



Stantec Architecture Inc.
1344 South Flores Street Suite 201
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ADDENDUM #4

07/24/2014

**TO PLANS AND SPECIFICATIONS FOR
RENOVATION AND ADDITION TO
FT. SAM HOUSTON ELEMENTARY SCHOOL
&
RENOVATION AT COLE HIGH SCHOOL**
Ft. Sam Houston
San Antonio, TX



7-24-14

NOTE:

If you have questions about this project, please contact:
Edward Rodriguez, Senior Project Manager.
210.223.9588
erodriguez@shwgroup.com

or

Wanira Magaloni
wmagaloni@shwgroup.com

This Addendum is generally separated into sections for convenience; however, all contractors, subcontractors, material suppliers and other involved parties shall be responsible for reading the entire Addendum. Failure to list an item(s) in all affected sections of this Addendum does not relieve any party affected from performing per instructions, provided the information is set forth one time anywhere in the Addendum.

This document shall become attached to and part of the Construction Documents for the aforementioned project.

BID DATE and TIME: July 29, 2014 at 2:30 pm

DELIVER PROPOSALS TO:

Office of SHW Group, LLP
1344 South Flores Street
Suite 201
San Antonio, Texas 78204

GENERAL ITEMS:

1. Due to a file printing error, some informative items related to the Electrical Sheets and Specifications AND related to the Structural Sheets were not clarified or identified in the previously issued Addendum. Consequently, this Addendum #4 shall clarify the Electrical and Structural items.
2. Refer to the Electrical Narrative included in this Addendum #4 for further information and clarifications.
3. Refer to the Structural Narrative and Structural Sheets included in this Addendum #4 for further information and clarifications.

END OF ADDENDUM #4

See attached Electrical Addendum #4.

See attached Structural Addendum #4.

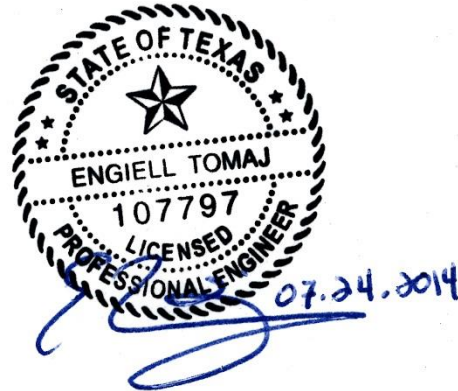


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ELEMENTARY SCHOOL AND HIGH SCHOOL

SPECIFICATIONS:

1. Section 26 41 13: Issued new specification for lightning protection system for the Elementary School. It shall be bid as an Alternate. **CLARIFICATION – The specification was issued as part of the Addendum #3 package.**

GENERAL ITEMS:

1. ELECTRICAL

- a. DEDUCT ALTERNATE: Metal Clad Cable (MC) for branch circuits shall be permitted as described here in. MC shall comply with N.E.C, NEMA Std RV 1 – 2008 and National Armored Cable Manufacturers Association (NACMA). Metal Clad (MC) Cable is acceptable for branch circuits and non-homeruns only. All MC cables shall be installed concealed within ceiling and wall cavities. All MC cables shall be installed in a workmanlike manner using right angles, parallel and perpendicular runs along the building lines. All MC cables shall be supported and derated as required by code. All homeruns, “feeders” (as defined by N.E.C.), and branch circuits installed in visible application shall be installed in “hardpipe” raceway. Metal Clad (MC) Cable shall be supported as required by code, NEMA Std RV 1 -2008, and NACMA and shall be installed as described herein. MC cable shall be supported independent from ceiling systems.
- b. Provide additional new circuit breakers in available spaces in panelboard as described herein in addendum #2. Connect all circuits per feeder and branch circuit schedules on sheet E401 and provide disconnect switch where indicated per motor circuiting sizing schedule on sheet E401, U.N.O.
- c. Where “PCX” or “PCA” photo cells are installed, provide an additional 10’ of cable slack to relocate photocell as necessary in field.

HIGH SCHOOL

DRAWINGS:

1. Sheet E111:

- a. General Note # 5: Revised to read “OCCUPANCY CONTROLS SHALL BE WIRED SUCH THAT ALL GENERAL ROOM LIGHTING IS CONTROLLED. IN ROOMS WHERE LV CONTROL SWITCHES ARE SHOWN ON PLAN, OCCUPANCY SENSOR SHALL BE SET TO AUTOMATIC “ON”/MANUAL “OFF” PER IECC 2012. REFER TO DRAWING E601 FOR ADDITIONAL INFORMATION/DETAILS.”
- b. DISPLAY AREA A110A: Refer to display case, change light switch to keyed switch and relocate switch on opposite side of the same wall.
- c. KILN A112: Change fixture type to FA from FA1.
- d. LIFE SKILLS A108:
 - i. Northern most row of lights shall be on relay “R-1”.
 - ii. Second northern most row shall be on relay “R-2”.
- e. CLINIC A103: Northern most light shall be on relay “R-1”.
- f. Exterior lighting type OA/OAX and OB/OBX: Connect to nearest exterior building lighting circuit and controls. Field verify circuit load does not exceed 80% of circuit breaker rating (total 16A).

2. Sheet E211:

- a. Delete General Notes #9 and #10.
 - b. MECH/ELEC A116: Provide (3) quad receptacles on north wall, west of doors, and 4” above shelf for charging stations. Connect receptacles to new 20A, 120V circuit in panel LE2.
 - c. CLASS A118: Change two duplex receptacles on north wall, at computer stations, to quad receptacles.
 - d. KILN A112: Provide a 60A/3P/NF disconnect switch to control special purpose outlet north wall. Locate disconnect switch adjacent to light switch for room.
 - e. DAEP A120: Provide ceiling mounted interior camera at northwest corner of room.
 - f. DAEP A120: Floor box “FBX” – Provide floor box equal to six-compartment Wiremold #RFB6/(2)RFB6DP/(3)RFB6B/FPBTCAL and internal communication bracket for four data drop termination. Extend (2) 1 ¼” conduits below slab to nearest full height wall to accessible ceiling space. Install two duplex receptacles within floor box.
 - g. LIFE SKILLS A106: Dryer – special purpose outlet shall be NEMA 14-30R. Connect to new 30A-2P, 208V circuit breaker in panel LE2. Washer – provide duplex receptacle and connect to new dedicated 20A-1P, 120V circuit in panel LE2.
 - h. Existing Mechanical Room, AHU-6(E): New VFD for existing AHU-6 furnished by mechanical contractor and installed by electrical contractor. Connect to existing AHU-6 power circuit.
 - i. TLT A109: Coordinate exact location of receptacle with patient lift installer prior to rough-in.
 - j. TLT A109: Coordinate exact location of push-buttons and power for automatic handicap door system with installer prior to rough-in.
3. Sheet E411:
- a. Panel LE: Revise breaker serving panel “LE2” from 20A-3P to 100A-3P. Revise associated feeders per schedule on drawing E401.
4. Sheet E601: Revised plan as re-issued. **CLARIFICATION – This drawing was issued as part of the Addendum #3 package.**

ELEMENTARY SCHOOL

DRAWINGS:

1. Sheet E003: Revised Key Note #2 to read:
 - a. “ALTERNATE BID: IN LIEU OF FEEDER DESCRIBED IN KEY NOTE #1, PROVIDE NEW 600A FEEDER ROUTED BELOW GRADE TO NEW DISTRIBUTION PANEL “DP-3” IN NEW ADDITION. WORK TO INCLUDE TRENCHING, BACK FILLING, PATCHING, TO MATCH EXISTING, ETC.”
2. Sheet ED111:
 - a. Refer to two exterior canopies south of Cafetorium: remove existing canopy lighting, including associated controls, wiring and conduit back to source to facilitate new construction. Refer to drawing E111 for new work scope.
 - b. Refer to General Note #11: This note shall only apply to area within demo scope of work boundary where ceiling is being removed.
 - c. Key Note #11 shall apply to standalone storage building on west side of plan.
 - d. Key Note #10 shall apply to data outlets within kitchen office and kitchen point of sale. Refer to drawing E211 for new work scope.

3. Sheet ED113: Limited scope in existing building and remote standalone buildings. Refer to FA series drawings.
4. Sheet E101: Crawl Space Power and Auxiliary Plan: Connect receptacle to new 120V, 20A-1P circuit in panel 7A.
5. Sheet E111: Revised plan as re-issued. **CLARIFICATION – This drawing was issued as part of the Addendum #3 package.**
6. Sheet E211:
 - a. Refer to Key Note #1 & #2: the language in these key notes shall be swapped, where Key Note #1 is referring to “Motion Operated Faucets” and Key Note #2 is referring to “Motion Operated Flush Valves.” As a result, these key notes will then align with the information illustrated on plan.
 - b. Key Note #10 shall apply to all VFDs on this sheet.
 - c. VAV Boxes: Provide 120V, 20A-1P circuit to all VAV boxes for damper controls. Connect up to 10 VAV boxes per circuit. Provide motor rated toggle switch at each VAV box for service disconnect.
 - d. TLT A114:
 - i. Delete Key Note #1, associated junction box and circuit.
 - ii. Relocate receptacle above sink to adjacent north wall.
 - e. MEN A120:
 - i. Delete Key Note #1, associated junction box and circuit.
 - f. WOMEN A121:
 - i. Delete Key Note #1, associated junction box and circuit.
 - g. KINDER D A104: Provide one “AV” device on north wall to the right of the white board.
 - h. CO-TEACH CLASS A113: Delete the triangle symbol and “T4/EX1” shall apply to the “TW1” box.
 - i. GIRLS A110B and CONF A: Connect both trap primers “TP-2” located in the ceiling space to new 120V, 20A-1P circuit breaker in panel 7A. Refer to plumbing plans for exact location.
 - j. MECH/RISER A105B: Connect both trap primers “TP-2” located in the ceiling space to new 120V, 20A-1P circuit breaker in panel 7M. Refer to plumbing plans for exact location.
 - k. ELEC A128: Provide lighting control panel “LCPA” per drawing E601 and specification 26 0943 - NETWORK LIGHTING CONTROLS and locate on south wall adjacent to panel “LP-HL.” Route lighting circuits via LCPA per schedule on drawing E601.
 - l. PLATFORM A122: Shift ceiling mounted receptacle (on circuit 7B-34) and data outlet (T2) plan north and adjacent to Key Notes #9 and #5.
7. Sheet E212: Revised plan as re-issued. **CLARIFICATION – This drawing was issued as part of the Addendum #3 package and revision items “c” thru “h” were reflected in said drawing.**
 - a. CLINIC B101A: Connect trap primer “TP-2” located in the ceiling space to new 120V, 20A-1P circuit breaker in panel 7C. Refer to plumbing plans for exact location.
 - b. VAV Boxes: Provide 120V, 20A-1P circuit to all VAV boxes for damper controls. Connect up to 10 VAV boxes per circuit. Provide motor rated toggle switch at each VAV box for service disconnect.
 - c. Refer to Key Note #1 & #2: the language in these key notes shall be swapped, where Key Note #1 is referring to “Motion Operated Faucets” and Key Note #2 is referring to “Motion Operated Flush Valves.” As a result, these key notes will then align with the information

- illustrated on plan. **Revision is reflected on drawing issued as part of Addendum #3 package.**
- d. Key Note #10 shall apply to all VFDs on this sheet. **Revision is reflected on drawing issued as part of Addendum #3 package.**
 - e. ELEC B106B: Provide two dedicated duplex receptacles, one on the north wall and one on the south wall, for FACP and Mass Notification panel. Connect receptacles to dedicated 120V, 20A-1P circuit in panel 7C. **Revision is reflected on drawing issued as part of Addendum #3 package.**
 - f. TLT B101C:
 - i. Delete Key Note #1, associated junction box and circuit. **Revision is reflected on drawing issued as part of Addendum #3 package.**
 - g. TLT B110:
 - i. Delete Key Note #1, associated junction box and circuit. **Revision is reflected on drawing issued as part of Addendum #3 package.**
 - h. OFFICE B101B: Relocate data drop from north wall to west wall, north of receptacle. **Revision is reflected on drawing issued as part of Addendum #3 package.**
8. Sheet E401:
 - a. Revise Key Note #1 to read "PROVIDE (1) 30A/3P CIRCUIT BREAKER IN PANELBOARD FOR EXTERNALLY MOUNTED SPD."
 - b. SPD conductor shall be per manufacturer's recommendation.
 9. Sheet E411:
 - a. Panel LP-HL: Circuits HL-9 thru HL-18 shall be 20A-1P Spares and the remaining circuits shall be prepared spaces.
 - b. Panel H3: Circuits H3-61 thru H3-84 shall be prepared spaces.
 - c. Panel H4: Circuit H4-13 thru H4-24 shall be prepared spaces.
 - d. Panel DP-3:
 - i. Circuit 26 thru 30 shall be a 225A/3P prepared spaces in lieu of 25A/3P.
 - ii. Circuit 19 thru 23, 225A/3P spare shall be deleted.
 - e. Panel 7M: Circuits 7M-11 thru 7M-16 shall be 20A-1P Spares and the remaining circuits shall be prepared spaces.
 10. Sheet E412:
 - a. Panel 7A: Circuit 7A-71 thru 7A-84 shall be prepared spaces.
 - b. Panel 7B: Circuit 7A-71 thru 7A-84 shall be prepared spaces.
 - c. Panel 7C: Circuit 7A-79 thru 7A-84 shall be prepared spaces.
 11. Sheet E501: Revised plan as re-issued. **CLARIFICATION – This drawing was issued as part of the Addendum #3 package.**
 12. Sheet E504: Added new sheet E504 for Lightning Protection System. **CLARIFICATION – The drawing was issued as part of the Addendum #3 package.**
 13. Sheet E601: Revised plan as re-issued. **CLARIFICATION – This drawing was issued as part of the Addendum #3 package. All changes on this re-issued drawing, whether clouded or not, shall be considered up-to-date and applicable.**
 14. Sheet FA101: Delete two duct smoke detectors adjacent to Corridor A100D.

END OF ADDENDUM #4



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SPECIFICATIONS: NONE

GENERAL ITEMS: NONE

HIGH SCHOOL

GENERAL ITEMS: NONE

DRAWINGS:

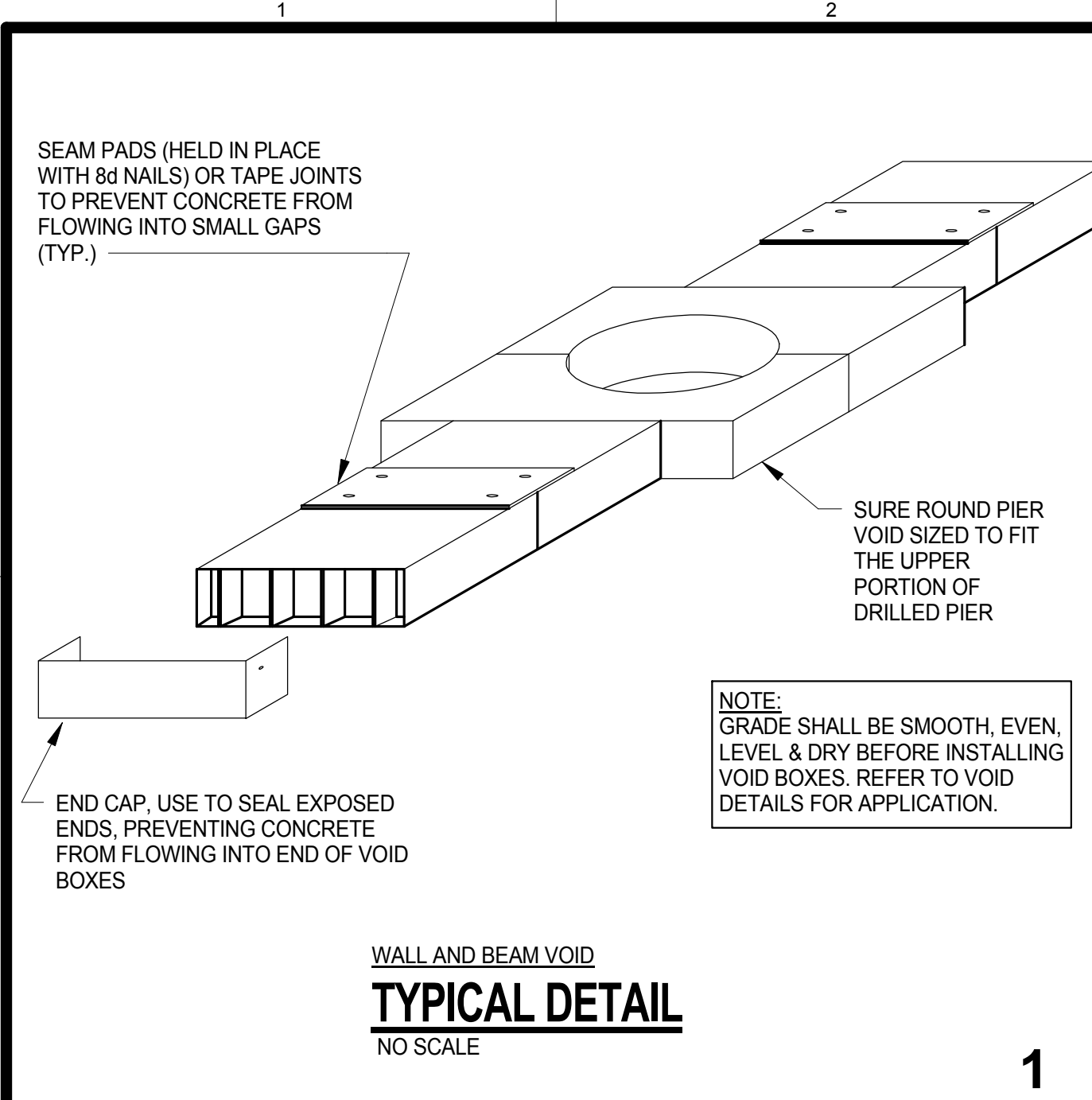
- A. Sheet S300:
 - a. See revised sheet for changes to typical pier detail and pier schedule.
- B. Sheet S310
 - a. See revised sheet for clarifications to grade beam reinforcing.

