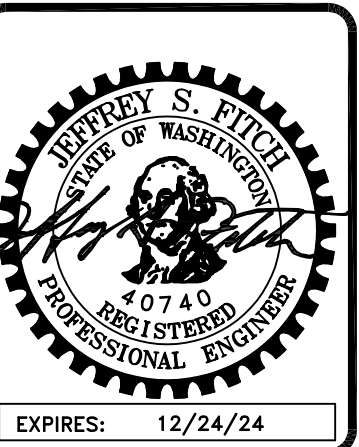


PROJECT DATA

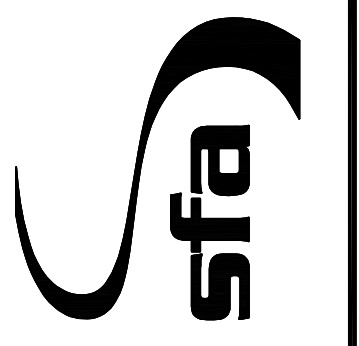
- PROJECT DESCRIPTION: UNDERPINNING OF EXISTING RESIDENCE FOR FOUNDATION STABILIZATION
- PROJECT ADDRESS: 9251 SE 46TH ST. MERCER ISLAND, WA 98040
- COUNTY: KING COUNTY
- PARCEL NO: 192300-0320
- BUILDING CODE: 2018 IBC & 2018 SEATTLE BUILDING CODE
- ZONING CODE: MERCER ISLAND CITY CODE
- ZONING: R-15
- SITE AREA: 11,666 SF
- LOT DIMENSIONS: AS SHOWN
- EXISTING BUILDING: 3,230 SF ((2) STORY)
- LEGAL DESCRIPTION: DAWN VISTA TGW AN UND INT IN TRACTS A THRU D PLAT BLOCK: PLAT LOT: 32
- OWNER INFORMATION: RUSTY JOHNSON
RUPERIOPROS@GMAIL.COM
PHONE: (206) 601-9631

SITE PLAN NOTES

1. ALL WORK AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF MERCER ISLAND DESIGN STANDARDS.
2. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, CITY OF MERCER ISLAND 24 HOURS BEFORE STARTING CONSTRUCTION OR RESUMING WORK AFTER SHUTDOWNS, EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SUNDAYS OR HOLIDAYS.
4. THE CONTRACTOR SHALL ASSIST THE ENGINEER IN PREPARING AS-CONSTRUCTED DRAWINGS.
5. CONTRACTOR TO SPECIFY EXACT LOCATIONS OF UTILITY STUBS. THE CONTRACTOR ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR ALL UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN AND NOT SHOWN ON THESE DRAWINGS AND IS REQ'D TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES ON SITE
6. ALL EXCAVATION REQ'D FOR PIER INSTALLATION SHALL BE COMPLETED BY HAND
7. ALL CONSTRUCTION VEHICLES SHALL REMAIN ON THE PAVED STREET, DRIVEWAY, OR AUTHORIZED TRAVEL PATH.
8. NO PROPOSED HORIZONTAL OR VERTICAL EXPANSION
9. ENTIRE SITE IS LOCATED IN STEEP SLOPE AREA
10. GRADING MUST BE STABILIZED BY OCTOBER 31st. NO EXCAVATION OR FILL PLACEMENT CAN BE PERFORMED BETWEEN OCTOBER 31st AND APRIL 1st



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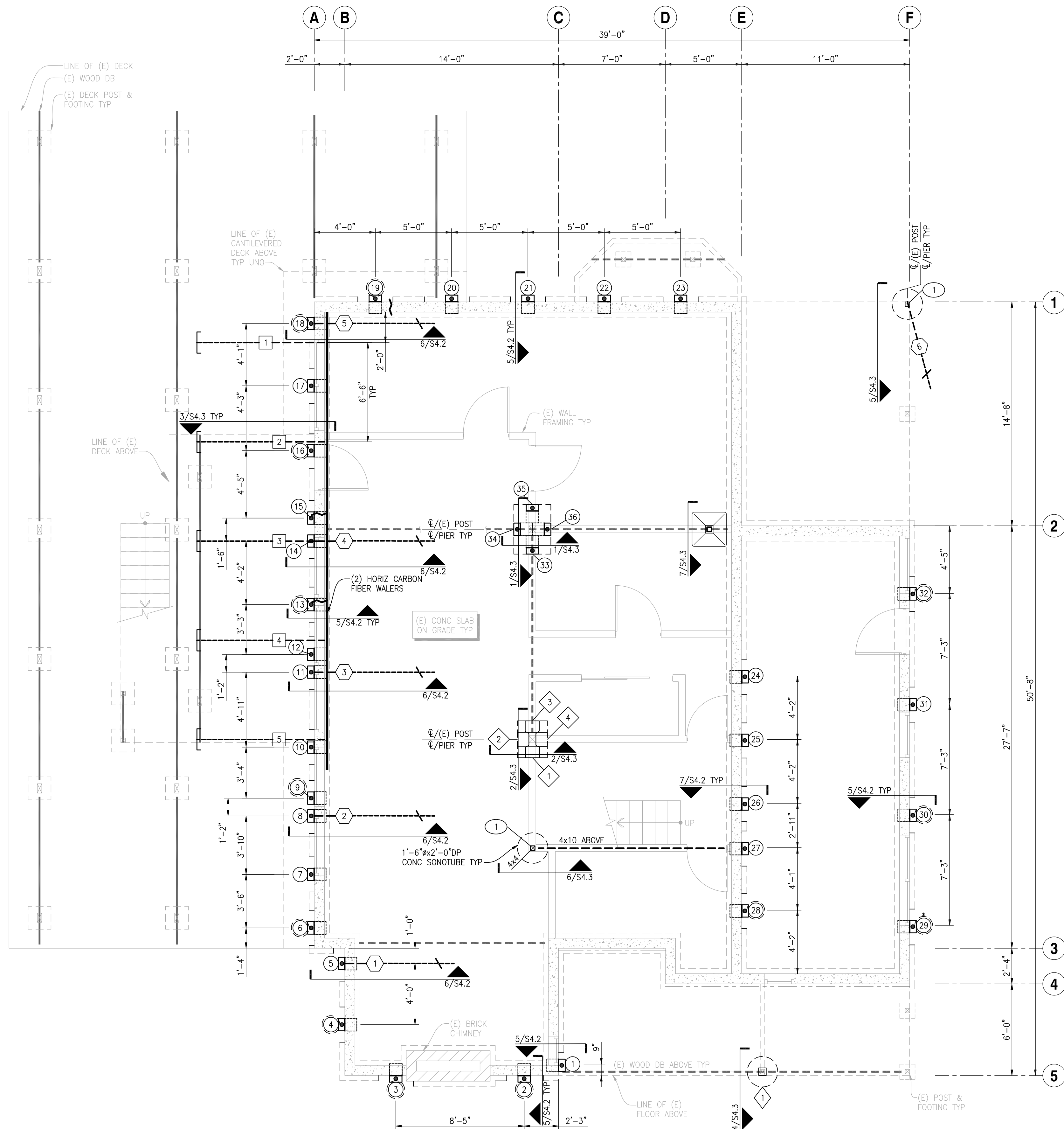
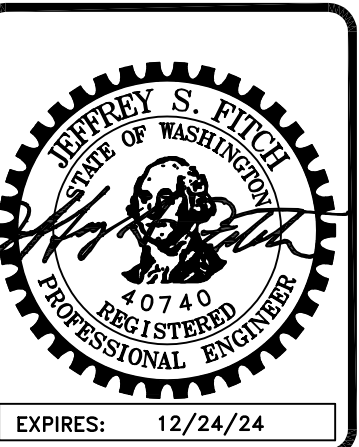
MATVEY FOUNDATION REPAIR, LLC
JOHNSON RESIDENCE UNDERPINNING
9251 SE 46TH ST.
MERCER ISLAND, WA 98040

SITE PLAN

REVISIONS	
▲	09-05-23

PROJECT NO:
MFR23-021
BY:
JB
DATE:
08.16.2023

SHEET NO:
S1.0

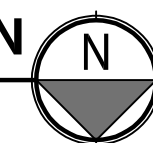


(E) FOUNDATION/(N) PIER/(N) TIEBACK/(N) WALL ANCHOR LAYOUT PLAN NOTES:

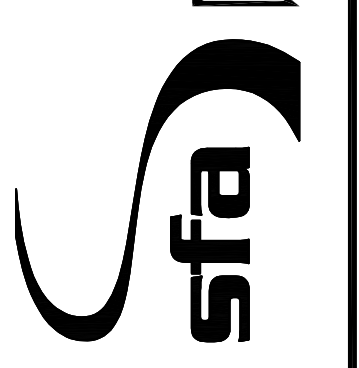
1. REFERENCE S1.1 FOR GENERAL REQUIREMENTS
2. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF DISCREPANCIES BETWEEN FIELD CONDITIONS & THOSE SHOWN IN THESE DOCUMENTS PRIOR TO WORK TYP
3. INDICATES (E) CONC WALL ON (E) CONC FOOTING (CONTRACTOR TO VERIFY 8"WS'-0" TO 8'-0" (E) CONC WALL AND 1'-4"WS'DP (E) CONC FOOTING MIN TYP (NOTIFY ENGINEER OF RECORD IF FIELD CONDITIONS DIFFER IN THE AREA OF WORK))
4. INDICATES (E) WOOD POST/COLUMN
5. INDICATES (N) POLYURETHANE BACKFILL PER DETAIL 5/S4.2 & 6/S4.2 ((13) TOTAL)
6. SECTION CUT - DETAIL NUMBER/SHEET NUMBER
X/SX.X
7. INDICATES LOCATION OF SAFEBASE 288 PUSH PIER W/ LIGHT DUTY OR SABERTOOTH FOUNDATION BRACKET OR PER DETAILS ON S4.1 ((36) TOTAL)
PUSH PIER INSTALLATION NOTES:
 - MAX LOAD TO ANCHOR = 14,063 LBS
 - 2.875" PIPE PILE W/ 0.165" THICK WALL
 - 3.5"X36" LONG PIPE SLEEVE W/ 0.220" WALL
 - MINIMUM 10'-0" INSTALLATION DEPTH
 - MINIMUM 3,000 PSI INSTALLATION PRESSURE
 - MINIMUM 1/4" FOUNDATION LIFT DURING INSTALLATION
8. INDICATES LOCATION OF SAFEBASE PIN PILE W/ FS238B FOUNDATION BRACKET PER DETAILS ON S4.1 & S4.2 ((4) TOTAL)
PIN PILE INSTALLATION NOTES:
 - MAX LOAD TO ANCHOR = 3,993 LBS
 - 2.375" PIPE PILE W/ 0.218" THICK WALL
 - MINIMUM 10'-0" INSTALLATION DEPTH
 - DRIVE UNTIL LESS THAN 1" MOVEMENT IS OBSERVED IN A 1 MIN TIME SPAN WITH A 110 LB PNEUMATIC HAMMER
9. INDICATES LOCATION OF SAFEBASE PIN PILE W/ FS238NCB NEW CONSTRUCTION BRACKET PER DETAILS ON S4.1 ((2) TOTAL)
PIN PILE INSTALLATION NOTES:
 - MAX LOAD TO ANCHOR = 1,311 LBS
 - 2.375" PIPE PILE W/ 0.218" THICK WALL
 - MINIMUM 10'-0" INSTALLATION DEPTH
 - DRIVE UNTIL LESS THAN 1" MOVEMENT IS OBSERVED IN A 1 MIN TIME SPAN WITH A 110 LB PNEUMATIC HAMMER
10. INDICATES LOCATION OF SB 288 HELICAL PIER W/ NEW CONSTRUCTION BRACKET ((1) TOTAL)
HELICAL PIER INSTALLATION NOTES:
 - MAX LOAD TO ANCHOR = 8,329 LBS
 - 2.875" PIPE PILE W/ 0.217" THICK WALL
 - 3.5"X36" LONG PIPE SLEEVE W/ 0.220" WALL
 - 0.375" THICK 8/10" HELIX W/ 1/4" FILLET WELDS EACH SIDE OF HELIX TO PIER
 - MINIMUM 10'-0" INSTALLATION DEPTH & 1,900 FT-LB INSTALLATION TORQUE
11. INDICATES TAT-150 HELICAL TIEBACK SYSTEM (PIER SHOWN AT AN ANGLE FOR CLARITY, INSTALL PERPENDICULAR TO STEMWALL) ((6) TOTAL)
LATERAL HELICAL TIEBACK INSTALLATION NOTES:
 - DESIGN LOAD = 4,683 LBS
 - 1.5" SOLID SQUARE SHAFT TIEBACK INSTALLED AT A 15±2° ANGLE FROM HORIZONTAL
 - 0.375" THICK 8/10" HELIX W/ 0.25" FILLET WELDS EA SIDE OF HELIX TO PIPE PILE
 - MINIMUM 20'-0" INSTALLATION DEPTH & 1,500 LB-FT INSTALLATION TORQUE
12. INDICATES LOCATION OF SAFEBASE WALL ANCHOR SYSTEM AT 6'-6" OC MAX UNO ON PLAN & INSTALLED PERP TO FOUNDATION WALL ((5) TOTAL)
13. INDICATES LOCATION OF SAFEBASE FLOOR STABILIZER W/ LIGHTFOOT STABILIZER BASE ((1) TOTAL)
MAX LOAD TO STABILIZER = 5,902 LBS
14. PIER SPACING SHALL BE AS INDICATED ON PLAN
15. REPLACE "N-KIND" ALL (E) WOOD MEMBERS (JOISTS, PURLINS, SUBPURLINS, SHEATHING, STUDS, WALL PLATES) WHICH SHOW SIGNS OF DRY ROT OR STRUCTURAL DAMAGE
16. CONTRACTOR TO NOTIFY ENGINEER OF RECORD IF (E) FOUNDATION CRACK IS PRESENT IN THE SPAN BETWEEN FOUNDATION BRACKETS
17. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING
18. ALL FASTENERS AND HARDWARE IN CONTACT W/ PT WOOD, CONCRETE OR MASONRY SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL
19. FILL ALL VISIBLE CRACKS IN THE FOUNDATION WALL WITH HYDRAULIC CEMENT OR EPOXY
20. ALL CONSTRUCTION MATERIALS IN THESE DOCUMENTS ARE (N) UNO

