED AT COLUMN CENTERLINES ARE CONSIDERED OPTIMUM. SEE DRAWINGS FOR JOINT LOCATIONS. DO NOT LOCATE CONSTRUCTION AND/OR CONTROL JOINTS BELOW MASONRY WALLS.

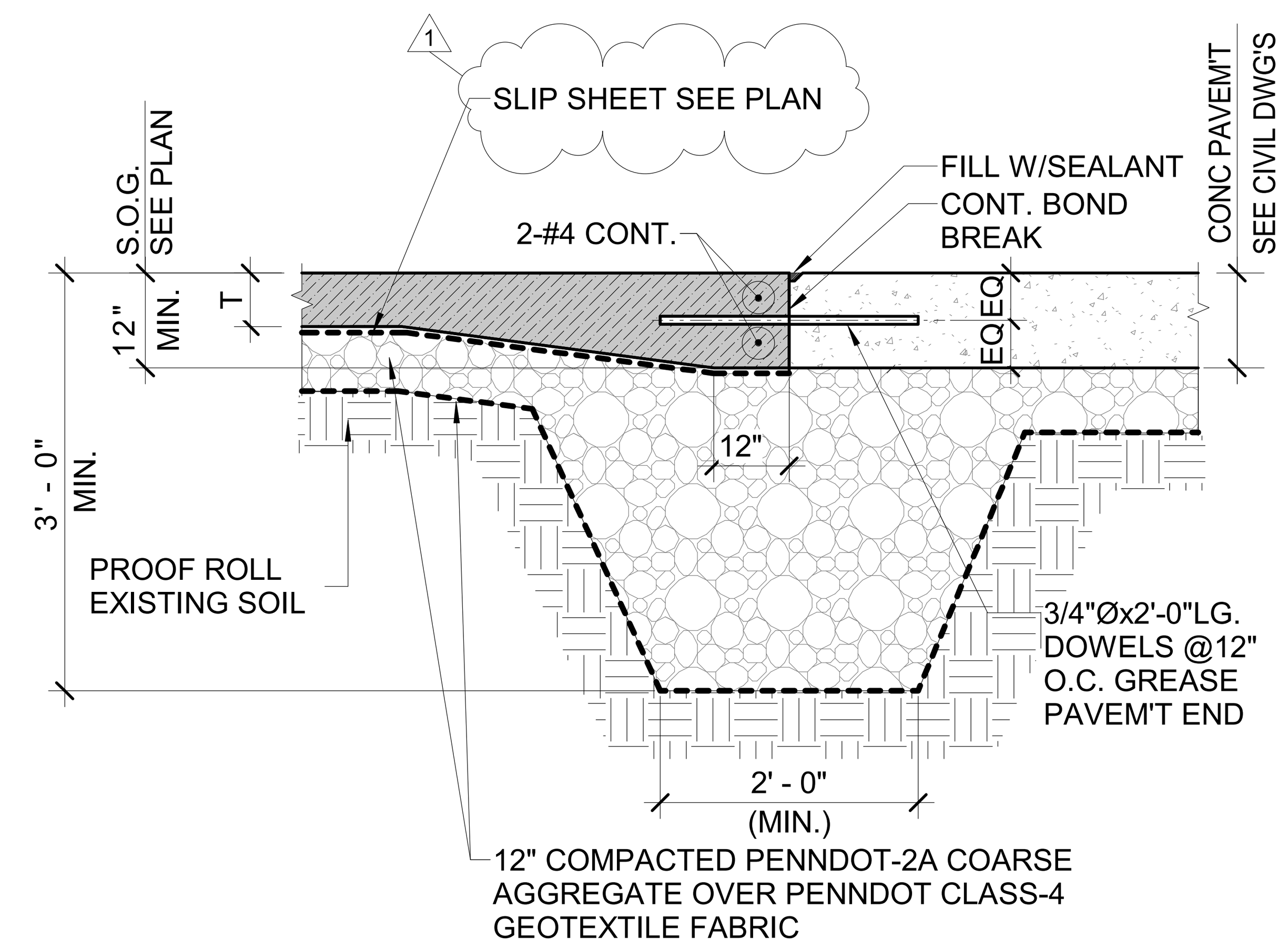
1 SD-01 TYP. SLAB-ON-GRADE CONSTRUCTION AND CONTROL JOINT DETAILS
SCALE: N.T.S.



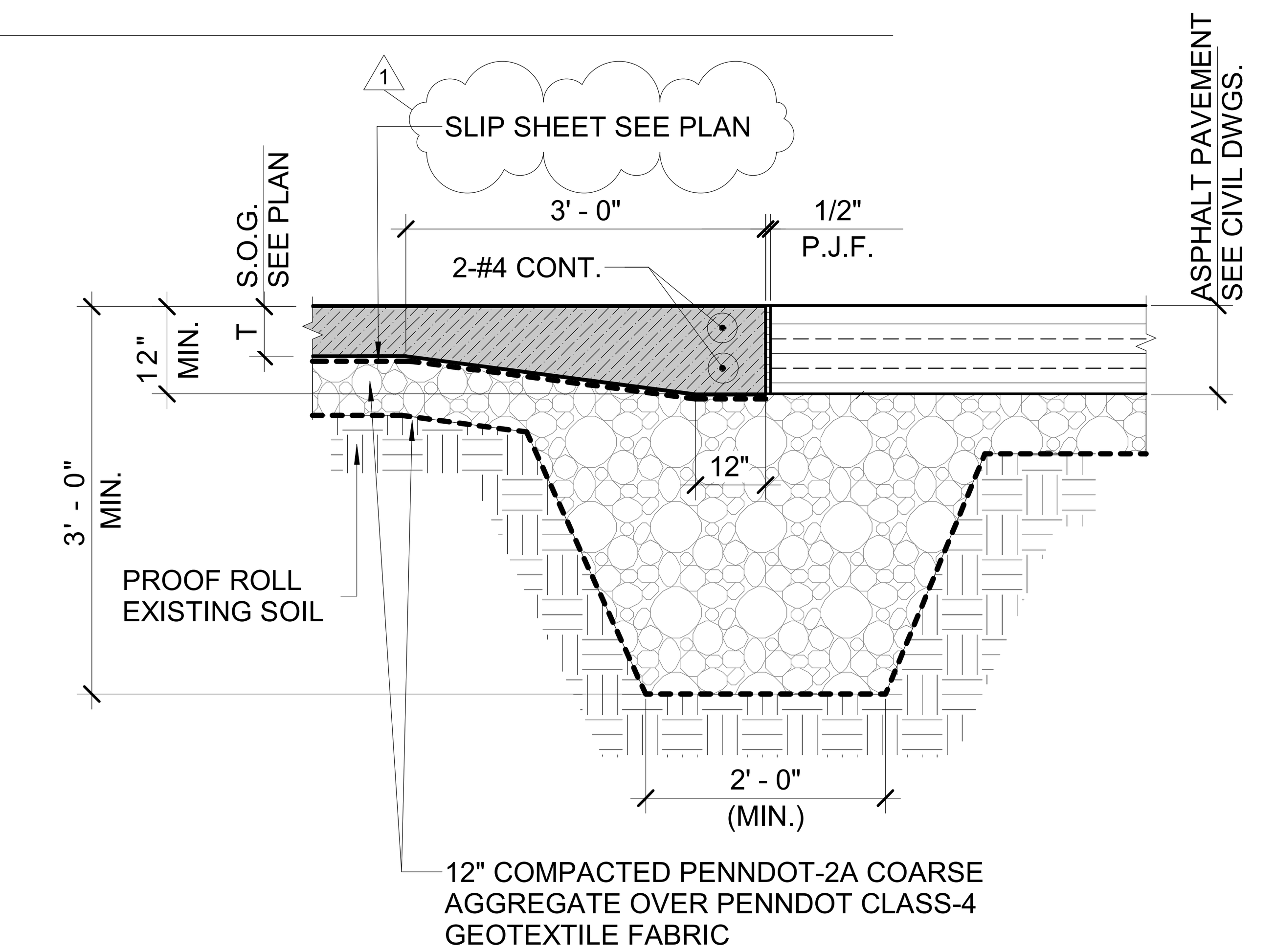
2 SD-01 TYPICAL SLAB-ON-GRADE DETAIL (S.O.G.)
SCALE: N.T.S.



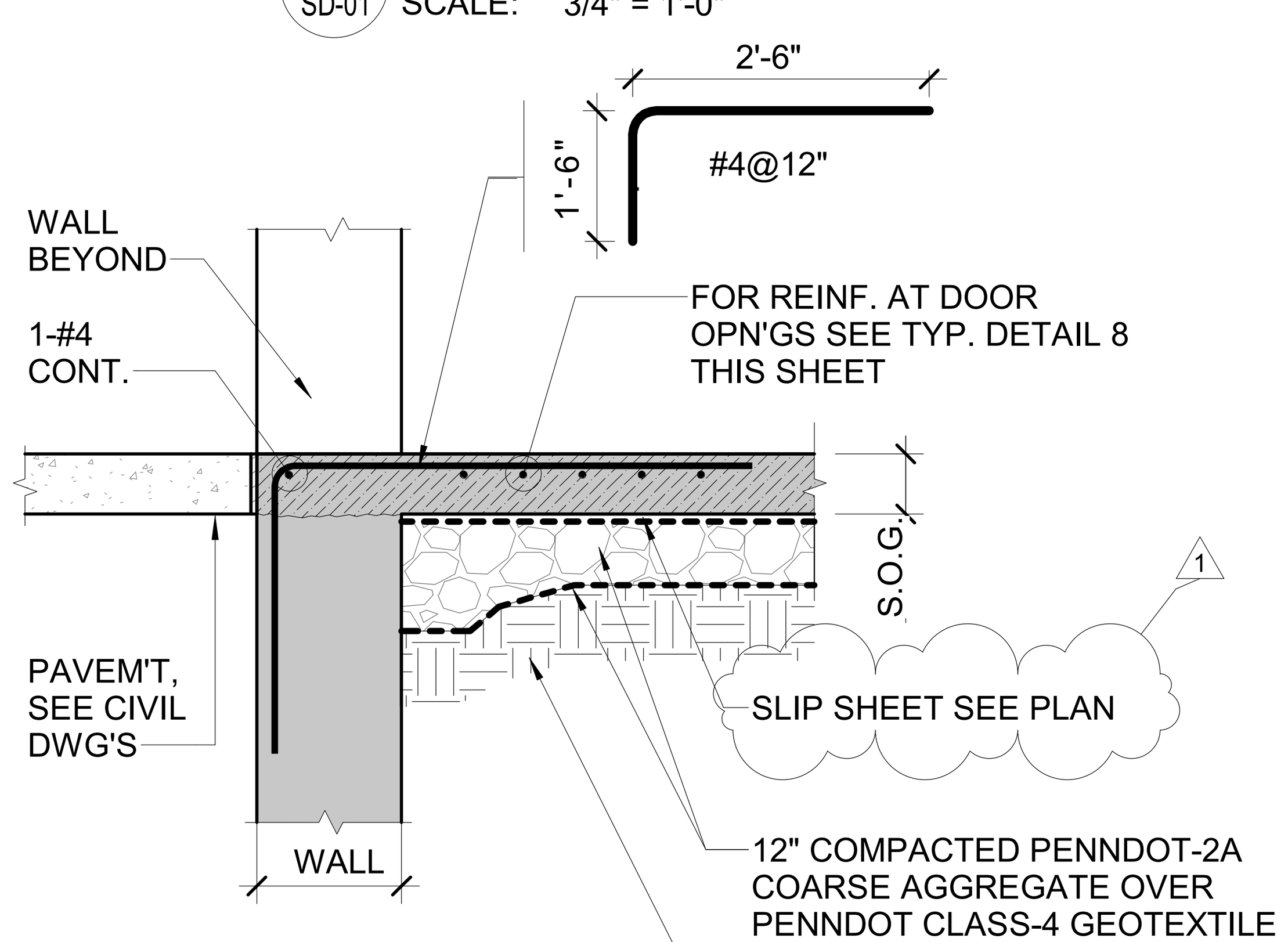
3 SD-01 TYP. STAIR-TO-S.O.G. DETAIL
SCALE: 3/4" = 1'-0"