ELEMENTARY SCHOOL

GENERAL ITEMS: NONE

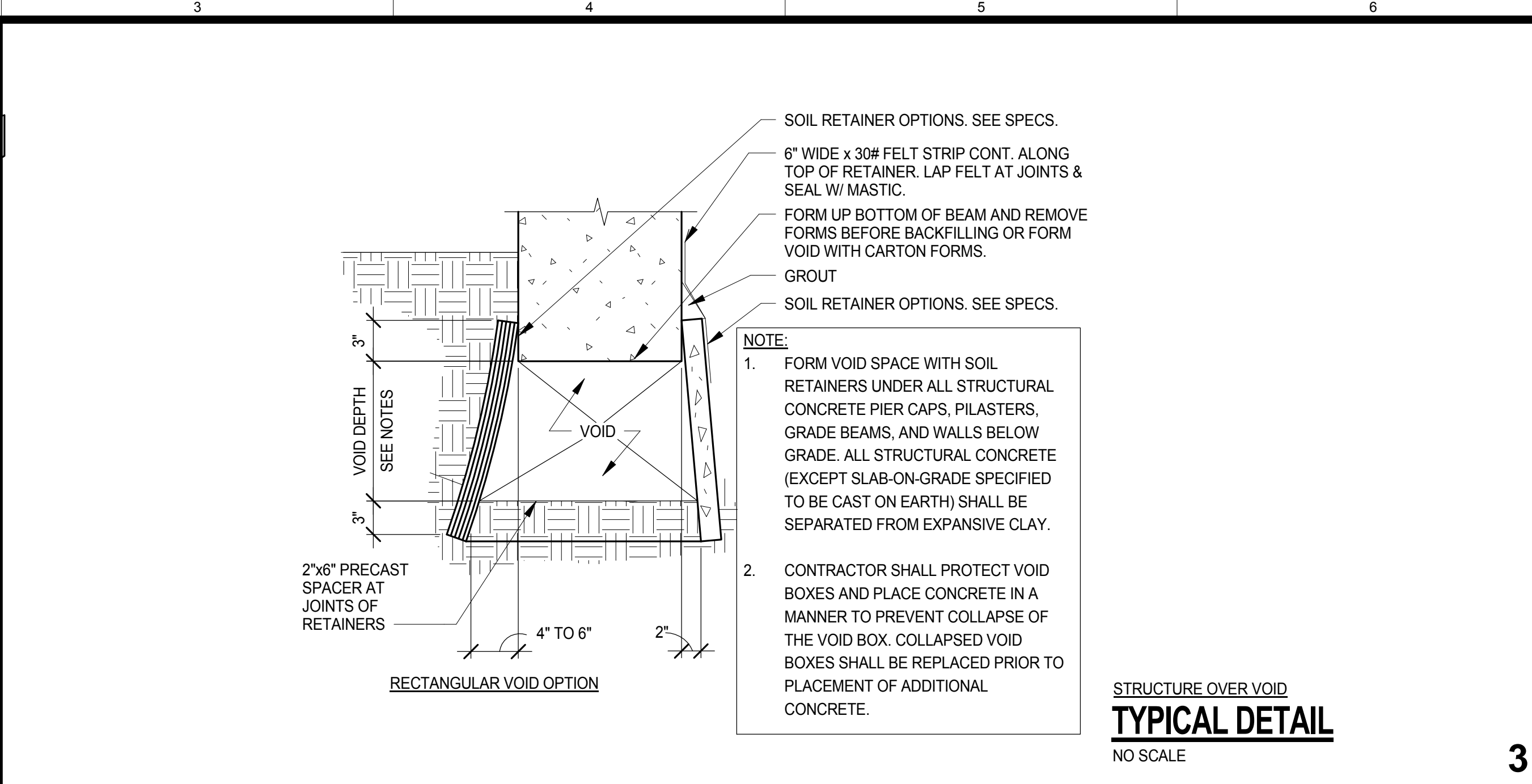
DRAWINGS: NONE

END OF ADDENDUM #4



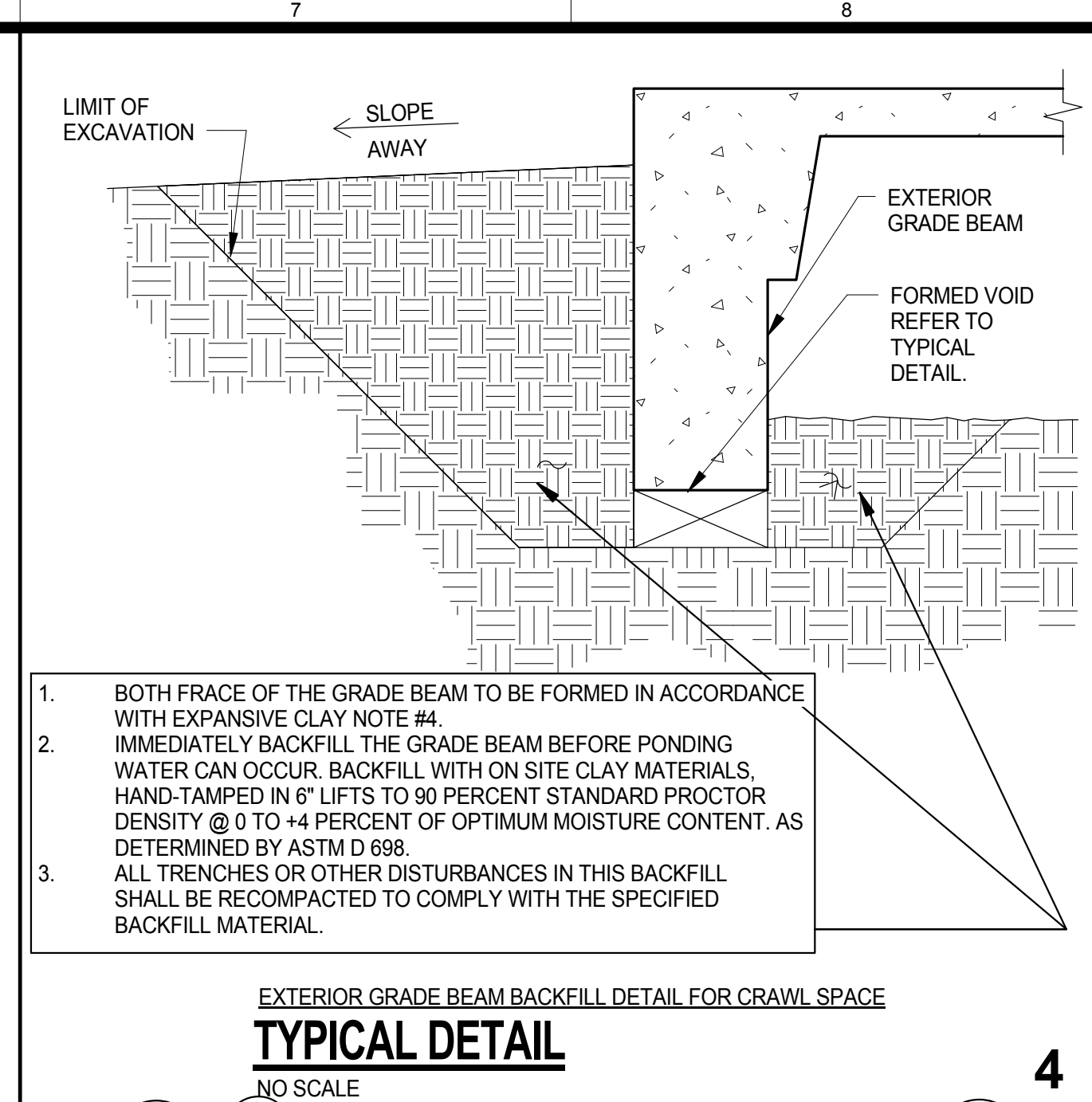
WALL AND BEAM VOID
TYPICAL DETAIL
NO SCALE

1



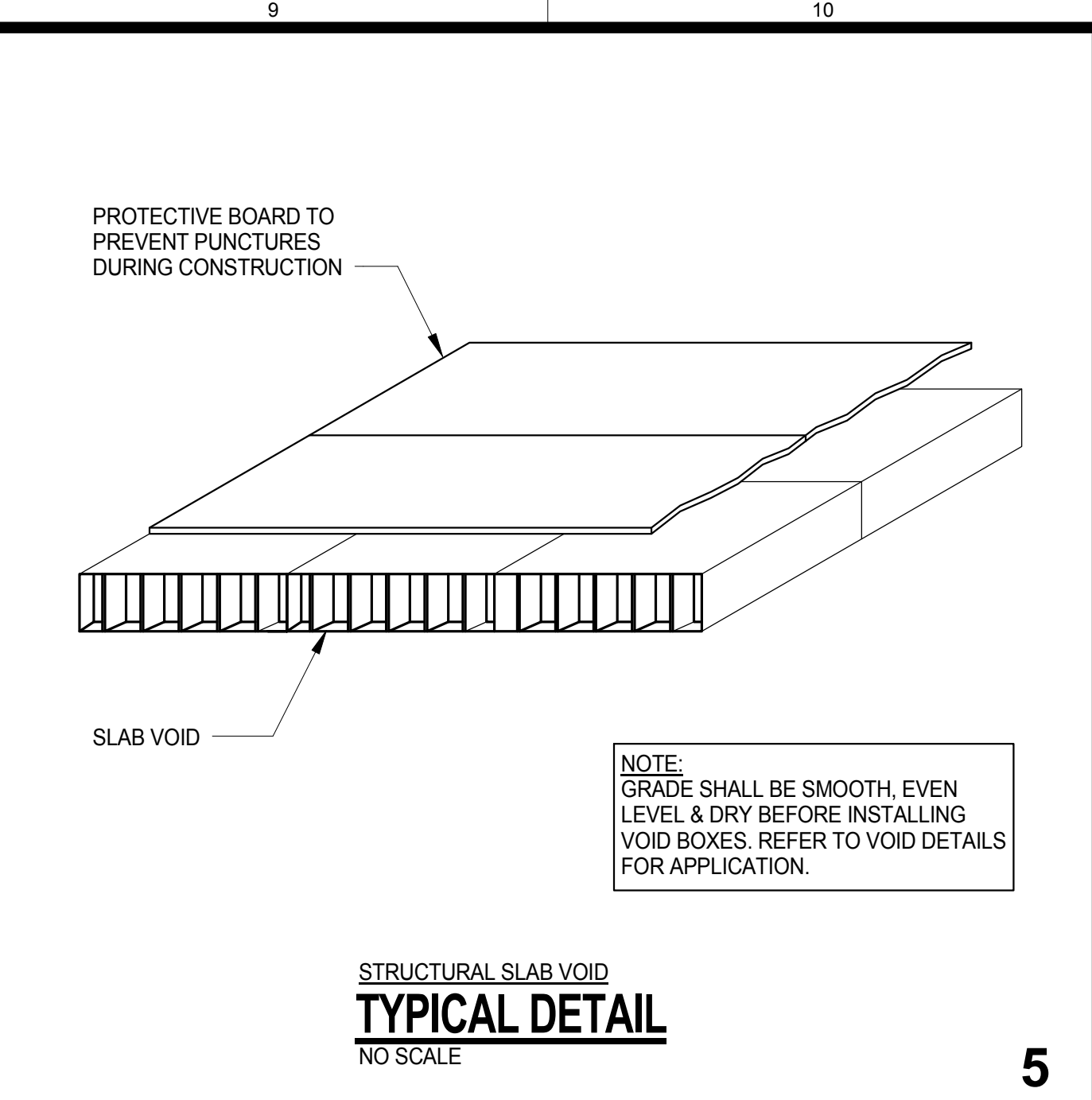
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TYPICAL DETAIL
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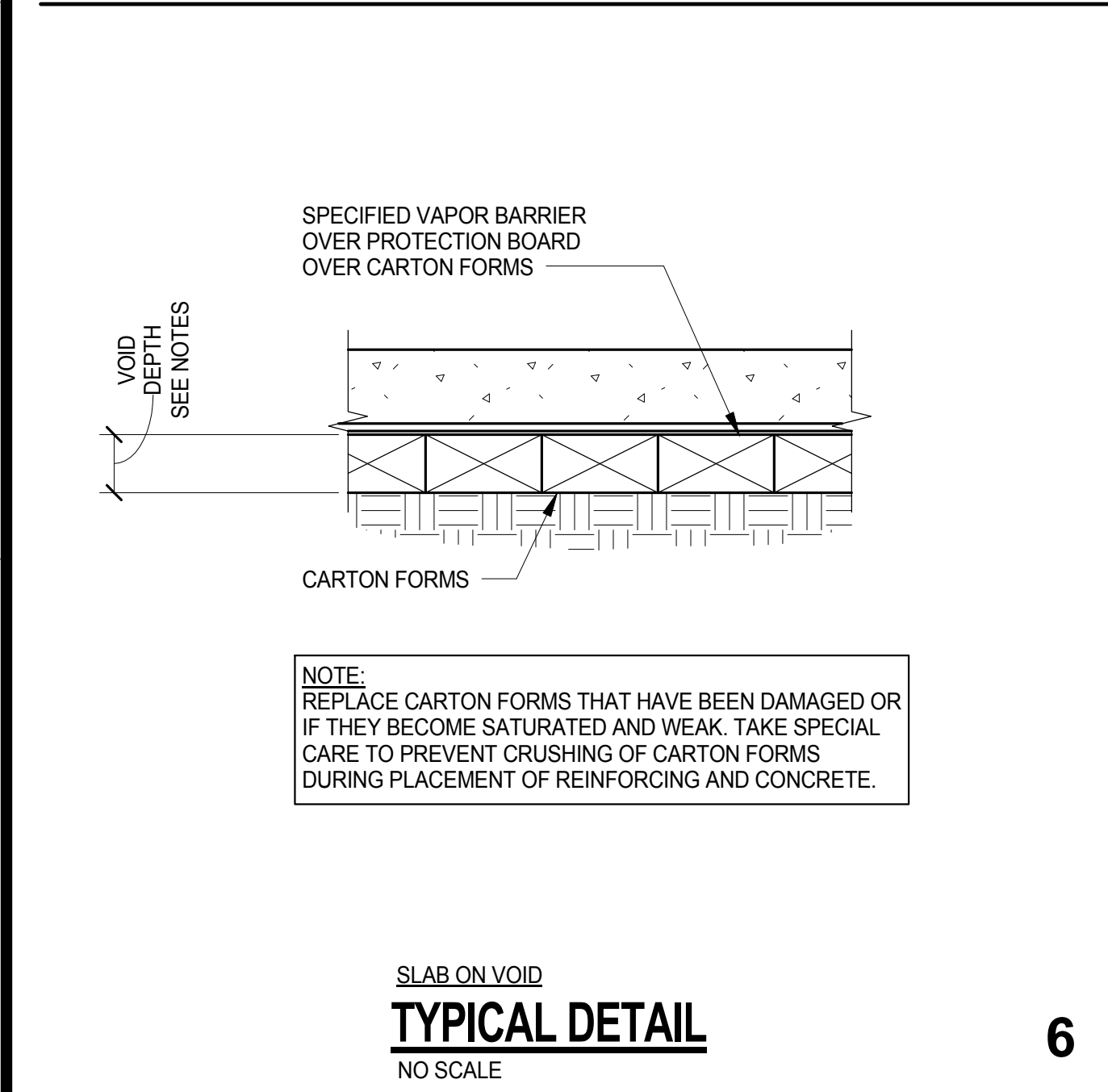
EXTERIOR GRADE BEAM BACKFILL DETAIL FOR CRAWL SPACE
TYPICAL DETAIL
NO SCALE