PARTIAL (E) FDN/(N) PIER/(N) TIEBACK/ (N) WALL ANCHOR LAYOUT PLAN

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



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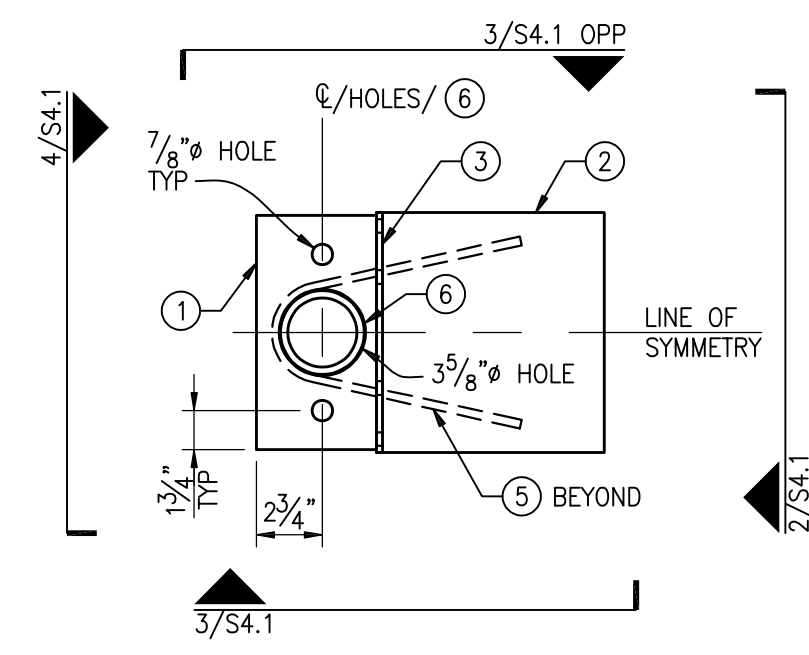
MATVEY FOUNDATION REPAIR, LLC
JOHNSON RESIDENCE UNDERPINNING
9251 SE 46TH ST.
MERCER ISLAND, WA 98040

(E) FDN/(N) PIER/
(N) TIEBACK/(N)
WALL ANCHOR
LAYOUT PLAN

REVISIONS	
▲	09-05-23

PROJECT NO:
MFR23-021
BY:
JB
DATE:
08.16.2023

SHEET NO:
S2.1

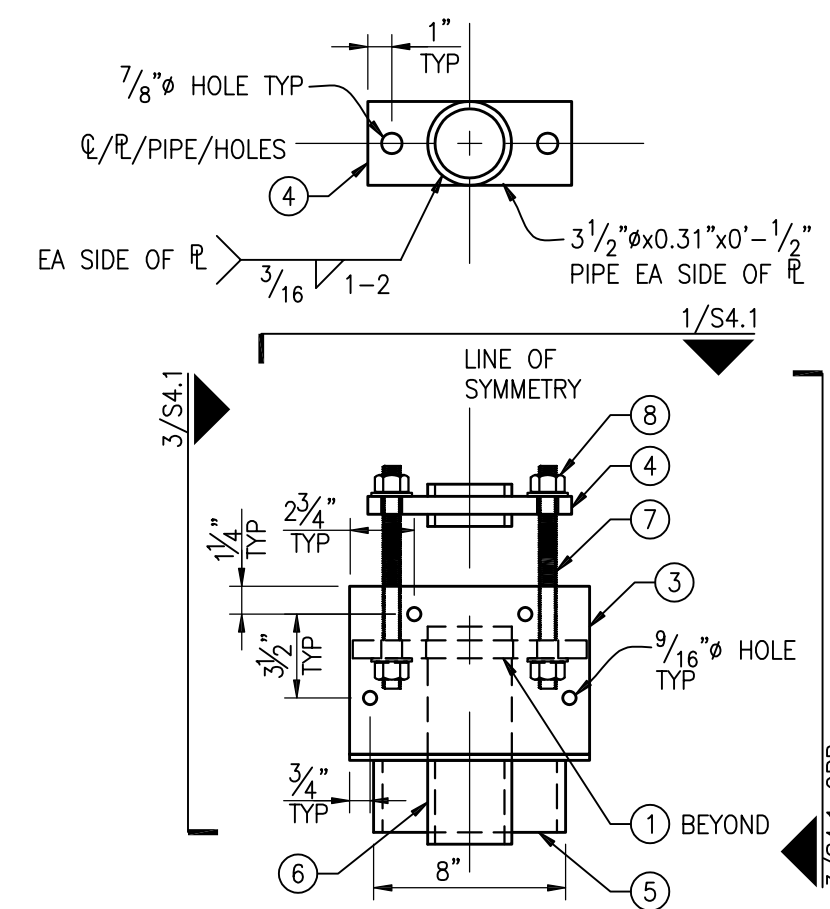


SB-LD BRACKET - TOP

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

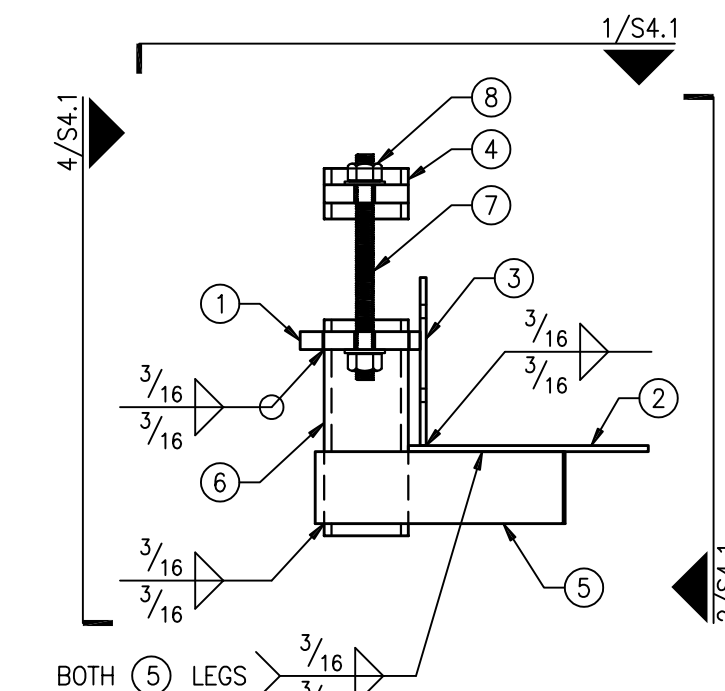
ITEM #	PART DESCRIPTION	DIMENSIONS	GRADE
1	MAIN R	R 3/4x5x0'-9 3/4"	A36
2	SEAT R	R 1/4x10x0'-10"	A36
3	BACK R	R 1/4x7x0'-10"	A36
4	TOP R	R 3/4x4x0'-8 1/2"	A36
5	STRAP	BENT R 3/8x3x2'-0"	A36
6	MAIN TUBE *	PIPE 4"Øx0.188x0'-9"	A500
7	ALL THREADED RODS (2x)	3/4"Øx1'-0"	A193
8	THREADED HEX NUTS (4x)	-	A193
9	PUSH PIER SHAFT *	PIPE 2.875"Øx0.188x4'-0"	A500
10	PUSH PIER EXTERNAL SLEEVE **	PIPE 3.5"Øx0.220x3'-0"	A500
11	CONNECTOR *	PIPE 2.5"Øx0.188x0'-6"	A500
12	FRICTION REDUCER *	PIPE 3"Øx0.188x0'-1"	A53