4 SD-01 SLAB-ON-GRADE TO CONCRETE PAVEM'T INTERFACE DETAIL
SCALE: N.T.S.

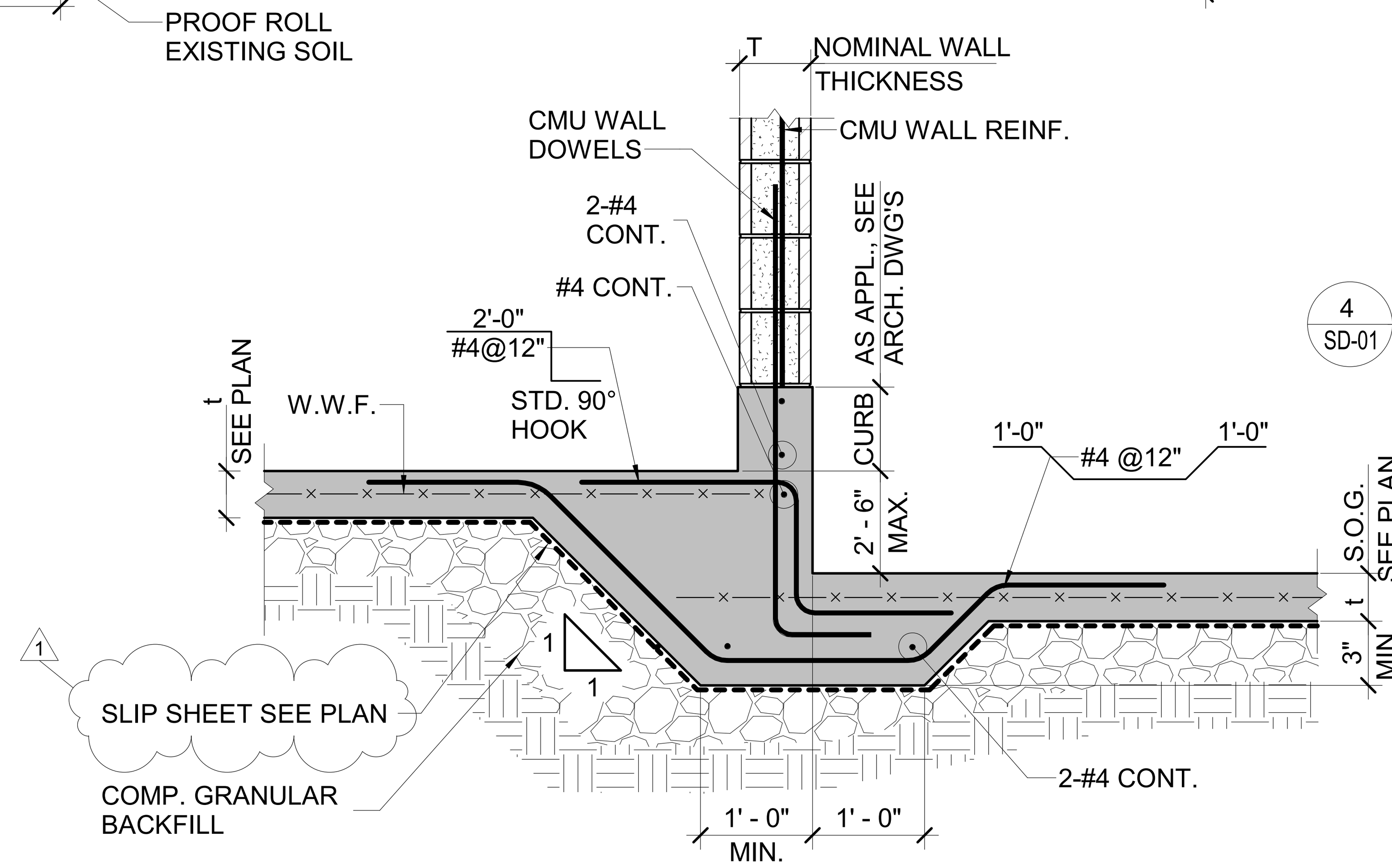


5 SD-01 SLAB-ON-GRADE TO ASPHALT PAVEM'T INTERFACE DETAIL
SCALE: N.T.S.

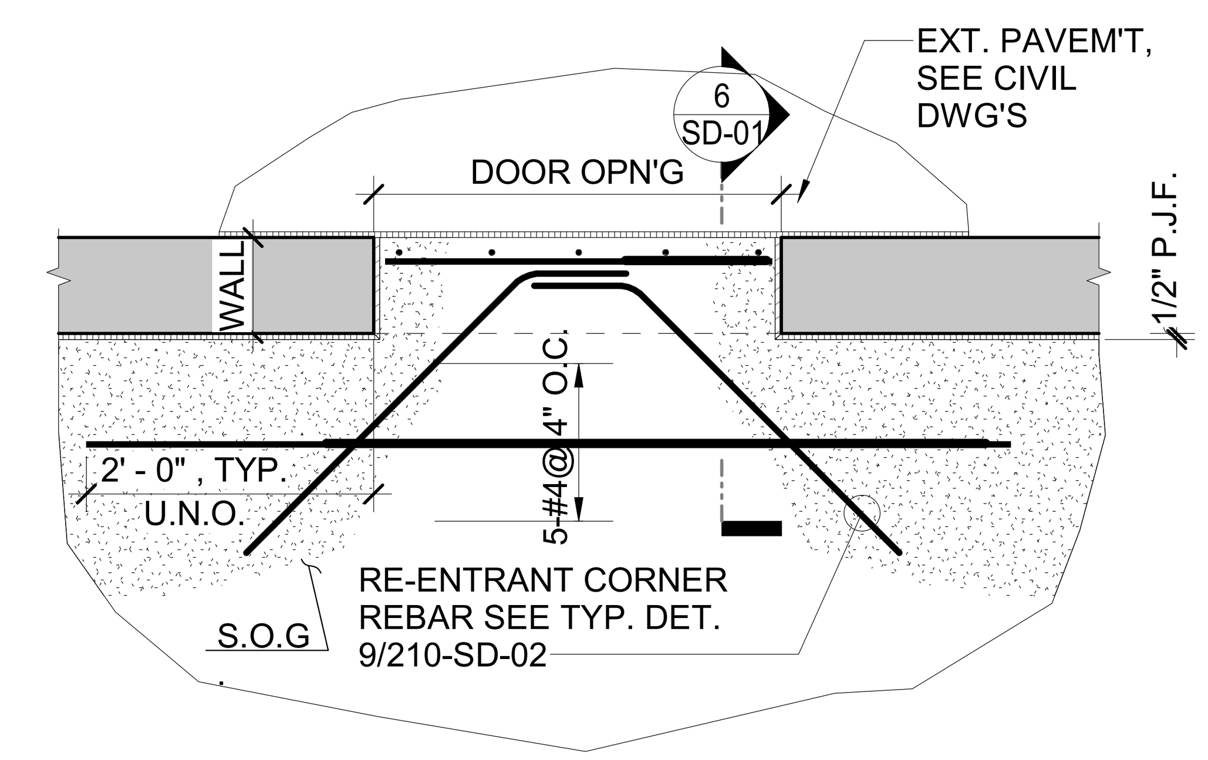


NOTE:
PROVIDE CONTINUOUS SEALANT ALONG ALL SLAB TO WALL JOINTS.

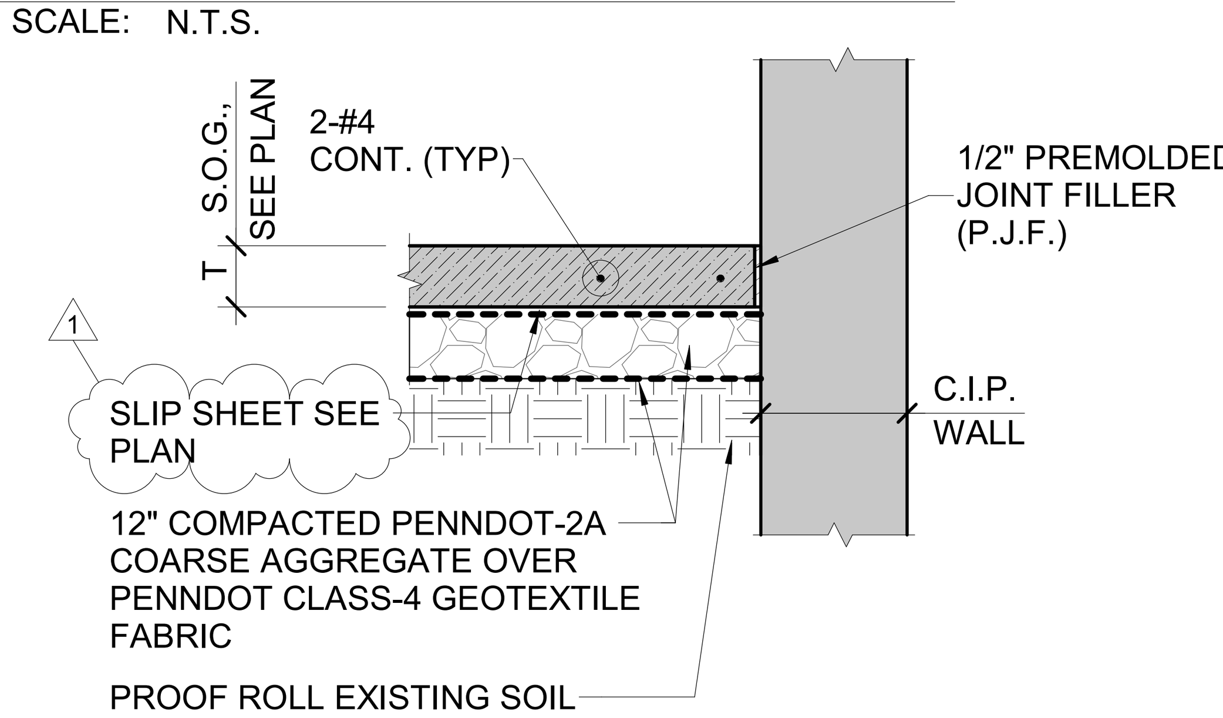
6 SD-01 TYP. SECTION -SLAB-ON-GRADE AT FOUNDATION RETAINING WALL AT DOOR OPENING
SCALE: NONE



7 SD-01 TYP. RECESS IN SLAB-ON-GRADE DETAIL
SCALE: NONE



8 SD-01 TYP. SLAB-ON-GRADE-FOUNDATION-WALL INTERFACE DETAIL AT DOOR OPENING
SCALE: 3/4" = 1'-0"



NOTE:
PROVIDE CONTINUOUS SEALANT ALONG ALL SLAB TO WALL JOINTS.

9 SD-01 TYP. SECTION SLAB-ON-GRADE AT FOUNDATION OR RETAINING WALL
SCALE: 3/4" = 1'-0"

Designed by: G. ABDALLAH
Drawn by: G. ABDALLAH
Checked by: G. ABDALLAH

REVISION

REV No.	DATE	DESCRIPTION	APPV
1	2/19/21	ADDENDUM 1	

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210-SD-01
TYPICAL SLAB ON GRADE DETAILS

Contract: 1735
CAD File Name: 210SD01.DWG
Date: 01 / 13 / 2021
Sheet: 102 of 158

POST-TENSIONED CONCRETE BEAM SCHEDULE

MARK	BEAM SIZE (Inches) WIDTH (B)	WIDTH (B1)	DEPTH (D)	SHAPE OF CROSS SECTION	TENDONS No. OF TENDONS Fe(26.5k) EFFECTIVE FORCE PER TENDON	TENDONS PROFILE(Inches) A	B	C	MILD STEEL REINFORCEMENT (Grade 60) TOP BARS T_L	T_M	T_R	BOTTOM BARS B_L	B_M	B_R	SIDE BARS EA. FA	STIRRUPS SIZE	SHAPE	SPACING, EACH END	HORIZONTAL MILD REBAR DIAGRAM	REMARKS
PB1	12	12	49		8	18	5	45	3-#7	2-#5	3-#7	2-#9	3-#7	3-#7	3-#5	#4		1 @2", 12 @6", BAL @16"		-
PB2	12	12	49		8	45	5	18	3-#7	2-#5	3-#7	2-#9	3-#7	3-#7	3-#5	#4		1 @2", 12 @6", BAL @16"		-
PB3	18	20	36		12	25	4	25	1-#8	2-#5	2-#8	2-#9	2-#9	2-#9	-	#4		1 @2", 4 @8", BAL @ 24"		BOT. REBAR CONT.
PB4	18	20	36		15	25	4	25	1-#8	2-#5	2-#8	2-#9	2-#9	2-#9	-	#4		1 @2", 4 @8", BAL @ 24"		BOT. REBAR CONT.
PB5	18	20	36		10	25	3	33	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB6	18	20	36		10	33	3	25	3-#9 2-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB7	18	20	36		12	25	4	32	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB8	18	20	36		12	32	4	25	3-#9 2-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB9	18	20	36		14	25	4	32	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB10	18	20	36		14	32	4	25	3-#9 2-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB11	18	20	36		14	25	3	25	3-#9 1-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB12	18	20	36		18	25	3	25	3-#9 1-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB13	18	20	36		18	25	4	32	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB14	18	20	36		18	32	4	25	3-#9 2-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB15	18	20	36		14	25	4	32	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB16	18	20	36		14	32	4	25	3-#9 2-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
PB17	12	12	49		8	18	4	45	3-#7	2-#5	3-#7	3-#7	3-#7	2-#9	3-#5	#4		1 @2", 12 @6", BAL @16"		-
PB18	12	12	49		8	45	4	18	3-#7	2-#5	3-#7	3-#7	3-#7	2-#9	3-#5	#4		1 @2", 12 @6", BAL @16"		-
PB19	12	12	49		18	17	4	17	3-#7	2-#5	3-#7	3-#7	2-#9 1-#5	3-#7	3-#5	#4		1 @2", 12 @6", BAL @16"		-
PG1	30	30	36		32	24	4	24	3-#9 2-#8	3-#6	3-#9 2-#8	2-#9	5-#9	2-#9	-	#4		1 @2", 4 @8", BAL @ 12"		F'c GIRDER = 5 ksi (1) FOR ADDITIONAL STIRRUPS, SEE DET 3/210-SD-12
PG2	30	30	36		32	24	4	24	3-#9 2-#8	3-#6	3-#9 2-#8	2-#9	5-#9	2-#9	-	#4		1 @2", 4 @8", BAL @ 12"		F'c GIRDER = 5 ksi (1) FOR ADDITIONAL STIRRUPS, SEE DET 3/210-SD-12

PT BEAM SCHEDULE NOTES:

1. BEAM MARKS IN PLANS ARE SHOWN AS #PBxx WHERE # IS THE CORRESPONDING LEVEL OF THE BEAM AND xx IS THE BEAM MARK NUMBER. THE BEAM SCHEDULE ONLY SHOWS PBxx SINCE THE BEAMS ARE REPETITIVE FOR ALL LEVELS.
2. FOR BEAMS AND GIRDERS, WHEN NUMBER OF PT TENDONS EXCEEDS THAT IN ADJACENT INTERIOR SPAN, ADDITIONAL TENDONS SHALL BE EXTENDED INTO ADJACENT INTERIOR SPAN BY A DISTANCE L/4 BEYOND SUPPORT.
3. WHERE END REBAR MATCHES MIDDLE REBAR (i.e., T_L=T_M, T_R=T_M, B_L=B_M, OR B_L=B_M), PROVIDE REBARS IN CONTINUOUS LENGTHS (WHENEVER POSSIBLE), RATHER THAN LAP SPLICING TWO SEPARATE LENGTHS.
4. USE 45 (65 FOR EPOXY COATED) BAR DIAMETER FOR BOT. BARS AND 48 (65 FOR EPOXY COATED) BAR DIAMETER FOR TOP BARS AS A MINIMUM SPLICE LENGTH.
5. SPLICE SIDE BARS AT MID SPAN.
6. WHERE GIRDER SUPPORTS BEAM, PROVIDE HANGER STIRRUPS PER TYPICAL DETAIL.
7. CONTRACTOR MAY USE DRAFTED FORMS FOR EASY REMOVAL. HOWEVER, BEAM/GIRDER WIDTH SHOWN SHALL BE MINIMUM. ALL DOWN-TURNED BEAM STEMS WIDTH IS 18" AT BOTTOM & 20" AT TOP U.N.O.
8. SEE TYPICAL POST-TENSIONING DETAILS FOR BEAM SCHEDULE INFO SUCH AS BEAM TYPES, PT AND REBAR INTERPRETATIONS.