4



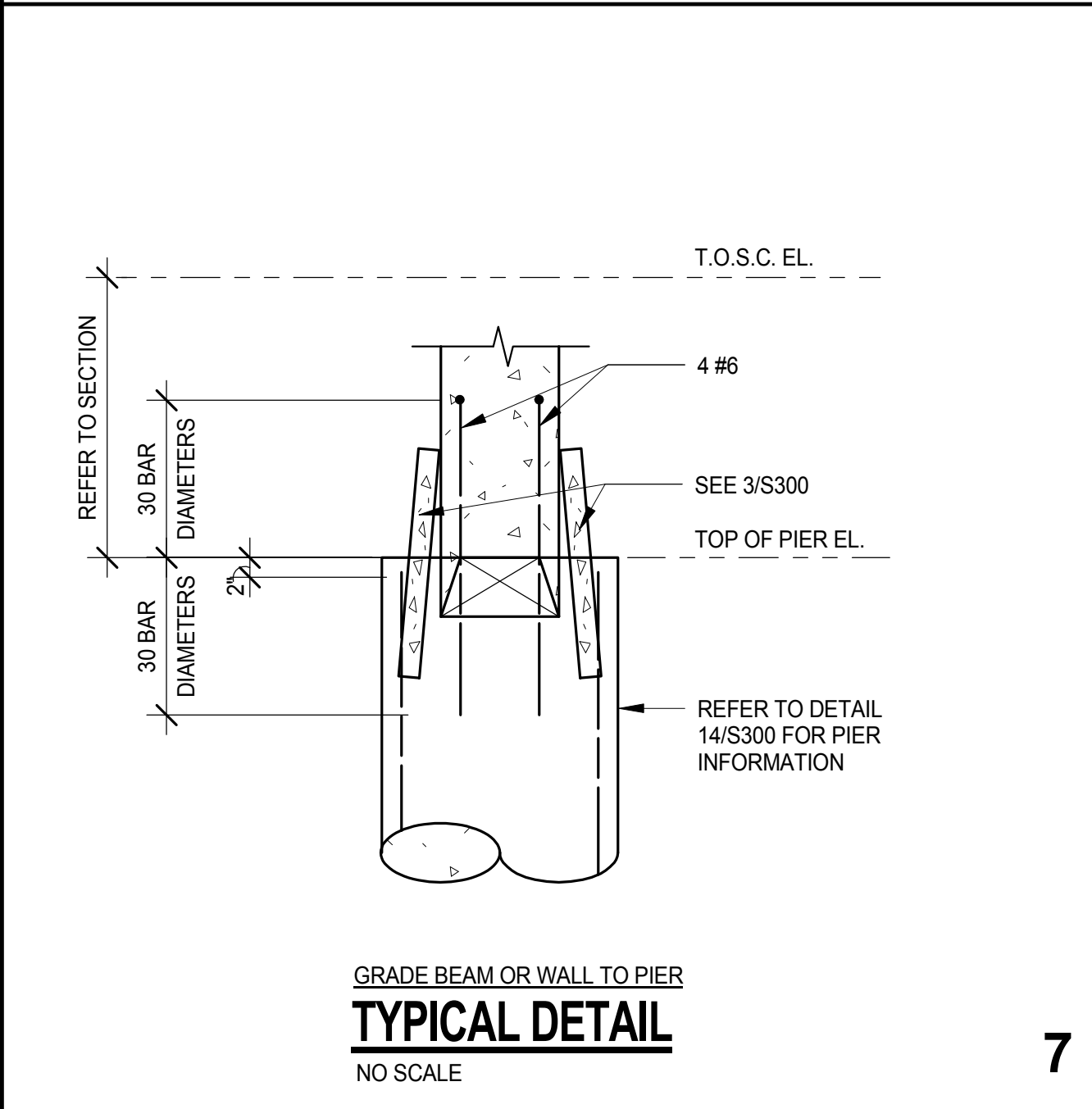
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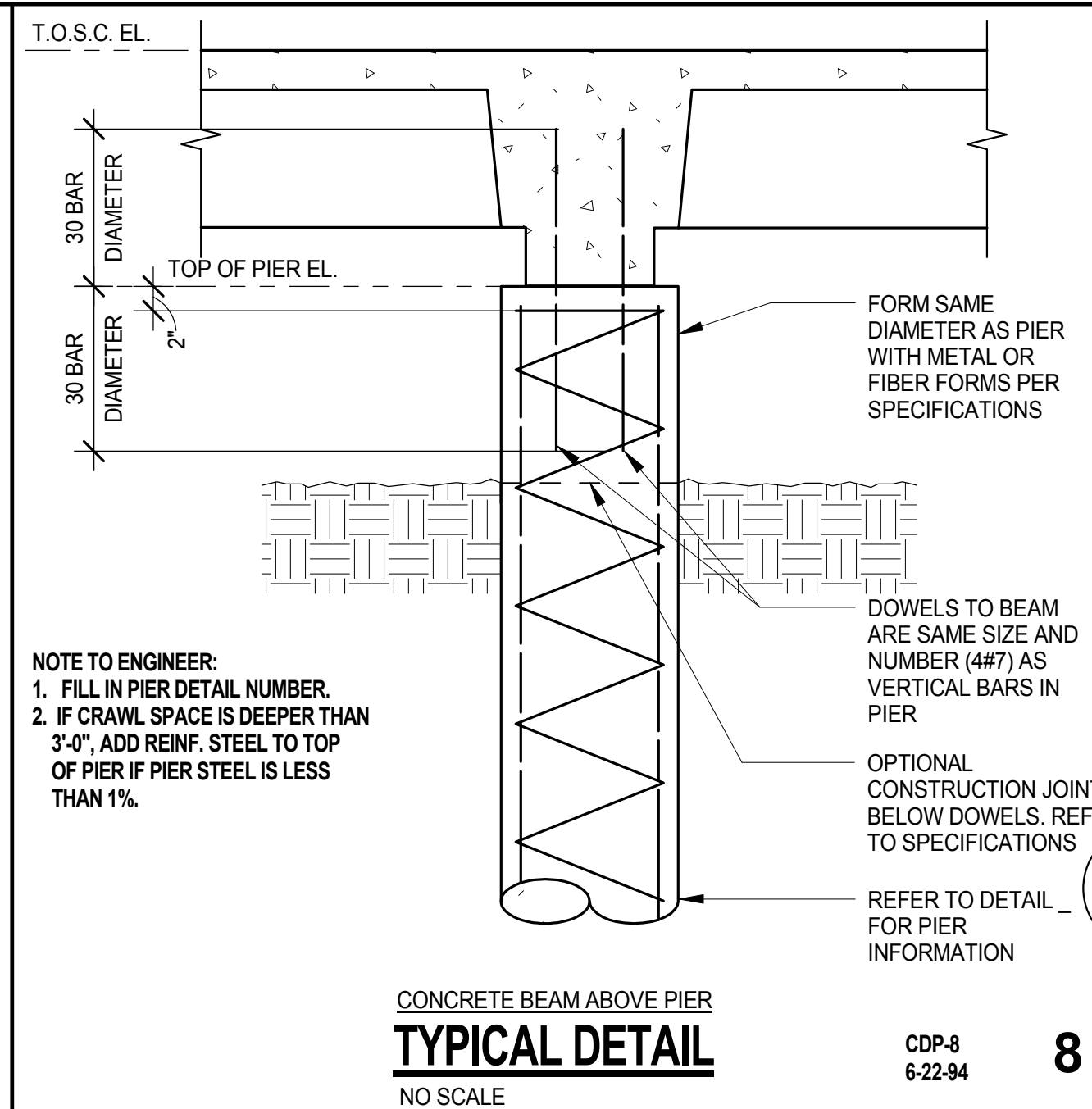
SLAB ON VOID
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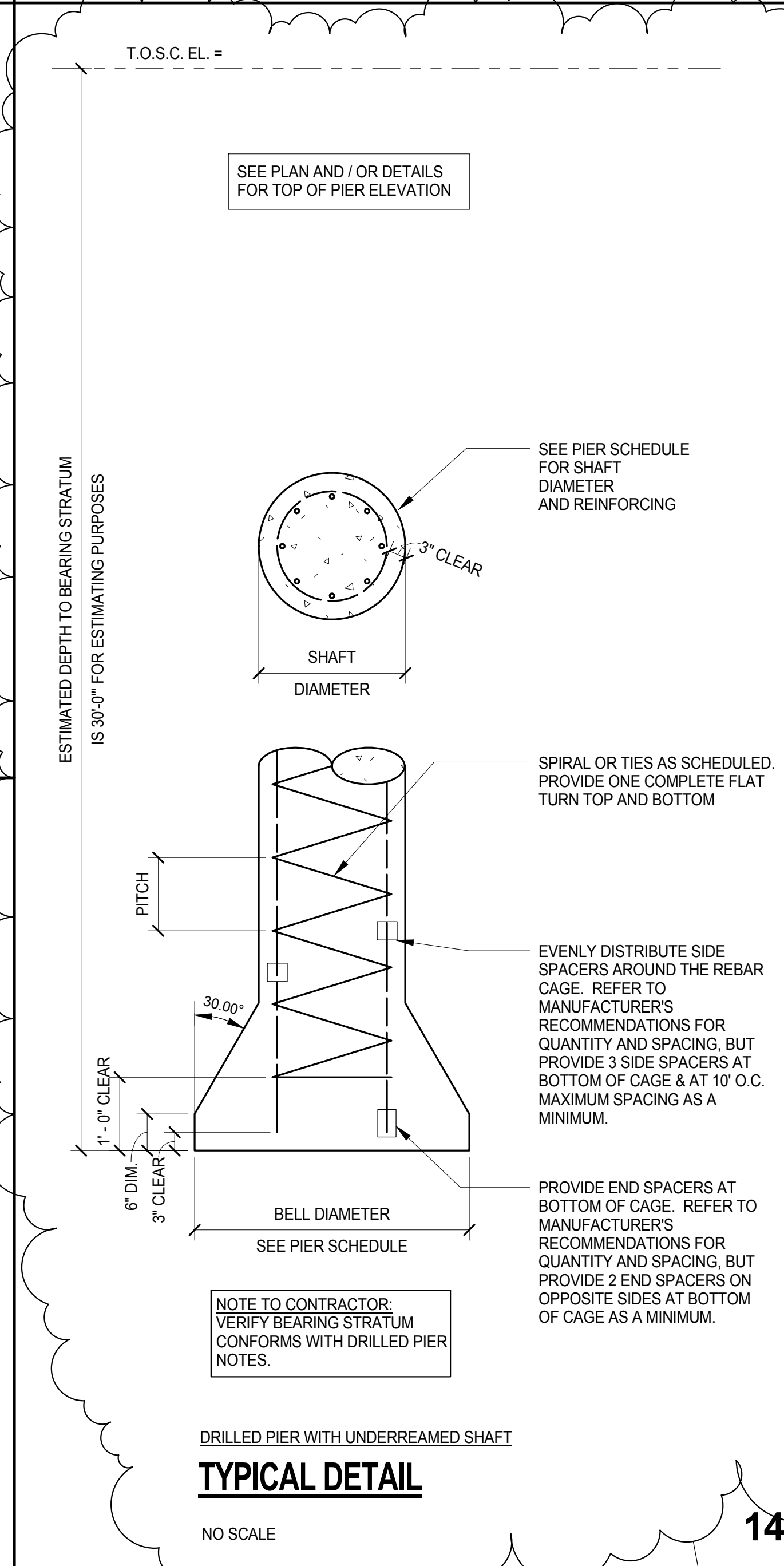
GRADE BEAM OR WALL TO PIER
TYPICAL DETAIL
NO SCALE