* DIMENSIONS GIVEN AS OUTER DIAMETER x WALL THICKNESS x LENGTH
 ** EXTERNAL SLEEVE ALSO AVAILABLE IN 48" LENGTH



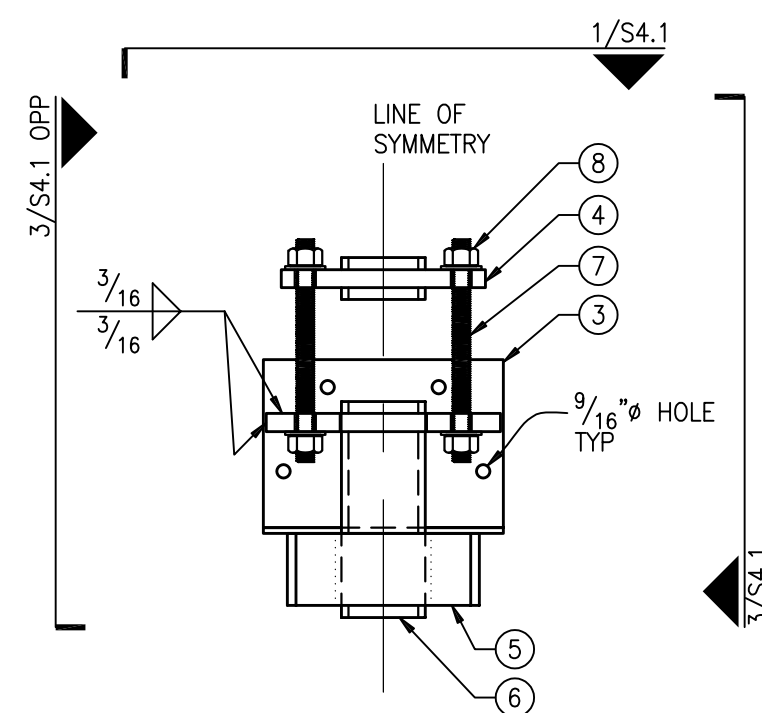
SB-LD BRACKET - FRONT

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



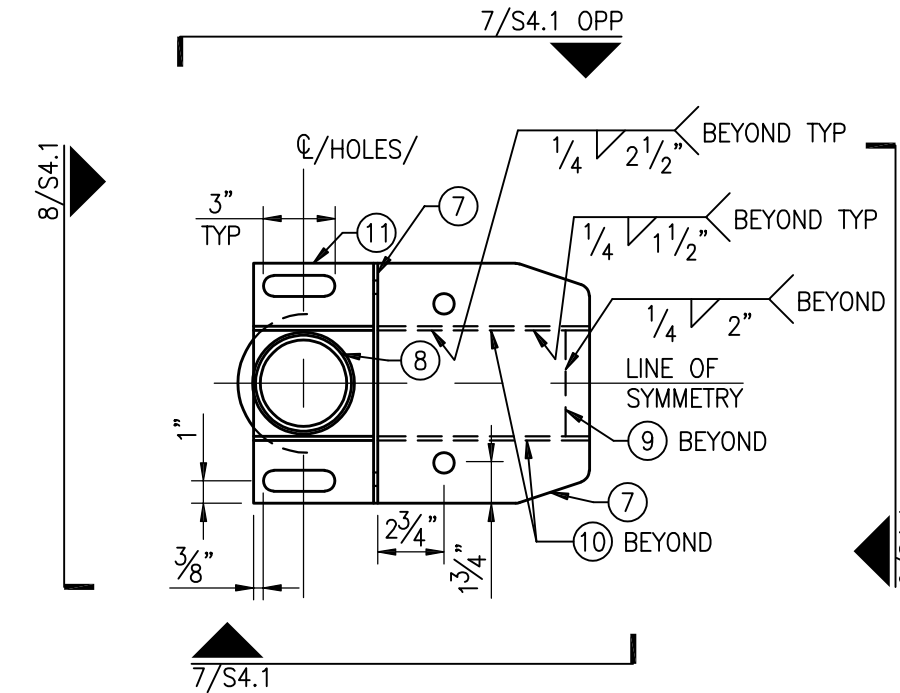
SB-LD BRACKET - SIDE

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



SB-LD BRACKET - BACK

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



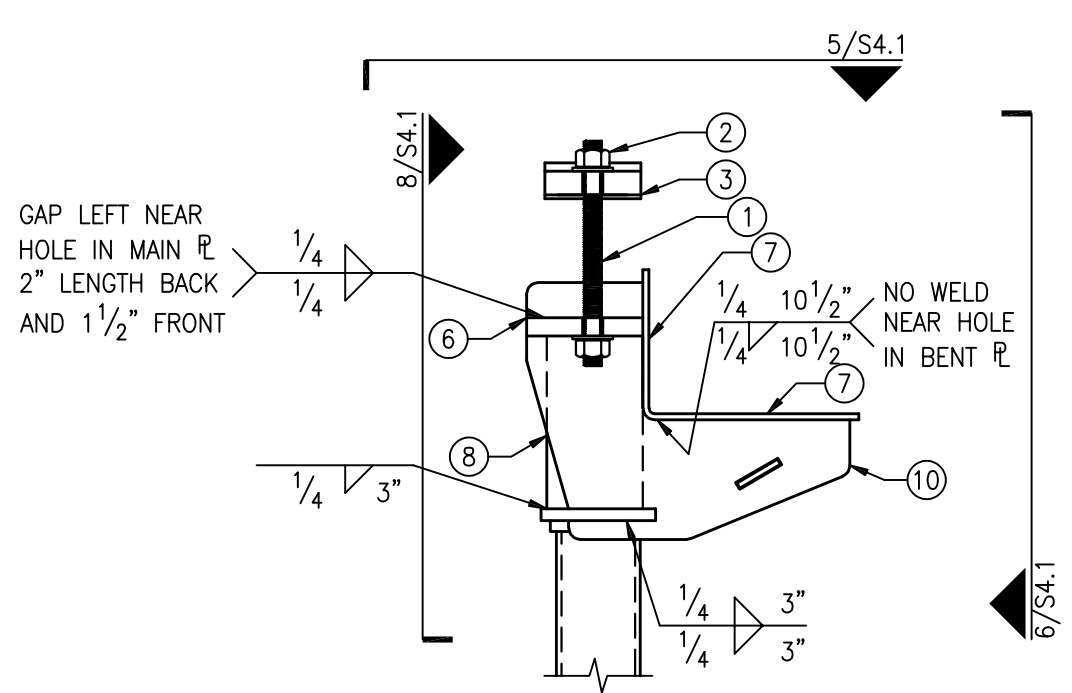
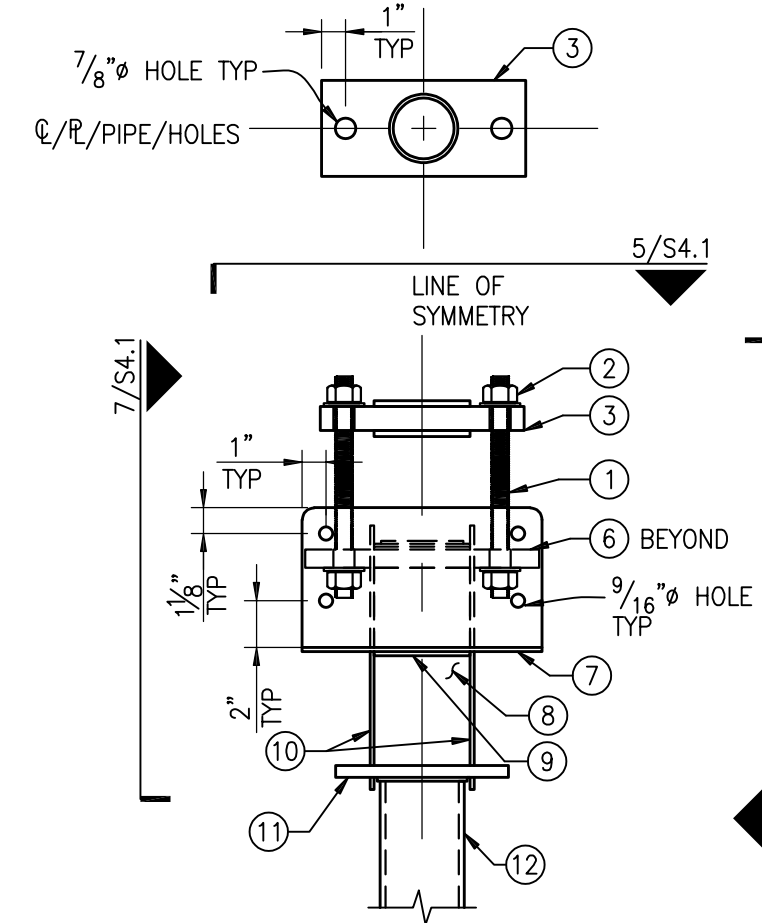
SB-ST-LD BRACKET - TOP

SCALE: 1 1/2"=1'-0" 5

ITEM #	PART DESCRIPTION	DIMENSIONS	GRADE
1	THREADED ROD	3/4"-10x12"	A193 GRADE B7
2	HEX NUTS	3/4"-10 HEX	A193 GRADE B7
3	CAP	R 1x8 1/2x4	A36
4	PUSH PIN	2.875"Øx0.165x3'-0"	A500 GRADE B/C
5	LOCKING WEDGE	R 0.120x2 1/4x0.219"	HARDENED STEEL
6	MAIN R	R 3/4x8 3/4x5"	A36
7	ANGLE R	R 0.171x10"	A572 GRADE 50
8	MAIN TUBE	4"Øx0.188x0'-10"	A500 GRADE B/C
9	STIFFENER	R 0.171x8 1/2x4 1/4"	A572 GRADE 50
10	EAR PLATES	R 0.171x10.8x13.7"	A572 GRADE 50
11	LOW R	R 1/2x7.2x5.3"	A36
12	REINFORCING SLEEVE	3 1/2"Øx0.220x3'-0"	A500 GARDE B/C
13	COUPLER	2 1/2"Øx0.188x6"	A500 GRADE B/C

