

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



## RANDOLPH MAINTENANCE SALT BUILDING

### SPECIFICATIONS

Design:  
-International Building Code 2009  
-ACI 318-14

### DESIGN LOADING

Live Load ..... Impact of 30,000lb Vehicle  
Ground Snow Load ..... 60psf  
Wind Velocity ..... 110mph  
General ..... Exposure Category 'C', Risk Category II

### MATERIALS

Reinforcing Steel ..... ASTM A615, Grade 60, Epoxy Coated  
(3" minimum concrete cover U.N.O.)  
Structural Steel:  
All Material (U.N.O.) ..... ASTM A36, Grade 36, Galvanized

### BASIC DESIGN STRESSES

Concrete .....  $f'c = 4,000$  psi  
Reinforcing Steel .....  $f_y = 60,000$  psi

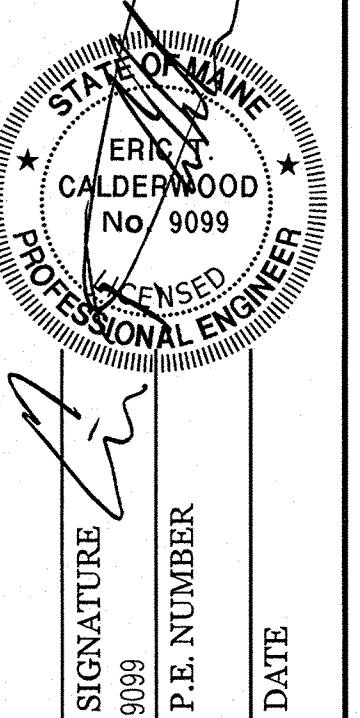
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WIN 026231.00

<b><u>PROJECT LOCATION:</u></b>	72 Birmingham Road Randolph, Maine 04346
<b><u>PROGRAM AREA:</u></b>	Highway Maintenance Program
<b><u>OUTLINE OF WORK:</u></b>	Construction of Salt Storage Building

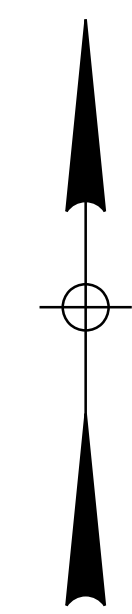
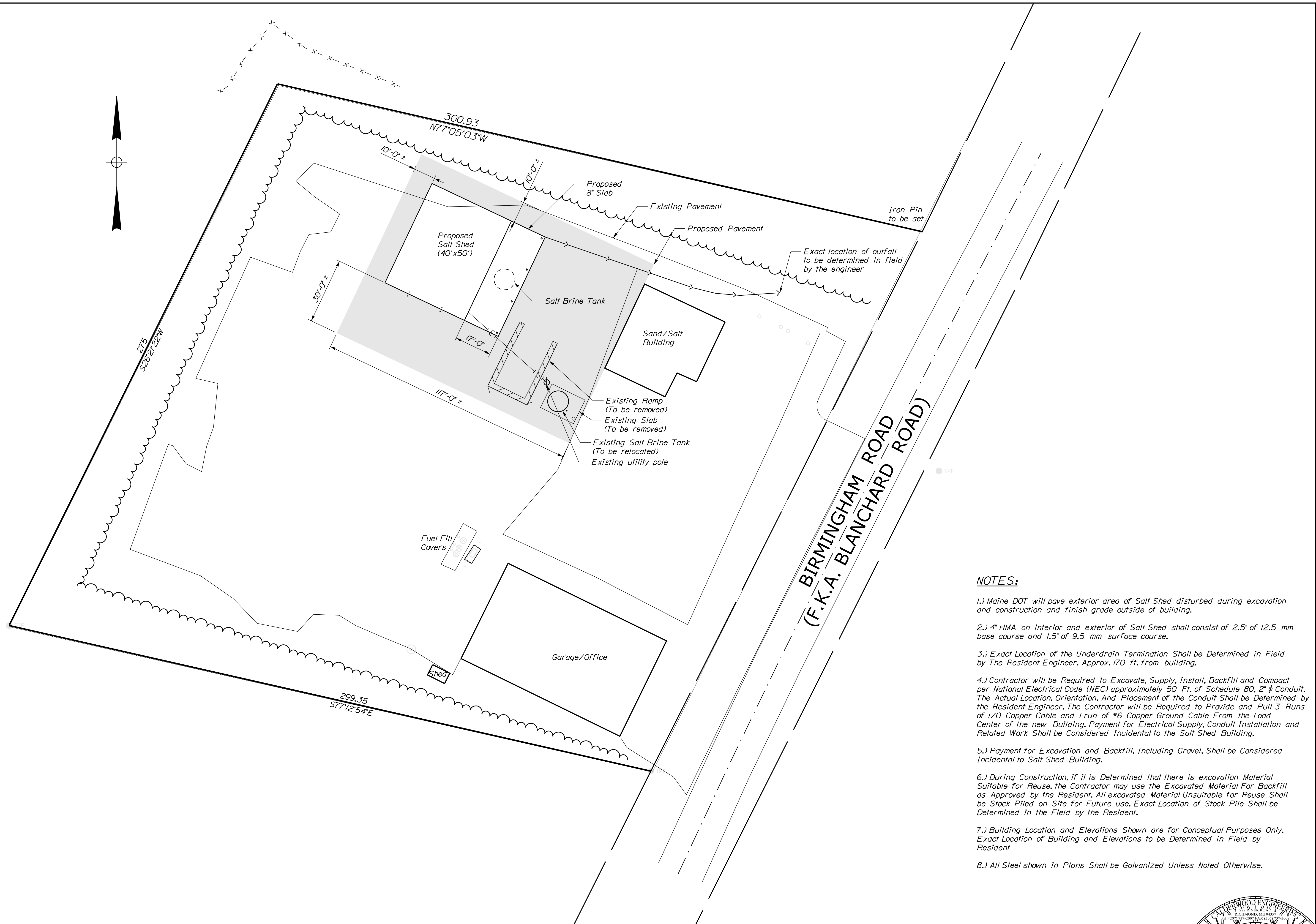
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
APPROVED: *[Signature]*  
COMMISSIONER: *[Signature]*  
DATE: 8/10/2020  
CHIEF ENGINEER: *[Signature]*



PROJECT INFORMATION	PROGRAM	M. HINKLEY	SIGNATURE	9099	P.E. NUMBER	DATE
	PROJECT MANAGER	M. COLE				
	DESIGNER					
	CONSULTANT	CALDERWOOD ENGINEERING				
	PROJECT RESIDENT					
	CONTRACTOR					
	PROJECT COMPLETION DATE					

RANDOLPH MAINTENANCE  
SALT BUILDING  
TITLE SHEET

SHEET NUMBER  
**1**  
OF 18

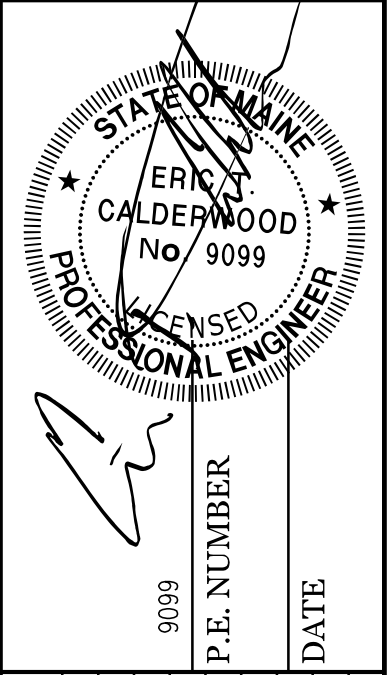


**BIRMINGHAM ROAD  
(F.K.A. BLANCHARD ROAD)**

**NOTES:**

- 1.) Maine DOT will pave exterior area of Salt Shed disturbed during excavation and construction and finish grade outside of building.
- 2.) 4" HMA on interior and exterior of Salt Shed shall consist of 2.5" of 12.5 mm base course and 1.5" of 9.5 mm surface course.
- 3.) Exact Location of the Underdrain Termination Shall be Determined in Field by The Resident Engineer. Approx. 170 ft. from building.
- 4.) Contractor will be Required to Excavate, Supply, Install, Backfill and Compact per National Electrical Code (NEC) approximately 50 Ft. of Schedule 80, 2"  $\phi$  Conduit. The Actual Location, Orientation, And Placement of the Conduit Shall be Determined by the Resident Engineer. The Contractor will be Required to Provide and Pull 3 Runs of 1/0 Copper Cable and 1 run of #6 Copper Ground Cable From the Load Center of the new Building. Payment for Electrical Supply, Conduit Installation and Related Work Shall be Considered Incidental to the Salt Shed Building.
- 5.) Payment for Excavation and Backfill, Including Gravel, Shall be Considered Incidental to Salt Shed Building.
- 6.) During Construction, if it is Determined that there is excavation Material Suitable for Reuse, the Contractor may use the Excavated Material For Backfill as Approved by the Resident. All excavated Material Unsuitable for Reuse Shall be Stock Piled on Site for Future use. Exact Location of Stock Pile Shall be Determined in the Field by the Resident.
- 7.) Building Location and Elevations Shown are for Conceptual Purposes Only. Exact Location of Building and Elevations to be Determined in Field by Resident
- 8.) All Steel shown in Plans Shall be Galvanized Unless Noted Otherwise.