7



CONCRETE BEAM ABOVE PIER
TYPICAL DETAIL
NO SCALE

8



DRILLED PIER WITH UNDERREAMED SHAFT
TYPICAL DETAIL
NO SCALE

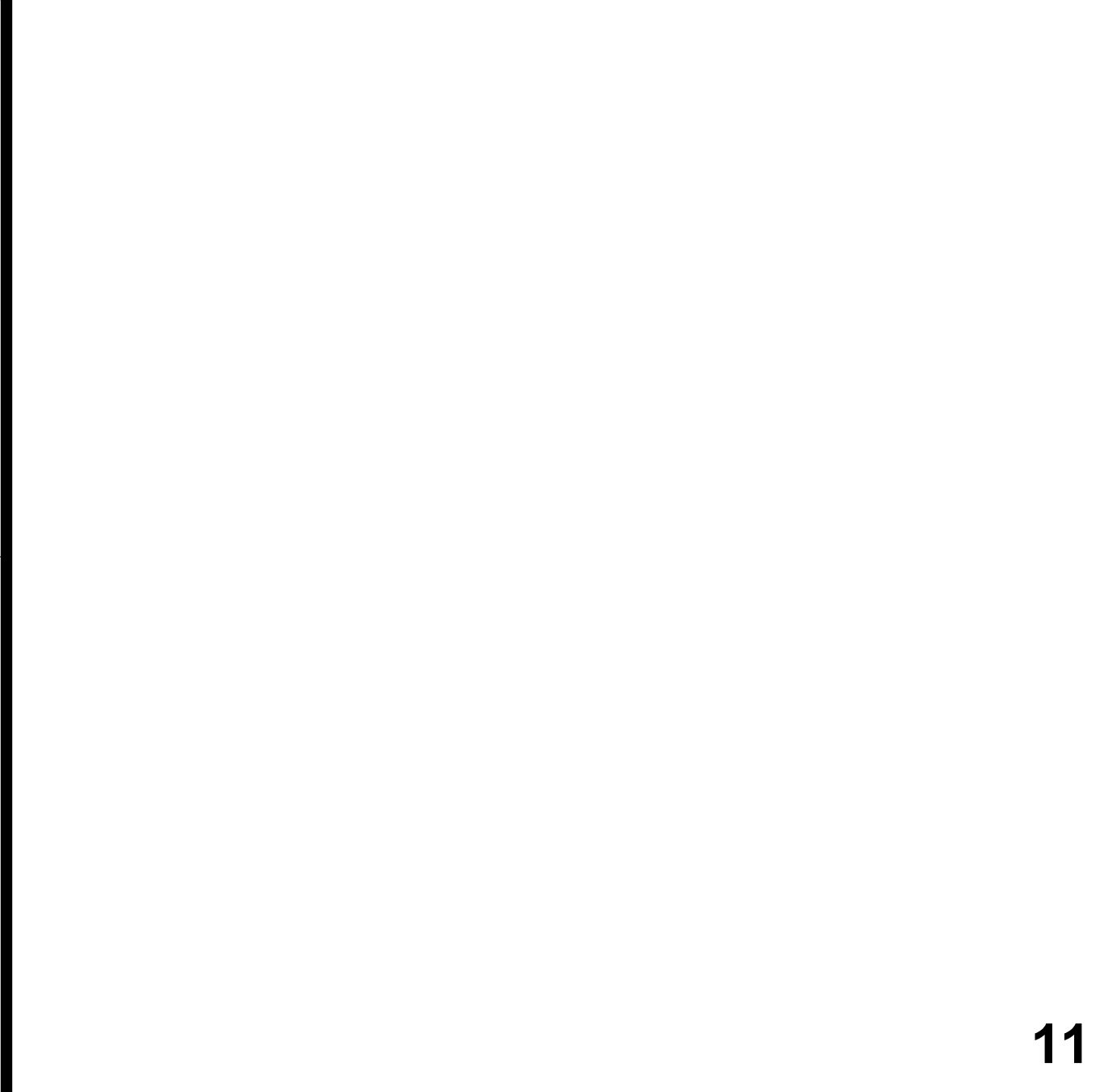
14

- DRILLED PIERS**
- PIER DRILLING MUST BE INSPECTED BY THE OWNER'S GEOTECHNICAL ENGINEER. CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER AT LEAST 2 DAYS IN ADVANCE OF DRILLING TO COORDINATE INSPECTIONS.
 - FOUNDATION DESIGN IS BASED ON AN ALLOWABLE VALUE OF 15,000 POUNDS PER SQUARE FOOT IN END BEARING AS RECOMMENDED IN THE SOIL REPORT, PREPARED BY RABA KISTNER CONSULTANTS, DATED JULY 16, 2013.
 - BEARING STRATUM SHOWN ON THE PIER DETAILS IS HARD GRAY CLAYSHALE.
 - PIERS SHALL EXTEND A MINIMUM OF 30' BELOW EXISTING GROUND LEVEL.
 - DISTRIBUTION OF THE VARIOUS PIER TYPES IS INDICATED ON THE PIER PLAN.
 - PIER SIZES, REINFORCING, AND DEPTHS ARE SHOWN IN THE PIER SCHEDULE ON SHEET S300.
 - THE CONTRACTOR SHALL VERIFY DEPTHS OF PIERS BEFORE PIER STEEL IS CUT. PIER STEEL SHALL BE DELIVERED TO THE JOBSITE IN STANDARD STOCK LENGTHS AND CUT AS REQUIRED BY THE ACTUAL FIELD MEASURED DEPTH OF THE PIER. SPLICES IN VERTICAL REINFORCING SHALL BE 64 BAR DIAMETERS, AND REINFORCING SHALL EXTEND TO 3 INCHES FROM BOTTOM OF HOLE, UNLESS SHOWN OTHERWISE.
 - THE CONTRACTOR SHALL TAKE ACCURATE MEASUREMENTS OF THE DEPTH OF PENETRATION INTO THE BEARING STRATUM, TO BE ASSURED OF CONFORMANCE WITH THE DEPTH OF PENETRATION REQUIRED BY THE PIER SCHEDULE, AND SUBMIT A REPORT OF DEPTHS OF PENETRATION DRILLED TO THE ENGINEER.
 - REINFORCING STEEL SHOP DRAWINGS SHALL INCLUDE DRAWINGS FOR PLACING OF TEMPLATES TO SET DOWELS IN PIERS.
 - PIER HOLES SHALL BE COMPLETED AND FILLED WITH CONCRETE WITHIN 8 HOURS AFTER THE START OF ANY DRILLING IN THE PENETRATION ZONE.
 - ELEVATION OF TOP OF PIERS, WHERE NOT GIVEN, IS AT THE BOTTOM OF THE DEEPEST INTERSECTING BEAM OR WALL SUPPORTED BY THE PIER. CONTRACTOR SHALL CALCULATE ALL TOP OF PIER ELEVATIONS BEFORE PROCEEDING WITH THE PIER DRILLING OPERATION. REMOVE EXCESS CONCRETE AT THE TOP OF THE PIER BEYOND THE LIMITS OF THE PIER DIAMETER. FORM SIDES OF PIER EXTENSIONS TO THE SAME DIAMETER AS SHAFT BELOW, AVOIDING OVERHANGS IN EXPANSIVE CLAY. USE SUREVOID COMMERCIAL "SURETOP" OR SONOTUBE COLLAR FORMS AT TOP OF EACH HOLE TO MAINTAIN SHAPE.
 - DRILL PIERS AFTER ALL SOIL TREATMENT, FILLING, AND COMPACTION HAVE BEEN COMPLETED IN THE AREA TO BE DRILLED. DISTURBED AREAS SHALL BE RECOMPACTED.
 - CONTRACTOR SHALL PROVIDE ADDITIONAL PIER REINFORCING STEEL (TIES, SPIRALS AND/OR VERTICAL REINFORCING), AS REQUIRED TO FACILITATE PLACEMENT OF THE REINFORCING CAGE WITHOUT BUCKLING, COLLAPSING OR EXCESSIVE DEFLECTION. PIERS SHALL NOT BE LARGER THAN THE DIAMETER SHOWN (PLUS 2-INCH TOLERANCE) IN ORDER TO LIMIT SURFACE AREA IN CONTACT WITH EXPANSIVE CLAY.

PIER SCHEDULE				
MARK	SHAFT DIAMETER	BELL DIAMETER	VERTICAL BARS	SPIRALS
P1	18"	3'-6"	6 #6	#3@6
P2				

NOTE: ROUND TIES THUS: ○ MAY BE USED IN LIEU OF SPIRALS. BAR SIZE WILL REMAIN THE SAME. SPACING OF TIES SHALL BE 12" O.C.

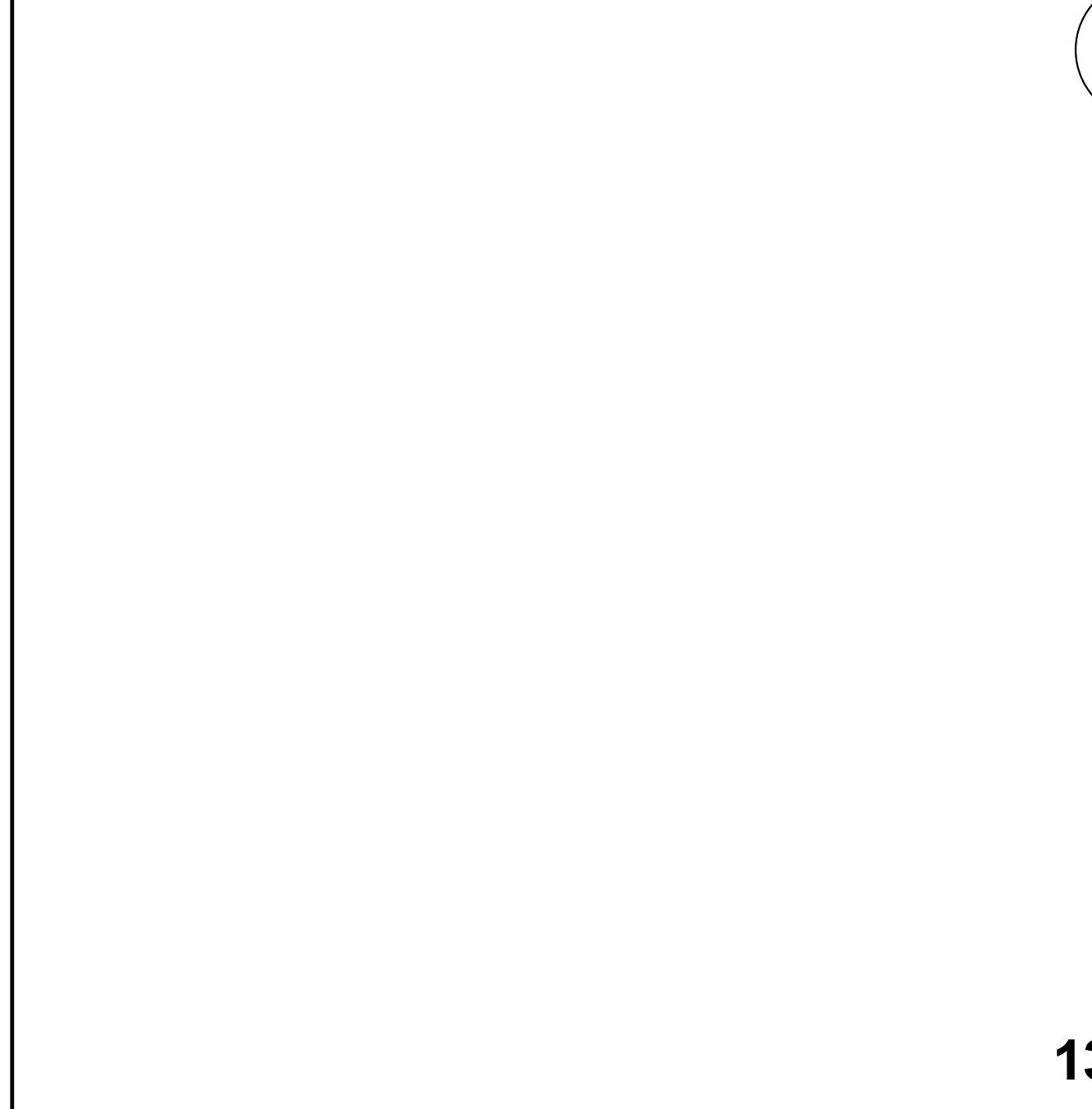
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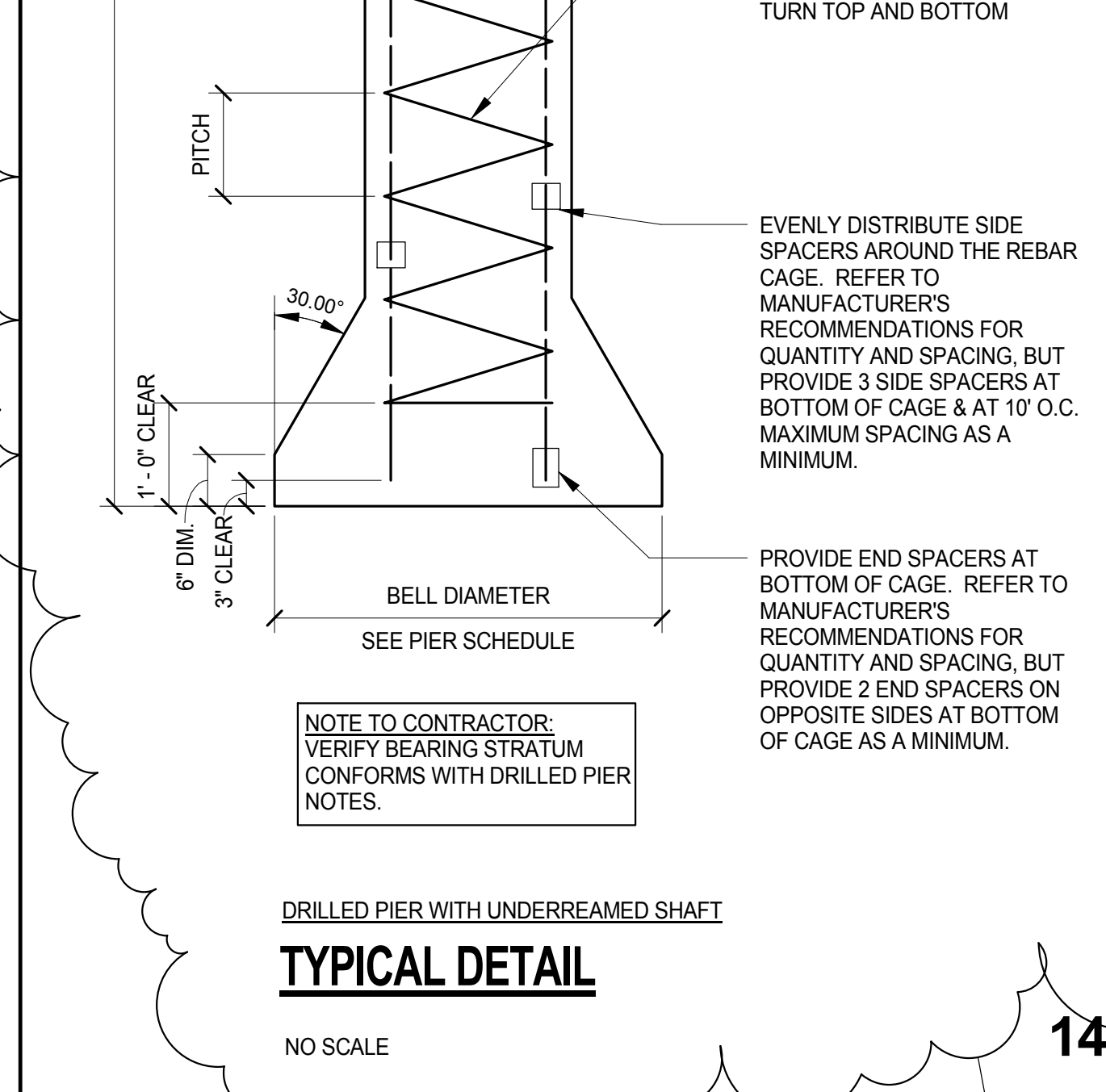
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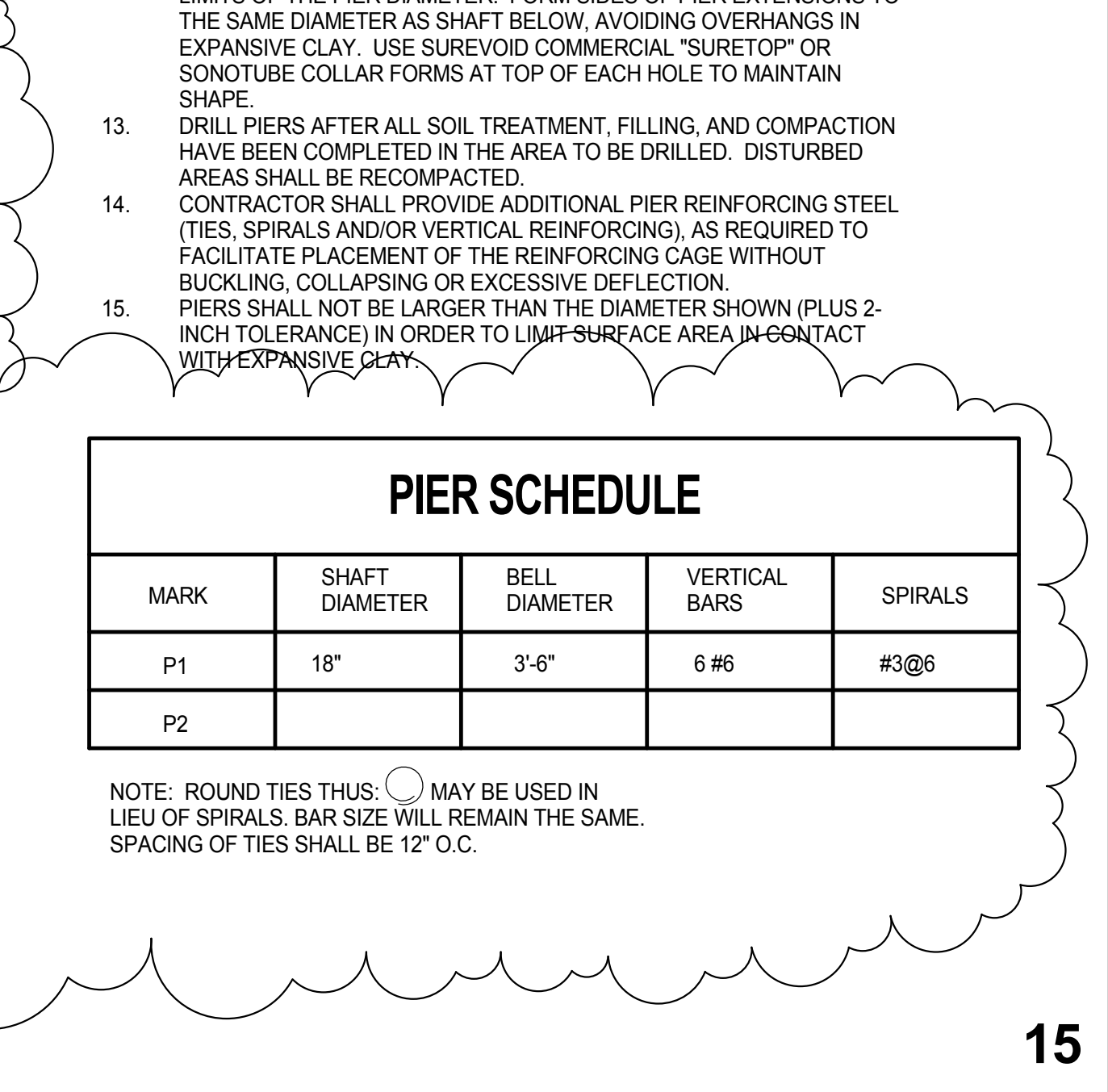
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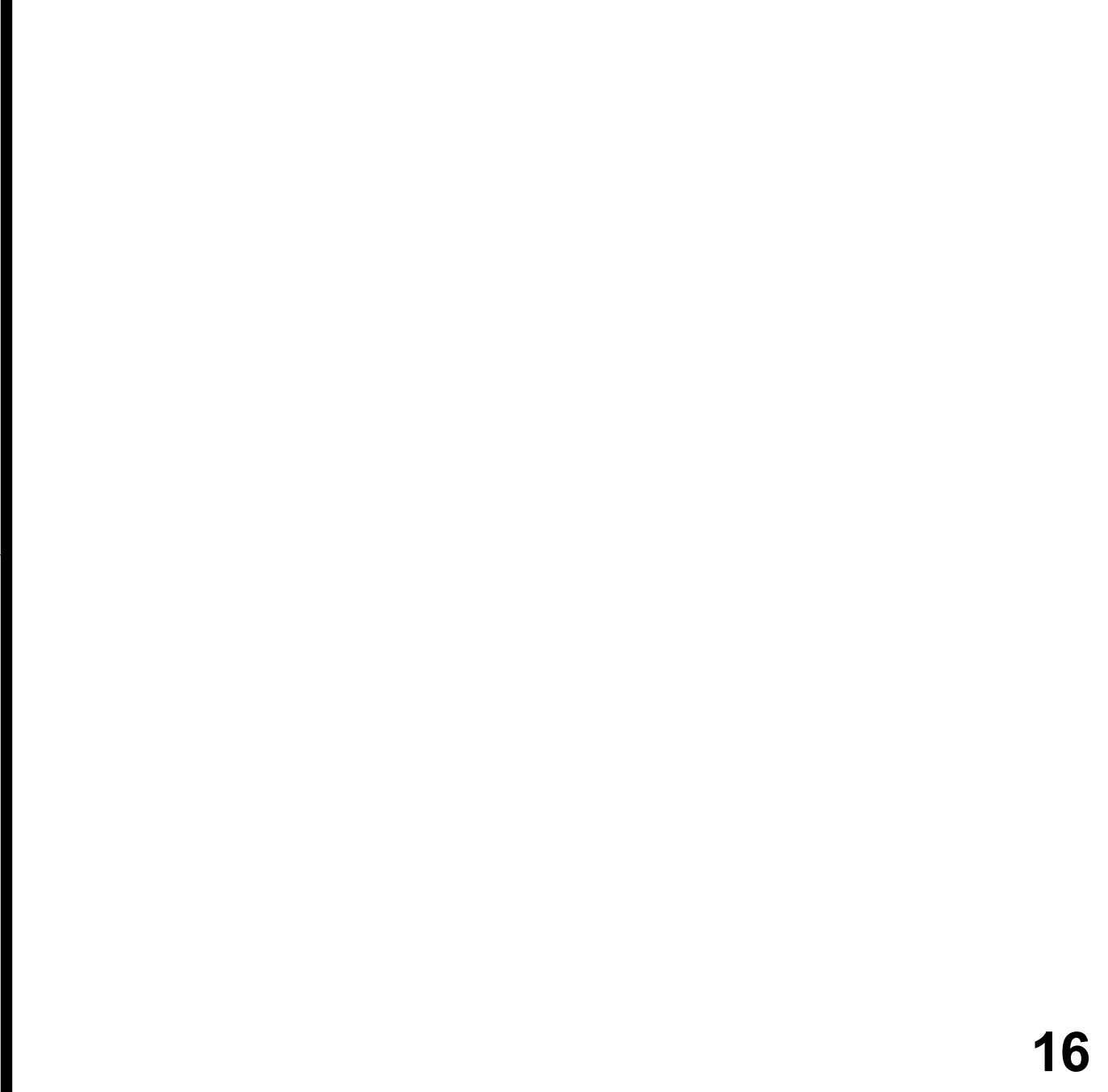
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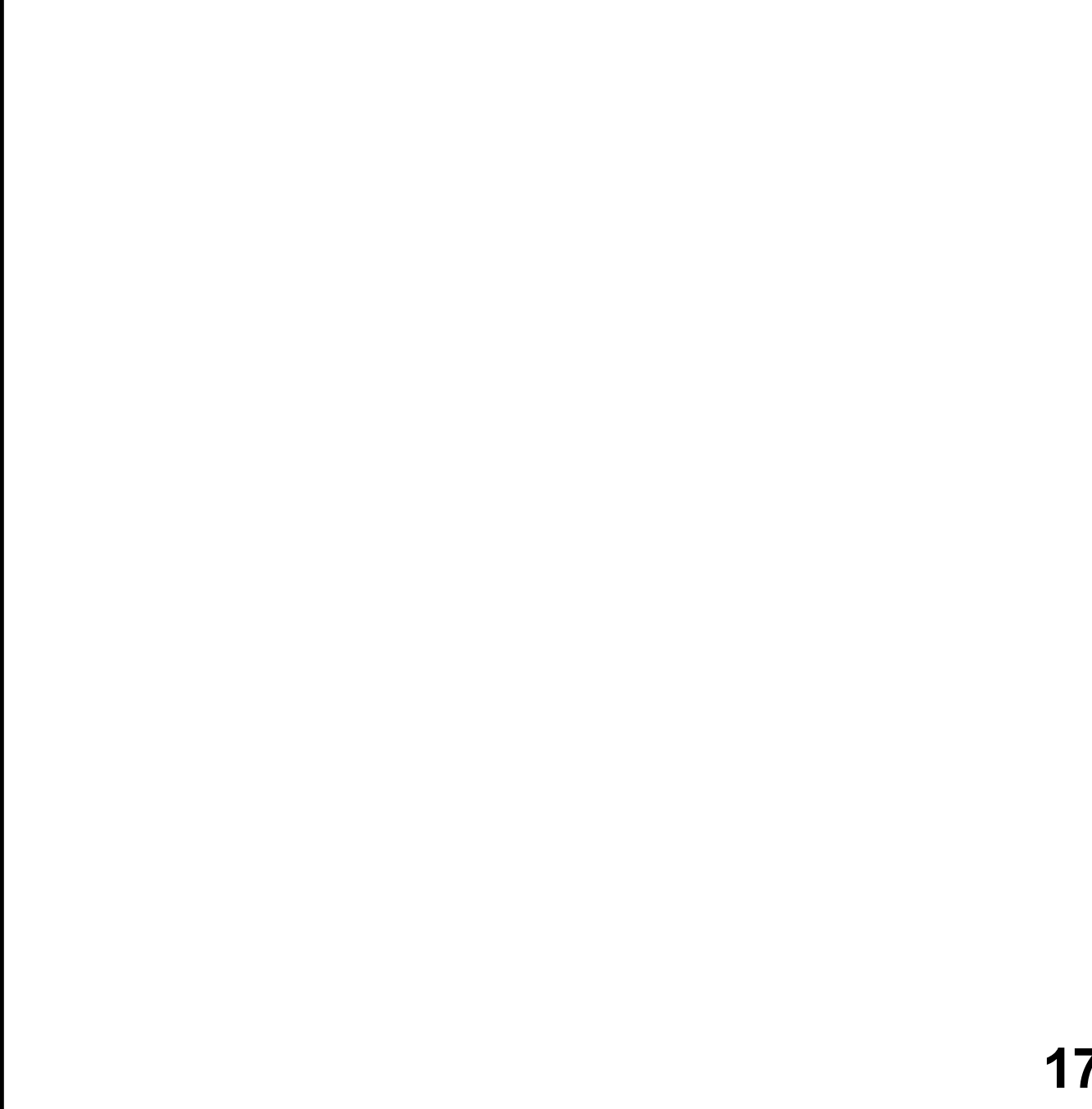
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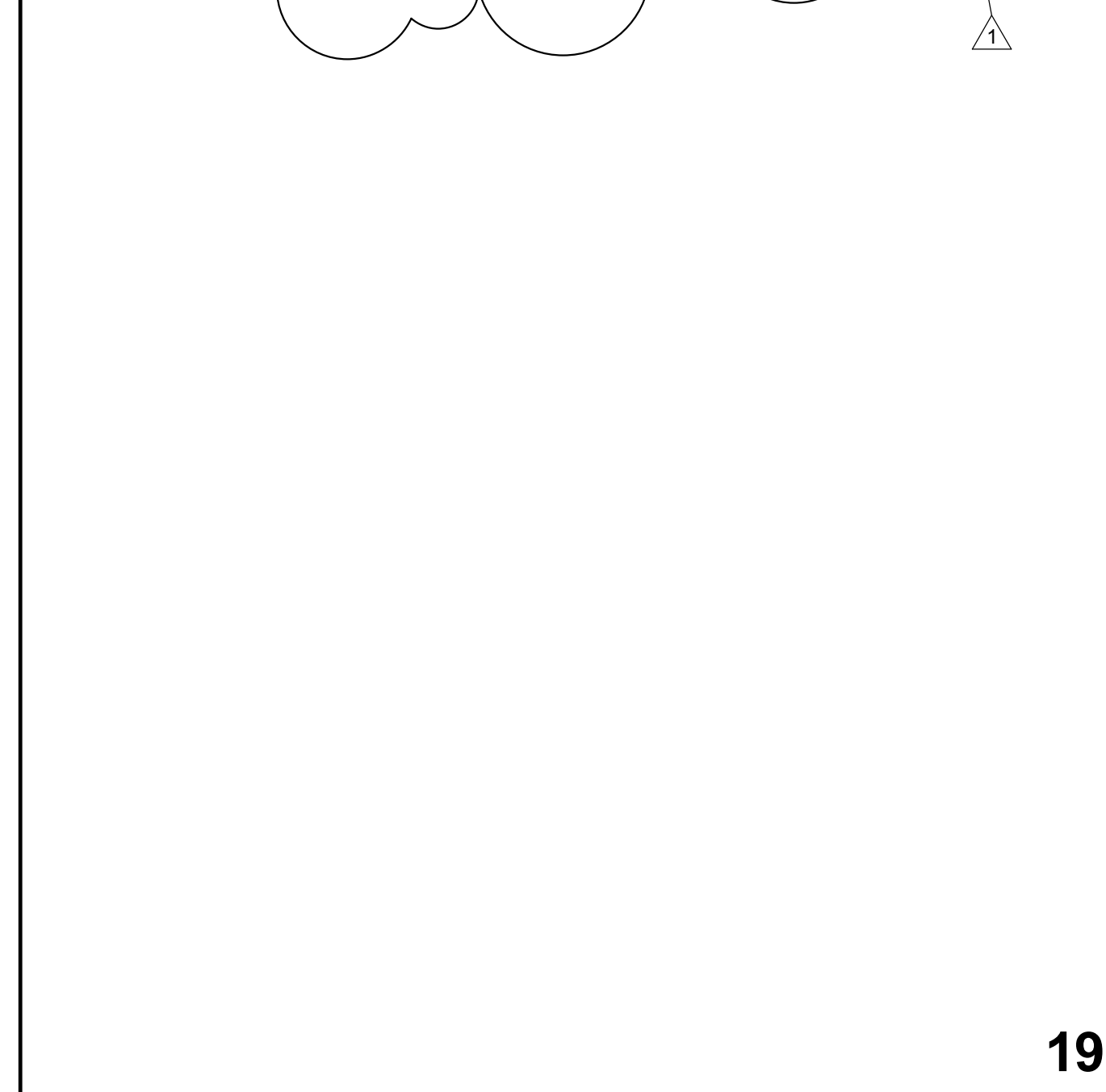
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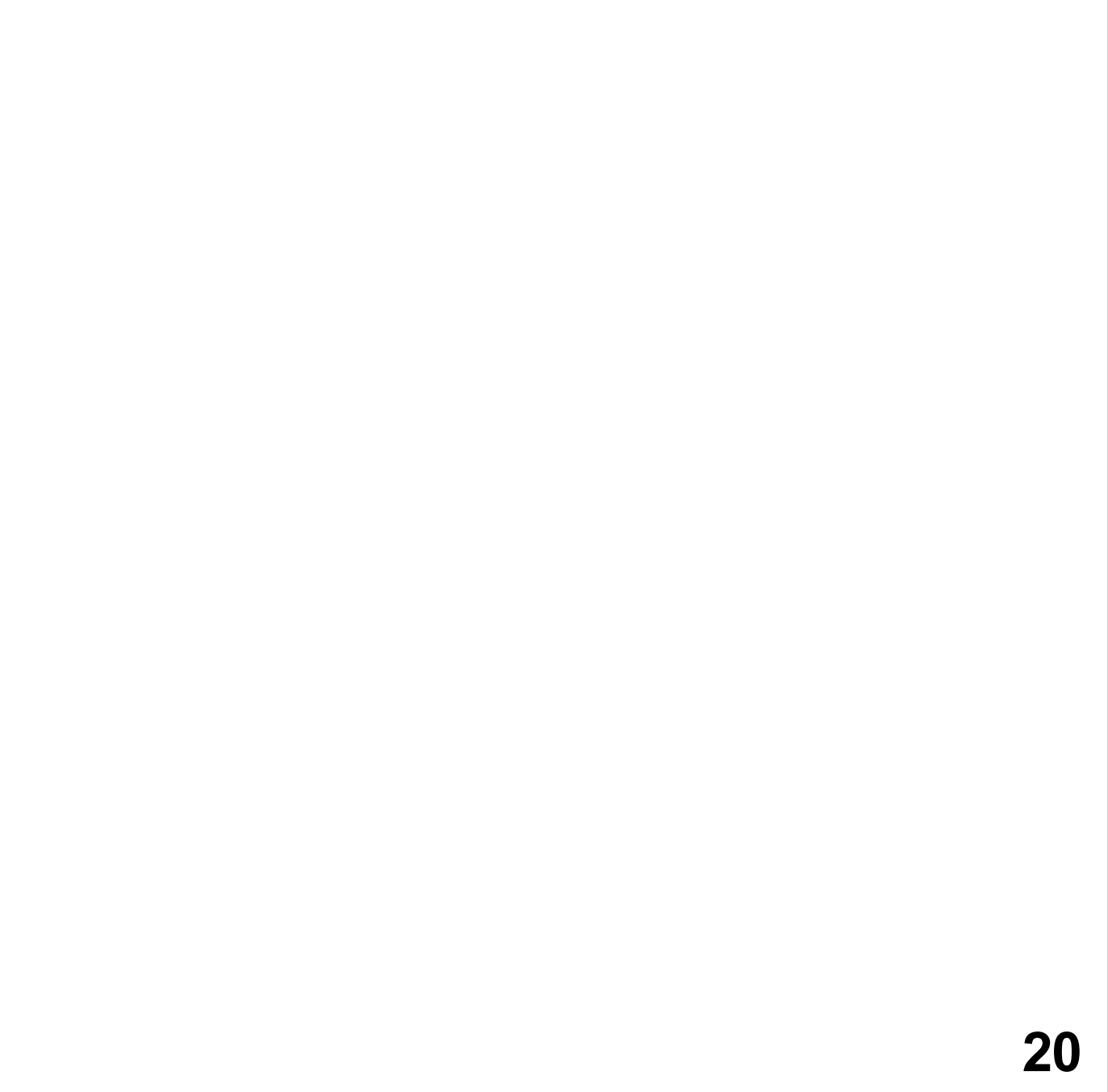
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18