Designed by: G. ABDALLAH
Drawn by: G. ABDALLAH
Checked by: G. ABDALLAH

REVISION

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1	2/19/21	ADDENDUM 1	

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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-SS-01
POST-TENSIONED BEAM SCHEDULE

Contract: 1735
CAD File Name: 210SS01.DWG
Date: 01 / 13 / 2021

POST-TENSIONED CONCRETE BEAM SCHEDULE - ROOF LEVEL

MARK	BEAM SIZE (Inches) WIDTH (B)	WIDTH (B1)	DEPTH (D)	SHAPE OF CROSS SECTION	TENDONS No. OF TENDONS Fe(26.5k) EFFECTIVE FORCE PER TENDON	TENDONS PROFILE(Inches) A	B	C	MILD STEEL REINFORCEMENT (Grade 60) TOP BARS T_L	T_M	T_R	BOTTOM BARS B_L	B_M	B_R	SIDE BARS EA. FA	STIRRUPS SIZE	SHAPE	SPACING, EACH END	HORIZONTAL MILD REBAR DIAGRAM	REMARKS
RPB1	12	12	49		8	18	5	45	3-#7	2-#5	3-#7	3-#7	2-#9	3-#7	3-#5	#4		1 @2", 12 @6", BAL @16"		-
RPB2	12	12	49		8	45	5	18	3-#7	2-#5	3-#7	3-#7	2-#9	3-#7	3-#5	#4		1 @2", 12 @6", BAL @16"		-
RPB3	18	20	36		14	25	3	25	3-#9 1-#8	2-#5	3-#9	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB4	18	20	36		16	25	3	25	3-#9 1-#8	2-#5	3-#9	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB5	18	20	36		11	25	3	32	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB6	18	20	36		11	32	3	25	3-#9 2-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB7	18	20	36		13	25	4	32	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB8	18	20	36		13	32	4	25	3-#9 2-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB9	18	20	36		15	25	4	32	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB10	18	20	36		15	32	4	25	3-#9 2-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB11	18	20	36		15	25	4	25	3-#9 1-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB12	18	20	36		19	24	4	24	3-#9 1-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		PROVIDE 22 TENDONS BETWEEN 'B' & 'C'
RPB13	18	20	36		22	25	4	32	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		PROVIDE ADDITIONAL TIES AT STAIR #3 BEAM, #4 @3" BOTH SIDE OF BEAM
RPB14	18	20	36		19	32	4	25	3-#9 2-#8	2-#5	3-#9 1-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB15	18	20	36		16	25	4	33	3-#9 1-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		-
RPB16	18	20	36		16	33	4	25	3-#9 2-#8	2-#5	3-#9 2-#8	2-#6	2-#9	2-#6	-	#4		1 @2", 4 @8", BAL @ 24"		PROVIDE ADDITIONAL TIES AT STAIRS COL, #4 @ 3" BOTH SIDE OF COL
RPB17	16	16	49		9	19	5	45	3-#7	2-#5	3-#7	3-#7	2-#9	3-#7	3-#5	#4		1 @2", 12 @6", BAL @16"		-
RPB18	16	16	49		9	45	5	19	3-#7	2-#5	3-#7	3-#7	2-#9	3-#7	3-#5	#4		1 @2", 12 @6", BAL @16"		PROVIDE ADDITIONAL TIES AT STAIRS COL, #4 @ 3" BOTH SIDE OF COL
RPB19	12	12	49		18	17	4	17	3-#7	2-#5	3-#7	3-#7	2-#9 1-#5	3-#7	3-#5	#4		1 @2", 12 @6", BAL @16"		-
RPG1	30	30	36		34	24	4	24	3-#9 2-#8	3-#6	3-#9 2-#8	2-#9	5-#9	2-#9		#4		1 @2", 4 @8", BAL @ 12"		F'c GIRDER = 5 ksi (1) FOR ADDITIONAL STIRRUPS, SEE DET 3/210-SD-12
RPG2	30	30	36		34	24	4	24	3-#9 2-#8	3-#6	3-#9 2-#8	2-#9	5-#9	2-#9		#4		1 @2", 4 @8", BAL @ 12"		F'c GIRDER = 5 ksi (1) FOR ADDITIONAL STIRRUPS, SEE DET 3/210-SD-12

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Designed by: G. ABDALLAH
Drawn by: G. ABDALLAH
Checked by: G. ABDALLAH

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WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-SS-02
POST-TENSIONED BEAM SCHEDULE

Contract: 1735
CAD File Name: 210SS02.DWG
Date: 01 / 13 / 2021
Sheet: 100 of 158

PARKING STRUCTURE COLUMN SCHEDULE

LOCATION	ELEVATION	COL. SIZE (IN.)	CONC. STRENGTH	PATTERN	VERTICAL REINF.	TIES
A-2, A-3, A-4,A-5, C-2, C-3, C-4, C-5, C-6	Above LEVEL 6	24X24	5000	C5	12-#10	#4 @9"
	LEVEL 5 – LEVEL 6	24X24	5000	C3	8-#10	#4 @9"
	LEVEL 4 – LEVEL 5	24X24	5000	C3	8-#10	#4 @9"
	LEVEL 3 – LEVEL 4	24X24	5000	C3	8-#10	#4 @9"
	LEVEL 2 – LEVEL 3	24X24	5000	C3	8-#10	#4 @9"
	LEVEL 1 – LEVEL 2	24X24	5000	C4	10-#10	#4 @9"
A-6, A-7, A-8, A-9, A-10, C-7. C-8, C-9, C-10	Above LEVEL 6					
	LEVEL 5 – LEVEL 6	24X24	5000	C5	12-#10	#4 @9"
	LEVEL 4 – LEVEL 5	24X24	5000	C3	8-#10	#4 @9"
	LEVEL 3 – LEVEL 4	24X24	5000	C3	8-#10	#4 @9"
	LEVEL 2 – LEVEL 3	24X24	5000	C3	8-#10	#4 @9"
	LEVEL 1 – LEVEL 2	24X24	5000	C4	10-#10	#4 @9"
A-0, C-0	Above LEVEL 6	24X24	5000	C3	8-#10	#4 @9"
	LEVEL 5 – LEVEL 6	24X24	5000	C2	6-#10	#4 @9"
	LEVEL 4 – LEVEL 5	24X24	5000	C2	6-#10	#4 @9"
	LEVEL 3 – LEVEL 4	24X24	5000	C2	6-#10	#4 @9"
	LEVEL 2 – LEVEL 3	24X24	5000	C2	6-#10	#4 @9"
	LEVEL 1 – LEVEL 2	24X24	5000	C3	8-#10	#4 @9"
C-13 ALL A.2	Above LEVEL 6					
	LEVEL 5 – LEVEL 6	24X24	5000	C2	6-#10	#4 @9"
	LEVEL 4 – LEVEL 5	24X24	5000	C2	6-#10	#4 @9"
	LEVEL 3 – LEVEL 4	24X24	5000	C2	6-#10	#4 @9"
	LEVEL 2 – LEVEL 3	24X24	5000	C2	6-#10	#4 @9"
	LEVEL 1 – LEVEL 2	24X24	5000	C2	6-#10	#4 @9"
STAIR #1 COLS TYP.	Above LEVEL 6	18X18	5000	C1	4-#9	#4 @9"
	LEVEL 5 – LEVEL 6	18X18	5000	C1	4-#9	#4 @9"
	LEVEL 4 – LEVEL 5	18X18	5000	C1	4-#9	#4 @9"
	LEVEL 3 – LEVEL 4	18X18	5000	C1	4-#9	#4 @9"
	LEVEL 2 – LEVEL 3	18X18	5000	C1	4-#9	#4 @9"
	LEVEL 1 – LEVEL 2	18X18	5000	C1	4-#9	#4 @9"
B-7, B-8, B-9	Above LEVEL 6					
	LEVEL 5 – LEVEL 6	28X28	5000	C5	12-#10	#4 @9"
	LEVEL 4 – LEVEL 5	28X28	5000	C3	8-#10	#4 @9"
	LEVEL 3 – LEVEL 4	28X28	5000	C3	8-#10	#4 @9"
	LEVEL 2 – LEVEL 3	28X28	5000	C3	8-#10	#4 @9"
	LEVEL 1 – LEVEL 2	28X28	5000	C5	12-#10	#4 @9"
B-4, B-5, B-6	Above LEVEL 6					
	LEVEL 5 – LEVEL 6	28X28	5000	C5	12-#10	#4 @9"
	LEVEL 4 – LEVEL 5	28X28	5000	C3	8-#10	#4 @9"
	LEVEL 3 – LEVEL 4	28X28	5000	C3	8-#10	#4 @9"
	LEVEL 2 – LEVEL 3	28X28	5000	C3	8-#10	#4 @9"
	LEVEL 1 – LEVEL 2	28X28	5000	C5	12-#10	#4 @9"
B-3	Above LEVEL 6					
	LEVEL 5 – LEVEL 6	28X28	5000	C6	14-#10	#4 @9"
	LEVEL 4 – LEVEL 5	28X28	5000	C5	12-#10	#4 @9"
	LEVEL 3 – LEVEL 4	28X28	5000	C5	12-#10	#4 @9"
	LEVEL 2 – LEVEL 3	28X28	5000	C5	12-#10	#4 @9"
	LEVEL 1 – LEVEL 2	28X28	5000	C6	14-#10	#4 @9"
B-9.8	Above LEVEL 6					
	LEVEL 5 – LEVEL 6					
	LEVEL 4 – LEVEL 5	28X28	5000	C6	14-#10	#4 @9"
	LEVEL 3 – LEVEL 4	28X28	5000	C5	12-#10	#4 @9"
	LEVEL 2 – LEVEL 3	28X28	5000	C5	12-#10	#4 @9"
	LEVEL 1 – LEVEL 2	28X28	5000	C6	14-#10	#4 @9"
B-13	Above LEVEL 6					
	LEVEL 5 – LEVEL 6					
	LEVEL 4 – LEVEL 5	28X24	5000	C5	12-#10	#4 @9"
	LEVEL 3 – LEVEL 4	28X24	5000	C5	12-#10	#4 @9"
	LEVEL 2 – LEVEL 3	28X24	5000	C5	12-#10	#4 @9"
	LEVEL 1 – LEVEL 2	28X24	5000	C5	12-#10	#4 @9"
B-0	Above LEVEL 6					
	LEVEL 5 – LEVEL 6	28X24	5000	C5	12-#10	#4 @9"
	LEVEL 4 – LEVEL 5	28X24	5000	C5	12-#10	#4 @9"
	LEVEL 3 – LEVEL 4	28X24	5000	C5	12-#10	#4 @9"
	LEVEL 2 – LEVEL 3	28X24	5000	C5	12-#10	#4 @9"
	LEVEL 1 – LEVEL 2	28X24	5000	C5	12-#10	#4 @9"

T/FTG. EL. SEE PLAN

LOCATION	DOWELS	COL. ORIENTATION
A-2, A-3, A-4,A-5, C-2, C-3, C-4, C-5, C-6	4-#9	24" x 24"
A-6, A-7, A-8, A-9, A-10, C-7. C-8, C-9, C-10	4-#9	24" x 24"
A-0, C-0	4-#9	24" x 24"
C-13 ALL A.2	4-#9	24" x 24"
STAIR #1 COLS TYP.	4-#9	18" x 18"
B-7, B-8, B-9	4-#10	28" x 28"
B-4, B-5, B-6	4-#10	28" x 28"
B-3	4-#10	28" x 28"
B-9.8	4-#10	28" x 28"
B-13	4-#10	28" x 24"
B-0	4-#10	28" x 24"

LEGEND:

E = TYP. EXTENSION
F = EXTENSION FOR FUTURE VERTICAL EXPANSION
(1) = EXTEND TO TOP OF COLUMN ALL INFORMATION NOTED BELOW

COLUMN SCHEDULE NOTES:

1. REFER TO THE FOLLOWING TABLE FOR REFERENCE SHEETS:

ITEMS	SHEET NUMBER
COLUMNS DETAILS	210-SD-20, 210-SD-21
COLUMN SCHEDULE	210-SS-03
FOUNDATION PLAN	210-S-11
GENERAL NOTES	210-S-01 THRU 210-S-05
TYPICAL DETAILS	210-SD-01 THRU 210-SD-05

2. ALL COLUMNS ARE CENTERED ON COLUMN GRID LINES UNLESS OTHERWISE NOTED.
3. FOR COLUMN ORIENTATION SEE PLAN AND COLUMN SCHEDULE.
4. WORK THE COLUMN SCHEDULES WITH RESPECTIVE FLOOR PLANS AND COLUMN DETAILS.
5. ALL COLUMN TIES SHALL BE PER ACI 318 WITH STANDARD HOOKS OF 135 DEGREES OR 90 DEGREES AS SHOWN, UNLESS OTHERWISE NOTED.
6. CLEAR COVER TO COLUMN TIES, EXPOSED TO WEATHER, FOR PARKING STRUCTURE SHALL BE 2 INCHES UNLESS OTHERWISE NOTED.
7. ALL COLUMN VERTICAL REBAR SHALL BE MECHANICALLY SPLICED PER ACI 301-16 PAR. 3.2.1.10. NO DEVIATION FROM THIS REQUIREMENT IS PERMITTED EXCEPT AS NOTED UNDER (10) BELOW.
8. SEE ARCHITECTURAL DRAWINGS FOR LIGHT POLE SUPPORT COLUMNS AND DETAILS. COORDINATE ANCHOR BOLT LOCATIONS FOR THE LIGHT POLES WITH THE ELECTRICAL CONTRACTOR.
9. IN ALL INSTANCES, VERTICAL REINFORCEMENT FROM COLUMN SEGMENT BELOW JOINT SHALL EXTEND THROUGH THAT JOINT. FOR ADJACENT TIER BAR PATTERNS, WHEN PART OF THE LOWER TIER VERTICAL REINFORCEMENT TERMINATES AT A JOINT PER SCHEDULE, EXTEND TERMINATING BARS A MINIMUM OF 45 DIAMETERS VERTICALLY UP INTO THE JOINT.
10. WHEN COLUMN CROSS SECTIONS OF ADJACENT TIERS MATCH BUT THE NUMBER OF VERTICAL BARS IN UPPER TIER INDICATED IN THE COLUMN SCHEDULE IS LARGER THAN THAT OF THE LOWER TIER AT ANY BEAM-COLUMN JOINT, ADD MATCHING SIZE DOWELS FOR THOSE BARS OF THE UPPER TIER THAT DO NOT EXTEND FROM THE TIER IMMEDIATELY BELOW, UNLESS NOTED OTHERWISE. LAP SPLICING OF SUCH DOWELS WITH VERTICAL BARS OF THE SAME SIZE IS PERMITTED, AND SPLICE LENGTH SHALL NOT BE LESS THAN 55 BAR DIAMETERS. DOWELS MUST EXTEND A MINIMUM OF 45 BAR DIAMETERS INTO THE LOWER COLUMN TIER FROM THE TOP OF BEAM-COLUMN JOINT.
11. WHEN CROSS SECTIONS AND/OR PATTERNS OF ADJACENT TIERS AT ANY JOINT DO NOT MATCH, PROVIDE MATCHING SIZE DOWELS INSTALLED IN SUCH A WAY THAT THEY WOULD LAP SPLICE (AT 55 BAR DIAMETERS) OR MECHANICALLY COUPLED, WITH VERTICAL BARS OF THE UPPER TIER AND ARE FULLY DEVELOPED IN TENSION INTO THE LOWER TIER OR RESPECTIVE STRUCTURE (45 BAR DIAMETERS MINIMUM). ACI STANDARD HOOKS MAY BE USED IF REQUIRED, UNLESS NOTED OTHERWISE. SEE DETAILS FOR ADDITIONAL INFORMATION.
12. FOR BEAM-COLUMN JOINTS OF THE PARKING STRUCTURE FRAME, PROVIDE JOINT REINFORCEMENT IN A FORM OF SCHEDULED COLUMN TIES, BUT IN NO CASE LESS THAN 3-#4 LEGS IN EACH DIRECTION, AS SHOWN IN DETAIL 8/210-SD10. WHEN NO VERTICAL BAR EXISTS WITHIN A PATTERN, TO ANCHOR CENTER LEG OF A TIE SET, PROVIDE A #4 DOWEL (MAXIMUM OF 4 WOULD BE REQUIRED FOR A 4-BAR COLUMN BAR PATTERN) EXTENDING A MINIMUM OF 1'-0" INTO COLUMN SEGMENTS ABOVE AND BELOW JOINT. ALTERNATIVELY, WITHIN BEAM-COLUMN JOINT, PROVIDE SETS OF OVERLAPPING #5 U-TIES. PLACE CLASS "B" TENSION LAP SPLICE PERPENDICULAR TO THE DIRECTION OF BEAM SPAN FRAMING INTO JOINT. ALTERNATE PLACEMENT OF TIE SETS WITH ROWS OF POST-TENSIONING ANCHORS PER TYPICAL POST-TENSIONING DETAILS, SUCH THAT TIE SPACING WITHIN JOINT AT ANCHOR CLUSTER DOES NOT EXCEED 7 INCHES. IN ADDITION, PROVIDE 2 SCHEDULED COLUMN TIES ABOVE ANCHOR CLUSTER AND SCHEDULED COLUMN TIES BELOW ANCHORAGE ZONE SPACED AT 4 INCHES ON-CENTER.
13. FOR BEAM-COLUMN OR SLAB-COLUMN JOINTS WITHOUT POST-TENSIONING ANCHORS, PROVIDE SCHEDULED TIES SPACED AT 4 INCHES ON-CENTER.