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**RANDOLPH, ME SALT SHED**  
 WIN 026231.00



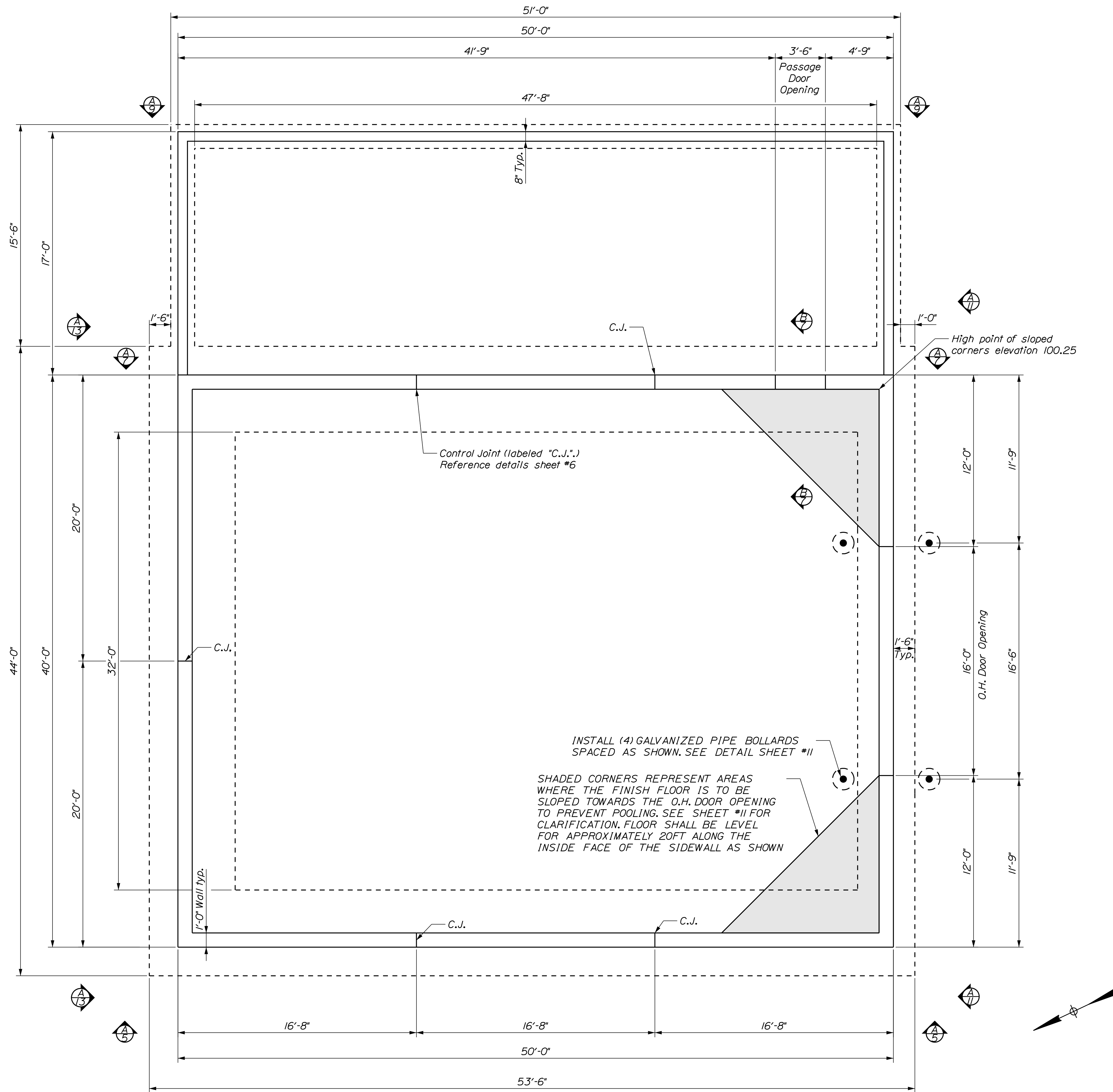
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		FIELD CHANGES

**RANDOLPH MAINTENANCE  
SALT BUILDING**

**GENERAL PLAN**

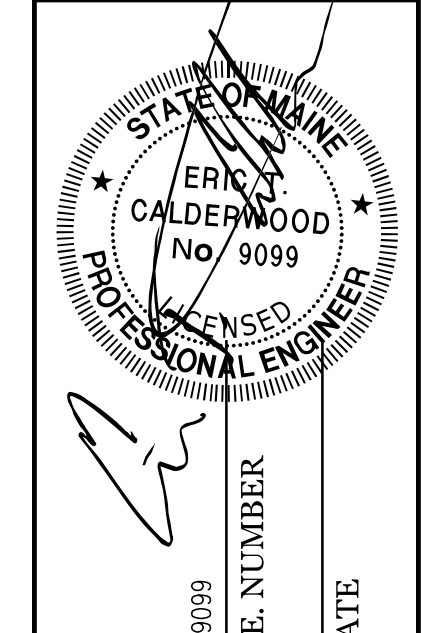
SHEET NUMBER  
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 OF 18





FOUNDATION PLAN  
 1/4" = 1'-0"

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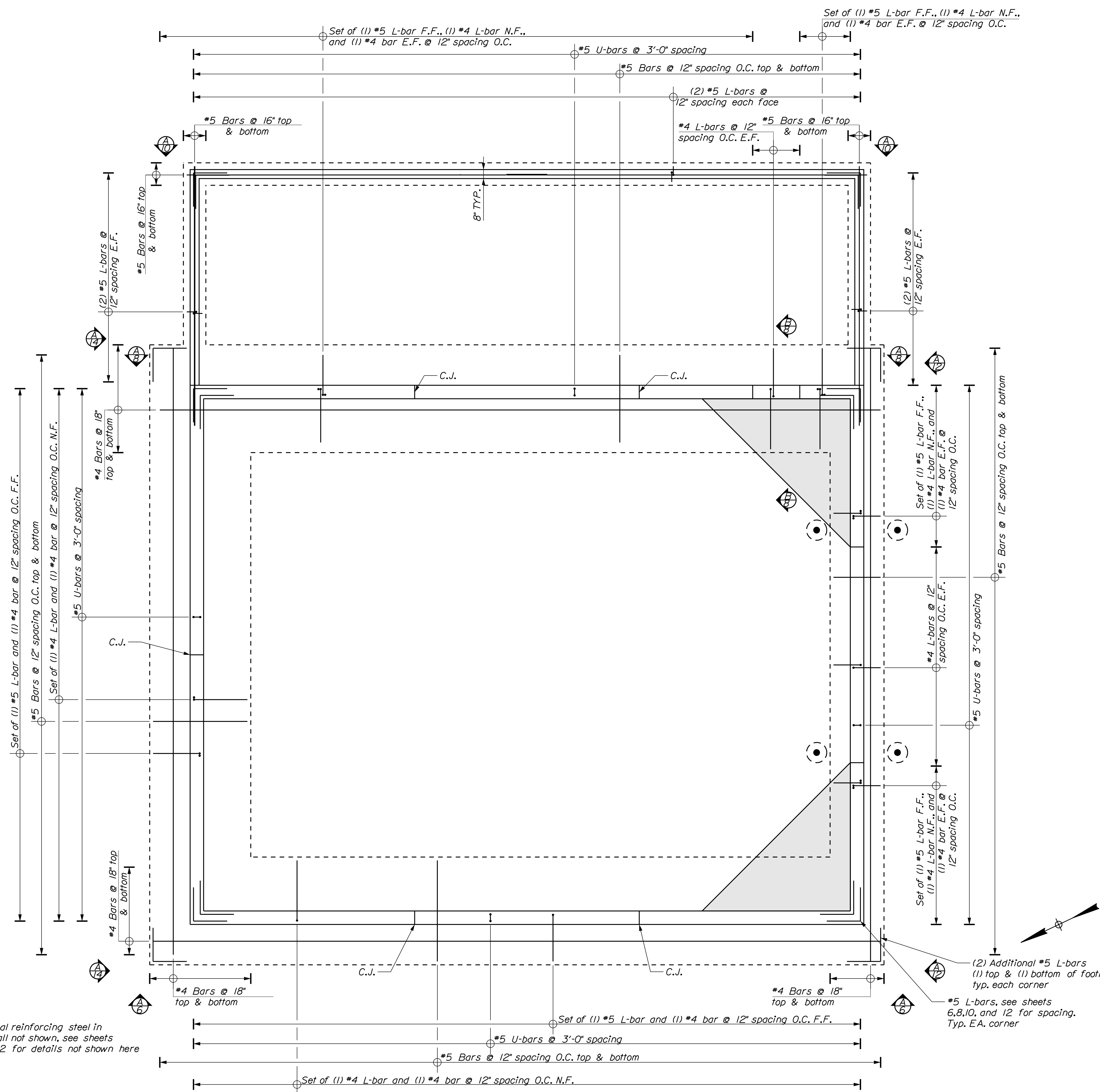
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RANDOLPH MAINTENANCE  
 SALT BUILDING  
 FOUNDATION PLAN

SHEET NUMBER  
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 OF 18

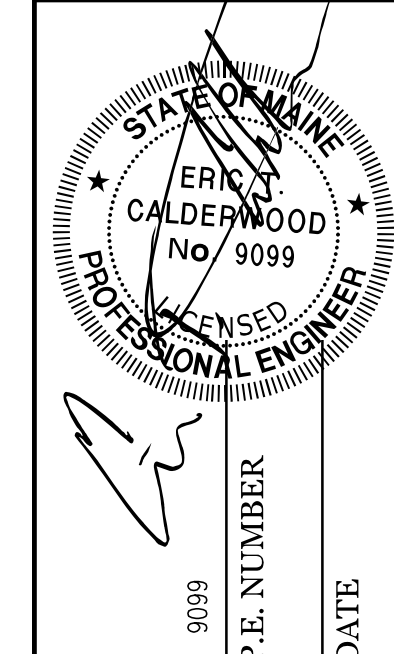


Note: Horizontal reinforcing steel in foundation wall not shown, see sheets 6, 8, 10, and 12 for details not shown here