19



20



**FT SAM HOUSTON
INDEPENDENT SCHOOL
DISTRICT**

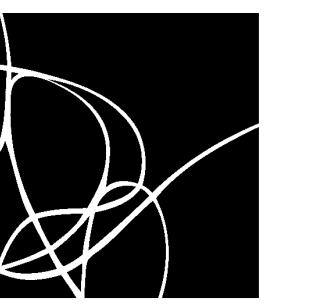


**FT SAM HOUSTON HS
CAFETERIA-CLASSROOM
RENOVATIONS
SAN ANTONIO, TEXAS**

CHECKED: Checker
SCALE: As Indicated
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ISSUE: 06/25/2014
1 07/24/2014 ADDENDUM #4

SHEET TITLE:
**TYPICAL FOUNDATION
DETAILS**



SHW GROUP

ARCHITECTS | ENGINEERS | PLANNERS

1344 SOUTH FLORES STREET SUITE 201
SAN ANTONIO, TEXAS 78204

P 210.223.9588
F 210.223.9589

DATUM

Datum Engineers Incorporated
WWW.DATUMENGINEERS.COM (OO REG. NO. 7-2010)
DATE: 07/24/2014
214-258-0174 812-459-9497 210-459-2959
Datum Project No. 13066



**FT SAM HOUSTON
INDEPENDENT SCHOOL
DISTRICT**



**FT SAM HOUSTON HS
CAFETERIA-CLASSROOM
RENOVATIONS
SAN ANTONIO, TEXAS**

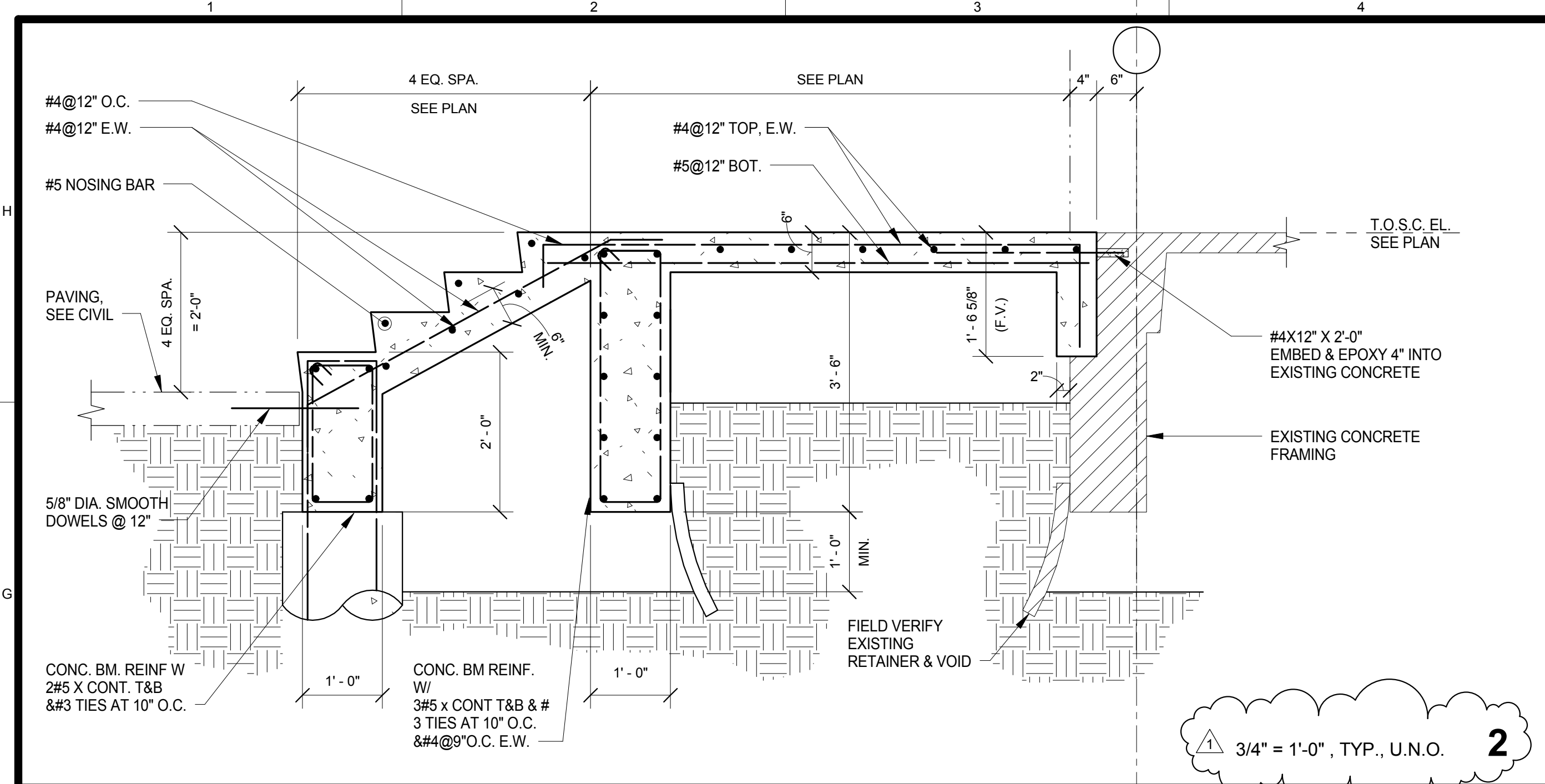
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ISSUE: 06/25/2014