Designed by: G. ABDALLAH	REVISION			
Drawn by: G. ABDALLAH	REV No.	DATE	DESCRIPTION	APPV
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ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
ALCOSAN PARKING GARAGE

210-SS-03
COLUMN SCHEDULE

Contract: 1735
CAD File Name: 210SS03.DWG
Date: 01 / 13 / 2021
Sheet: 101 of 158

CONTRACTS 1735 G, E, P, H
ALCOSAN PARKING GARAGE
Pre-Bid Meeting Agenda

Wednesday February 17, 2020 @ 11:00 AM
Virtual Microsoft Teams Meeting

INTRODUCTION

a. Opening comments from ALCOSAN PM, Cody Edgell.
b. Meeting moderated by GSI Construction Manager, Michael Raig.
c. Overview of MBE/WBE requirements from ALCOSAN Manager of Purchasing and DBE Coordinator, Ray Meyer.
d. Presentation of Contract Scope by AE Works [Article 6].
e. Attendees joining via email will be noted in attendee list. Any call-in attendees that wish to be added to the list should send email to CM following meeting.

BID DOCUMENTS

1. Legal Notice

a. All bids to be submitted to Alcosan Engineering Department clerks (2nd floor of the O&M Building, 3300 Preble Ave. Pittsburgh PA, 15233) on or before bid opening date and time. If the bid package is sent to ALCOSAN by land courier (UPS, FedEx, etc.), allow enough time for delivery to the clerks.
b. Bid opening on **Wednesday March 17th, 2021** at **11:00 AM** sharp! Those who have purchased bid documents will be given the link to the virtual public bid opening
c. Encourage a target goal of WBE/MBE participation. (10% to 25% of contract value)
d. Bid security 10% of bid price by certified check or bid bond.
e. Contract documents must be purchased directly from ALCOSAN to qualify as an eligible bidder.
f. All questions regarding the Technical Aspects of the Project shall be submitted to **Michael Raig, G. Stephens, Inc. via email to** mraig@gstephensinc.com. Answers to any question shall be considered informal and without legal or binding effect on the contract, or to the Owner, unless formalized by an addendum.
g. Any questions regarding the purchase of Contract Documents should be directed to **Kathleen P. Uniatowski, via email to** Contract.clerks@alcosan.org.
h. This Pre-bid meeting is not mandatory for bidders.
i. The last day for questions is Close of Business **March 5th, 2021**. Responses will be distributed as addenda, as soon as possible, as deemed applicable.

2. Bidding Documents [Article One]

a. Bid Forms – For contract G, fill in TOTAL BASE BID (Sum of lines 8.3.1 and 8.3.2) on page 1-4G. For contracts E, H, and P fill in Total Base Bid on pages 1-2E, 1-2H, and 1-2P respectively.

There are no alternates to be bid. Bids shall be submitted with all bid forms complete and signed by an authorized representative of the Company. The bid forms required to be submitted: (Article 1 pages 1-1G through 1-23G or 1-21 (E, P, H) and Solicitation and Commitment Statement pages 1 of 4 through 4 of 4), not the entire book.

b. Bid Form for General Contractor paragraph 8.2 Unit Price Work. Items 03A, 03B, 03C, and 03D includes all of the work required to install 100% of the caissons along with disposal of residual waste spoils from drilling. If the spoils meet contamination thresholds established by the PADEP, the special costs to handle and dispose said spoils will be compensated on a T&M basis against the Allowance established in item 07.

c. Acknowledge all Addenda received and made part of the Bid Documents page 1-2. (Art.2.16) AND, attach a signed Acknowledgement of Receipt of each individual addendum to the front of the Bid Form package.

d. Provide a contact for your company in the space designated on page 1-7G or 1-5 (E, H, or P) for receipt of any communications necessary for the bid evaluation.

e. Bid Bond - Certified check or Bid Bond. (Art. 2.19)

f. Project Labor Agreement (Art. 2.33) - Primes to sign and submit Letter of Assent with bid. Subs sign before working on project.

g. Use of Model (Art. 2.34) – "facilitate sequencing of the work in preparing bid"

3. Information for Bidders [Article Two]

a. Submission of Bids (2.04); Sealed Bid to be submitted to ALCOSAN Engineering Department on or before bid opening date and late bids (anything received after 11:00 AM) will be treated as "non-responsive" and returned to the Bidder unopened.

b. Award Contract Execution and Notice to Proceed (2.07); Intend to award Contract 1735 at the **March 25th, 2021** ALCOSAN Board Meeting. Contract execution typically requires 6 weeks to process paperwork (including bonds and certificates of insurance). Anticipate a Notice to Proceed to be issued by the first week of May.

c. Bidders to Investigate (2.13); Bidders may coordinate site visits through the Construction Manager's Project Manager, Michael Raig, at mraig@gstephensinc.com.

d. Tax Exemptions (2.18) See Article 3.21 and Exhibit D. Exhibit D language will be removed along with the Exhibit itself. This project is NOT exempt from sales and use tax.

e. Bid Security / Contract Execution (2.19).

f. Alterations of Bids and Documents (2.22)

g. Qualifications and Experience of Bidders (2.24)

h. MBE & WBE Participation (2.25); Lower-tier subcontractor participation counts towards 10%-25% goal.

i. Project Labor Agreement and Letter of Assent (Prime and Subs) (2.33)

4. Contract Provisions [Article Three]

a. Project Coordination (3.7 & 3.27)

b. Retainage; (3.35): 10% to start. Reduced to 5% at 50% completion.

c. Bonds (3.55); Performance Bond and Labor and Material Payment Bond to be provided prior to the execution of the Contract Agreement by Owner in the amount (100%) of the Contract Sum. Also, Maintenance Bond (100% of Contract sum) required upon final acceptance of the completed work.

d. Compliance with Health (COVID-19), Safety, and Environmental Laws (3.72); requires a project-specific written safety program, tailored specifically for the work on this Contract 1735 to be submitted to the Construction Manager prior to performing any work on-site.

e. Working hours (3.74); Normally for an 8-hour period between 7:00 AM to 5:00 PM, Monday through Friday. Work performed after hours, during ALCOSAN holidays and weekends shall be overseen by the Construction Manager, ALCOSAN and FDC staff as required, at the sole expense of the Contractor.

f. Sales and Use Tax (3.21) There are NO tax-exempt items on this project.

g. Pennsylvania Prevailing Wage Rates (3.75); Minimum wage rates as set forth by the PA Prevailing Wage Act. (See Article 7)

h. Compliance to the Buy American (3.76)

i. Compliance to the PA Steel Products Procurement Act/Trade Practices Act (3.77/3.78)

5. Contract Agreement [Article Four]

a. Contract Milestones:

Construction Milestones	Contract Time (Calendar Days)	Notes
Substantial Completion of Contract	372 days	From Notice to Proceed
Final Completion of Contract	403 days	From Notice to Proceed

b. Liquidated Damages

Construction Milestone	Liquidated Damages
Substantial Completion of Contract	$5,000/calendar day
Final Completion of Contract	$5,000/calendar day

6. Bonds, Certificates and Statements [Article Five]

a. Performance Bond (At beginning of contract)

b. Labor and Material Payment Bond (At beginning of contract)

c. Contractor's Certificate of Satisfaction (At completion of contract)

d. Maintenance Bond (At completion of contract)

CONTRACTS 1735 G, E, P, H
ALCOSAN PARKING GARAGE
Pre-Bid Meeting Agenda

7. **Project Specifications [Article 6)**
   a. Summary of Work 011100 – presentation by AE Works Project Manager, Shane Goodman

8. **Prevailing Minimum Wage Determination [Article 7]**

9. **Contract Drawings – 158 Drawings**

SITE TOUR REQUESTS

a. Tours are limited to 4 people and are scheduled to last 1 hour.
b. Tour dates and times are as follows:
   i. Friday February 19th and 26th: 8:15, 9:30, 10:45, 12:30, 13:45, and 15:00.
   ii. Friday March 5th: 8:15, 9:30, and 10:45.
c. To reserve an appointment, send requests to Michael Raig at mraig@gstephensinc.com.

QUESTIONS

a. Provide name and affiliation prior to asking question(s).

♦ ♦ ♦ ♦ ♦ END OF AGENDA ♦ ♦ ♦ ♦ ♦

CONTRACTS 1735 G, E, P, H
ALCOSAN PARKING GARAGE
Pre-Bid Meeting Minutes

Subject:	Pre-Bid Meeting Minutes
Date:	February 17, 2021
Time:	11:00 AM
Project:	**ALCOSAN Parking Garage**
Location:	Microsoft Teams - Virtual Meeting

Link (copy and paste into browser):

https://bit.ly/3pF3yHH

INTRODUCTION

a. Opening comments were provided by ALCOSAN PM, Cody Edgell.
   i. Cody described the proposed use of garage and size: 461-space, 5 ½ floor private parking lot for ALCOSAN employees.
   ii. Meeting to be recorded and included with minutes.
b. Meeting was moderated by GSI Construction Manager, Michael Raig.
c. Overview of MBE/WBE requirements and goals from ALCOSAN Manager of Purchasing and DBE Coordinator, Ray Meyer were explained. Ray encouraged a target goal of 10%-25% of the contract value(s).
   i. Ray stated that in the contract packet, a participation and commitment statement needs to be filled out with all the companies that were contacted even if they are not used. Ray also stated to document who you used and the dollar amount and the percentage of the contract amount. Supplies are included in the dollar amount used as well. Goals that are higher, are very much recommended.
   ii. All certifications are accepted, in-state or out-of-state. Make sure to obtain copies of certifications and verify that they are up-to-date. Ray advised that the PAUCP website is a good source for contractor information. Ray advised that all ALCOSAN projects meet the MBE and WBE goals.
d. Mike advised that the presentation of Contract Scope will be by Shane Goodman of AE Works [Article 6].
e. Mike advised that attendees will be noted in an attendee list. All call-in attendees that wish to be added to the list should send an email to the CM following meeting.
f. Mike presented a power point overview of the project. The power point is included in the meeting minutes.

CONTRACTS 1735 G, E, P, H
ALCOSAN PARKING GARAGE
Pre-Bid Meeting Minutes

BID DOCUMENTS

1. Legal Notice

a. All bids are to be submitted to Alcosan Engineering Department clerks (2nd floor of the O&M Building, 3300 Preble Ave. Pittsburgh PA, 15233) on or before bid opening date and time. If the bid package is sent to ALCOSAN by land courier (UPS, FedEx, etc.), allow enough time for delivery to the clerks.

b. Bid opening will be on **Wednesday March 17th, 2021** at **11:00 AM** sharp! Those who have purchased bid documents will be given the link to the virtual public bid opening

   i. Only prime contractors that have purchased documents may bid on the project.

c. A target goal of WBE/MBE participation is encouraged. (10% to 25% of contract value)

d. Bid security will be 10% of bid price by certified check or bid bond.

e. Contract documents must be purchased directly from ALCOSAN to qualify as an eligible bidder.

f. All questions regarding the Technical Aspects of the Project should be submitted to **Michael Raig, G. Stephens, Inc. via email to** mraig@gstephensinc.com. Answers to any question is to be considered informal and without legal or binding effect on the contract, or to the Owner, unless formalized by an addendum.

g. Any questions regarding the purchase of Contract Documents should be directed to **Kathleen P. Uniatowski, via email to** Contract.clerks@alcosan.org.

h. The Pre-bid meeting was not mandatory for bidders.

i. The last day for questions will be Close of Business **March 5th, 2021**. Responses will be distributed as addenda, as soon as possible, as deemed applicable.

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b. Bid Form for General Contractor paragraph 8.2 Unit Price Work. Items 03A, 03B, 03C, and 03D includes all of the work required to install 100% of the caissons along with disposal of residual waste spoils from drilling. If the spoils meet contamination thresholds established by the PADEP, the special costs to handle and dispose said spoils will be compensated on a T&M basis against the Allowance established in item 07.

   i. Caisson unit prices include entire installation of caissons of items 03A-03D and will be paid on a per vertical lineal foot basis. The cost for this work to be included in Base Bid item 8.2 Unit Price Work.

   ii. Caisson work should not be included in Base Bid item 8.1 Lump Sum Work.

c. Acknowledge all Addenda received and made part of the Bid Documents page 1-2. (Art.2.16) AND, attach a signed Acknowledgement of Receipt of each individual addendum to the front of the Bid Form package.

d. Provide a contact for your company in the space designated on page 1-7G or 1-5 (E, H, or P) for receipt of any communications necessary for the bid evaluation.

e. Bid Bond - Certified check or Bid Bond is required. (Art. 2.19)

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c. Bidders to Investigate (2.13); Bidders are to coordinate site visits through the Construction Manager's Project Manager, Michael Raig, at mraig@gstephensinc.com.

d. Tax Exemptions (2.18) See Article 3.21 and Exhibit D. Exhibit D language will be removed along with the Exhibit itself. This project is NOT exempt from sales and use tax.

   i. Please INCLUDE sales and use tax expense in your bids.

e. Bid Security / Contract Execution (2.19).

f. Alterations of Bids and Documents (2.22).

   i. No alterations accepted, unless through an addendum.

g. Qualifications and Experience of Bidders (2.24).

h. MBE & WBE Participation (2.25); Lower-tier subcontractor participation will count towards 10%-25% goal.

i. Project Labor Agreement and Letter of Assent (Prime and Subs) (2.33)

4. Contract Provisions [Article Three]

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b. Retainage; (3.35): 10% to start. Reduced to 5% at 50% completion.

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a. Performance Bond is located at beginning of contract.

b. Labor and Material Payment Bond is located at beginning of contract.

c. Contractor's Certificate of Satisfaction is located at completion of contract.

d. Maintenance Bond is located at completion of contract.

7. Project Specifications [Article 6)

a. Summary of Work 011100 – Covered by AE Works Project Manager, Shane Goodman.
   i. Shane reviewed the scope of work for each prime contractor.