FOUNDATION REINFORCING PLAN  
1/4" = 1'-0"

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REVISIONS	P.E. NUMBER	DATE
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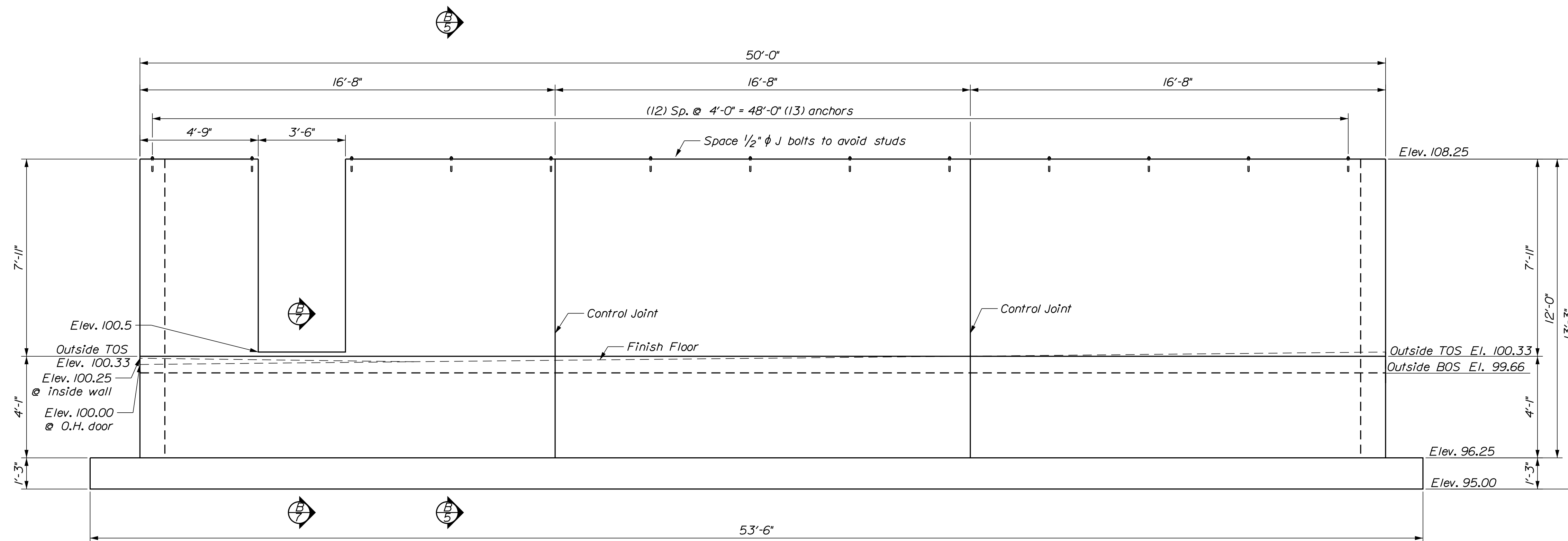
RANDOLPH MAINTENANCE  
SALT BUILDING  
FOUNDATION REINFORCING PLAN

SHEET NUMBER  
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OF 18

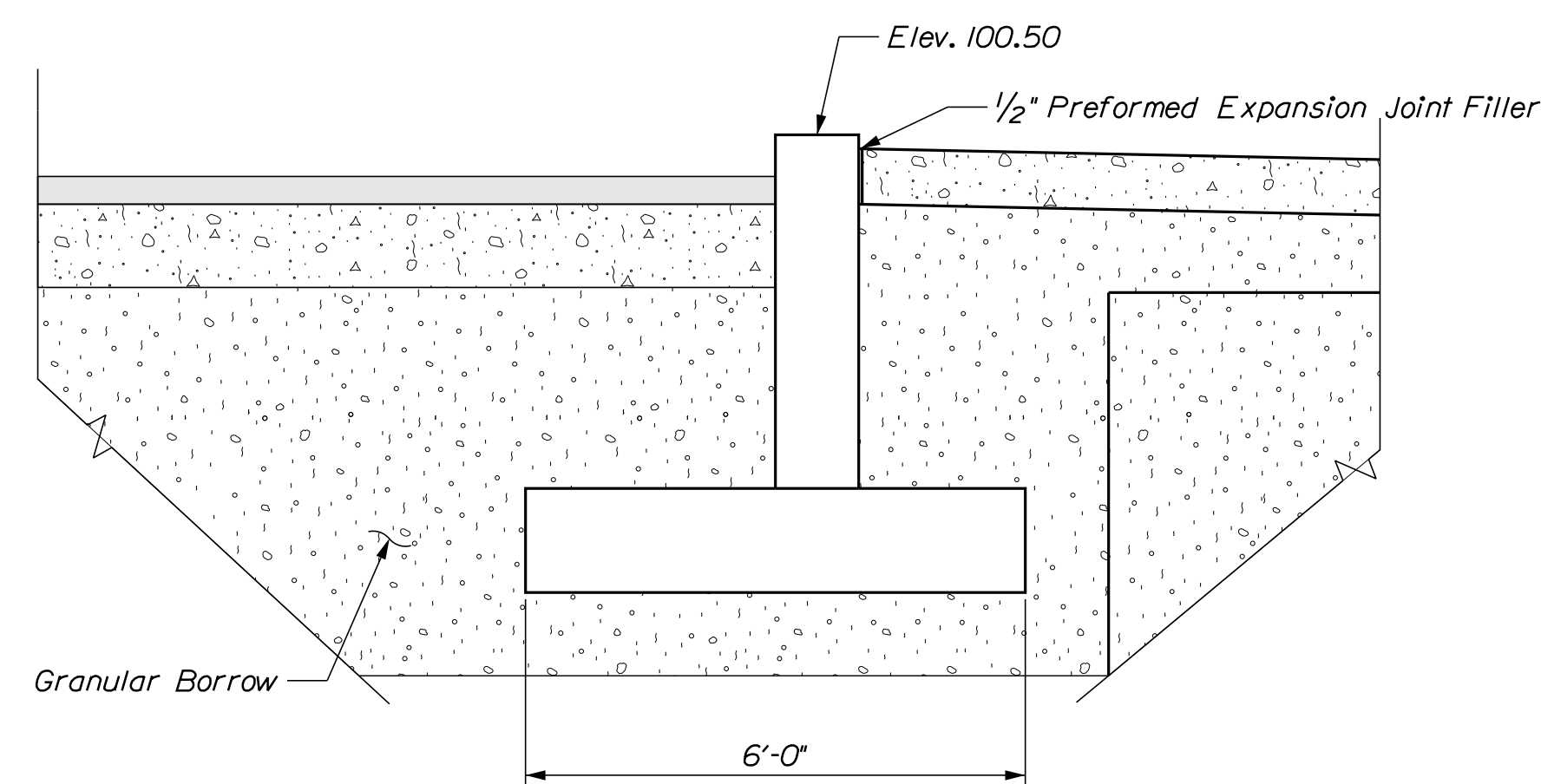






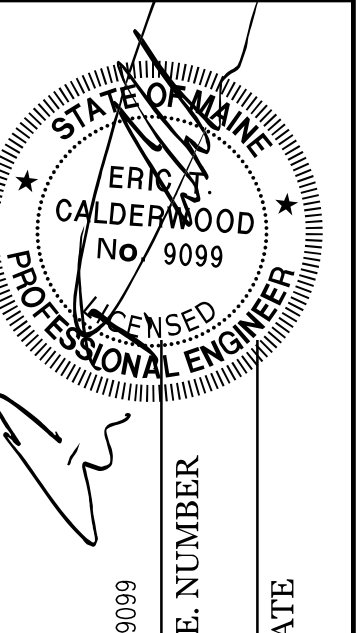


**A** EAST SIDEWALL ELEVATION  
3/8" = 1'-0"



**B** FOUNDATION SECTION AT PASSAGE DOOR  
1/2" = 1'-0"

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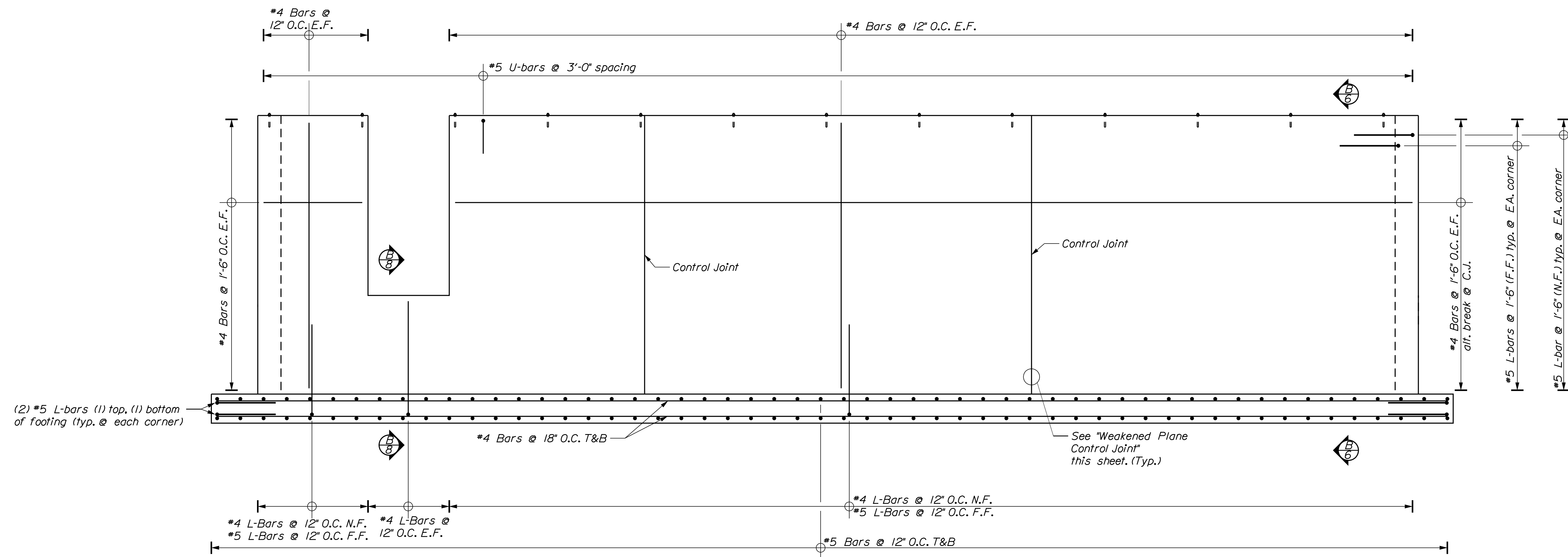
RANDOLPH MAINTENANCE  
SALT BUILDING  
EAST SIDEWALL  
DIMENSIONAL DETAILS