07/24/2014 ADDENDUM #4

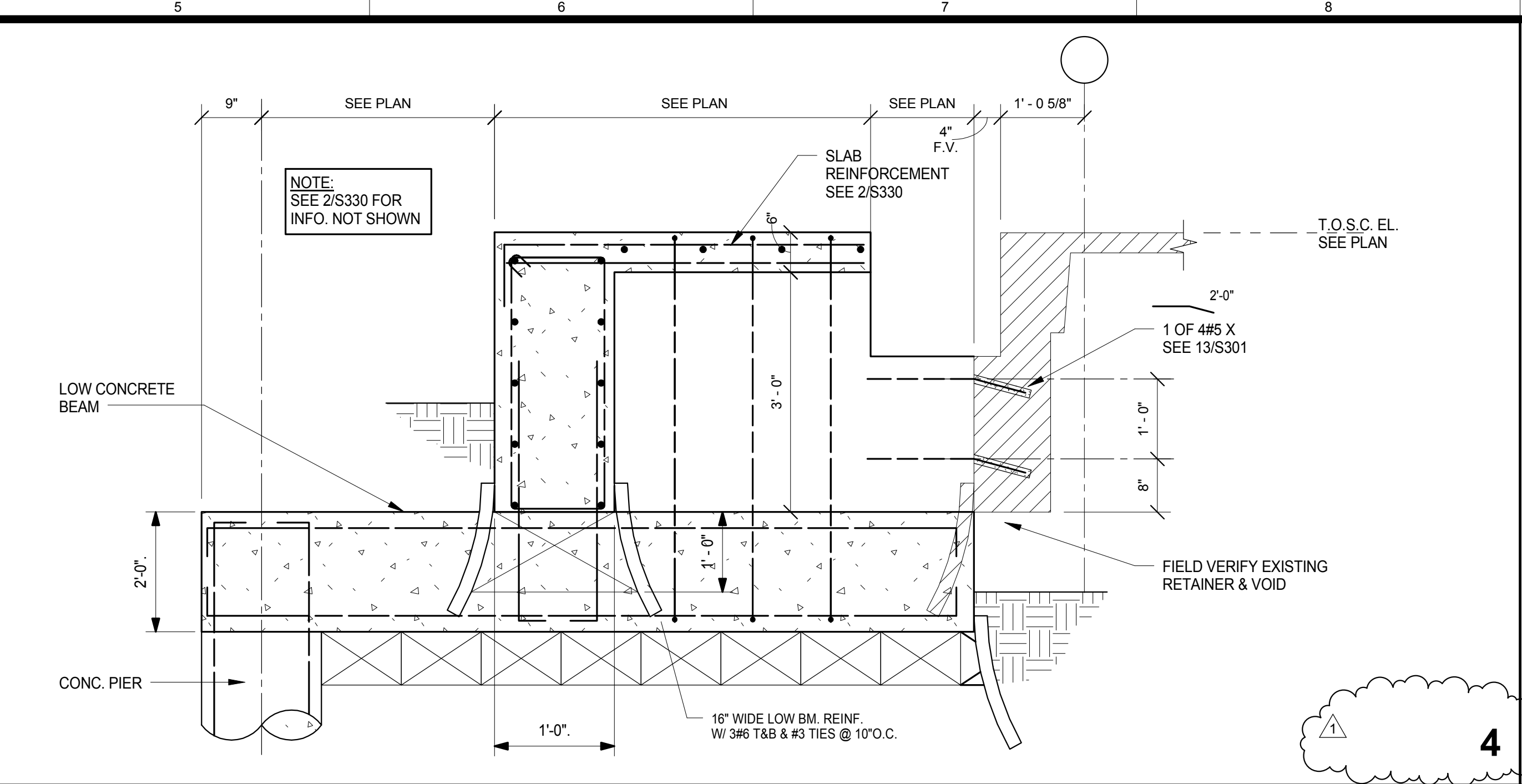
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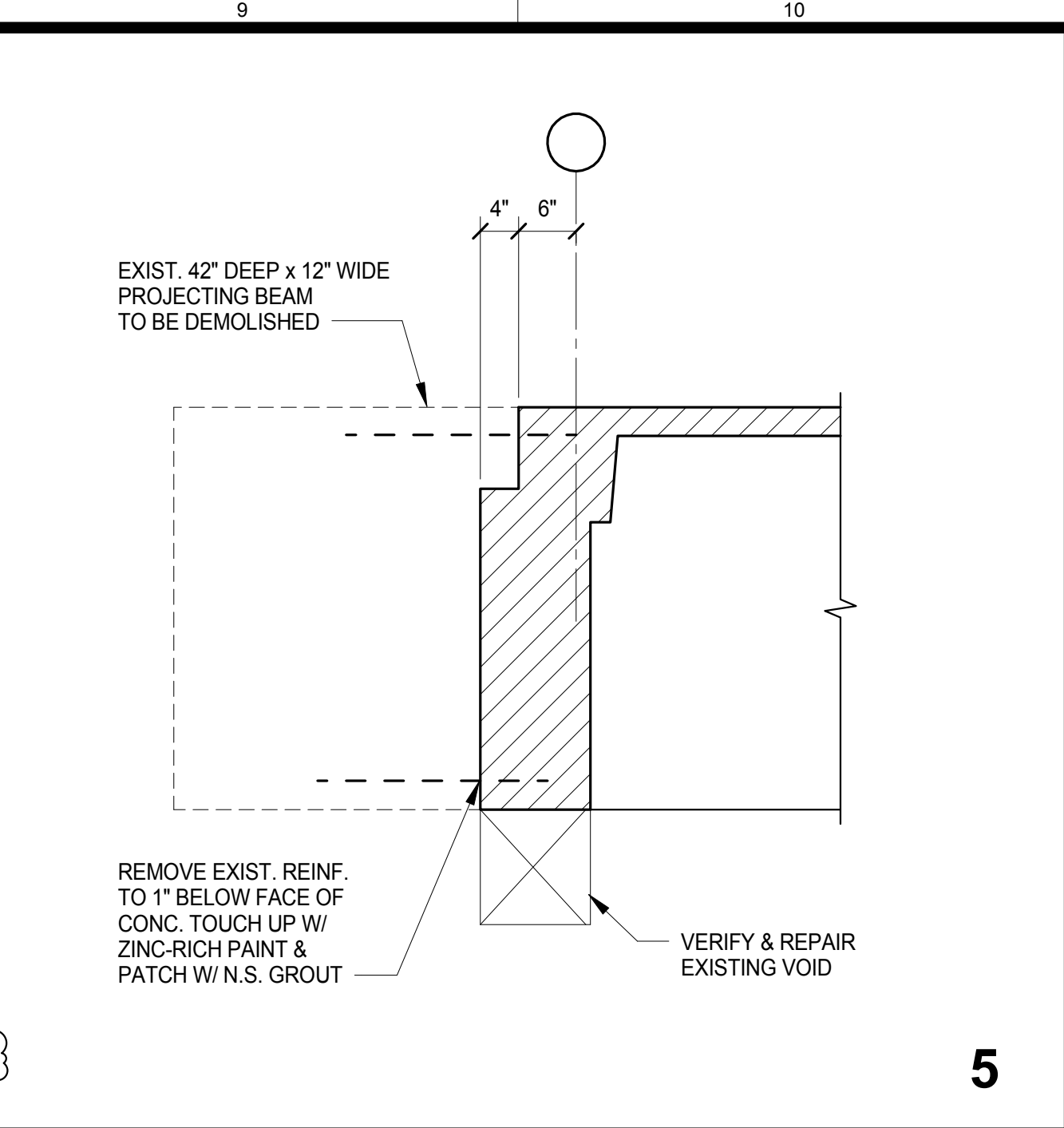