8. Prevailing Minimum Wage Determination [Article 7]

9. Contract Drawings – 158 Drawings

CONTRACTS 1735 G, E, P, H
ALCOSAN PARKING GARAGE
Pre-Bid Meeting Minutes

SITE TOUR REQUESTS

a. Tours are limited to 4 people and are scheduled to last 1 hour.
   i. Mike requested that no more than 1-2 people per contractor should be scheduled. They will be scheduled in the order that they are received and are scheduled to last an hour. If the time slots provided below are insufficient to cover the need, adjustments will be made.
b. Tour dates and times are as follows:
   i. Friday February 19th and 26th: 8:15, 9:30, 10:45, 12:30, 13:45, and 15:00.
   ii. Friday March 5th: 8:15, 9:30, and 10:45.
c. To reserve an appointment, send requests to Michael Raig at mraig@gstephensinc.com.

QUESTIONS & Comments

1. Cody stated to pay special attention to spec section 312300.
   i) Covers all types of construction waste, residual waste, and clean fill. It defines all of those precisely according to PADEP regulations. Residual waste is included in the lump sum for this project. Waste that is covered under the force account ($100,000 allowance) is waste that meets the definition of "other" contaminated waste per that spec section.
2. Cody stated to pay particular attention to the elevator specification (division 14).
   i) Cody explained that the elevator specification's basis of design is an elevator manufactured by Otis and calls for non-proprietary components. Other manufacturers are listed and may be used subject to compliance with the project requirements. It is the owner's intent that future solicitations for a maintenance contract can be competitively bid. A written affirmation that this goal can be met will be addressed in an addendum.
3. Someone asked in the chat (did not state who or where from) Are the unit price and allowance items to be included in the base bid amount
   i) Answer: Yes, Mike stated that the lump sum (8.1) and unit price and allowance (8.2) items are to be combined in the bid summary in 8.3.
4. John Harris from G. Stephens asked; where can the recording of the meeting of the recording be found?
   i) Answer: Cody will send Microsoft teams recording hyperlink and password to Mike Raig to be distributed in minutes.
5. Someone asked (Did not state who or where from) will the cost of permits be the responsibility of the general contractor?
   i) Answer: Cody answered contractors will be responsible for their respective permits. ALCOSAN has placed a deposit on the (building, electrical, mechanical, fire alarm, and fire suppression) permits and the contractor shall pay the remaining balance in their bid. The amount paid by ALCOSAN will be addressed in the first addendum.
6. Alan Kraemer from PSX asked regarding page 111200-9 (parking access and control system); paragraph 2.4.A.3 states that all equipment must match equipment used elsewhere on the

campus. Is the equipment in reference to the gates that are at the existing security gate currently?

i) Answer: Cody stated that is correct, ALCOSAN uses Magnetic Automation Corporation gates with metal panels for the hardware. Regarding the parking access control system, there is not one to speak of at the moment. Whatever equipment is provided, must be compatible with the hardware currently at ALCOSAN.

7. Someone asked (Did not state who or where from) will the construction material testing and special inspections fall under the responsibility of the general contractor or will ALCOSAN hire a third-party for QA/QC?

   i) Answer: Mike answered, testing will be done by a third party (DLZ), paid by the owner and will not be part of the general contractor's scope of work.

♦ ♦ ♦ ♦ ♦ END OF AGENDA ♦ ♦ ♦ ♦ ♦

PRE-BID MEETING ATTENDANCE LIST

PROJECT: ALCOSAN Parking Garage	DATE: Feb. 17, 2021
	Time: 11:00 AM
ALCOSAN PROJECT MANAGER: Cody Edgell	Location: Virtual
G. STEPHENS, INC. PROJECT MANAGER: Michael Raig	

NAME	INITIAL HERE	ORGANIZATION	E-MAIL ADDRESS	OFFICE PHONE	CELL PHONE
Sung Yi	SY	ATC	Sung.Yi@atcgs.com	+1 412 826 3120 Ext. 218	+1 412 596 9713
Vinny Butera	VB	Fallon Electric	vbutera@fallonelectric.net	(412) 563-4100	
Joe Scaramuzzo	JS	Burchick	scaramuzzo@burchick.com	412-369-9700	
Dan Davis	DD	Skelly and Loy	ddavis@skellyloy.com	(412) 426 7018	(412) 327 3320
Matthew Henning	MH	G. Stephens Inc.	mhenning@gstephensinc.com	614-227-0304	419 575 9090
John Harris	JH	G. Stephens Inc.	jharris@gstephensinc.com	330-762-1386	216 337 7521
Michael Raig	VMR	G. Stephens Inc.	mraig@gstephensinc.com	330-762-1386	216 650 4722
Adrian Bivins	AB	G. Stephens Inc.	abivins@gstephensinc.com	330-762-1386	330 338 1356
Jay Kester	JK	Coates Construction Company	j.kester@mikecoatesconstruction.com		
Chuck Baran	CB	Coates Construction Company	c.baran@mikecoatesconstruction.com		
Terri Lee	TL	TerriLeeConsulting	terrilee2860@comcast.net		
Alan Kraemer	AK	PSX Group	alan.kraemer@psxgroup.com	412-848-8326	
Bill Vodde	BV	Brayman	w_vodde@brayman.com	724 443 1533 Ext 50517	724 996 2928
Brad Brock	BB	Rycon	bbrock@ryconinc.com	412-392-2525	412-559-8578

PRE-BID MEETING ATTENDANCE LIST

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ALCOSAN PROJECT MANAGER: Cody Edgell	Location: Virtual
G. STEPHENS, INC. PROJECT MANAGER: Michael Raig	

NAME	INITIAL HERE	ORGANIZATION	E-MAIL ADDRESS	OFFICE PHONE	CELL PHONE
Scott Stonecheck	SS	Amelie Construction	sstonecheck@amelieconstruction.com	724.354.5292	412.916.9600
Jamison Vernallis	JV	Volpatt Construction	jamison@volpatt.com	412 942-0200	
Justin Jones	JJ	PJ Dick	justin.jones@pjdick.com	412.807.2229	412.287.9937
Roxanne Heineman	RH	PJ Dick	Roxanne.Heineman@pjdick.com		
John Fratto	JF	CPS Construction	jfratto@cpsconstructiongroup.com	412.824.2900	
Tim Plinta	TP	CPS Construction	TPlinta@cpsconstructiongroup.com	412.824.2900x121	412.335.1816
Ken Comella	KC	CPS Construction	KComella@cpsconstructiongroup.com	412.824.2900 x108	412.292.7700
Ed Blank	EB	Franjo	eb@franjocc.com		
Jeff Argyros	JA	ALCOSAN	Jeff.Argyros@alcosan.org	412-734-6281	
Eric Barbour	EB	Kokosing	ebarbour@kokosing.biz	614.212.5700	614.325.0222
Robert W. Means	RWM	Mosites	RobM@mosites.com	412.923.2255 x 217	412.260.3377
Cary Morris	CM	Mosites	CaryM@mosites.com	412.923.2255 x 217	
John Uranker	JU	Wheels Mechanical Contracting	john@wheelsmechanical.com	412.405.9760	724.705.4358

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ALCOSAN PROJECT MANAGER: Cody Edgell	Location: Virtual
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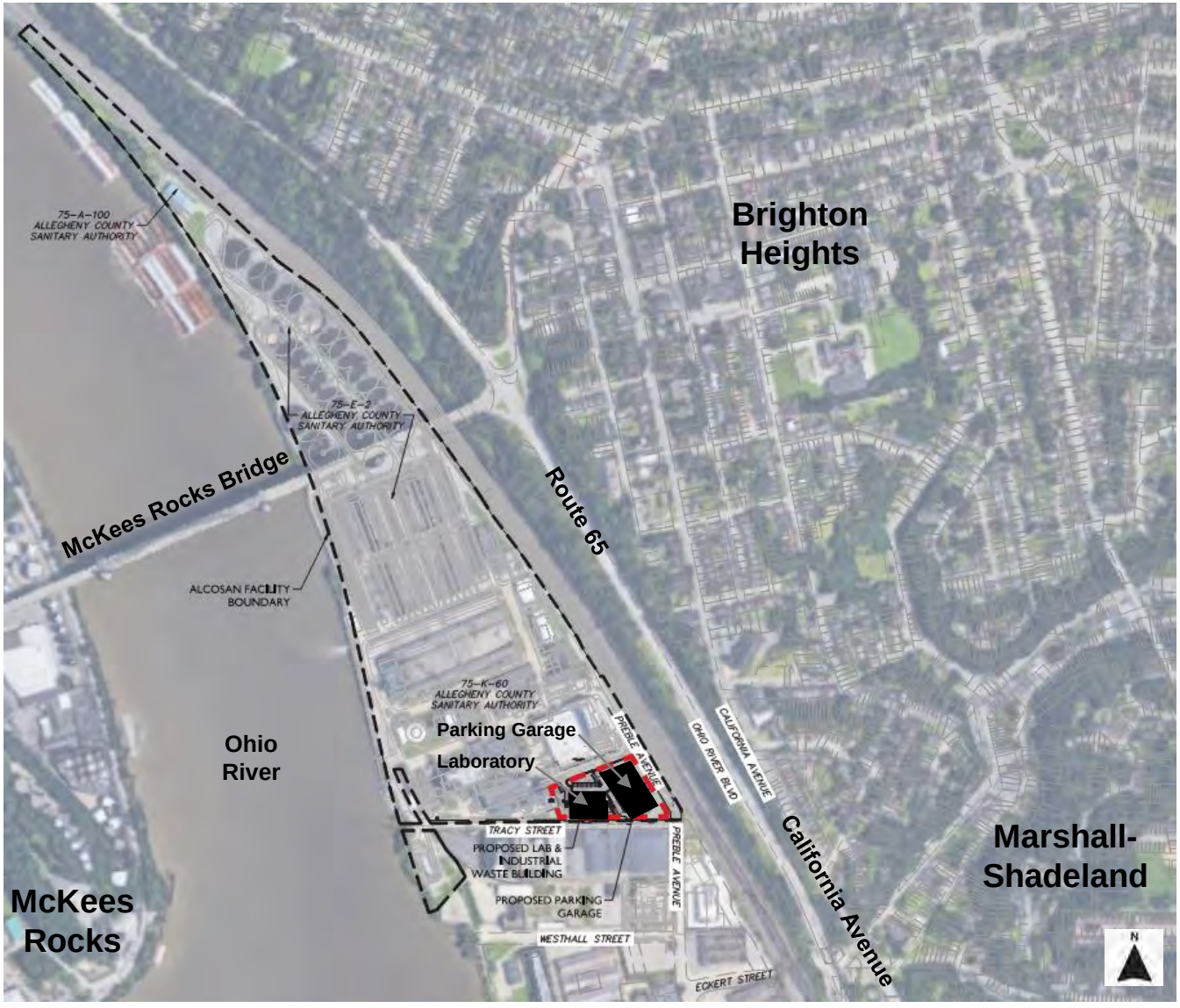
NAME	INITIAL HERE	ORGANIZATION	E-MAIL ADDRESS	OFFICE PHONE	CELL PHONE
Kody Grabiak	KG	Mele & Mele & Sons, Inc.	kgrabiak@meleinc.com	412.351.1234	412.652.2128
Andrew M. Krall	AMK	Wellington Power Corp.	akrall@wellingtonpower.com	1.724.779.4000	1.412.287.8393
Hunter Lund	HL	Kirby Electric	hlund@kirbyelectricinc.com	724.772.1800	724.590.2656
Chad Basinger	CB	Swank Construction Company	cbasinger@swankco.com	724-335-6000	724-323-4100
Chris McElhaney	CM	Carl Walker Construction	cmcelhaney@carlwalkerconstruction.com	412-490-2924	412-427-4866
Phil Hutchison	PH	Desman	phutchison@desman.com	312.614.1388	312.972.9731
Klaus Sailer	KS	Nathan Contracting	Klaus@nathancontracting.com	412.487.7077 x212	412.953.1327
Cody Edgell	CE	ALCOSAN	Cody.Edgell@alcosan.org	412-734-6260	
Raymond Meyer	RM	ALCOSAN	Raymond.Meyer@alcosan.org	412.734.8737	
Patrick Godwin	PG	Tri-state Design	PGodwin@tri-statedesign.com	412-276-2219	412-721-1803
Skylar D. Van Soest	SDV	a.m. Higley	svansoest@amhigley.com	412-670-5433	
Shane Goodman	SG	AE Works	shane@aeworks.com	412.287.7333 x 219	412.841.9401
Curtis Morehead	CM	Emerald Electrical Services	more1head@gmail.com		(412) 609-5290

ALCOSAN
PARKING GARAGE

CONTRACT NO. 1735 – Pre-bid

February 17, 2021

ALCOSAN Woods Run WWTP – Context Map & Project Description



Existing Use
- ALCOSAN employee private surface parking lot (access controlled)
- Within Woods Run Wastewater Treatment Plant (3300 Preble Avenue)
- WWTP is a US Homeland Security Nationally-critical site

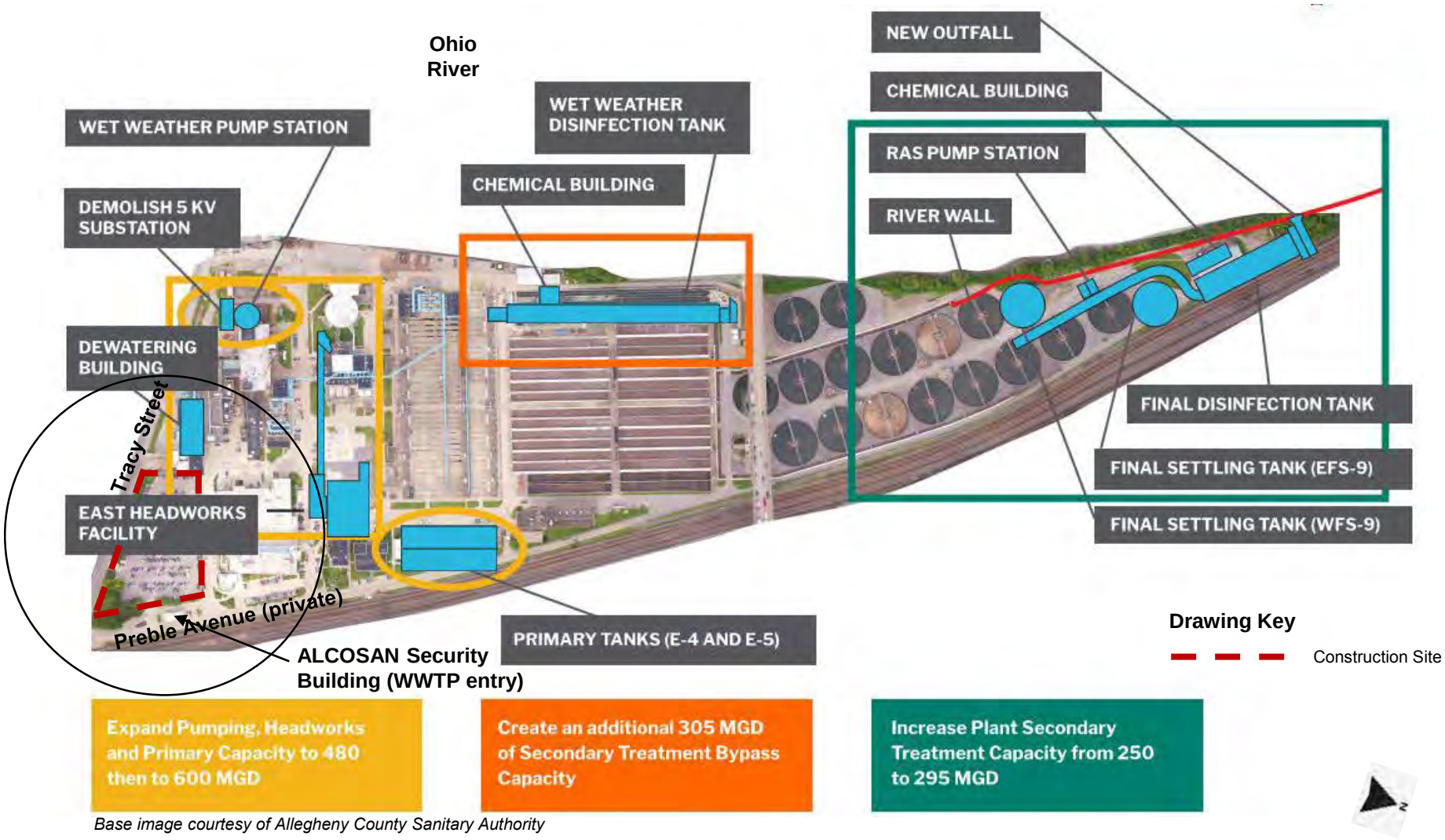
Proposed Use
- 53,000sf, 3-story Laboratory/Office building
- **461-space, 5 ½ floor private parking garage (This Contract)**