SHEET NUMBER

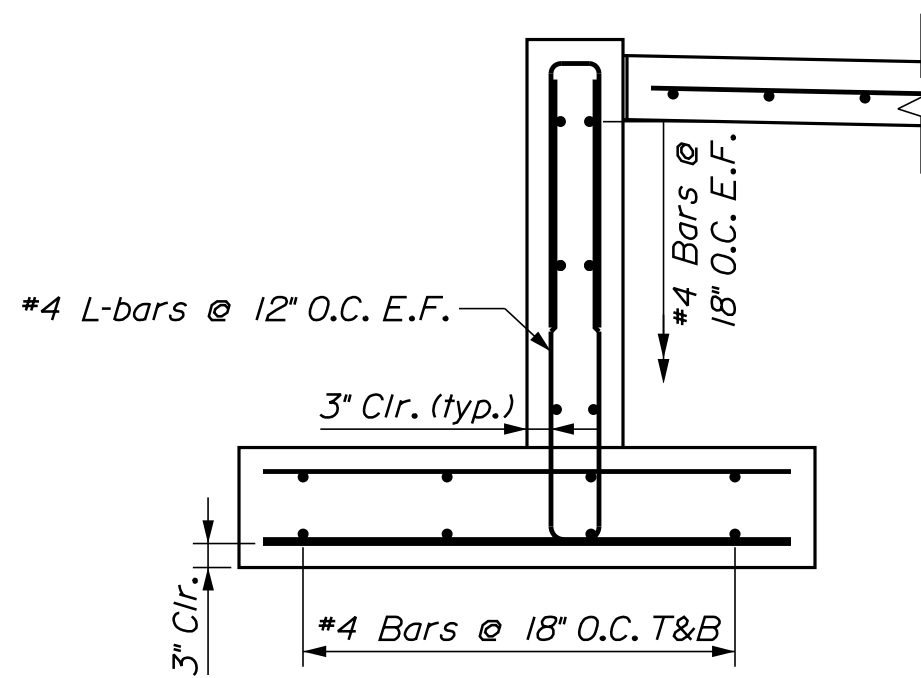
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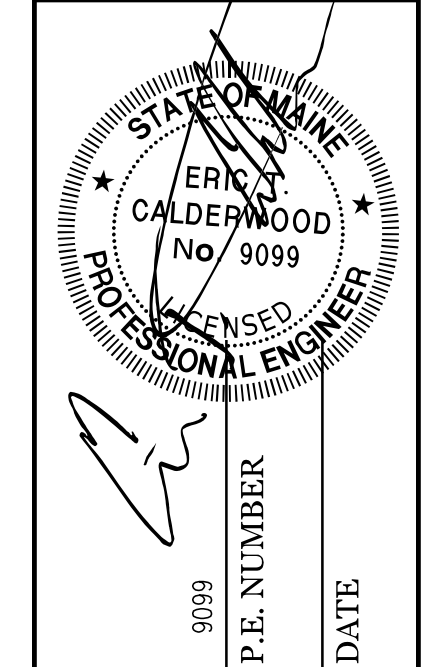


**(A)** EAST SIDEWALL REINFORCING ELEVATION  
 3/8" = 1'-0"



**(B)** FOUNDATION REINFORCING SECTION AT PASSAGE DOOR  
 1/2" = 1'-0"

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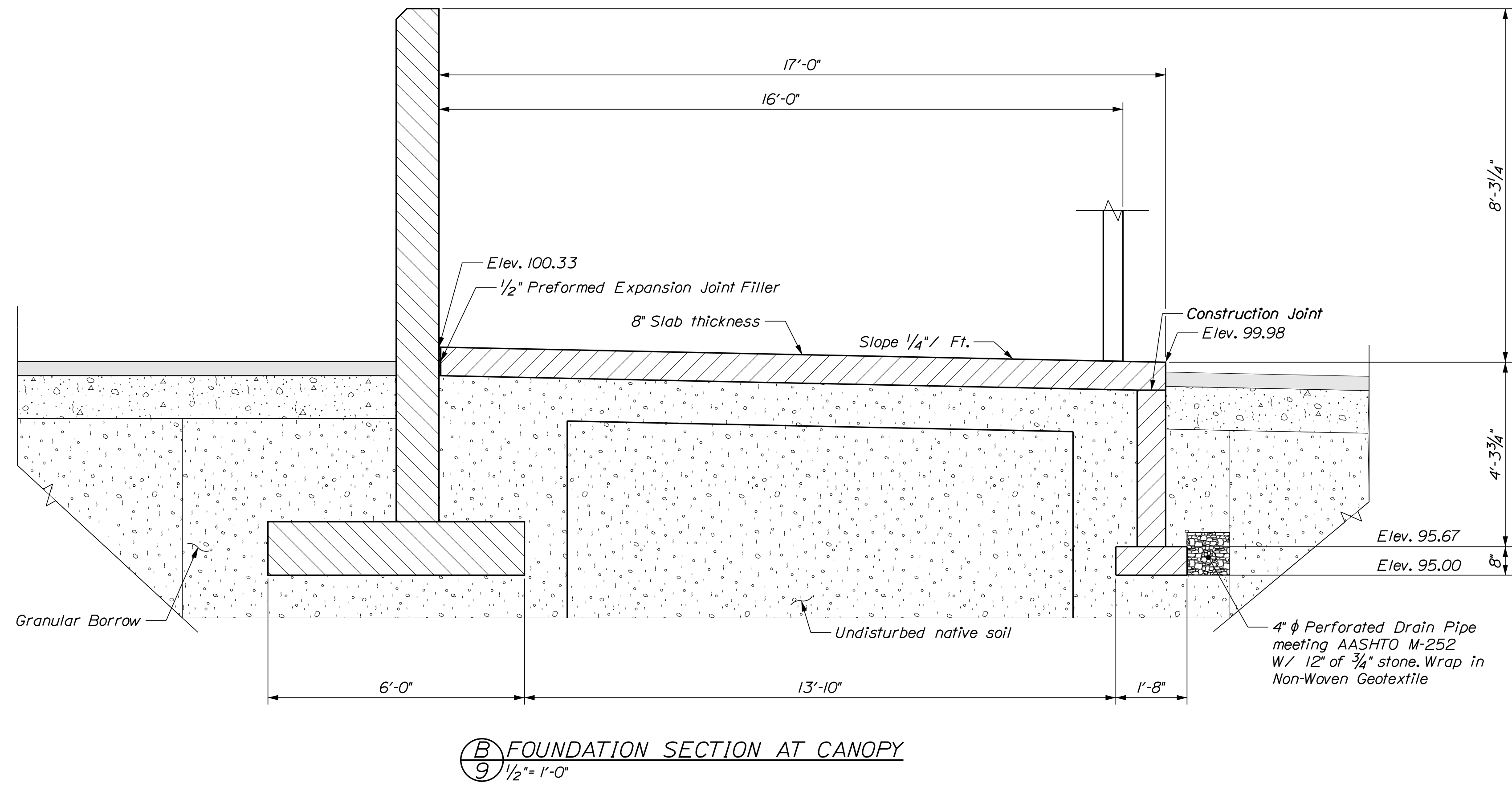
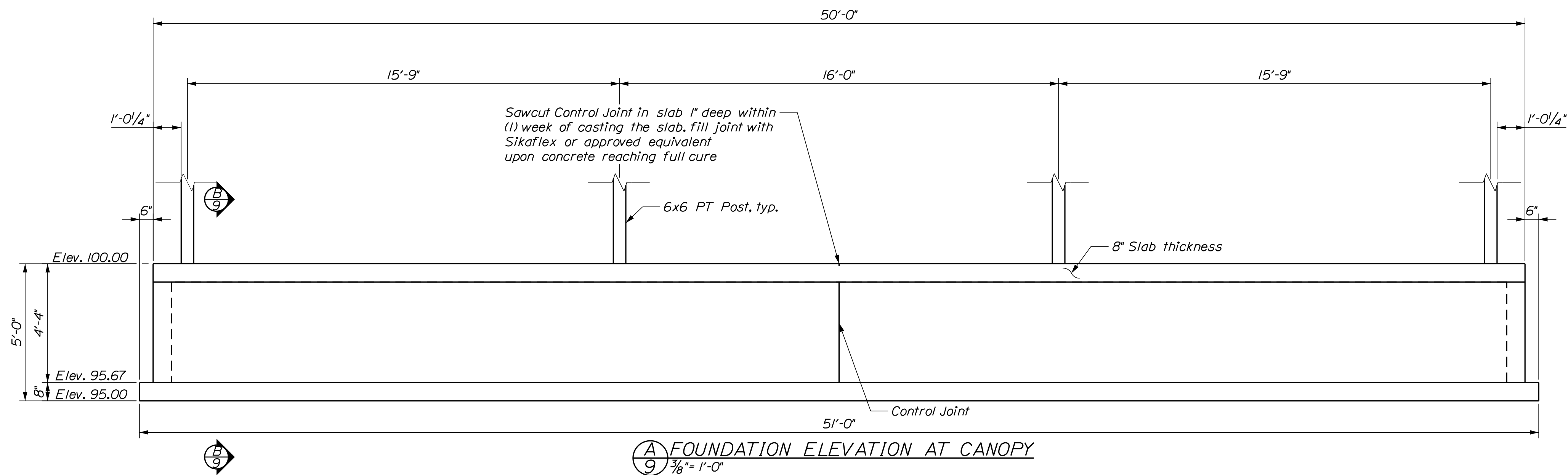