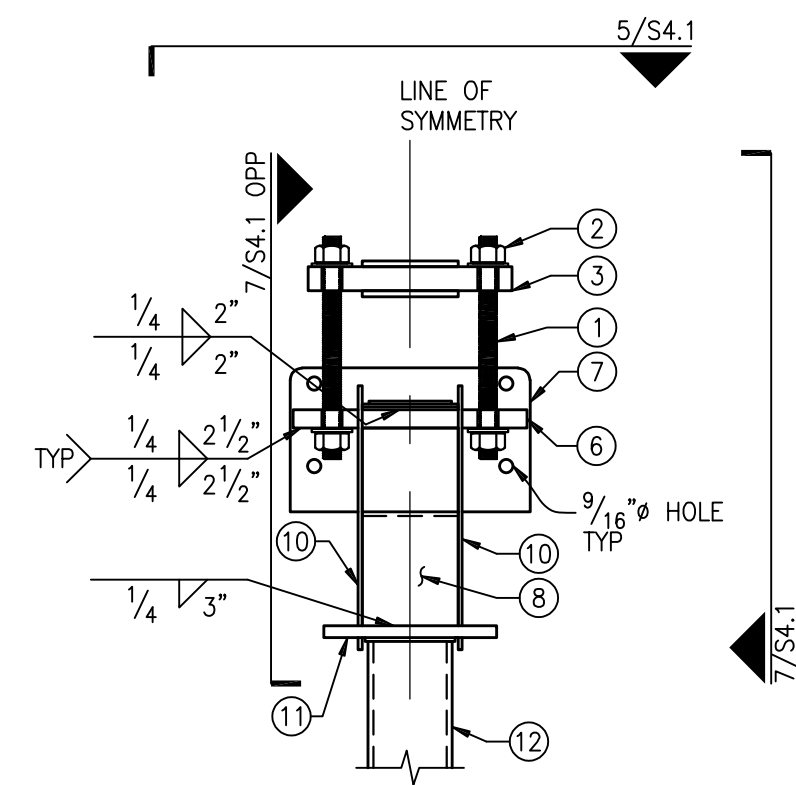
SB-ST-LD BRACKET - FRONT

SCALE: 1 1/2"=1'-0" 6



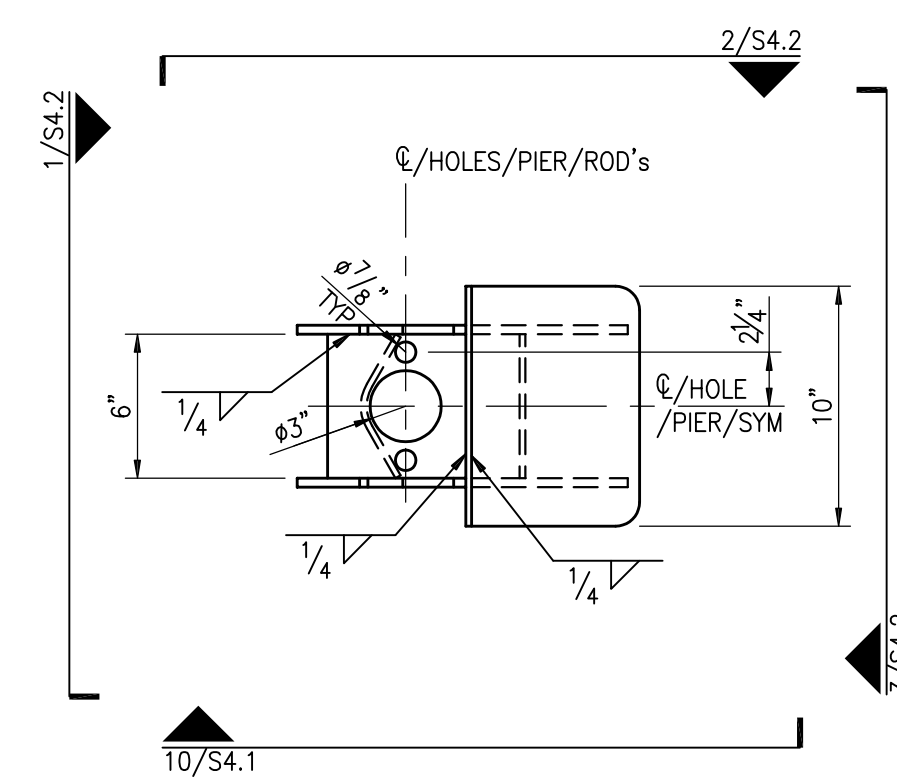
SB-ST-LD BRACKET - SIDE

SCALE: 1 1/2"=1'-0" 7



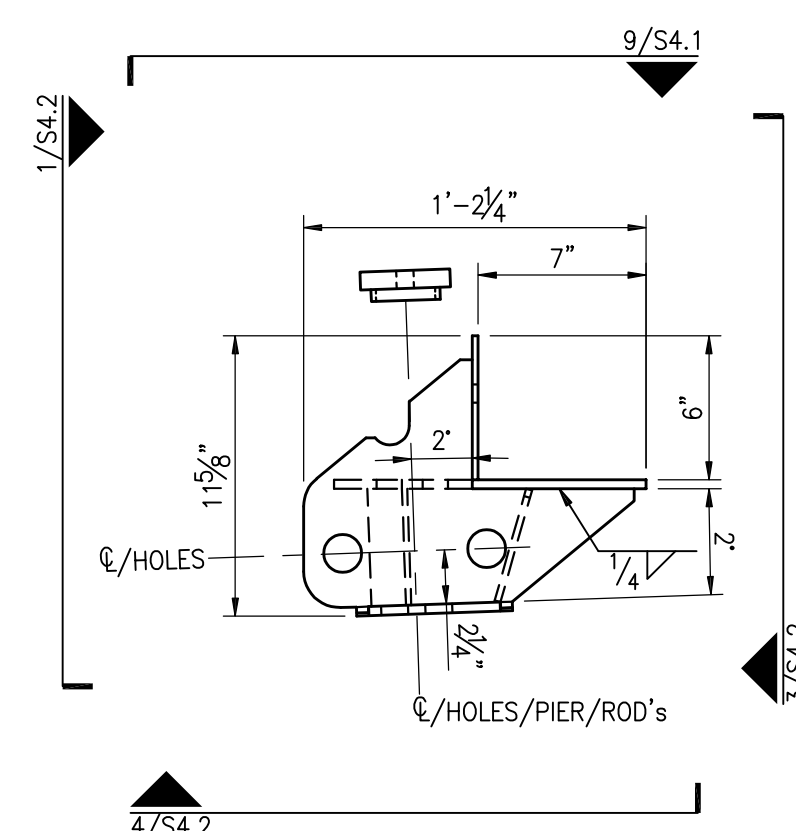
SB-ST-LD BRACKET - BACK

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



FS238B BRACKET - TOP

SCALE: 1 1/2"=1'-0" 9

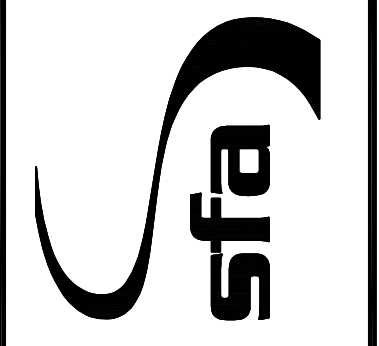


FS238B BRACKET - LEFT

SCALE: 1 1/2"=1'-0" 10



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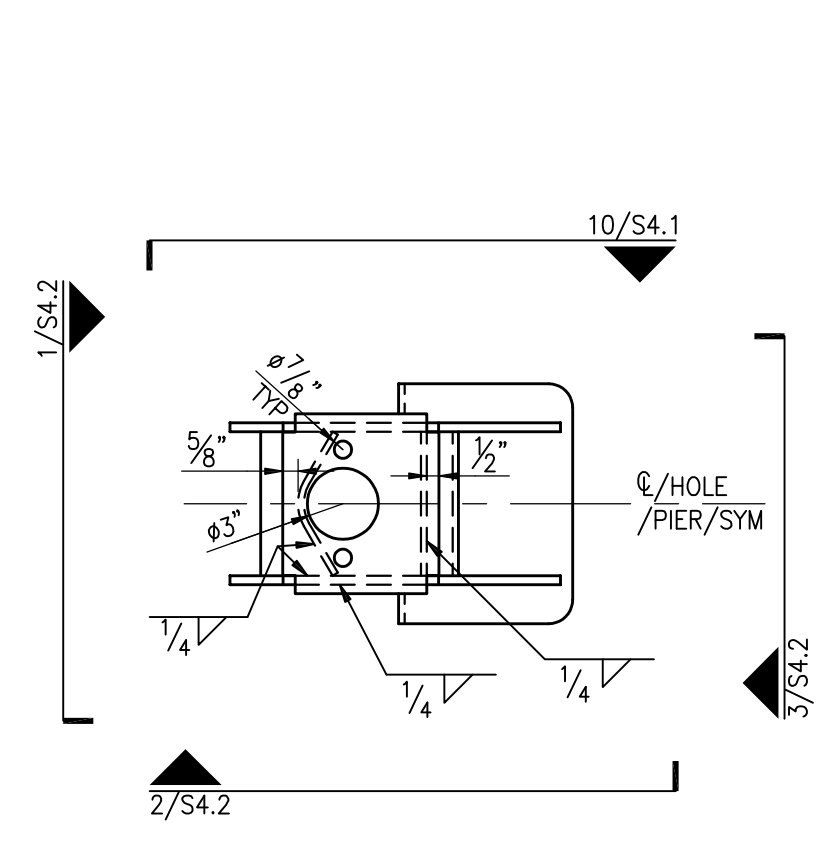
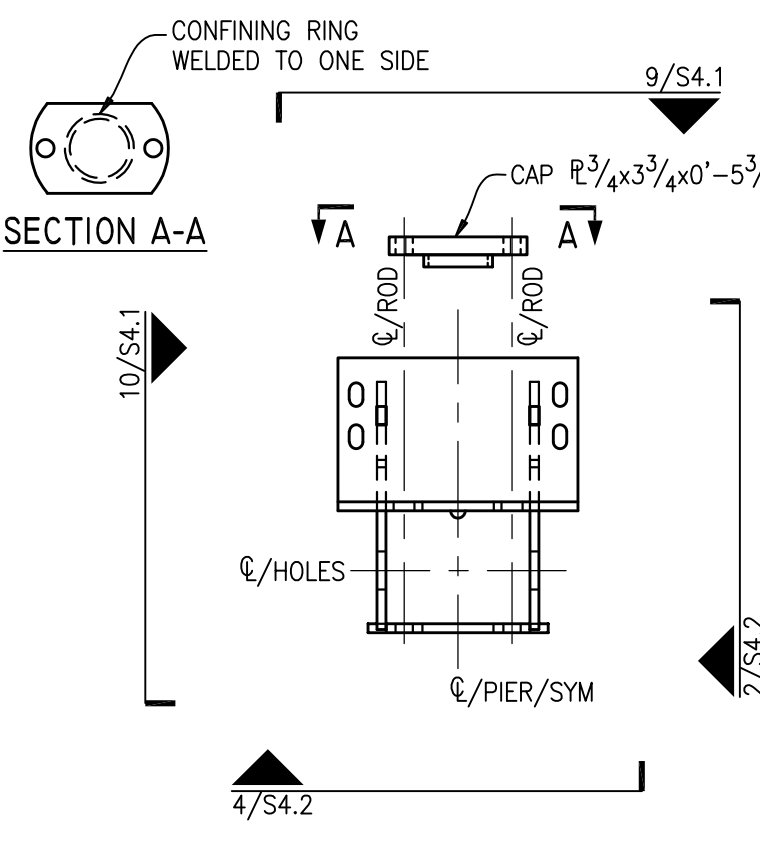
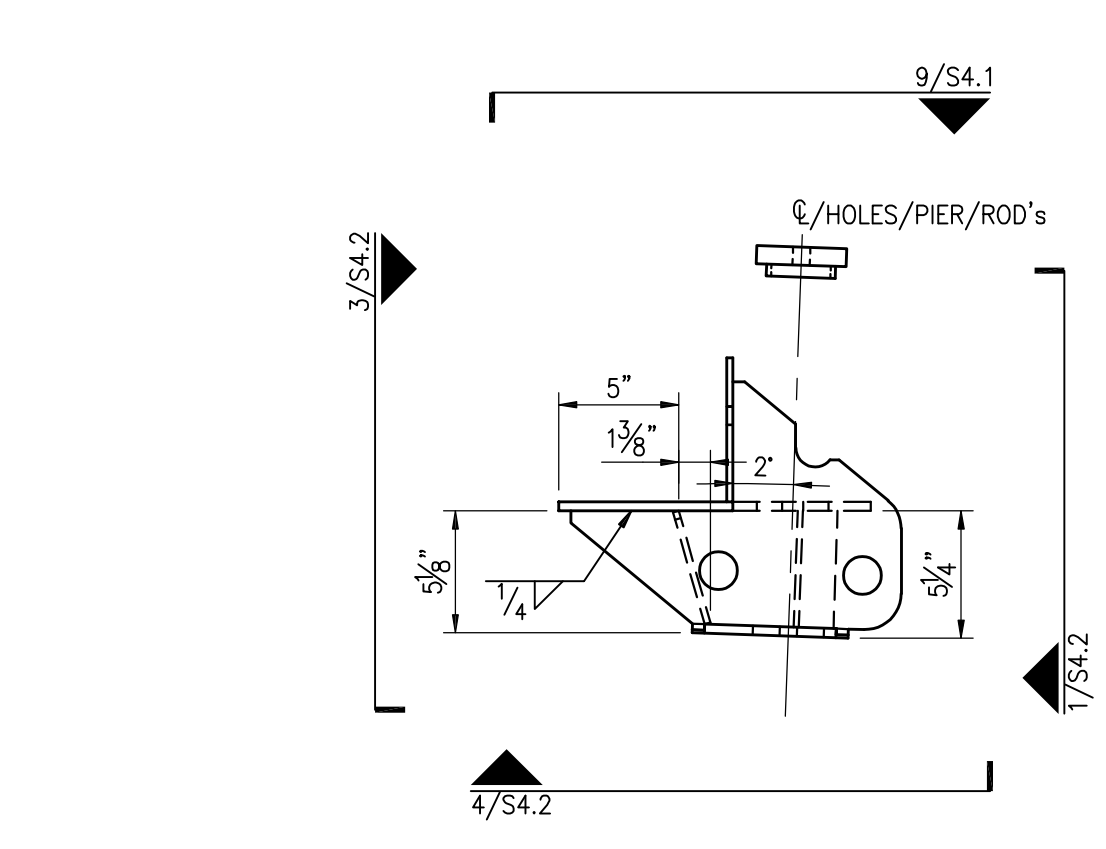
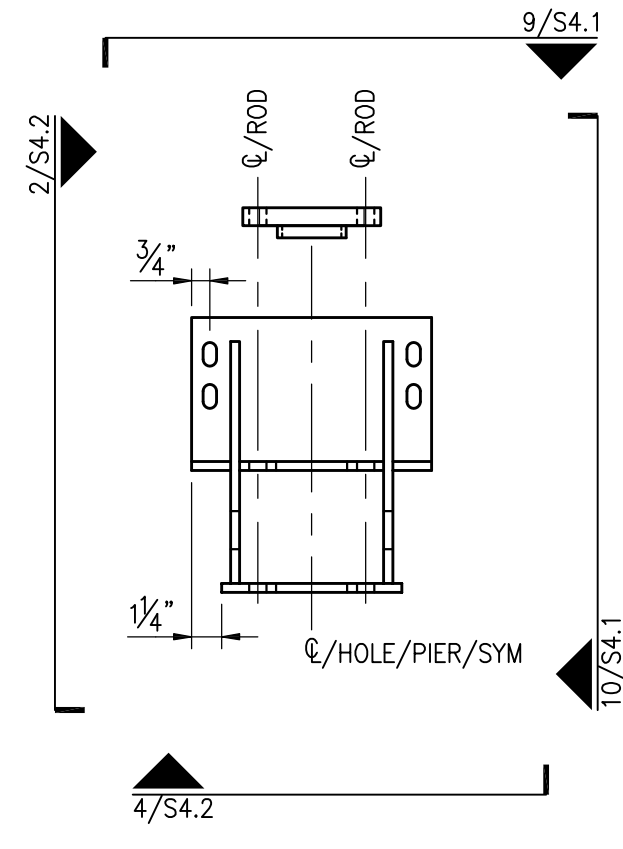
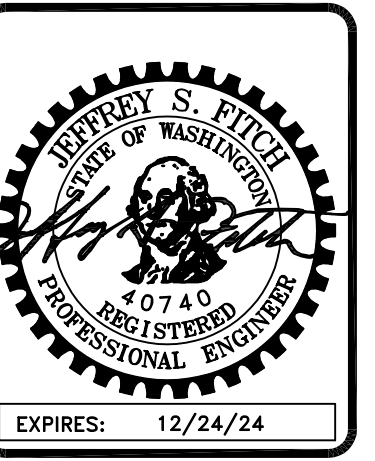
MATVEY FOUNDATION REPAIR, LLC
 JOHNSON RESIDENCE UNDERPINNING
 9251 SE 46TH ST.
 MERCER ISLAND, WA 98040