Context
- Marshall-Shadeland neighborhood
- RCO: Brightwood Civic Group
- RIV-GI zoning district
- Industrial area
- Water-dependent use

Regulatory Review Status
- Planning commission approval and all requested variance granted
- Currently in permitting process

ALCOSAN Property
Construction Site
New ALCOSAN Building

ALCOSAN Master Plan & Project Purpose



Base image courtesy of Allegheny County Sanitary Authority

Views of Environmental Compliance Facility & Parking Garage on Site

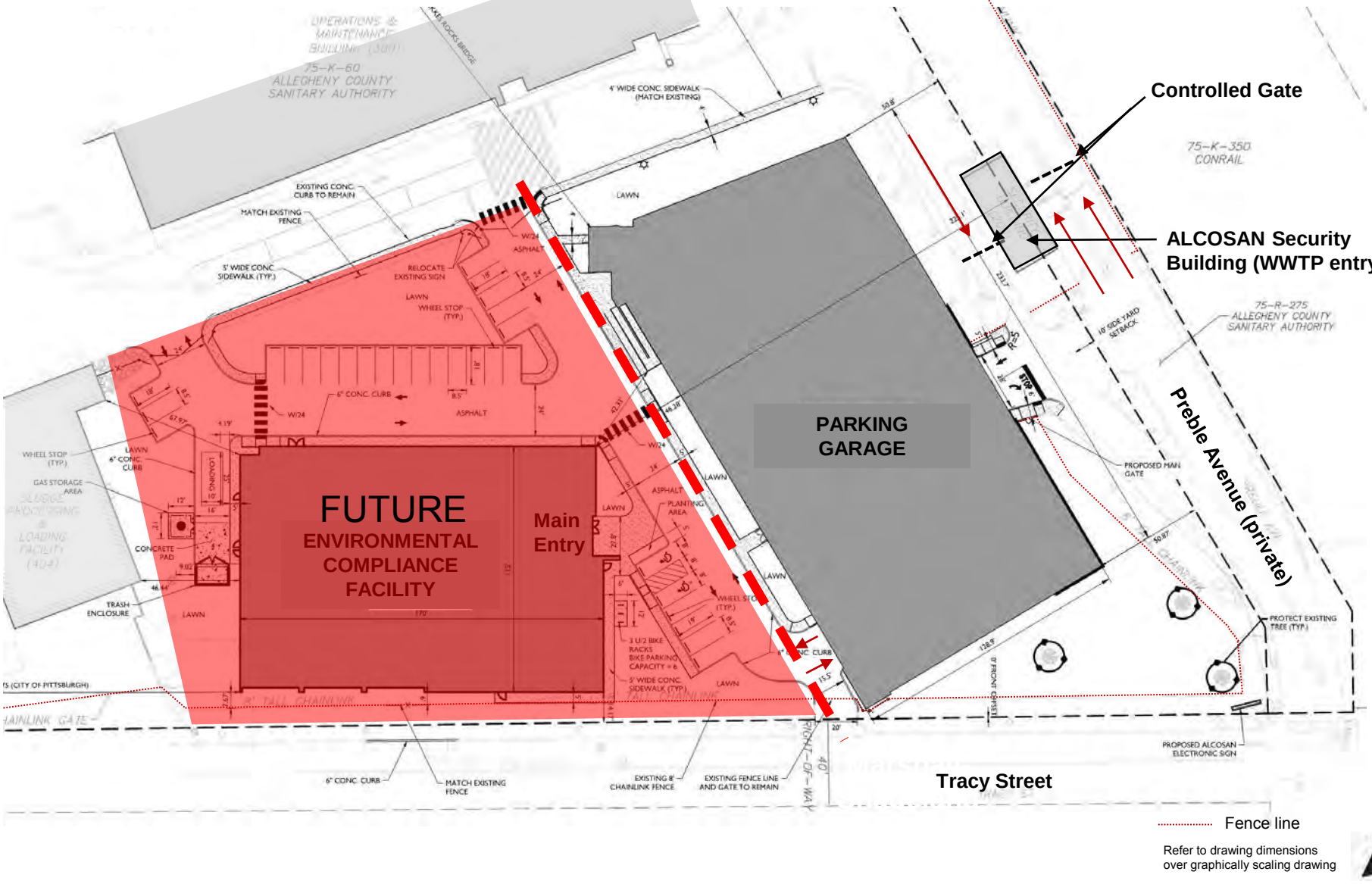
View from Route 65

View from the McKees Rocks Bridge

View looking southwest

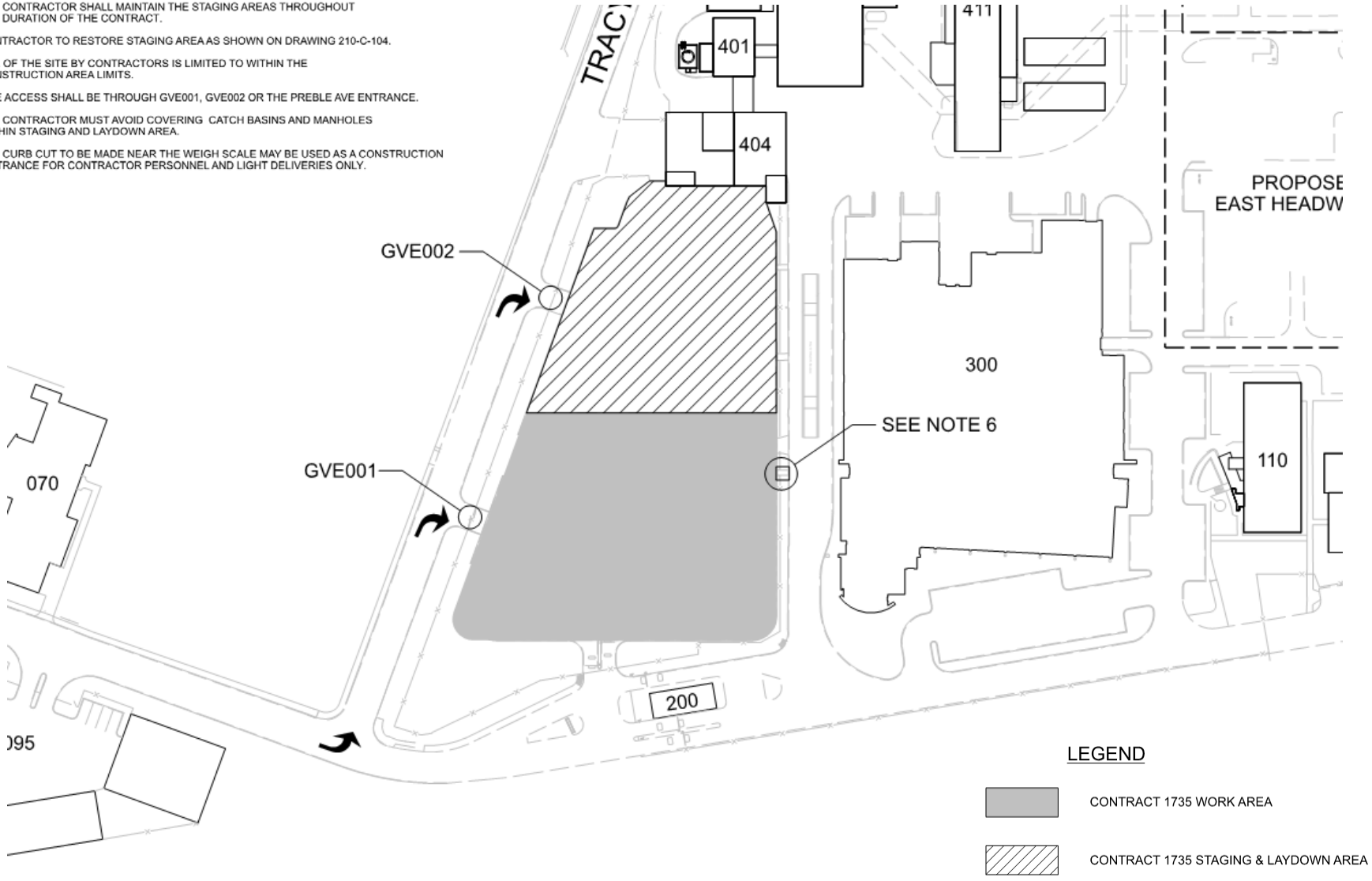
View looking northeast

Site Division of Projects



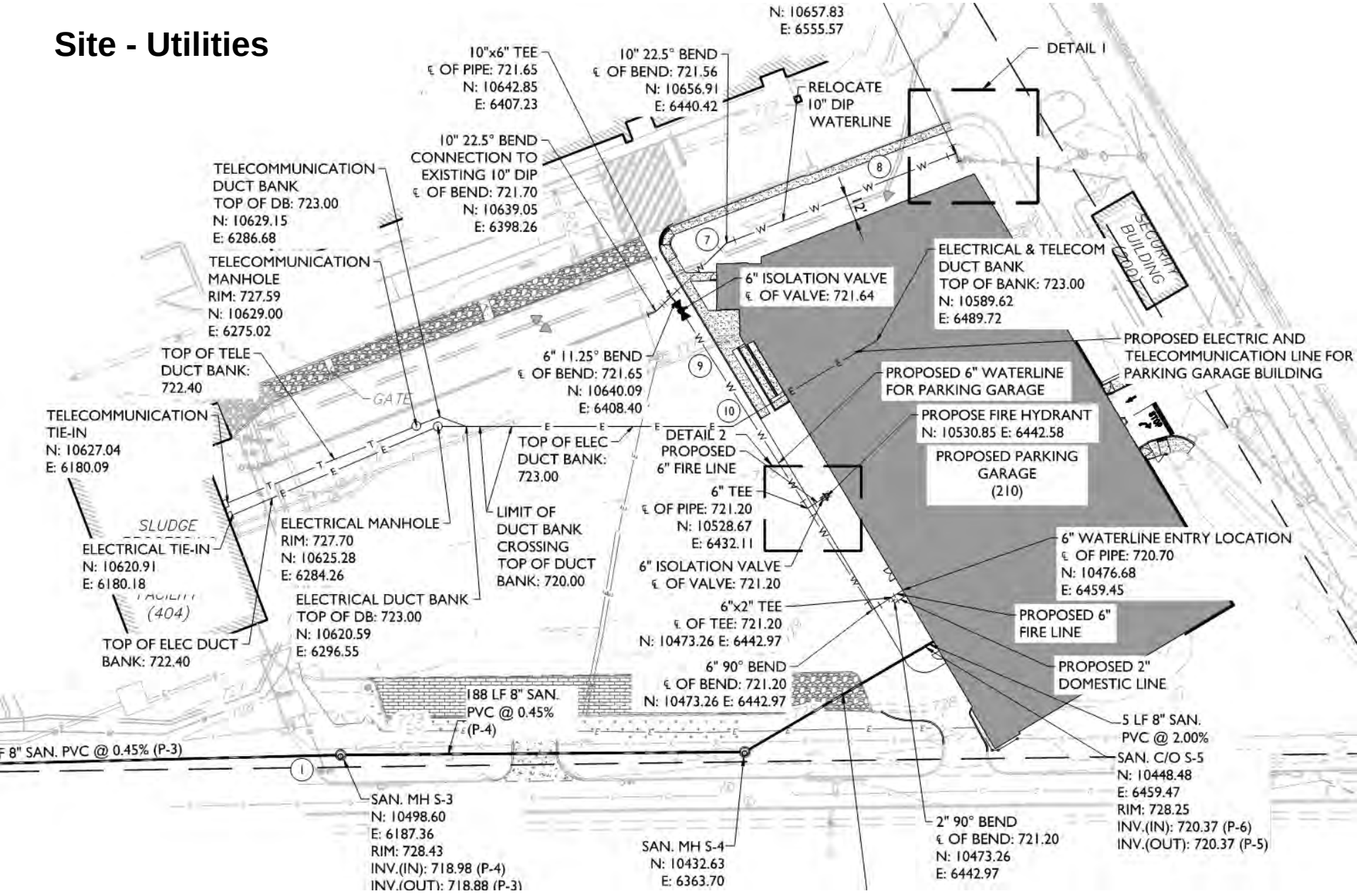
Site Utilization

1. THE CONTRACTOR SHALL MAINTAIN THE STAGING AREAS THROUGHOUT THE DURATION OF THE CONTRACT.
2. CONTRACTOR TO RESTORE STAGING AREA AS SHOWN ON DRAWING 210-C-104.
3. USE OF THE SITE BY CONTRACTORS IS LIMITED TO WITHIN THE CONSTRUCTION AREA LIMITS.
4. SITE ACCESS SHALL BE THROUGH GVE001, GVE002 OR THE PREBLE AVE ENTRANCE.
5. THE CONTRACTOR MUST AVOID COVERING CATCH BASINS AND MANHOLES WITHIN STAGING AND LAYDOWN AREA.
6. THE CURB CUT TO BE MADE NEAR THE WEIGH SCALE MAY BE USED AS A CONSTRUCTION ENTRANCE FOR CONTRACTOR PERSONNEL AND LIGHT DELIVERIES ONLY.