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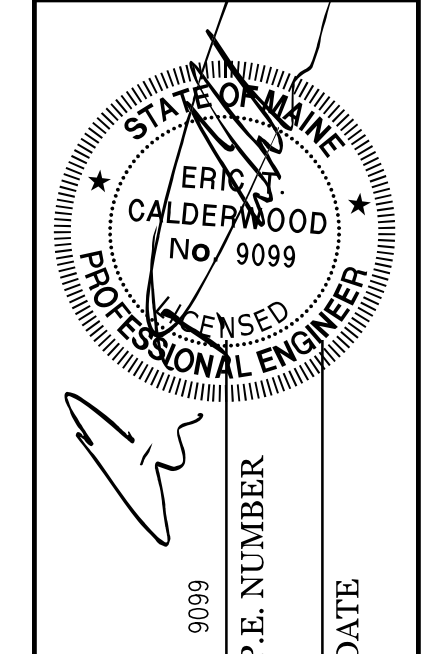
RANDOLPH MAINTENANCE  
 SALT BUILDING  
 EAST SIDEWALL  
 REINFORCING DETAILS

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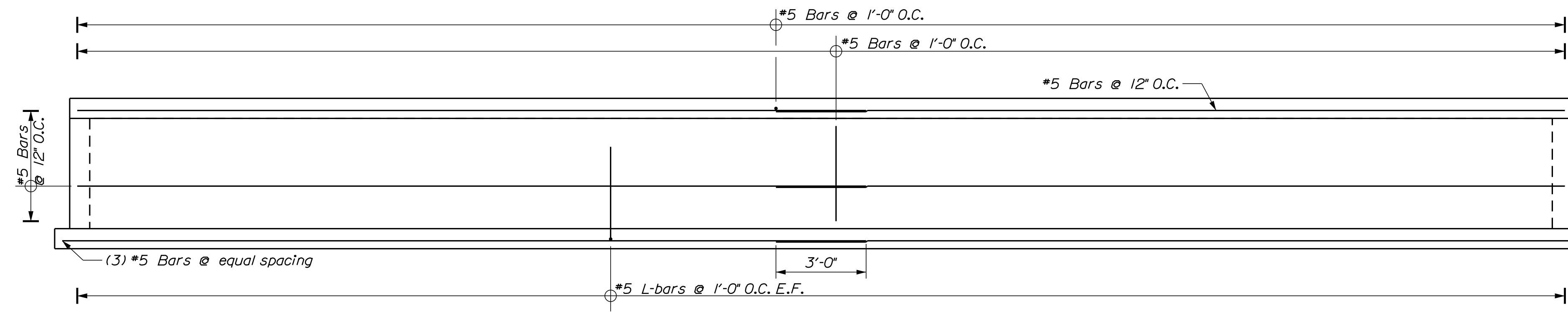


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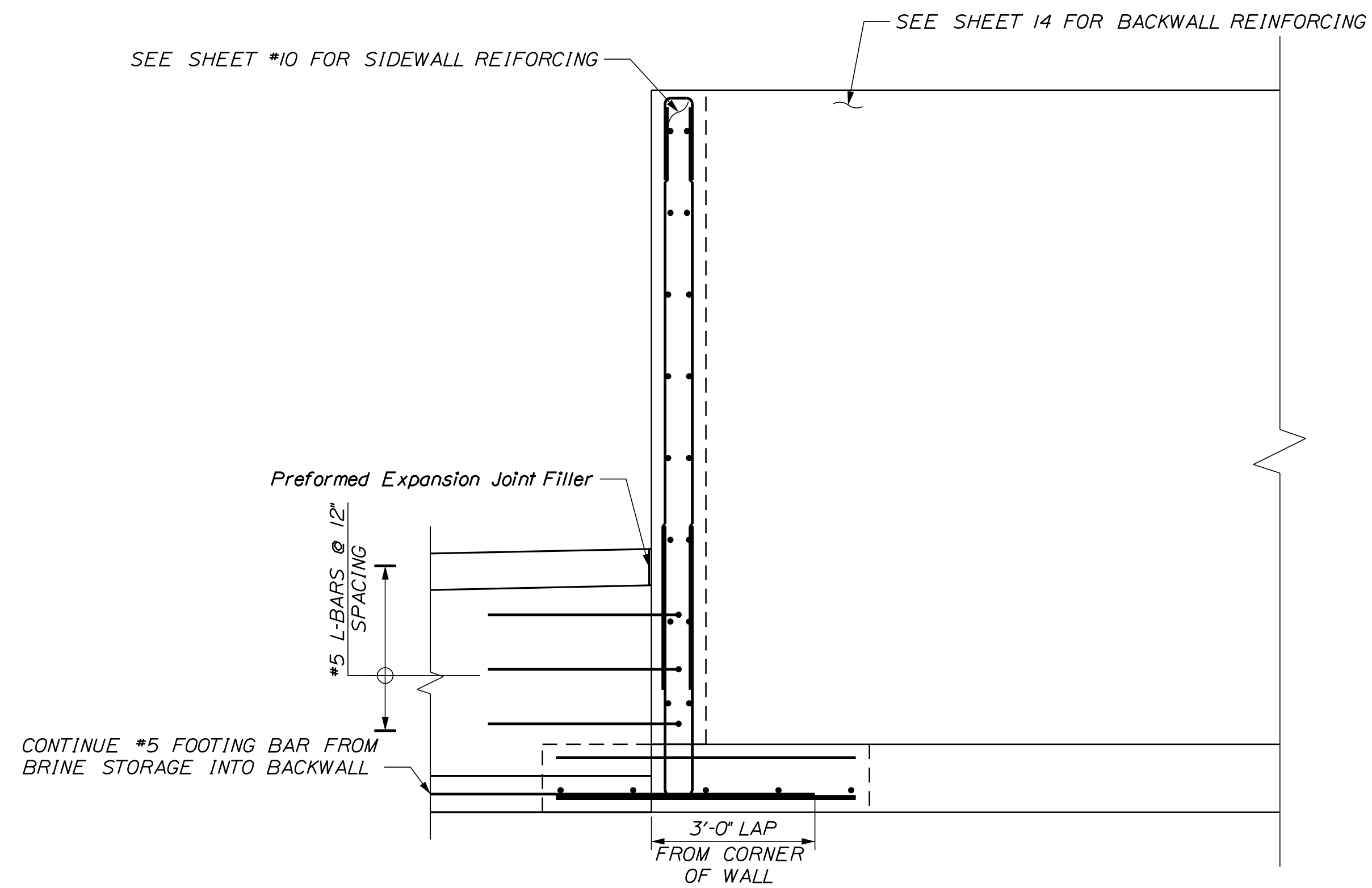
RANDOLPH MAINTENANCE  
SALT BUILDING  
BRINE STORAGE DIMENSIONAL  
FOUNDATION DETAILS