DETAILS

REVISIONS	DATE
Δ	09-05-23

PROJECT NO:
MFR23-021
BY:
JB
DATE:
08.16.2023

SHEET NO:
S4.1



FS238B BRACKET - BACK

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

FS238B BRACKET - RIGHT

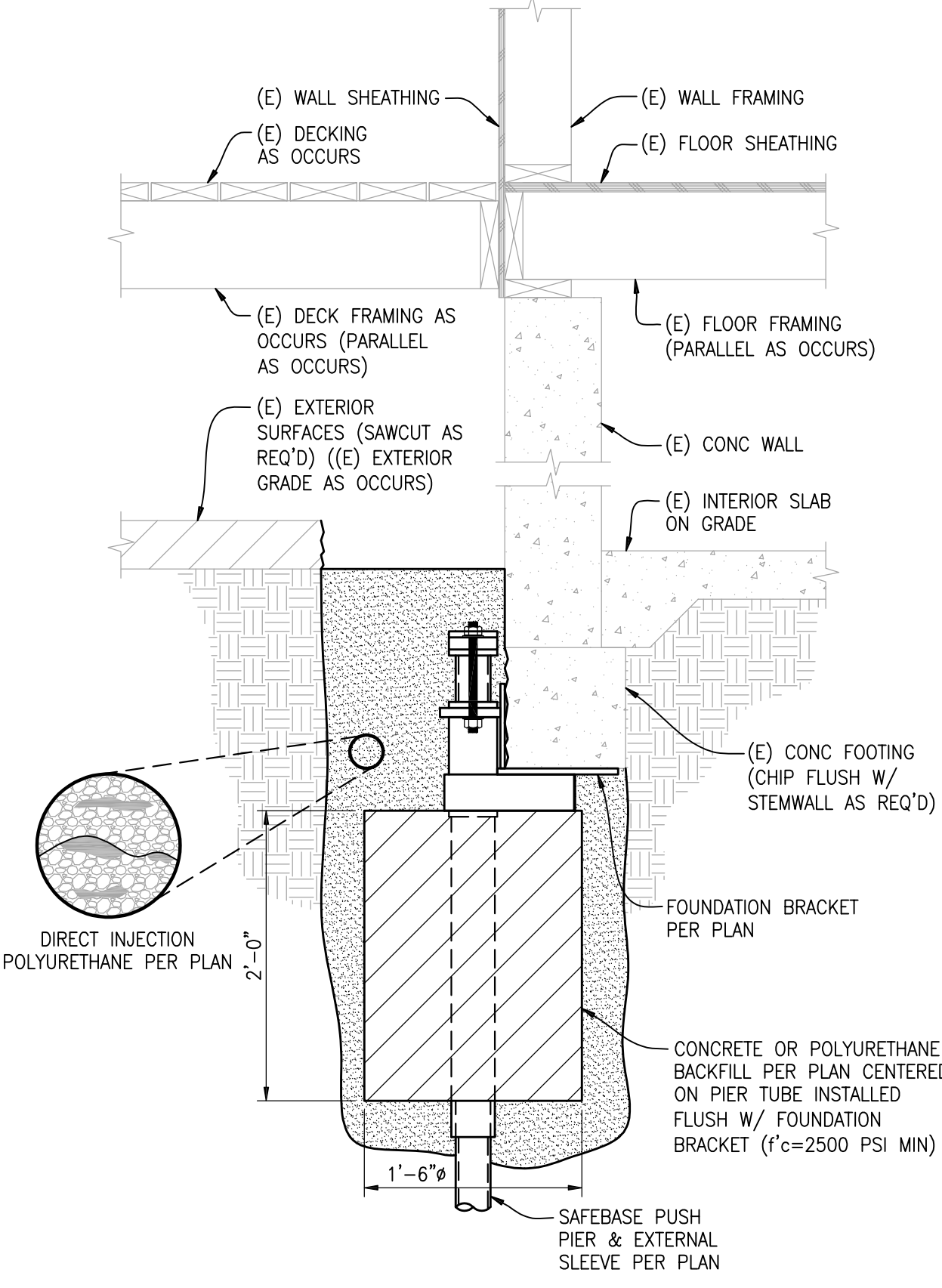
SCALE: 1 1/2"=1'-0" 2

FS238B BRACKET - FRONT

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

FS238B BRACKET - BOTTOM

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

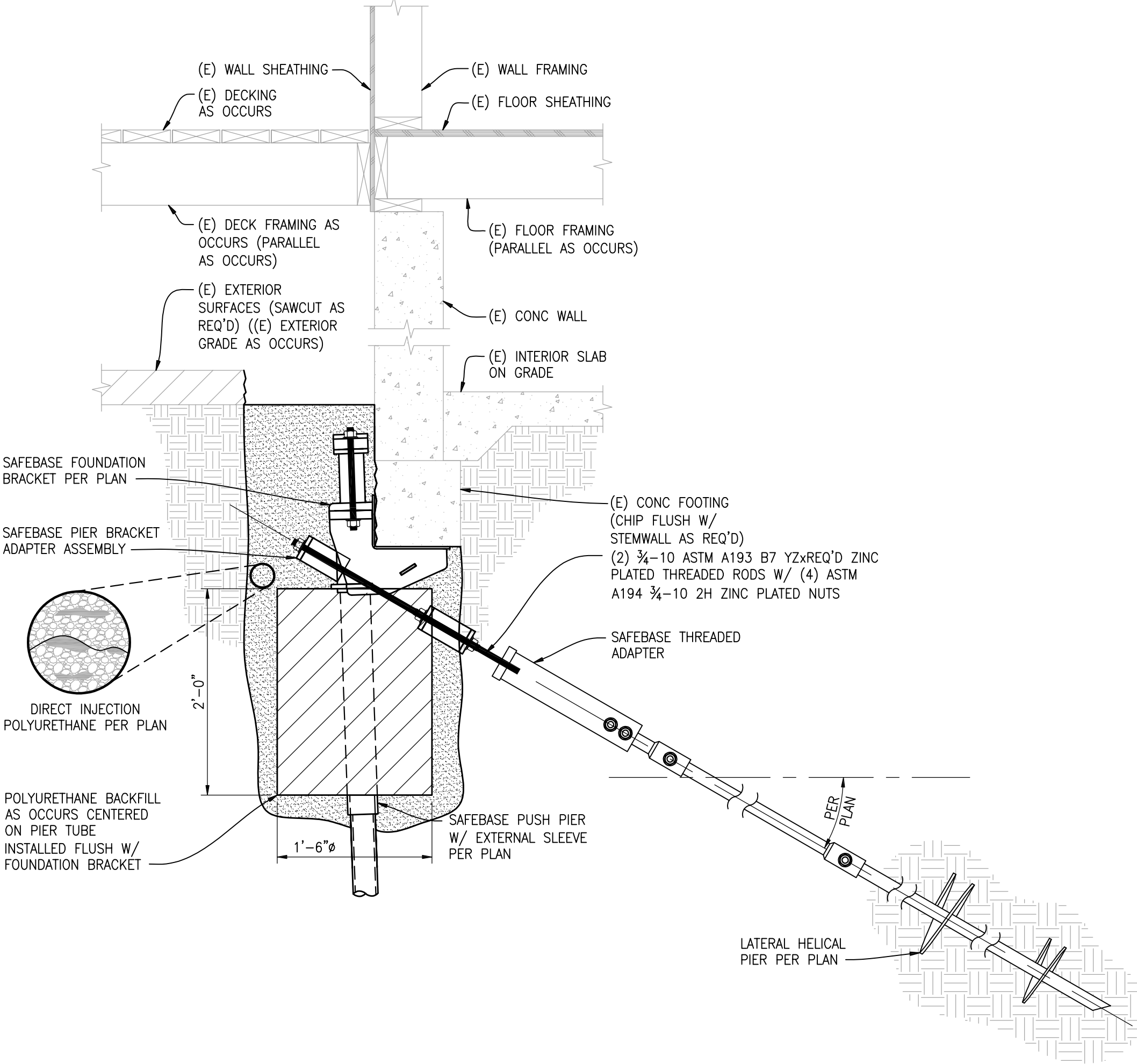


NOTES:

- 1. REF PLAN FOR LAYOUT & INSTALLATION REQ'S
- 2. WALL ANCHOR PER PLAN AS OCCURS NOT SHOWN FOR CLARITY

(N) PUSH PIER W/ HELICAL TIEBACK TO (E) FOUNDATION DETAIL

SCALE: 1"=1'-0" 5

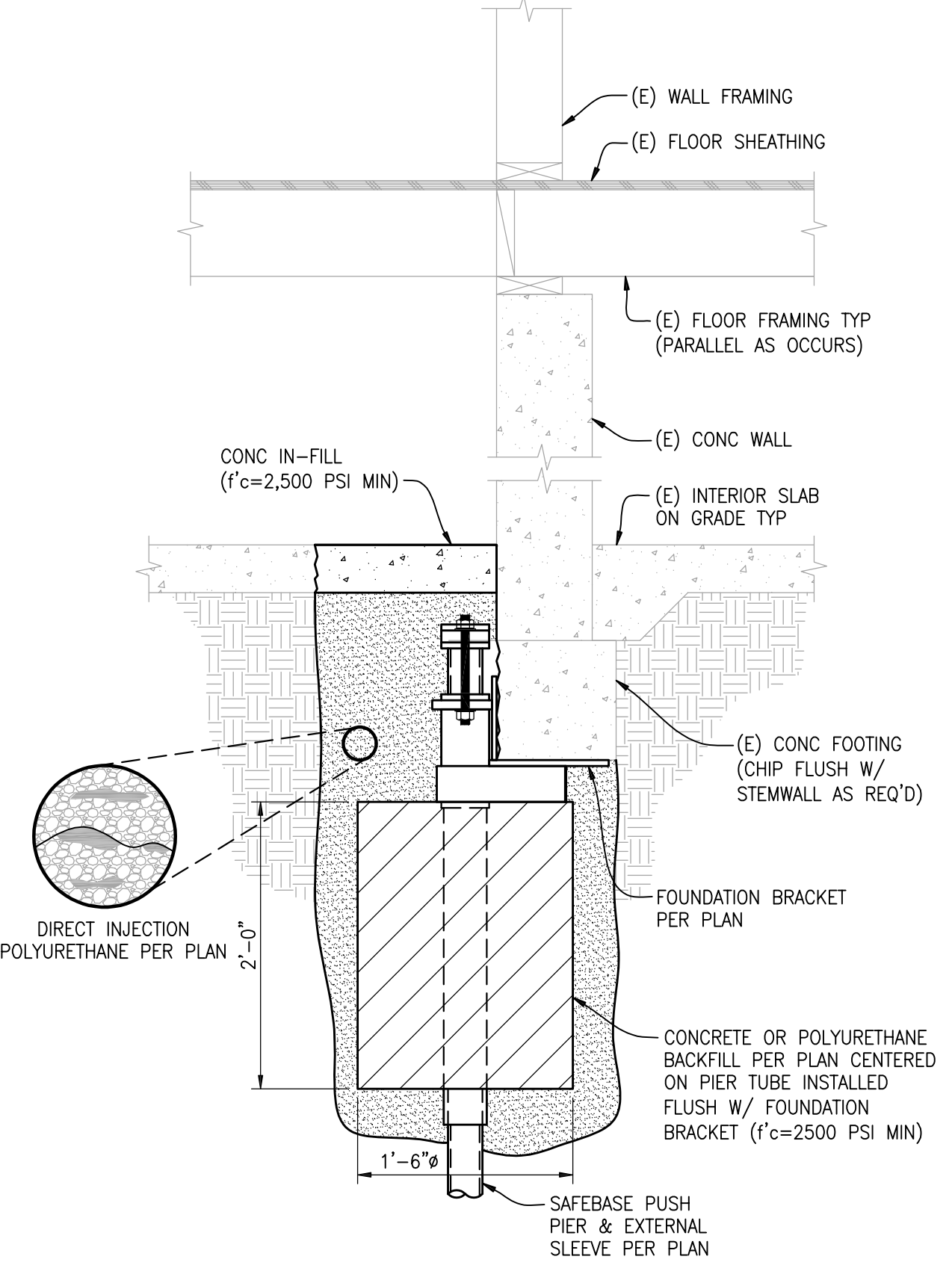


NOTE:

REF PLAN FOR LAYOUT & INSTALLATION REQ'S

(N) PUSH PIER TO (E) FOUNDATION DETAIL

SCALE: 1"=1'-0" 6

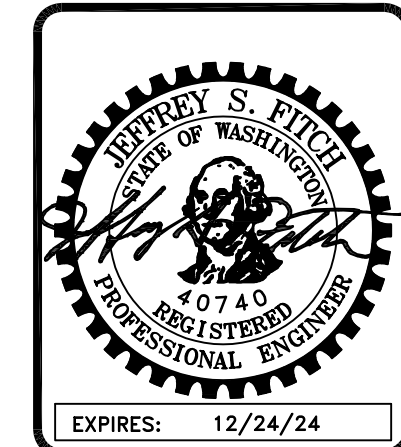


NOTE:

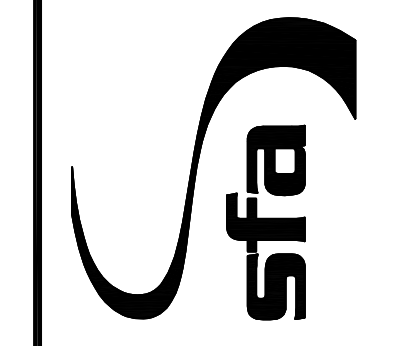
REF PLAN FOR LAYOUT & INSTALLATION REQ'S

(N) PUSH PIER TO (E) FOUNDATION DETAIL

SCALE: 1"=1'-0" 5



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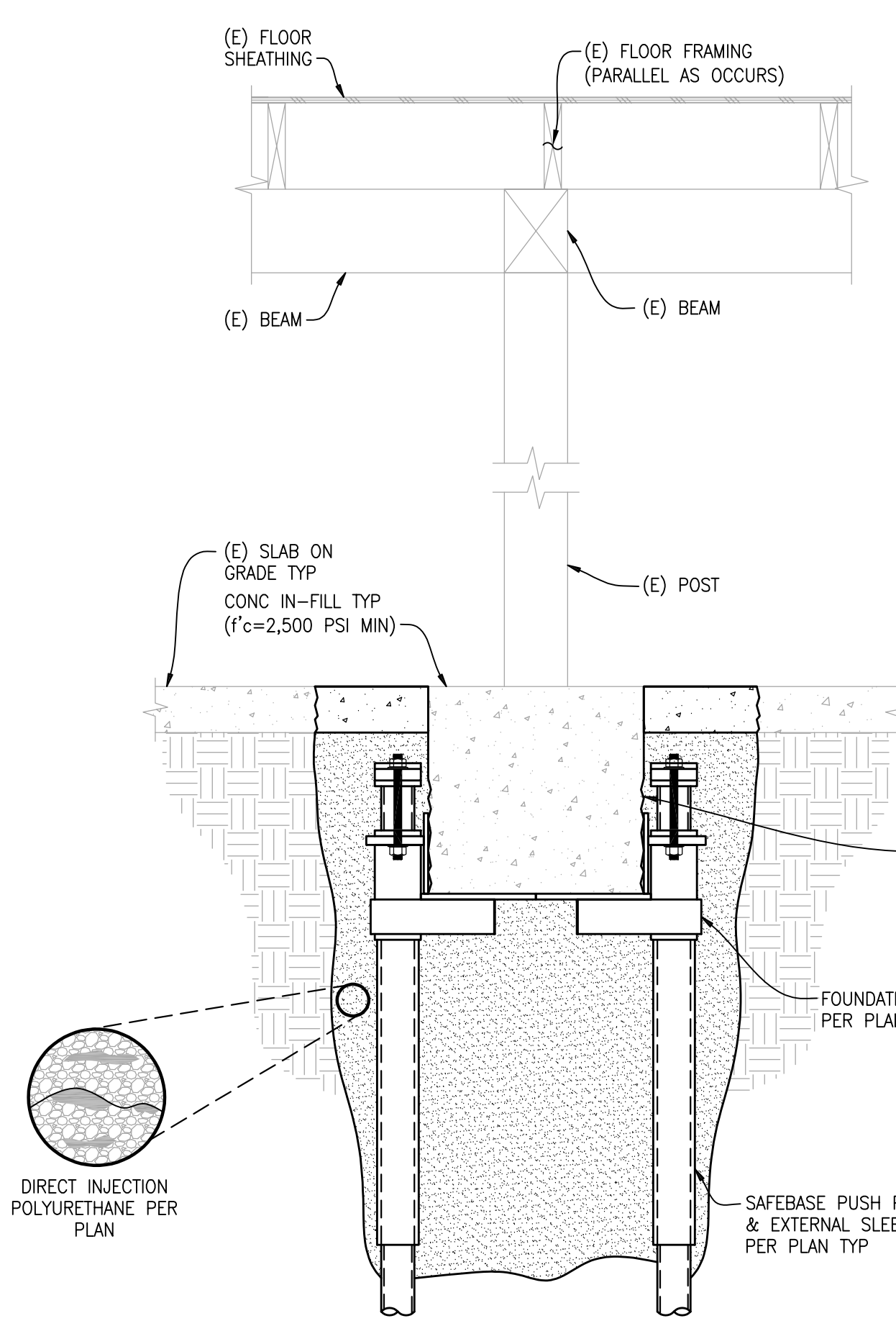
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 MERCER ISLAND, WA 98040