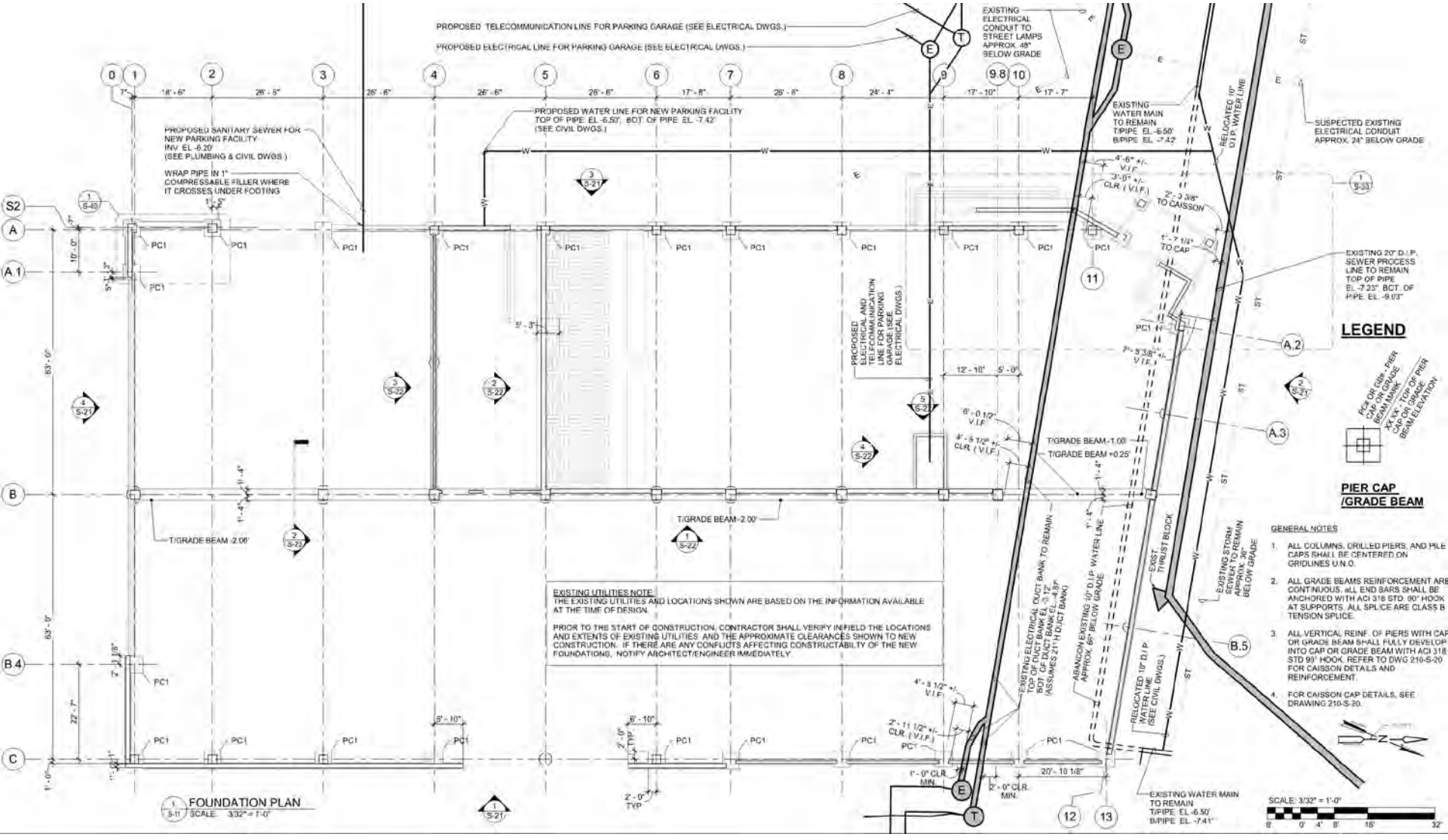


Site - Existing

Site - Utilities



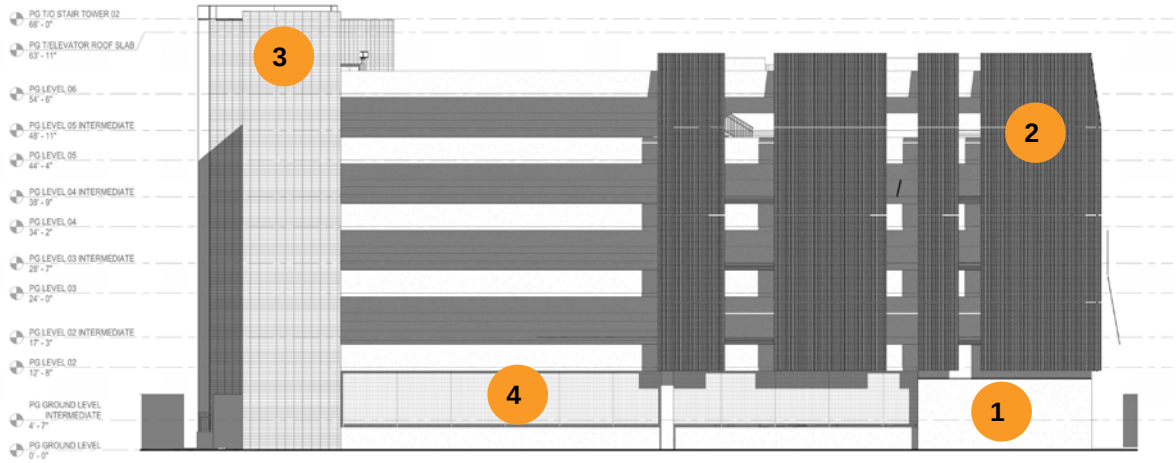
Site – Utilities/Foundations



View of Parking Garage near corner of Preble Avenue & Tracy Street

View looking northwest

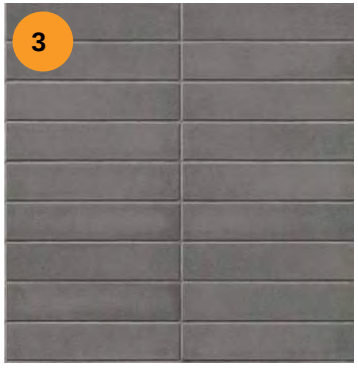
Parking Garage South Elevation & Materials



South Elevation (from Tracy Street): Maximum height of building less than 60'-0"

Concrete Panel
Vertical Texture Accent

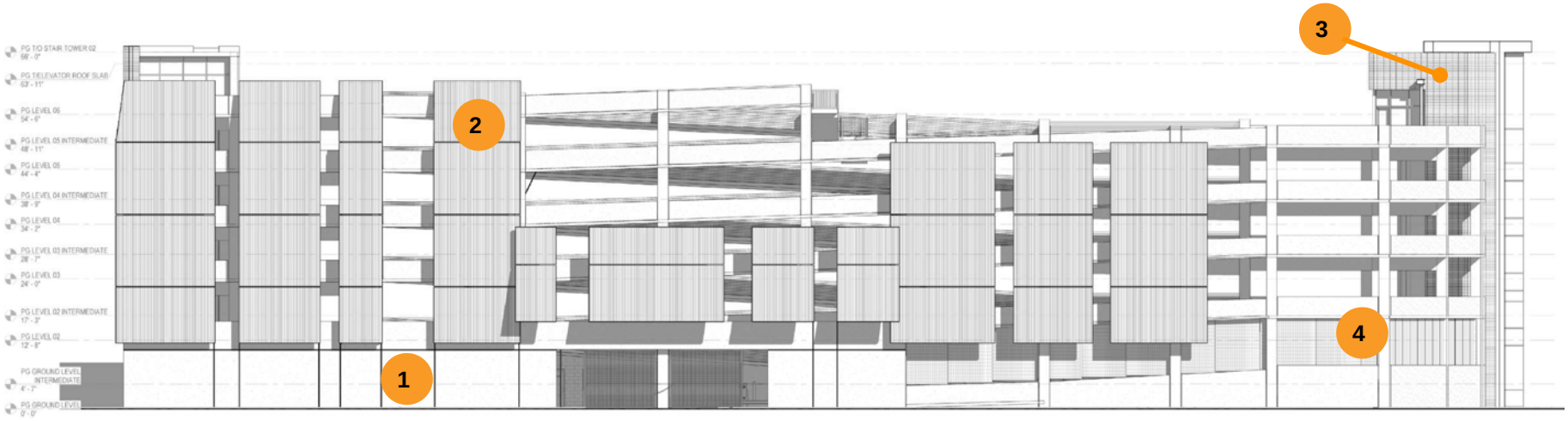
Perforated Panel
Vertical Profile



Gray Brick
Horizontal Stackbond Pattern

Welded Wire Security Fence

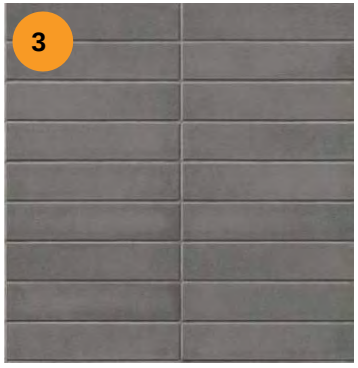
Parking Garage East Elevation & Materials



East Elevation (from Preble Avenue—a private street): Maximum height of building less than 60'-0"