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**9**  
OF 18

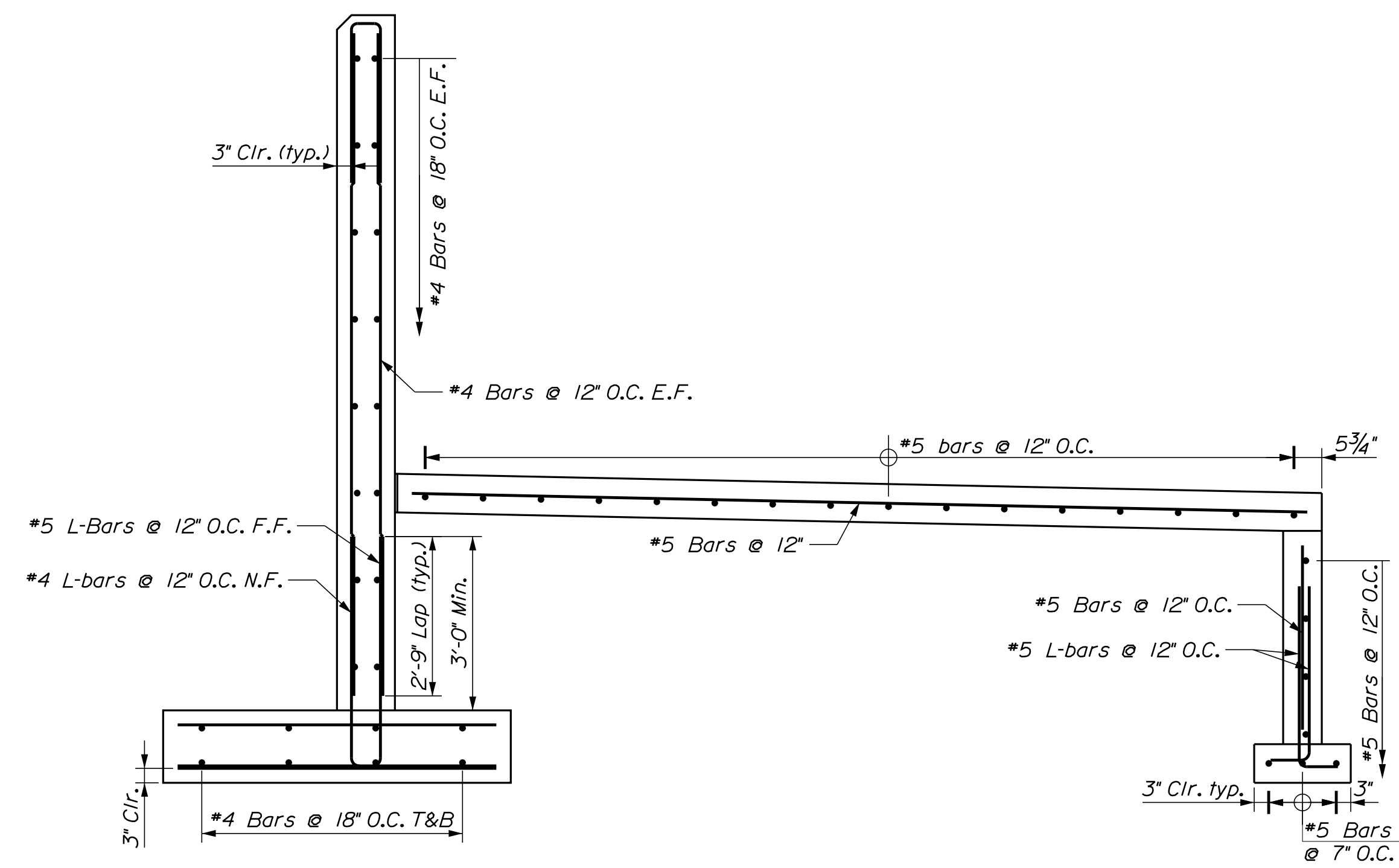




**(A)** FOUNDATION ELEVATION REINFORCING AT CANOPY  
 $\frac{1}{8}'' = 1'-0''$

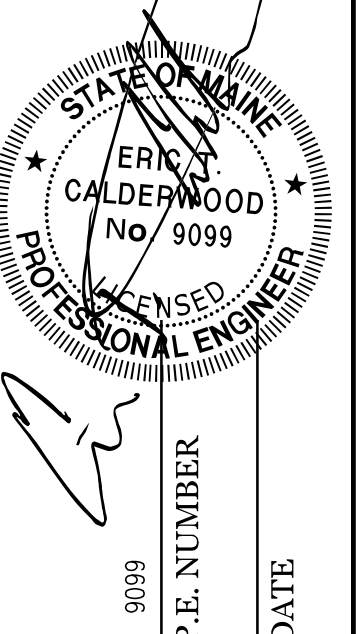


TYPICAL CANOPY FOUNDATION CONNECTION DETAIL  
 $\frac{1}{2}'' = 1'-0''$



**(B)** FOUNDATION REINFORCING SECTION AT CANOPY  
 $\frac{1}{2}'' = 1'-0''$   $\frac{1}{2}'' = 1'-0''$

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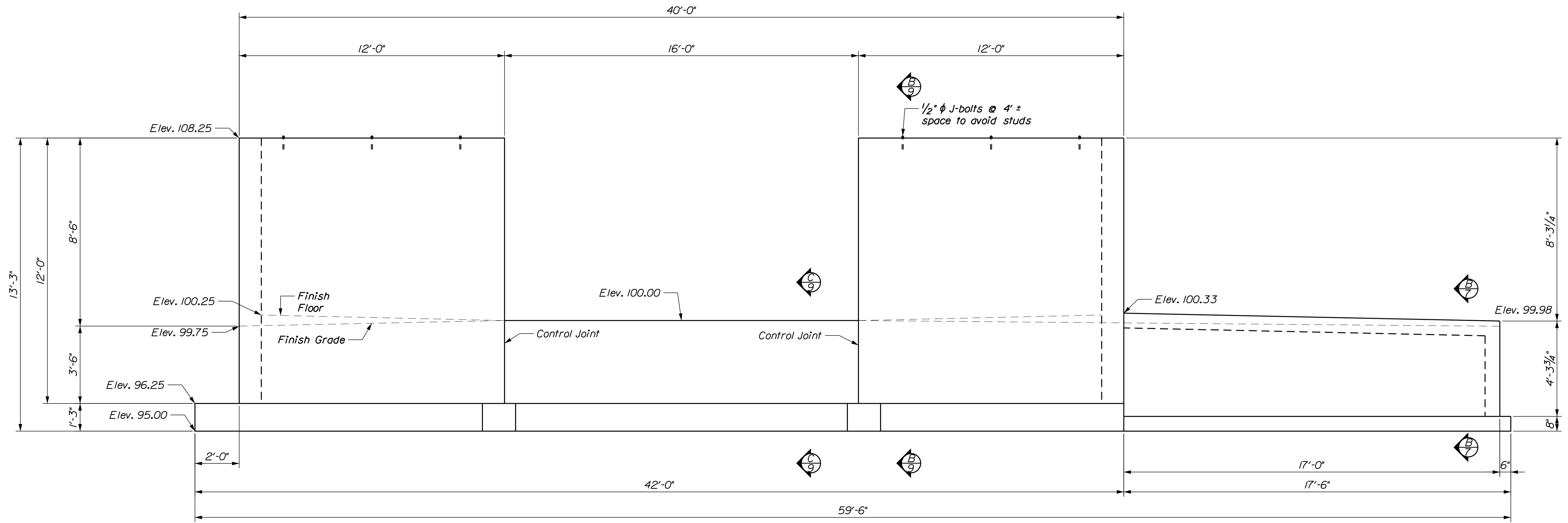
RANDOLPH MAINTENANCE  
 SALT BUILDING  
 BRINE STORAGE REINFORCING  
 FOUNDATION DETAILS