DETAILS

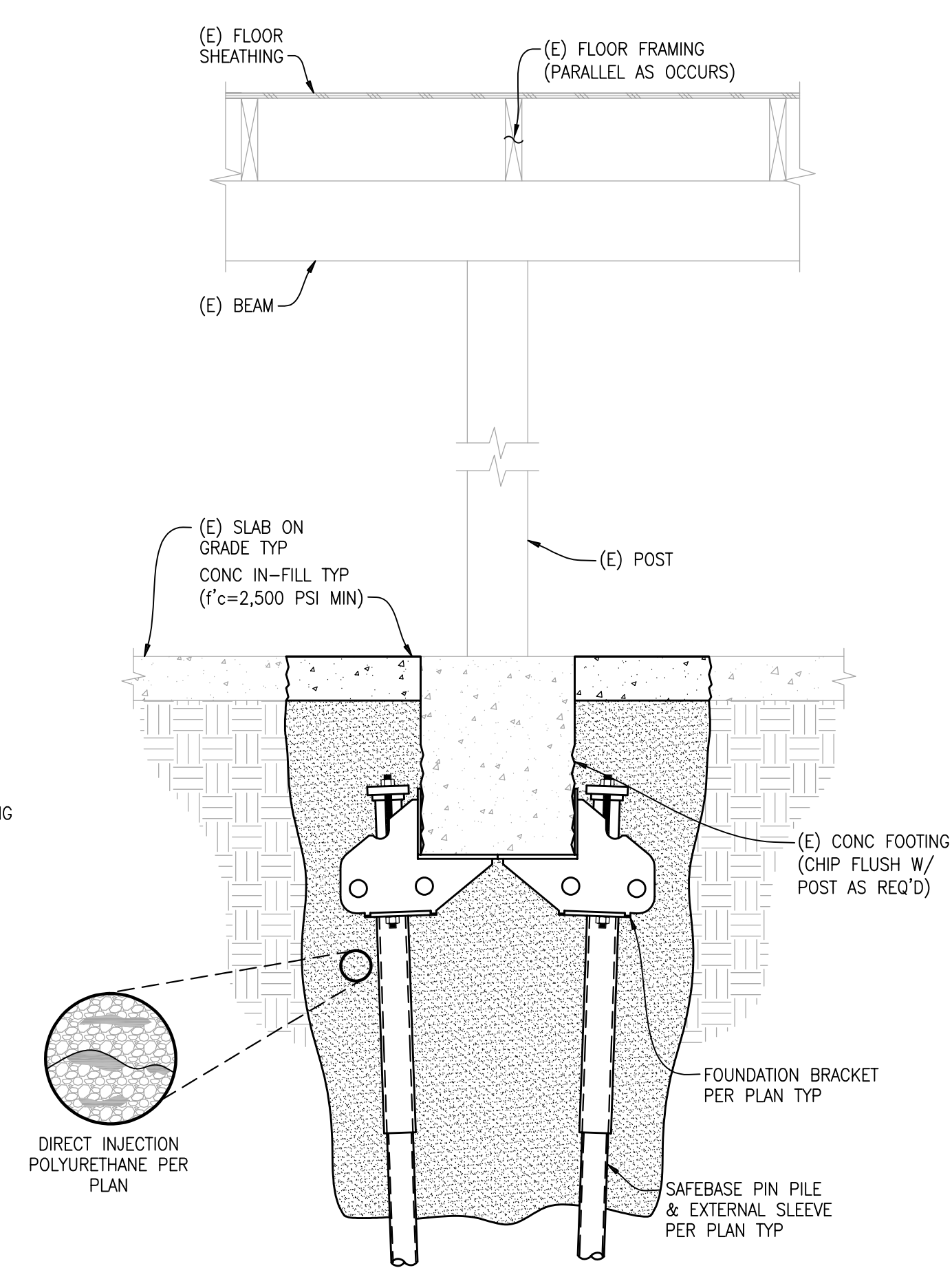
REVISIONS	
△	09-05-23

PROJECT NO:
MFR23-021
 BY:
JB
 DATE:
08.16.2023

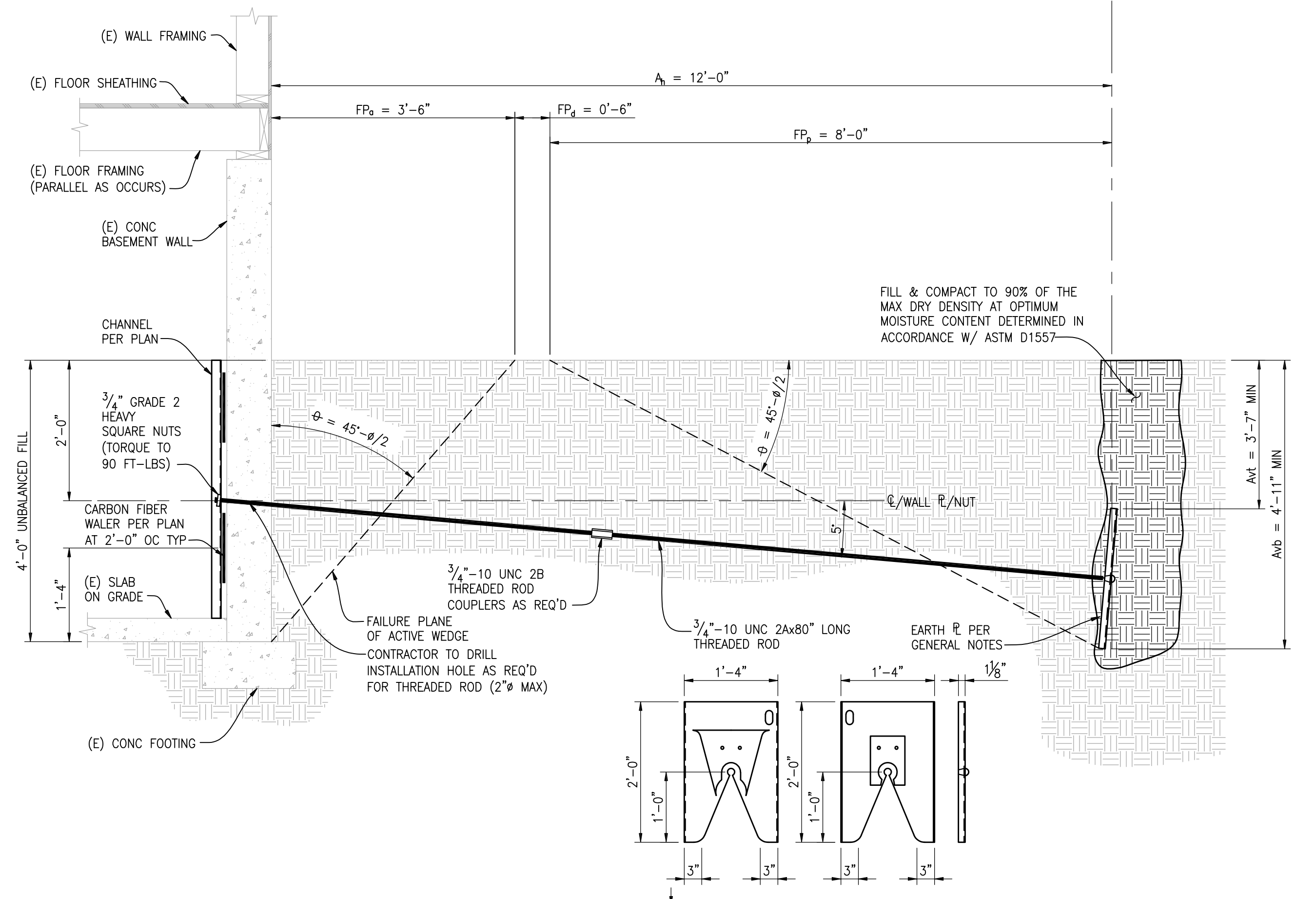
SHEET NO:
S4.3



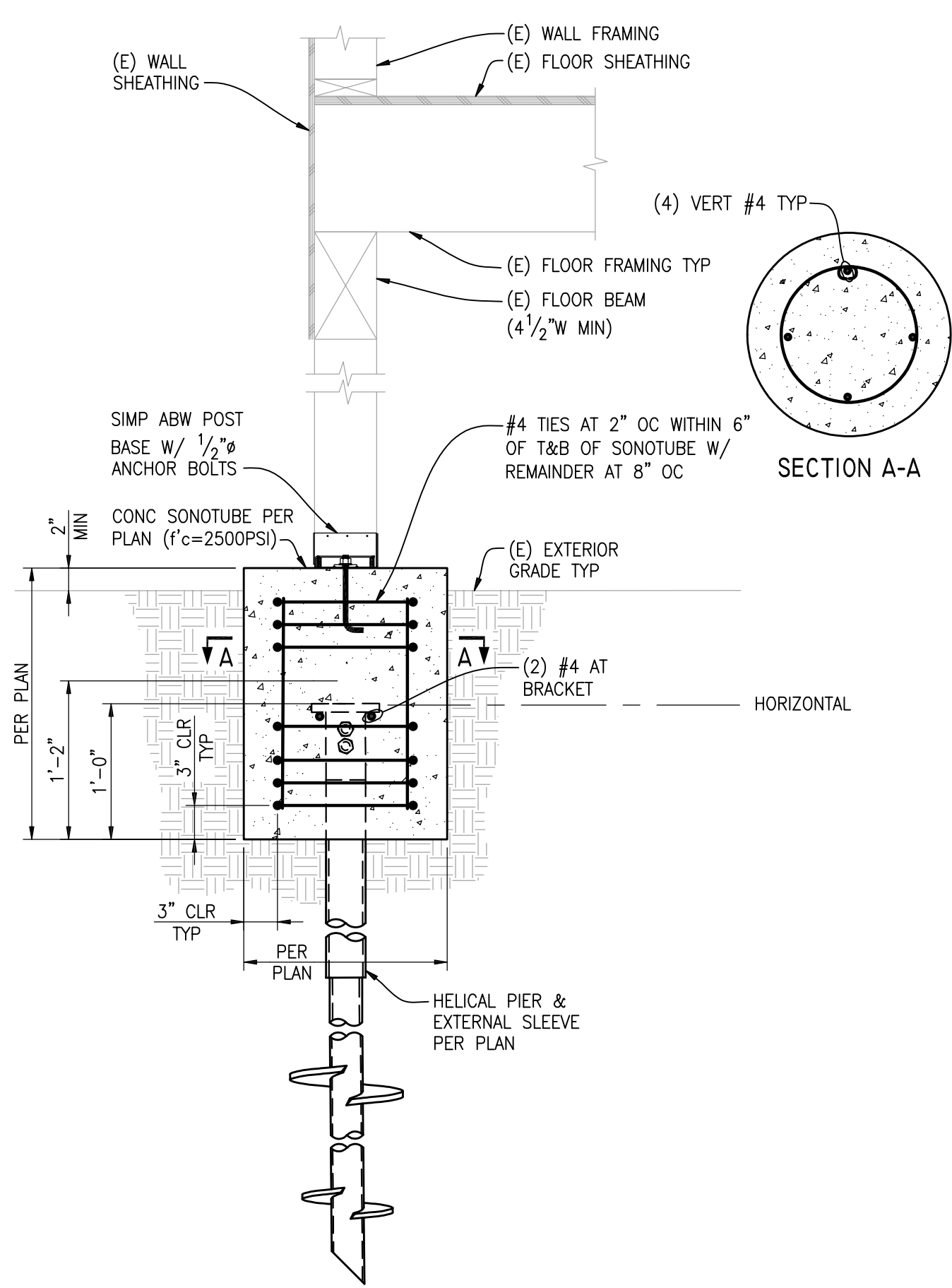
NOTE:
 REF PLAN FOR LAYOUT & INSTALLATION REQ'S
(N) PUSH PIER TO (E) FOUNDATION DETAIL
 SCALE: 1"=1'-0" **1**