Concrete Panel
Vertical Texture Accent

Perforated Panel
Vertical Profile

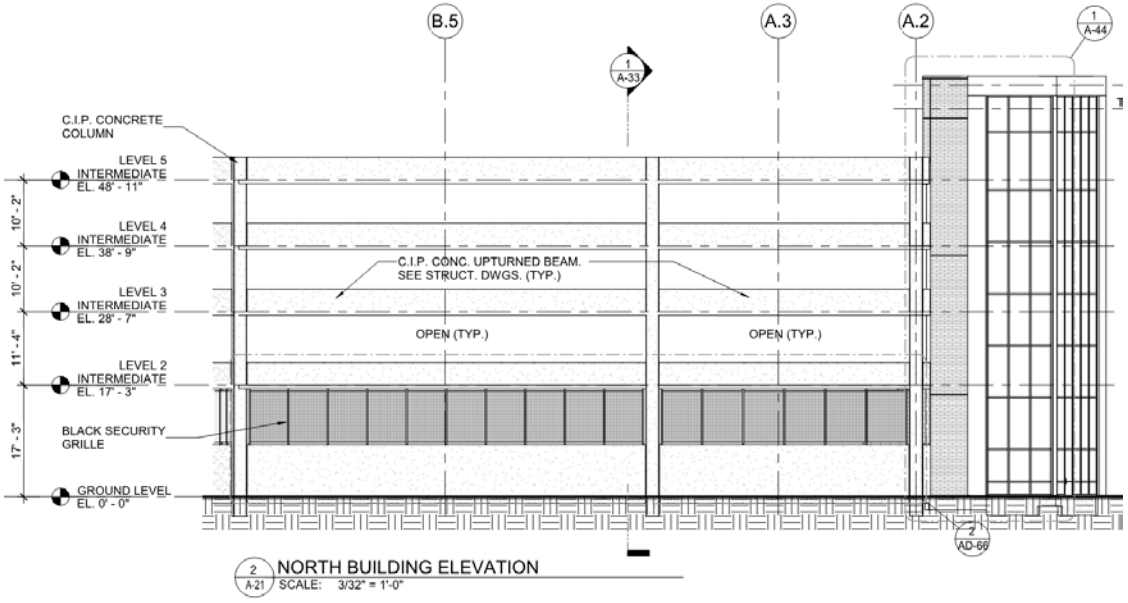


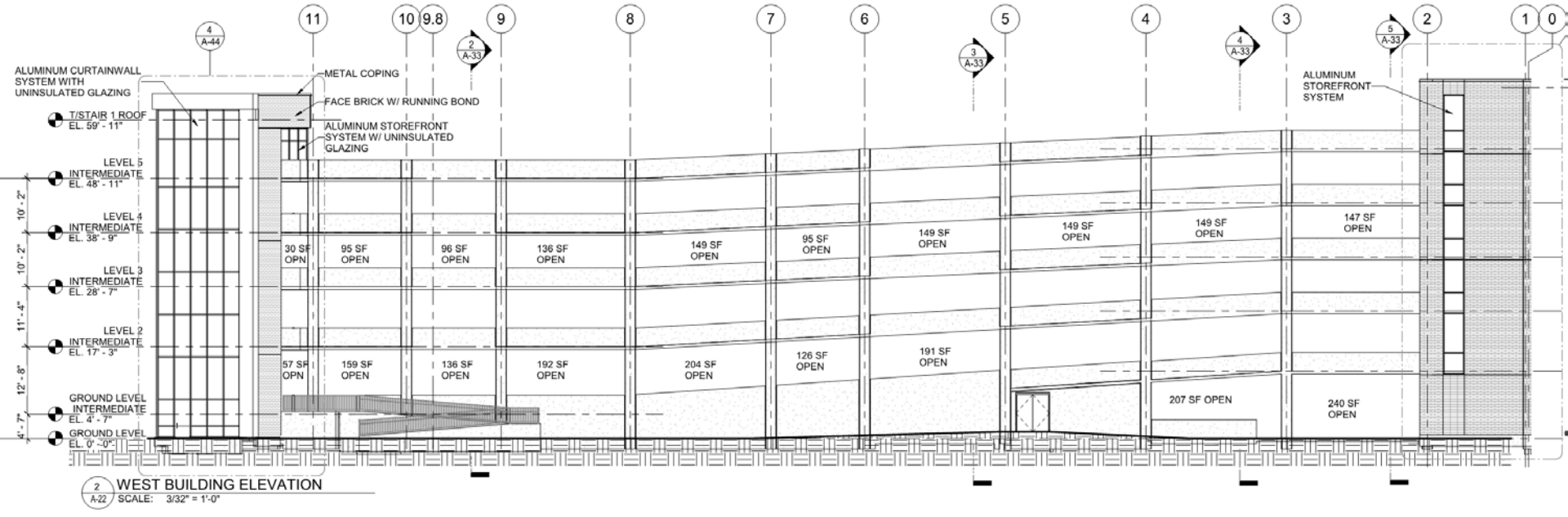
Gray Brick
Horizontal Stackbond Pattern

Welded Wire Security Fence

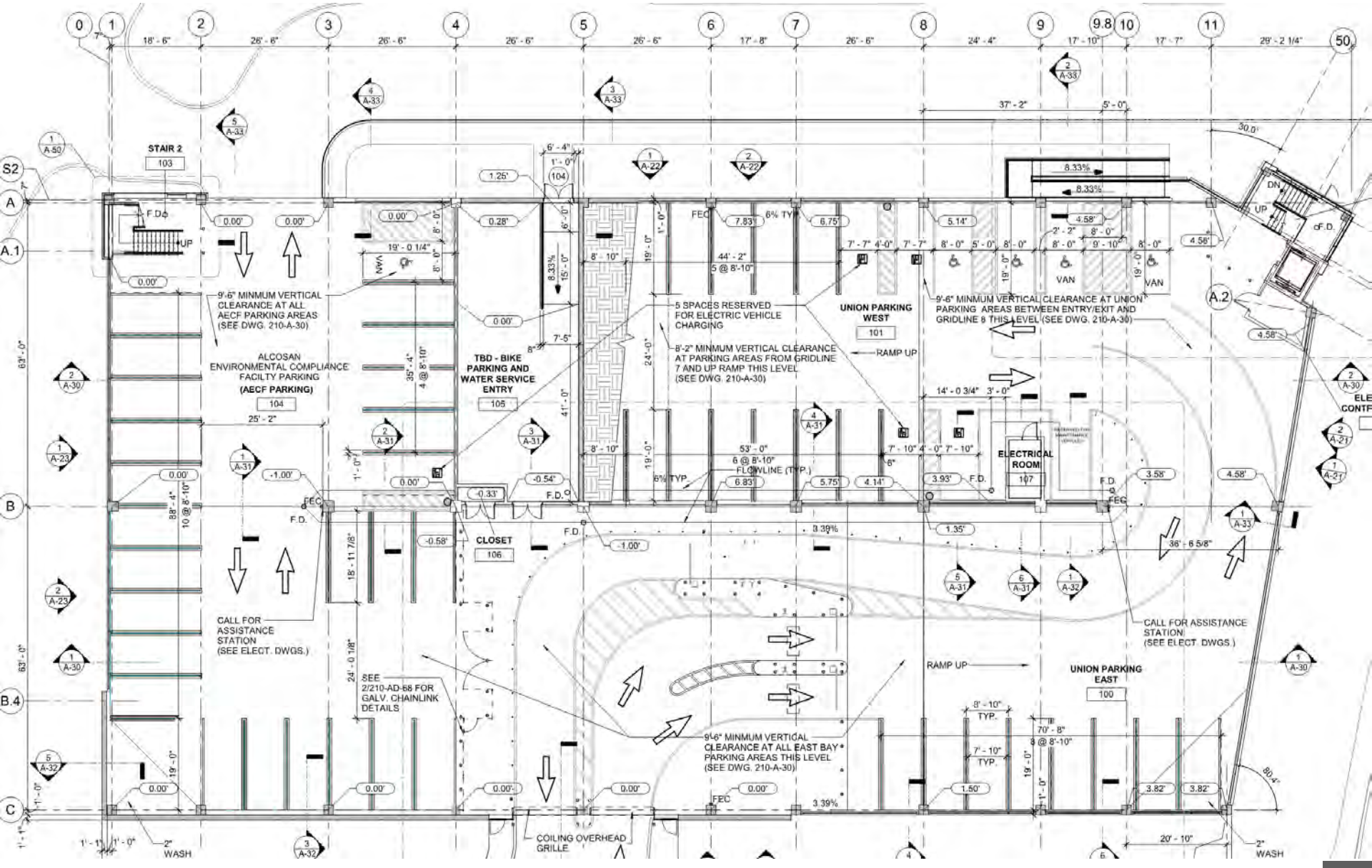
Parking Garage North &

West Elevations

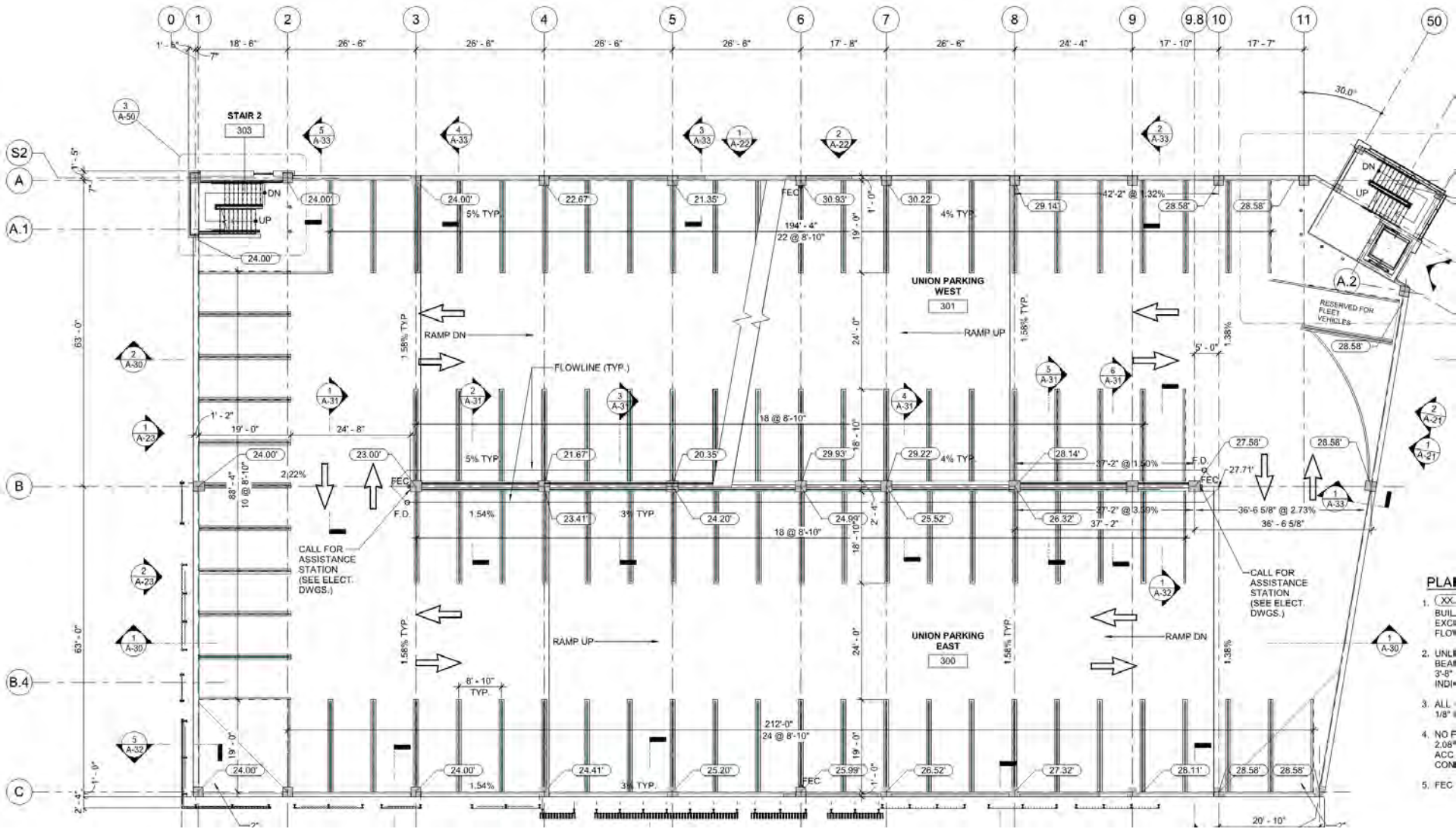




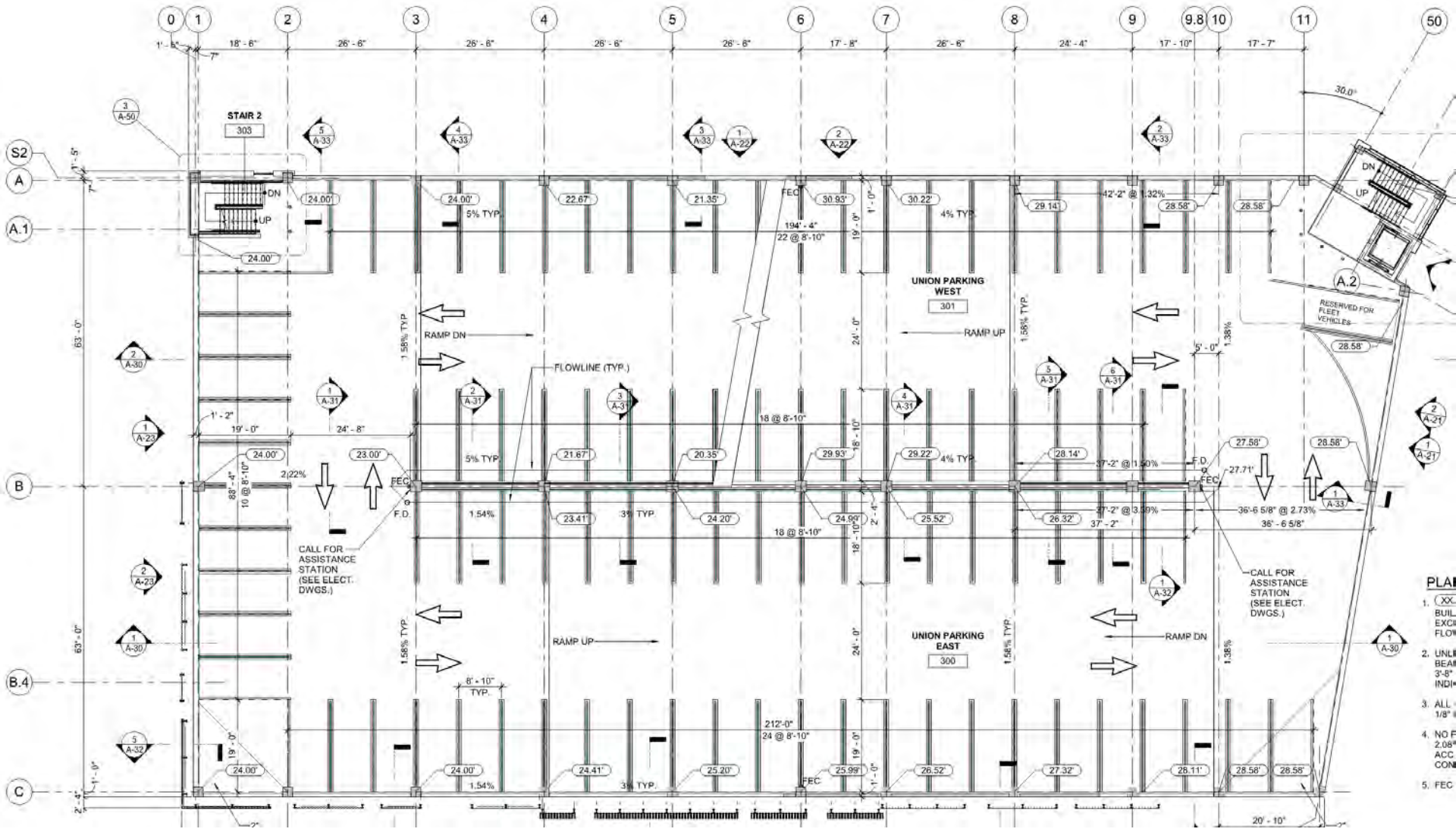
Ground Floor – Ground Level



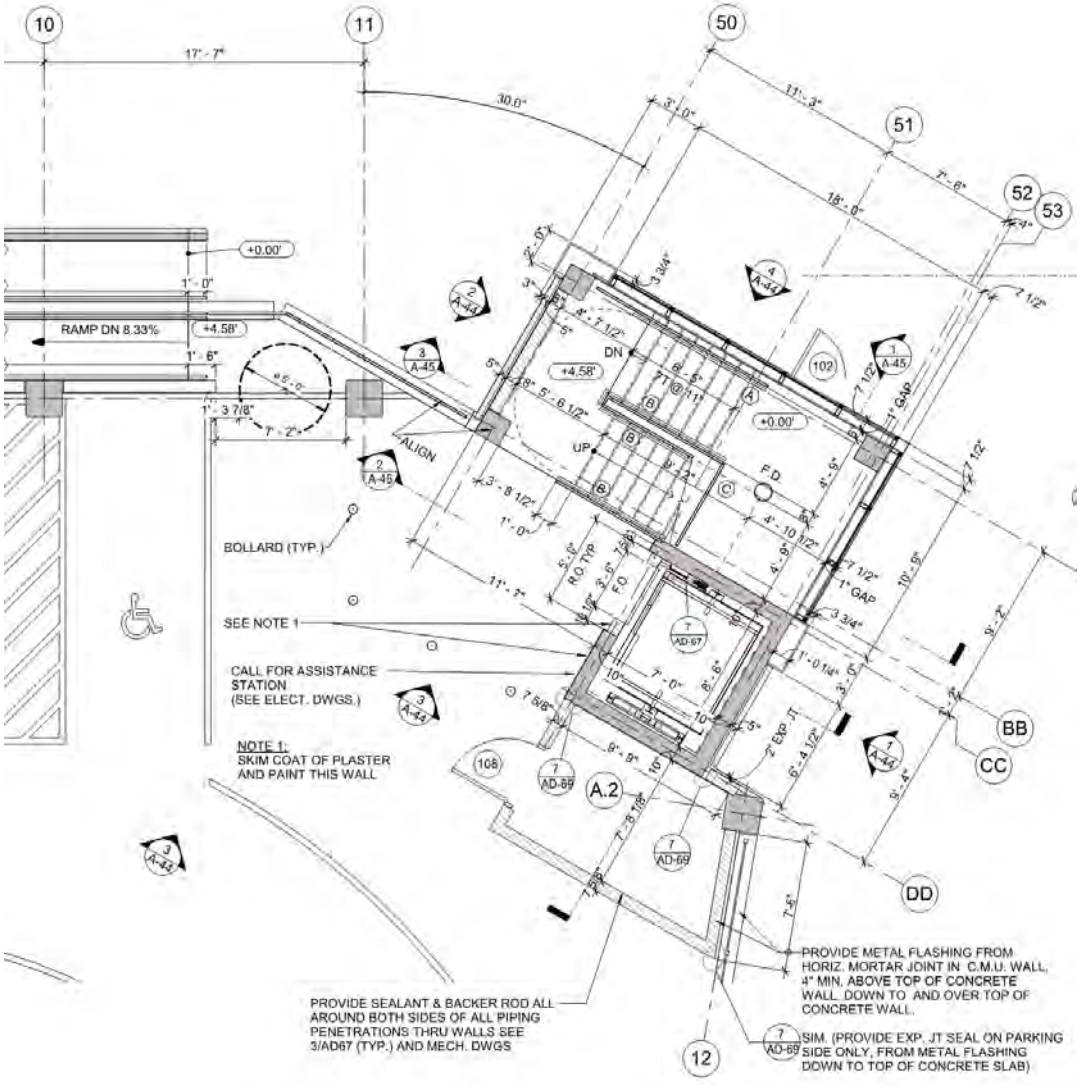
Typical Middle Floor – Levels 2 through 5



Top Floor – Level 6



Elevator Area



2 A-41 STAIR 1/ELEVATOR - GROUND LEVEL PLAN
SCALE: 1/4" = 1'-0"

As a condition of being included as a listed vendor in ALCOSAN's elevator specifications [your firm here] affirms compliance with Contract 1735 Specification 14 21 20 Section 1.2C:

1. Insofar as practicable, the Owner desires that the traction elevators are comprised of non-proprietary components that will allow service and maintenance by whomever the Owner determines, not necessarily the elevator contractor for this project.

    a. Contractors are expected to clarify what, if any, proprietary components are included, along with procedures for obtaining spare parts and maintaining the elevators.

2. Special tools: Any special tools required to service the elevator shall be included in the base bid and become the property of the owner upon contract completion.

3. Diagnostic capabilities must be integral to the controls. Any diagnostic devices necessary to adjust, troubleshoot and change parameters must be a part of the control system and become the Owner's property upon completion of the job. If a separate diagnostic device is required, it shall be included in the base bid at no additional cost to the Owner and become the Owner's property upon completion of the job.

4. The Owner must have ready access to software revisions and any technical support required to maintain the elevator in its originally installed functional state after completion of the installation.

[your firm here] further understands that failure to attest compliance in writing with the above specification will result in the rejection of any submitted elevator bid by ALCOSAN.

Signed,

[authorized representative of your firm]