SHEET NUMBER

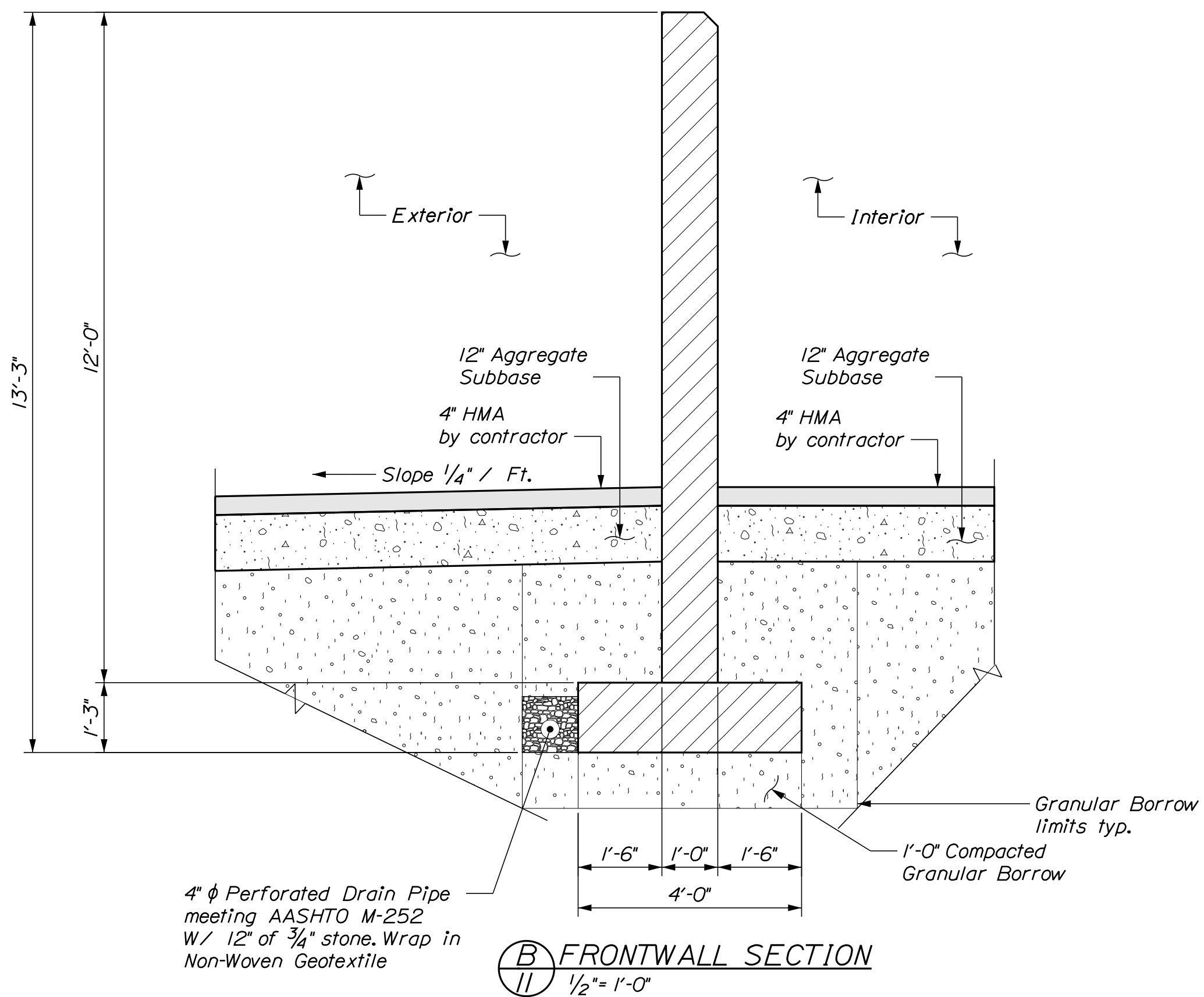
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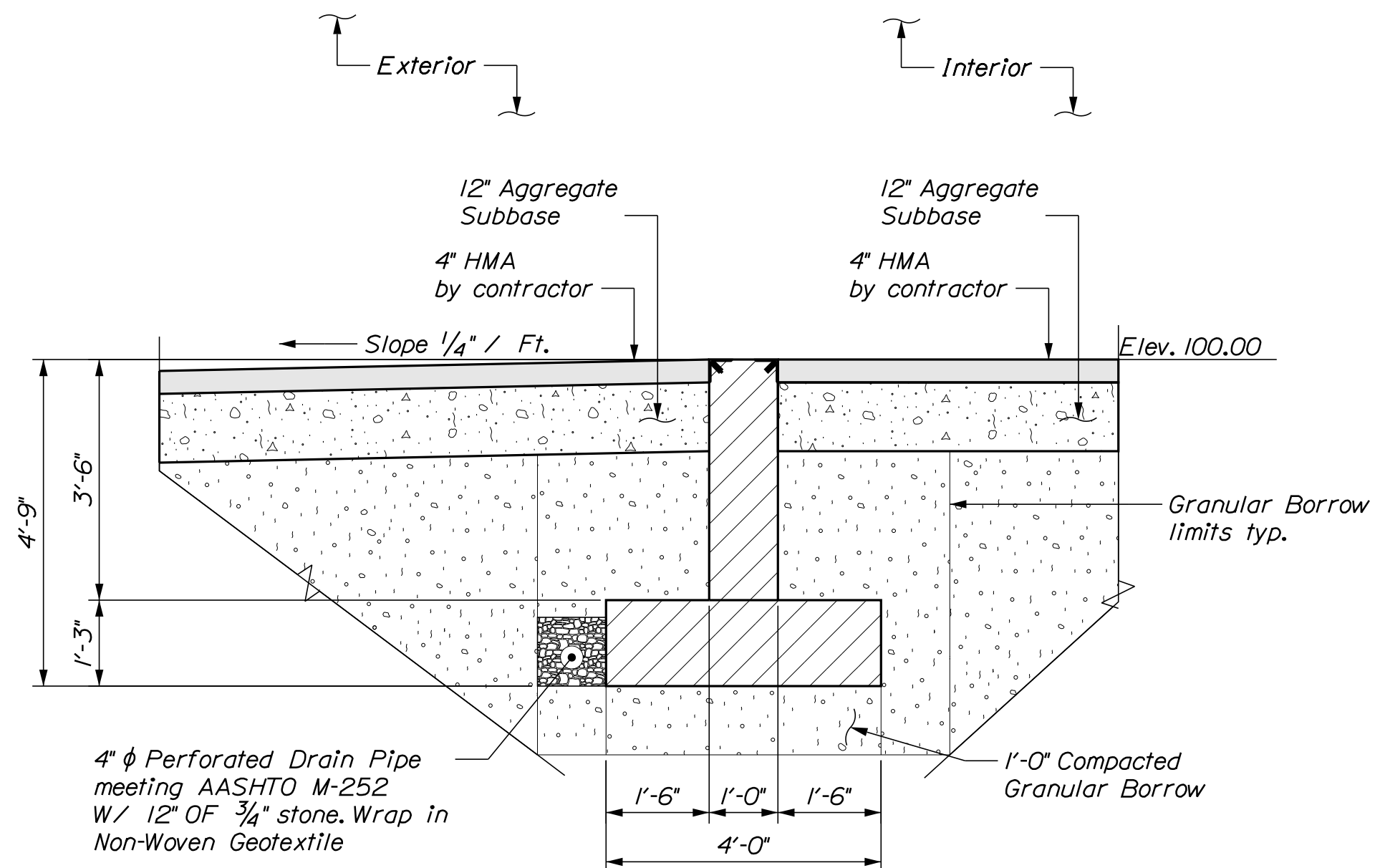




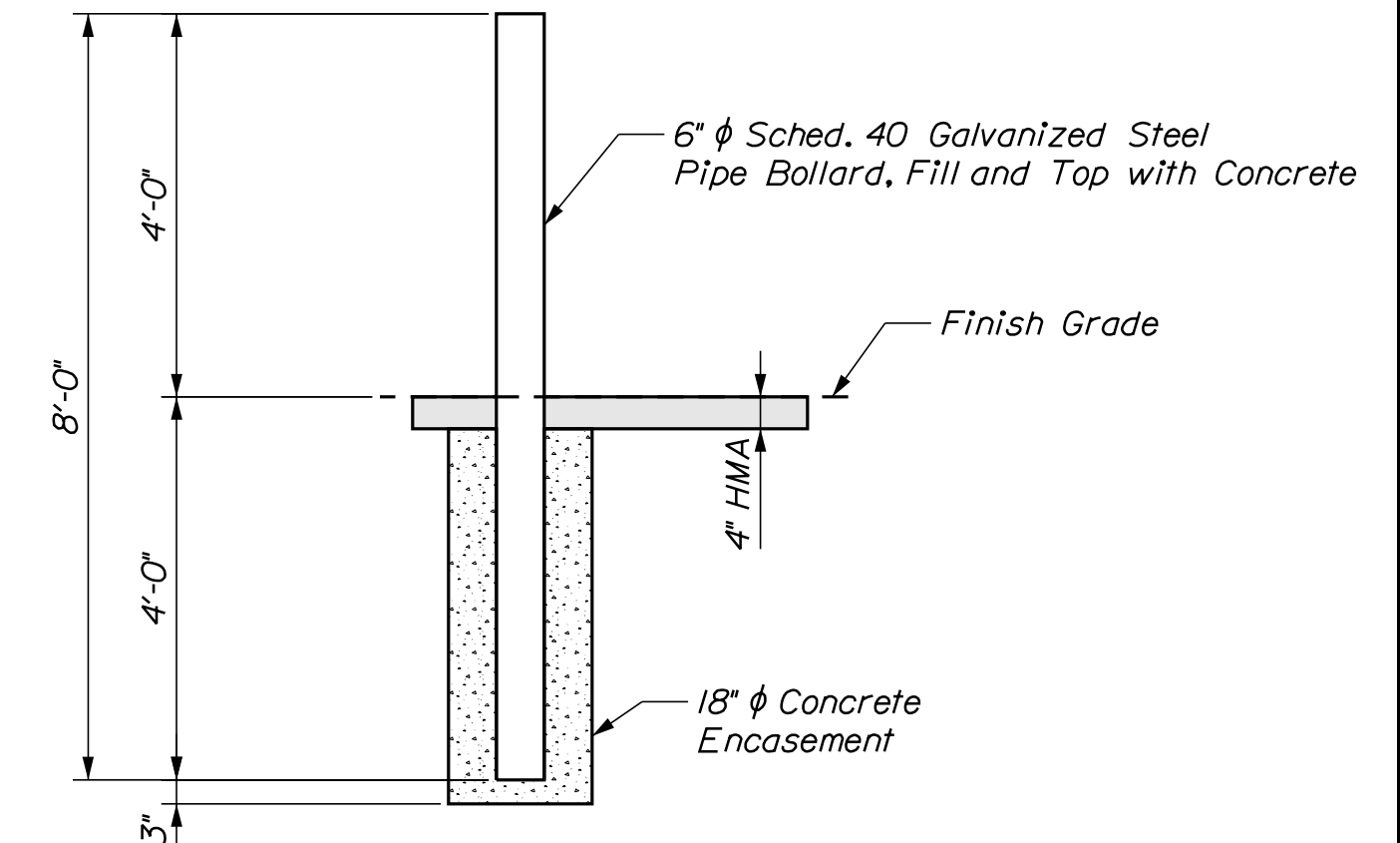
**A FRONT WALL ELEVATION**  
 1/8" = 1'-0"