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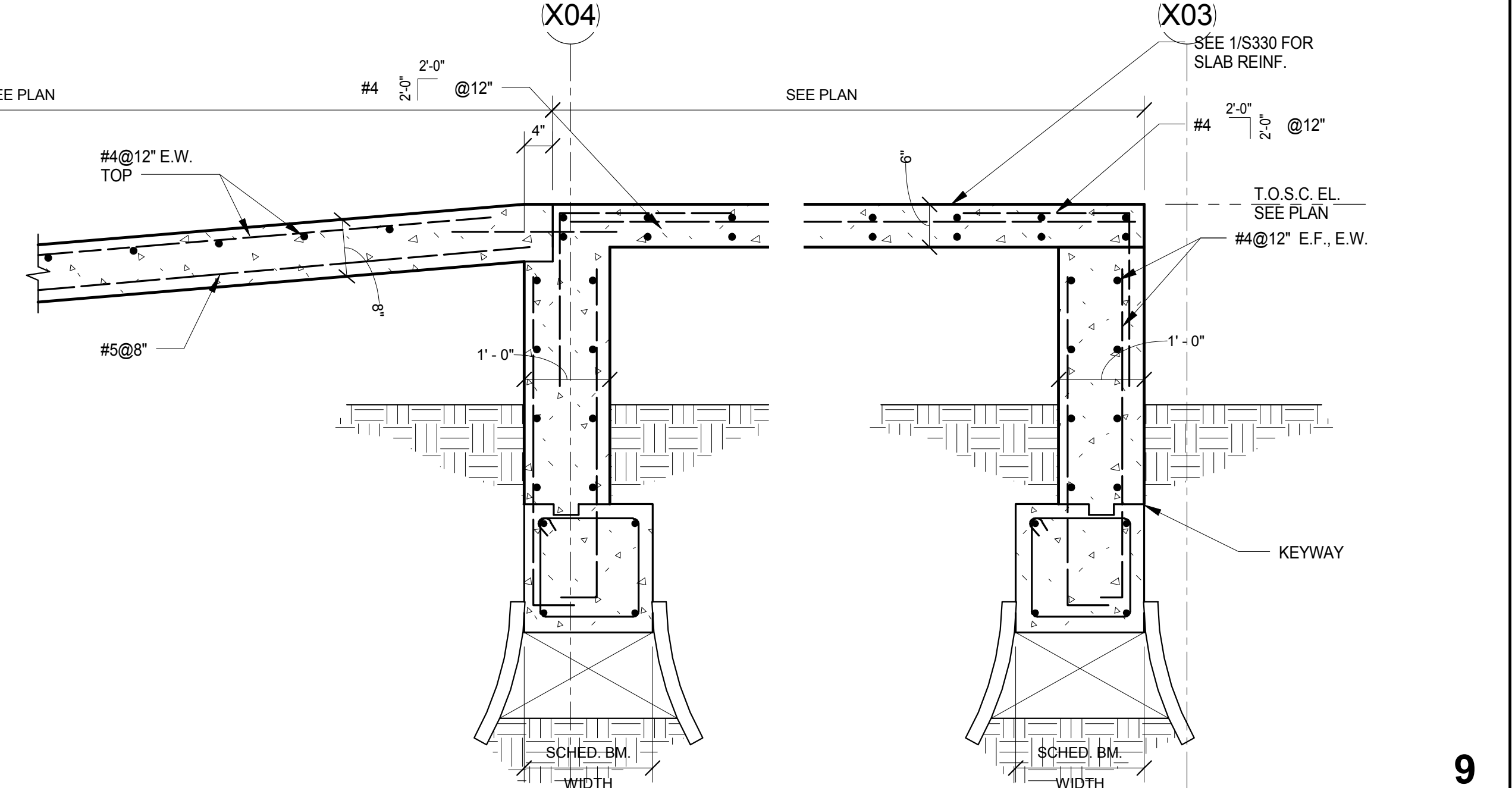
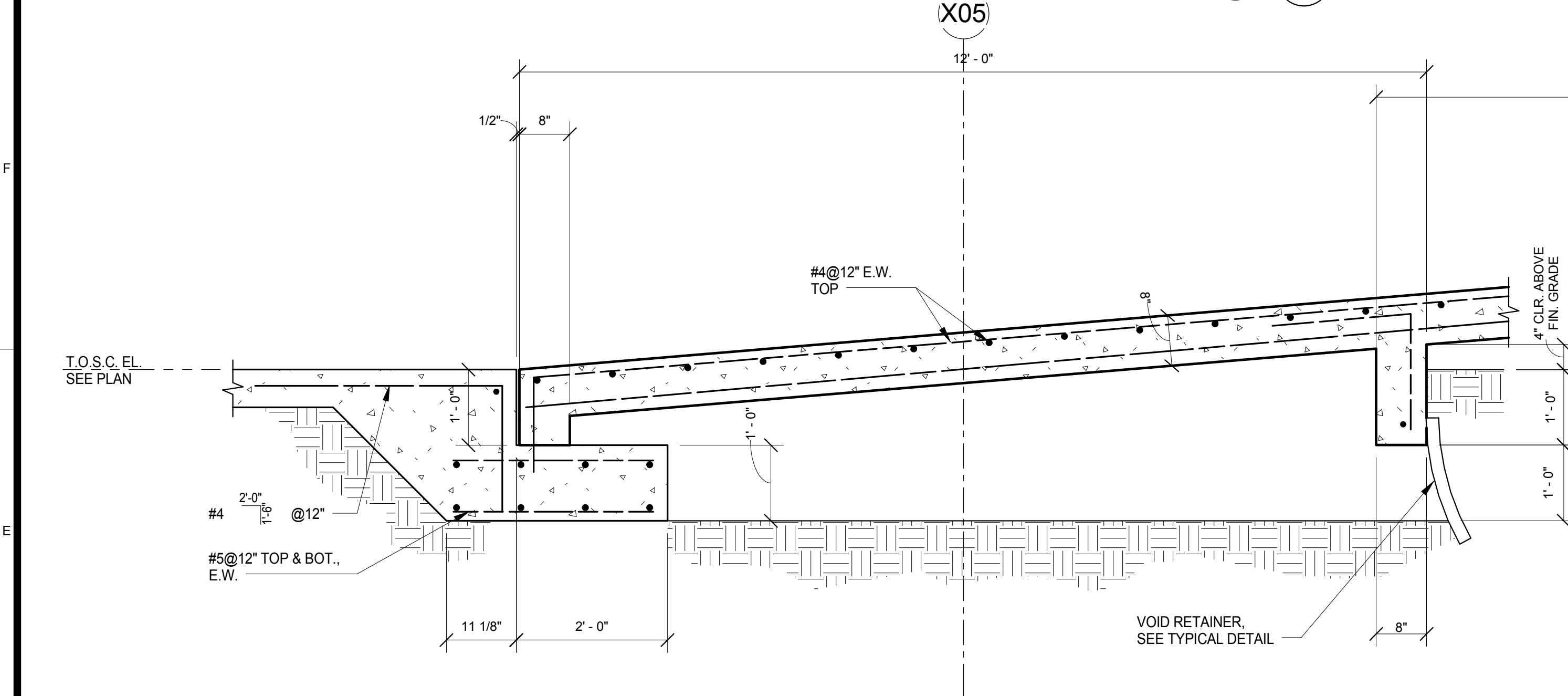
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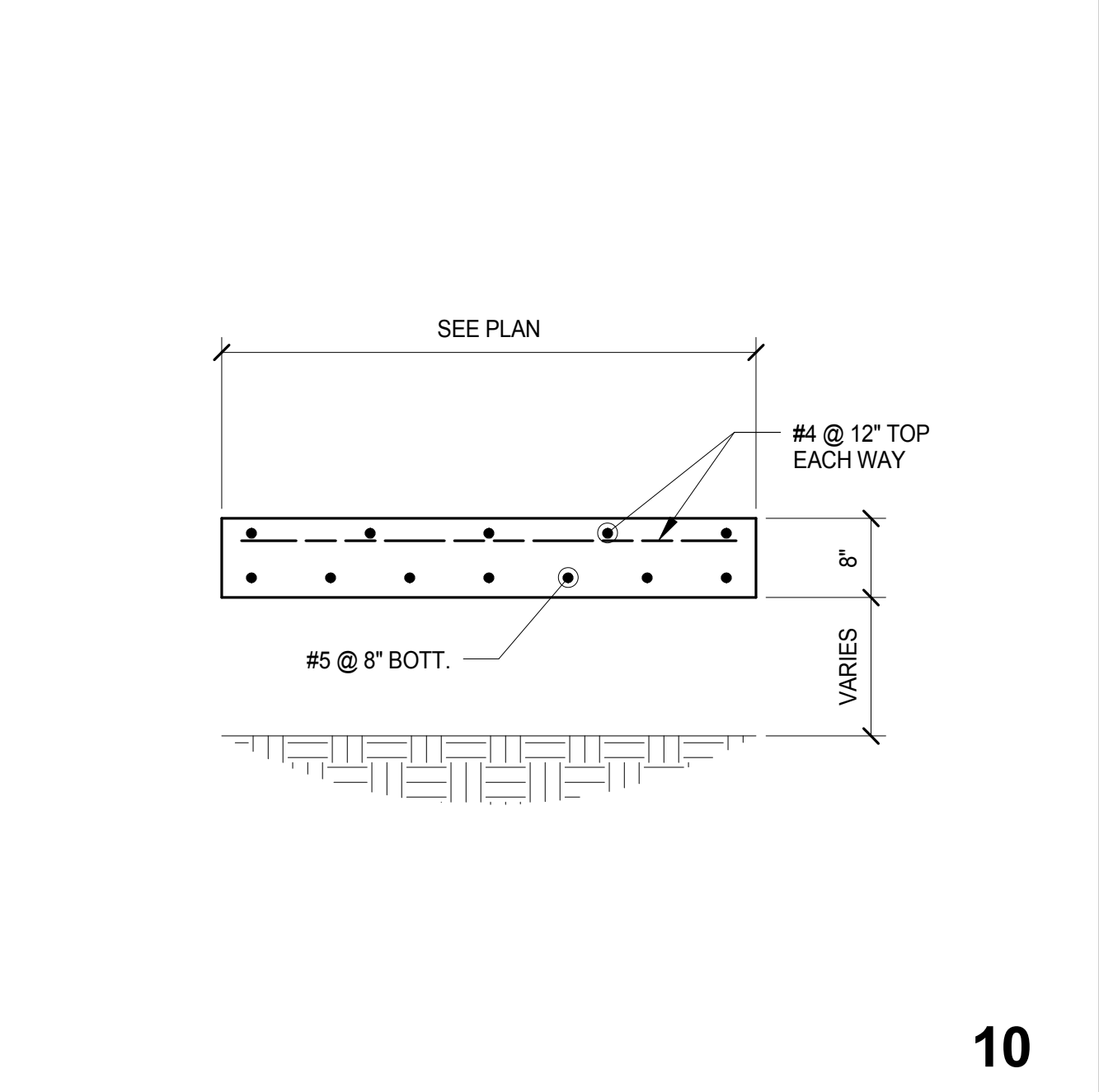
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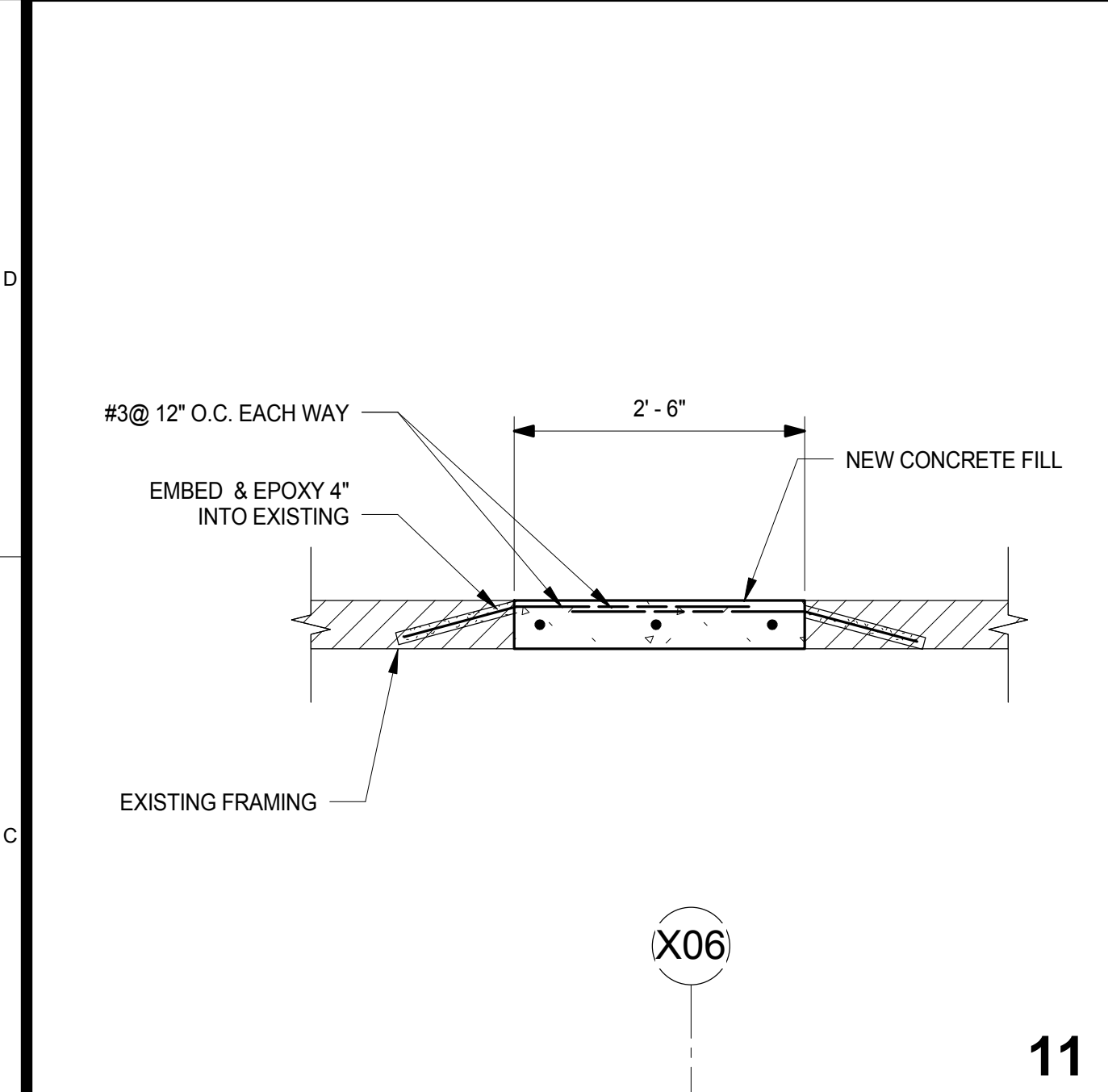
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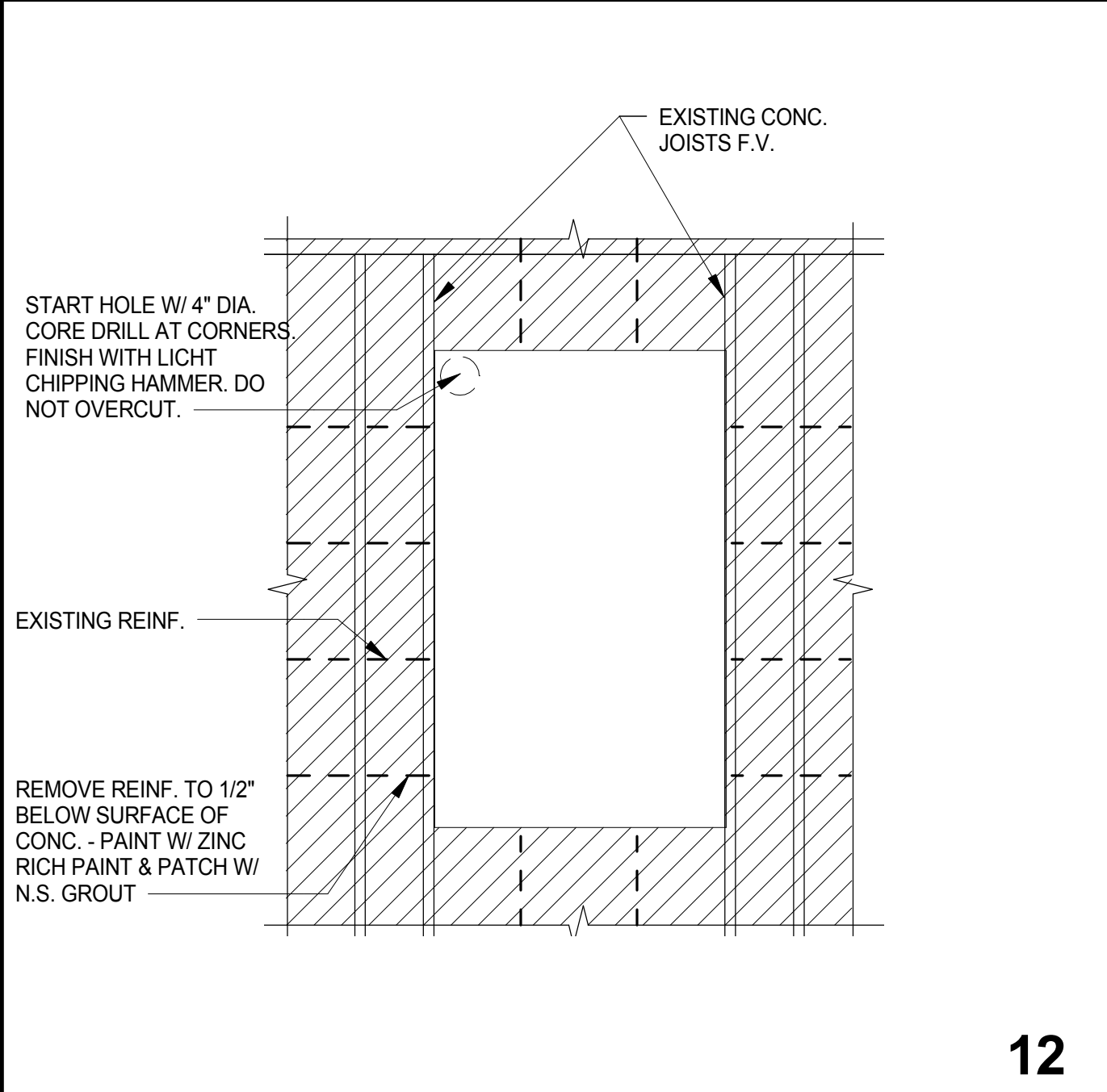
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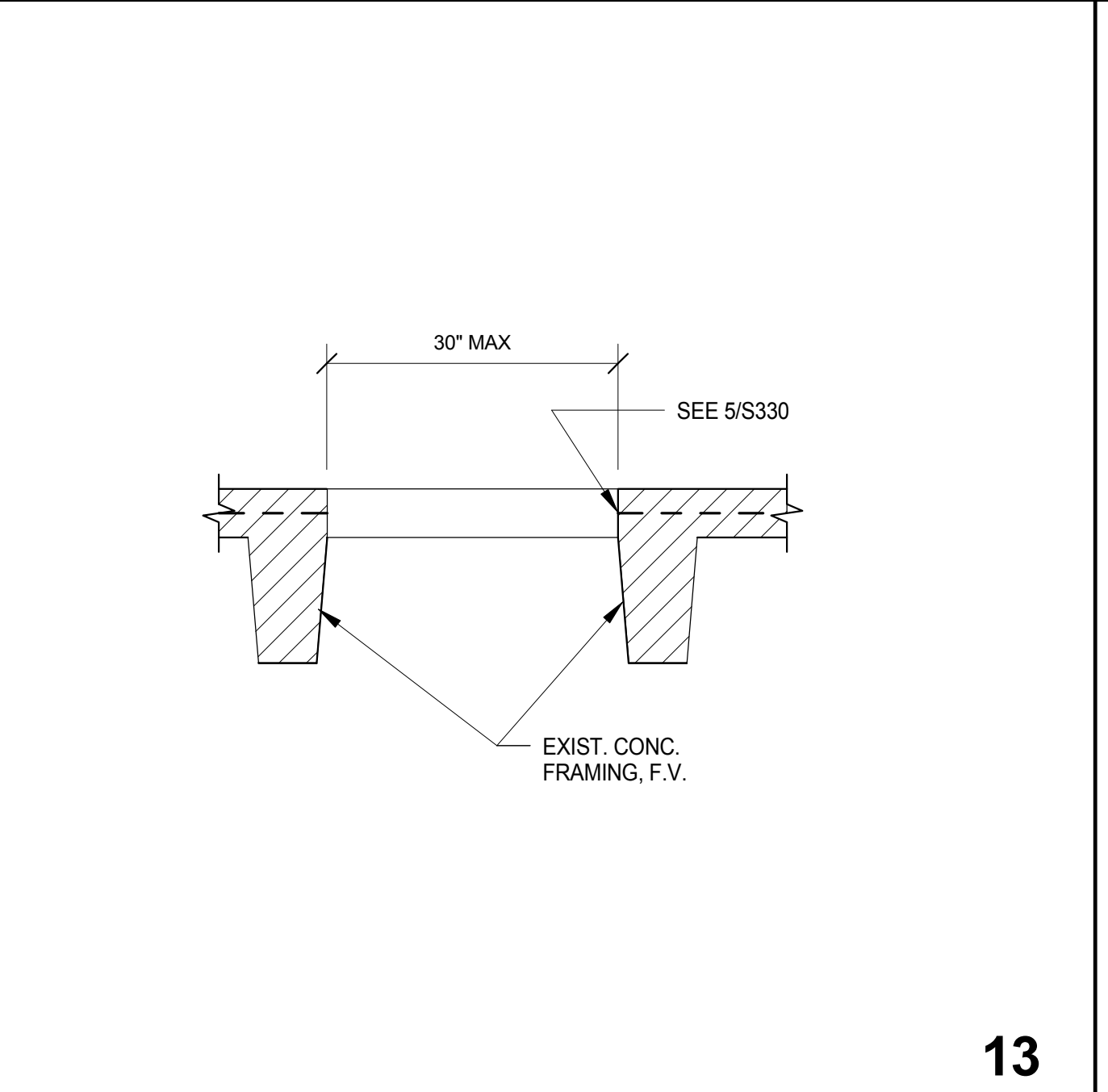