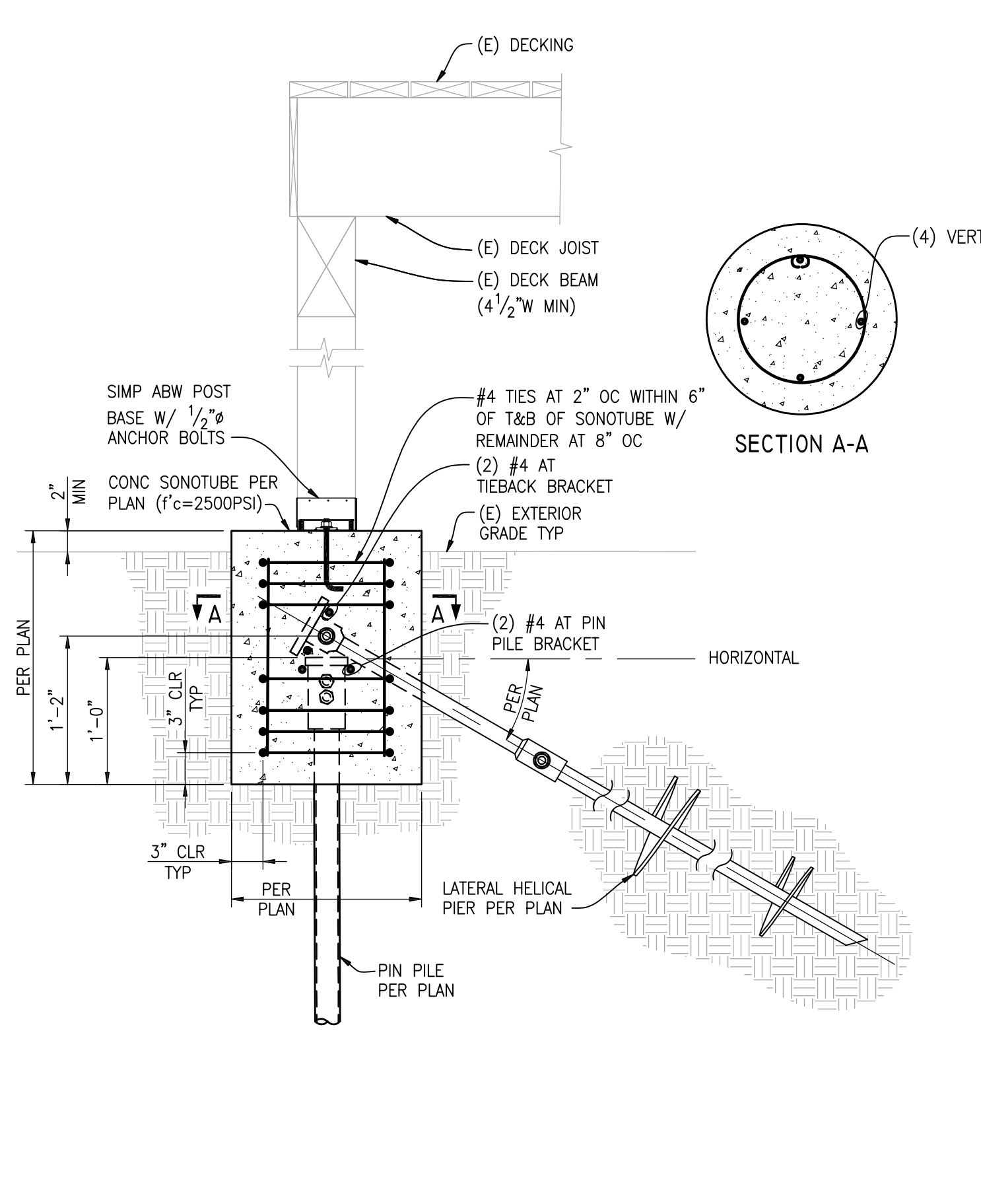
NOTE:
 REF PLAN FOR LAYOUT & INSTALLATION REQ'S
(N) PIN PILE TO (E) FOUNDATION DETAIL
 SCALE: 1"=1'-0" **2**



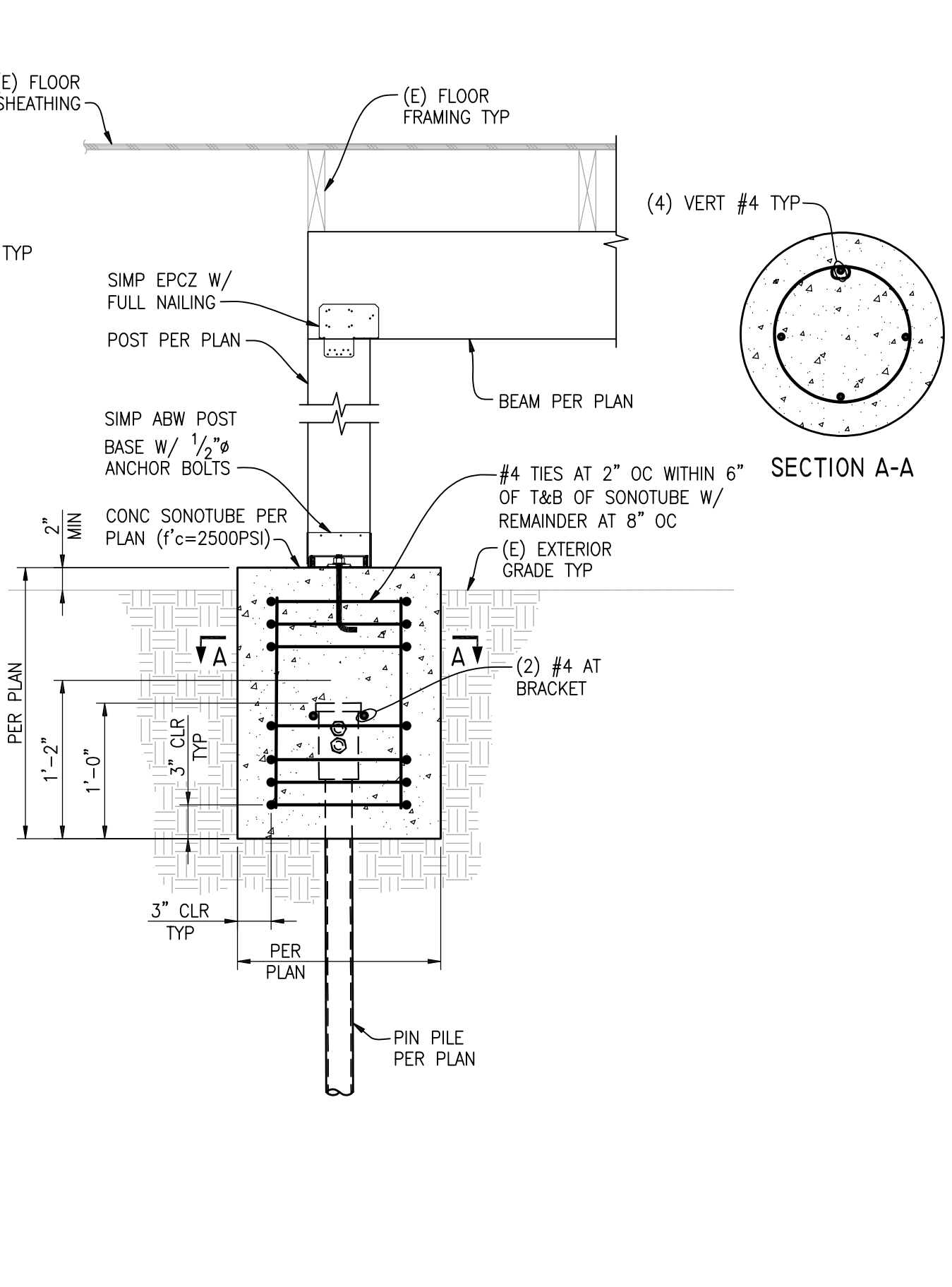
NOTES:
 1. REF PLAN FOR LAYOUT & INSTALLATION REQ'S
 2. ENTIRE ANCHOR ASSEMBLY IS HD GALV
 3. PUSH PIER AND HELICAL TIEBACK PER PLAN NOT SHOWN FOR CLARITY
(E) CONC BASEMENT WALL/(N) WALL ANCHOR SECTION
 SCALE: 3/4"=1'-0" **3**



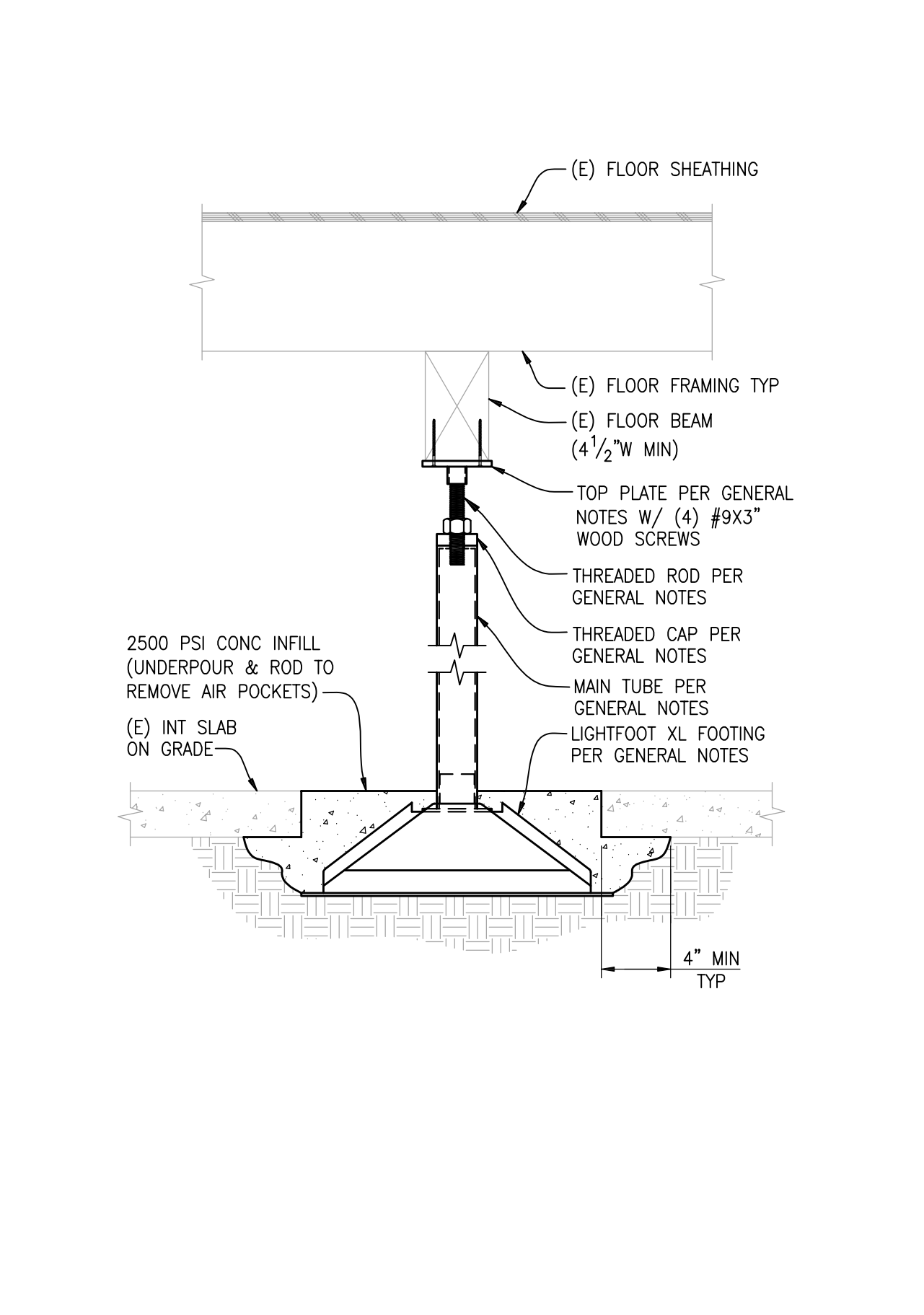
NOTE:
 REF PLAN FOR LAYOUT & INSTALLATION REQ'S
(E) FLOOR TO (E) POST/HELICAL PIER/FTG
 SCALE: 1"=1'-0" **4**



NOTE:
 REF PLAN FOR LAYOUT & INSTALLATION REQ'S
(E) FLOOR TO (N) POST/PIN PILE/TIEBACK/FTG
 SCALE: 1"=1'-0" **5**



NOTE:
 REF PLAN FOR LAYOUT & INSTALLATION REQ'S
(E) FLOOR TO (E) POST/PIN PILE/FTG
 SCALE: 1"=1'-0" **6**



NOTES:
 1. REF PLAN FOR LAYOUT & INSTALLATION REQ'S
 2. INSTALL PER MFR RECOMMENDATIONS
LF STABILIZER IN BASEMENT
 SCALE: 1"=1'-0" **7**