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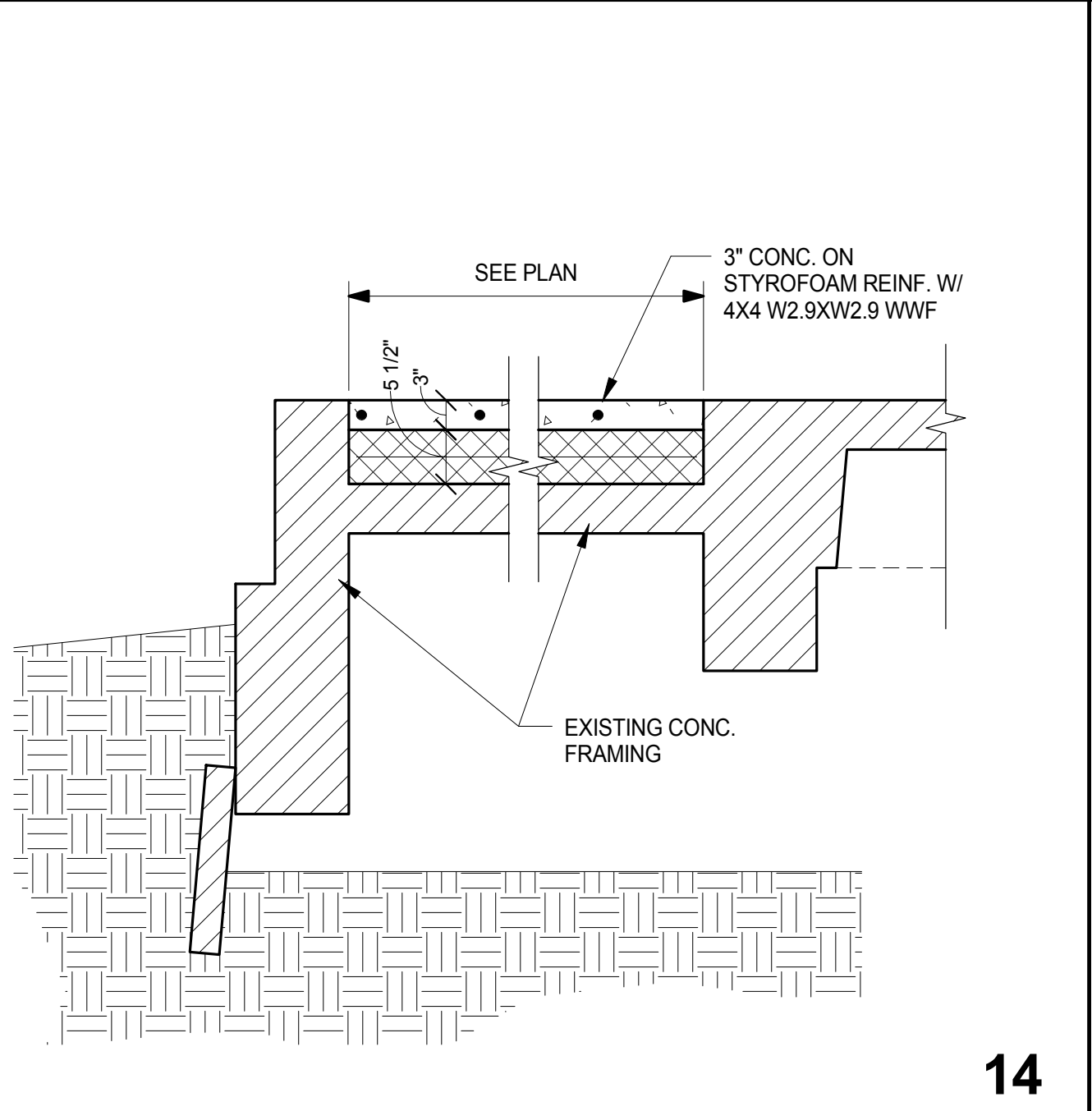
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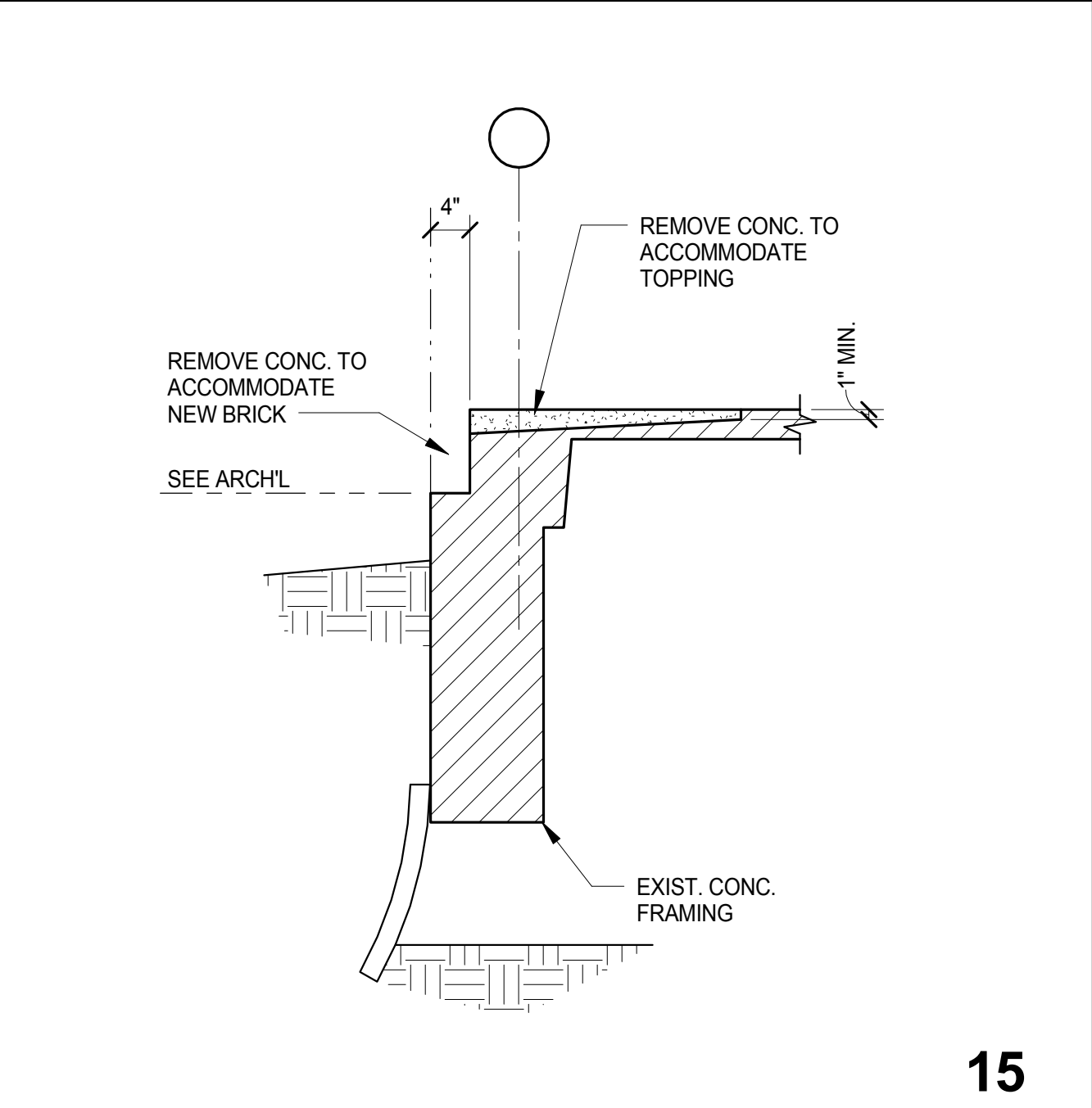
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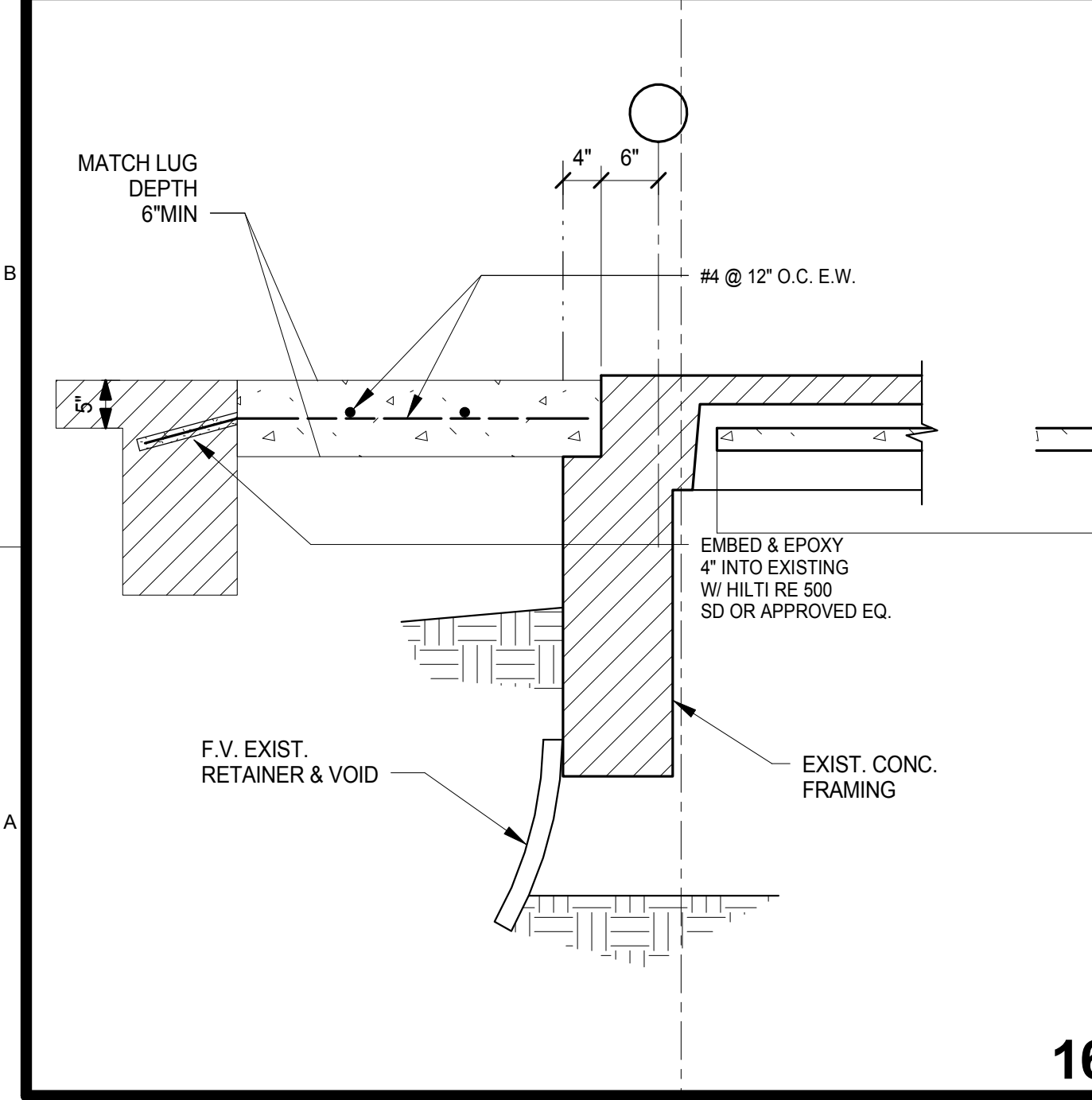
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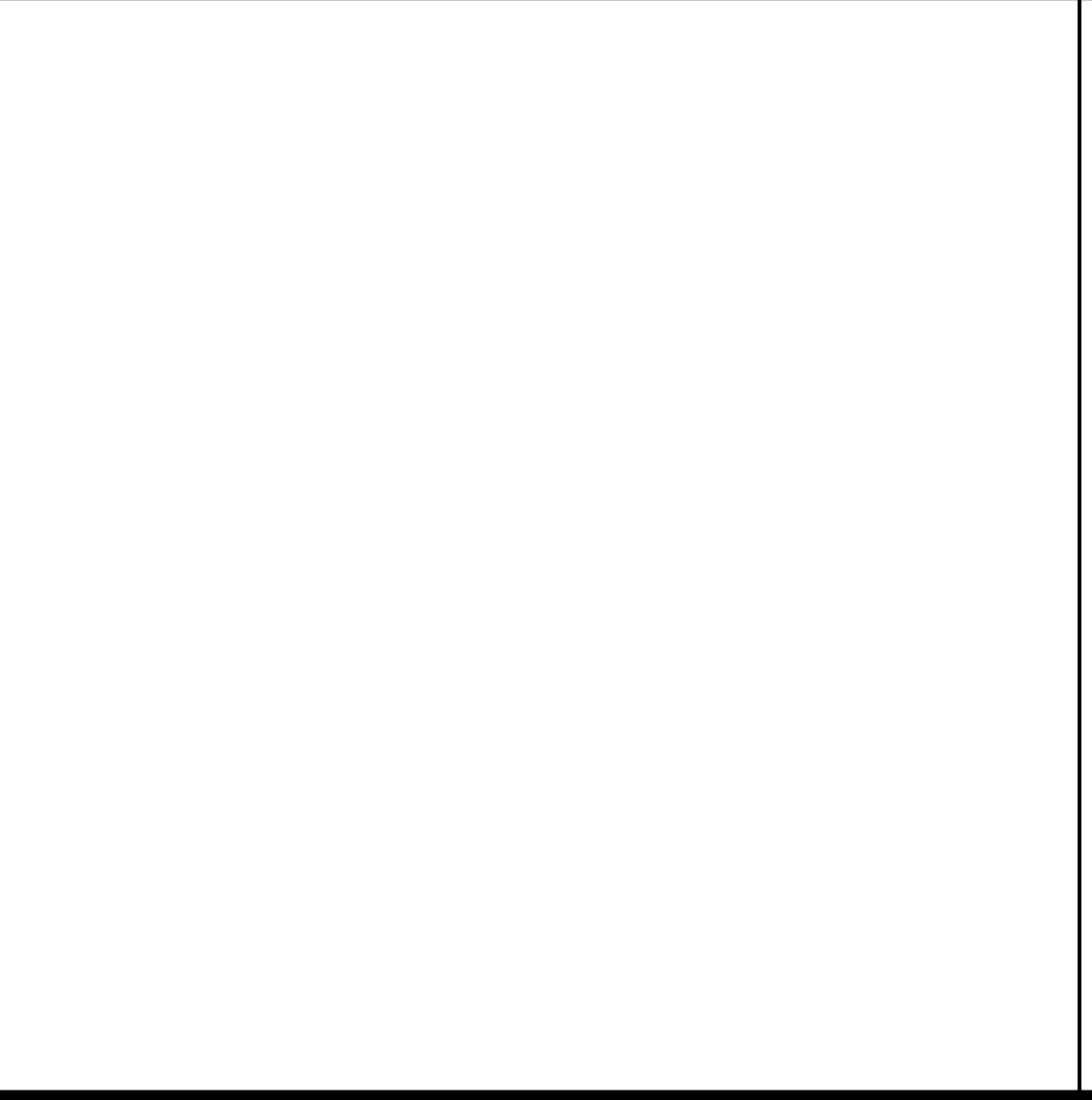
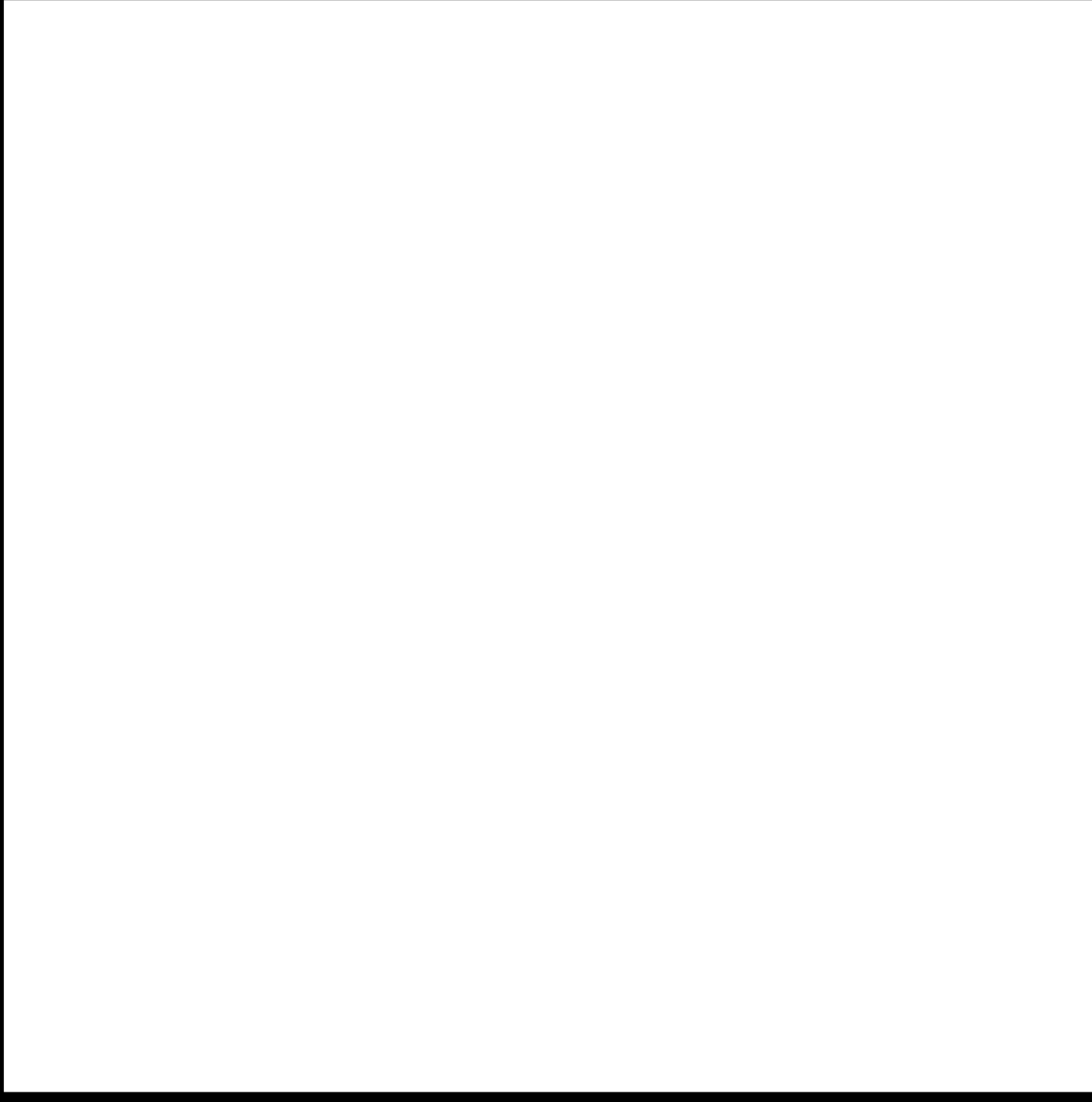
14



15



16



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PORTIONS OF THIS DRAWING MAY NOT BE TO SCALE. THEREFORE, THIS DRAWING SHALL NOT BE SCALED.