**B FRONT WALL SECTION**  
 1/2" = 1'-0"

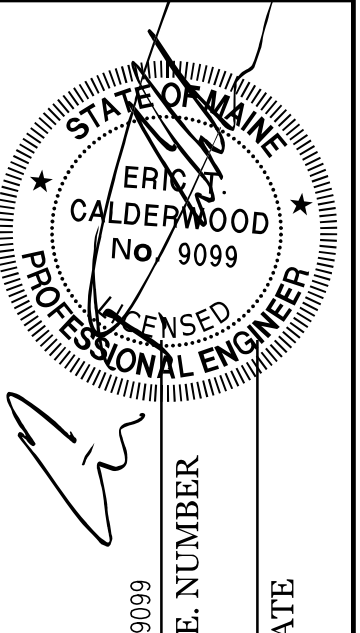


**C SECTION @ OVERHEAD DOOR**  
 1/2" = 1'-0"



**PIPE BOLLARD DETAIL**  
 1/2" = 1'-0"

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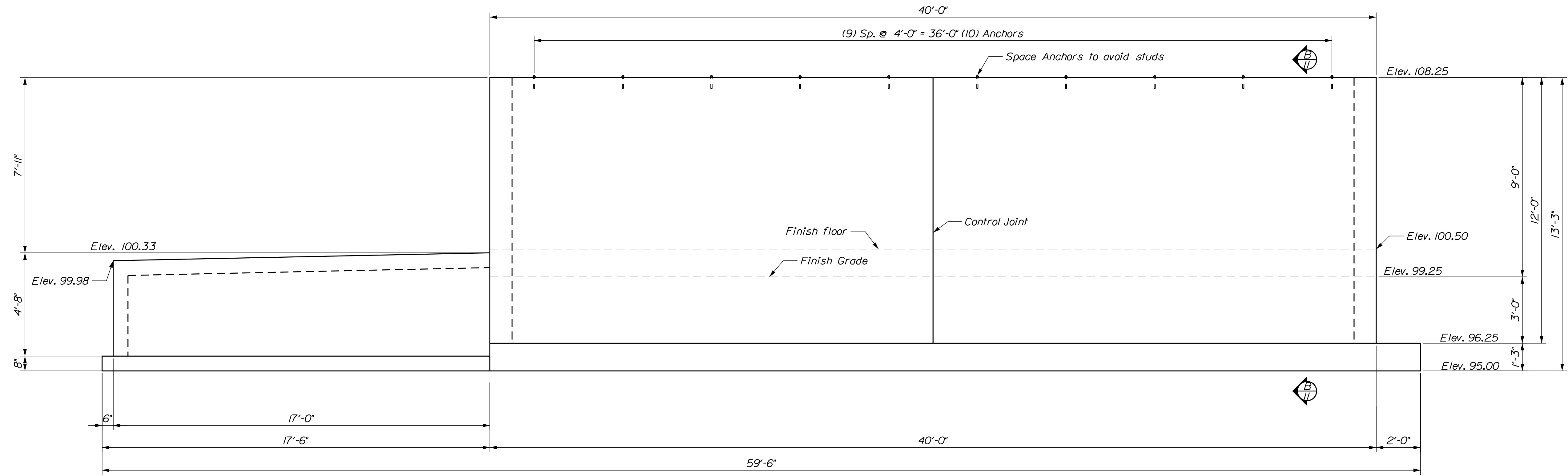
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**RANDOLPH MAINTENANCE SALT BUILDING**  
**SOUTH FRONT WALL DIMENSIONAL DETAILS**

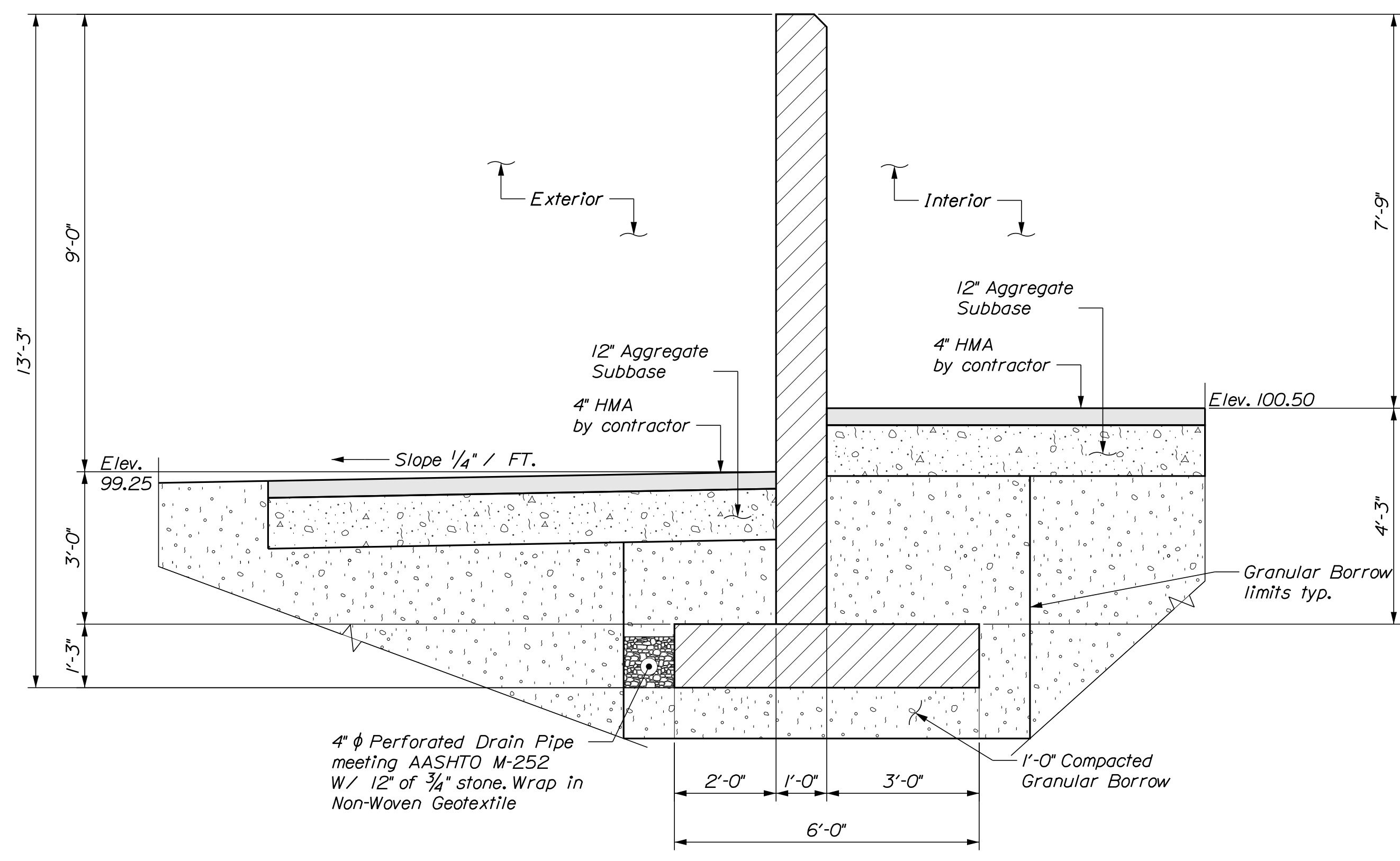
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 OF 18





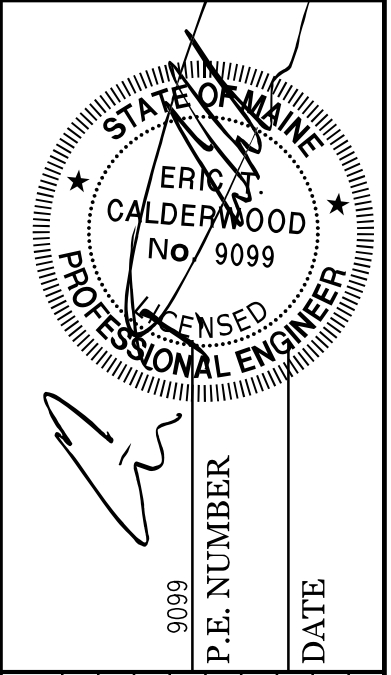


**(A) BACKWALL ELEVATION**  
3/8" = 1'-0"



**(B) BACKWALL SECTION**  
1/2" = 1'-0"

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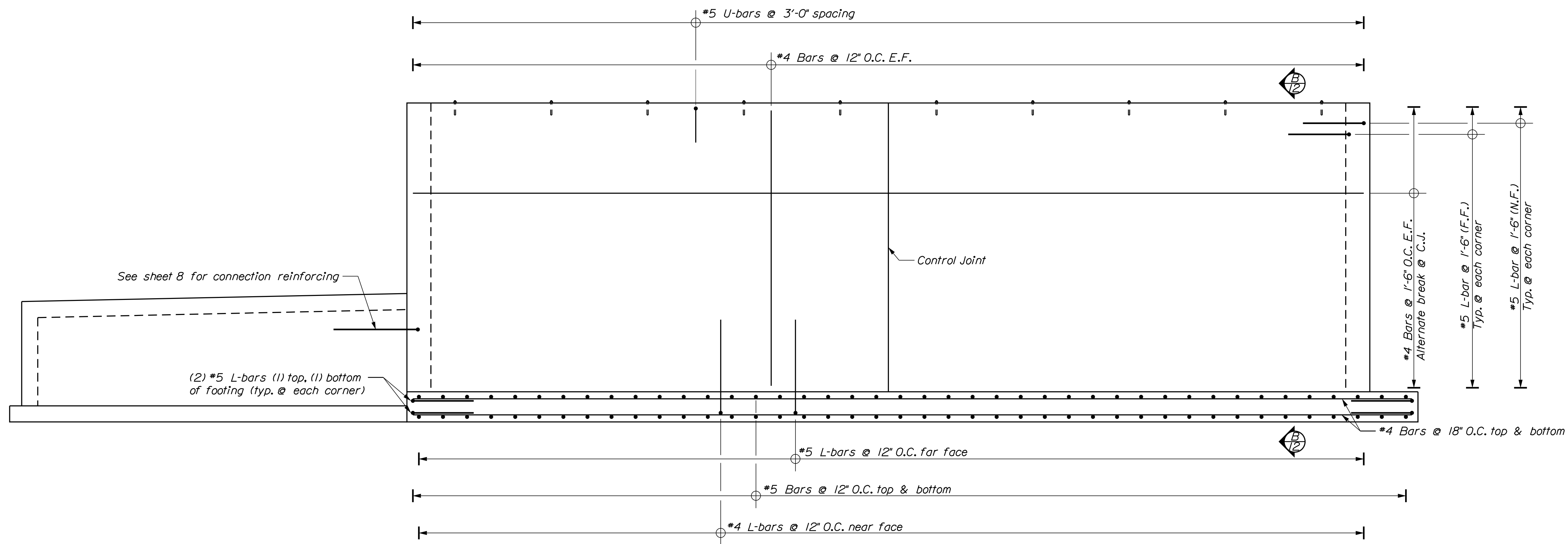


DESIGN-DETAILED	DATE	BY
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FIELD CHANGES		

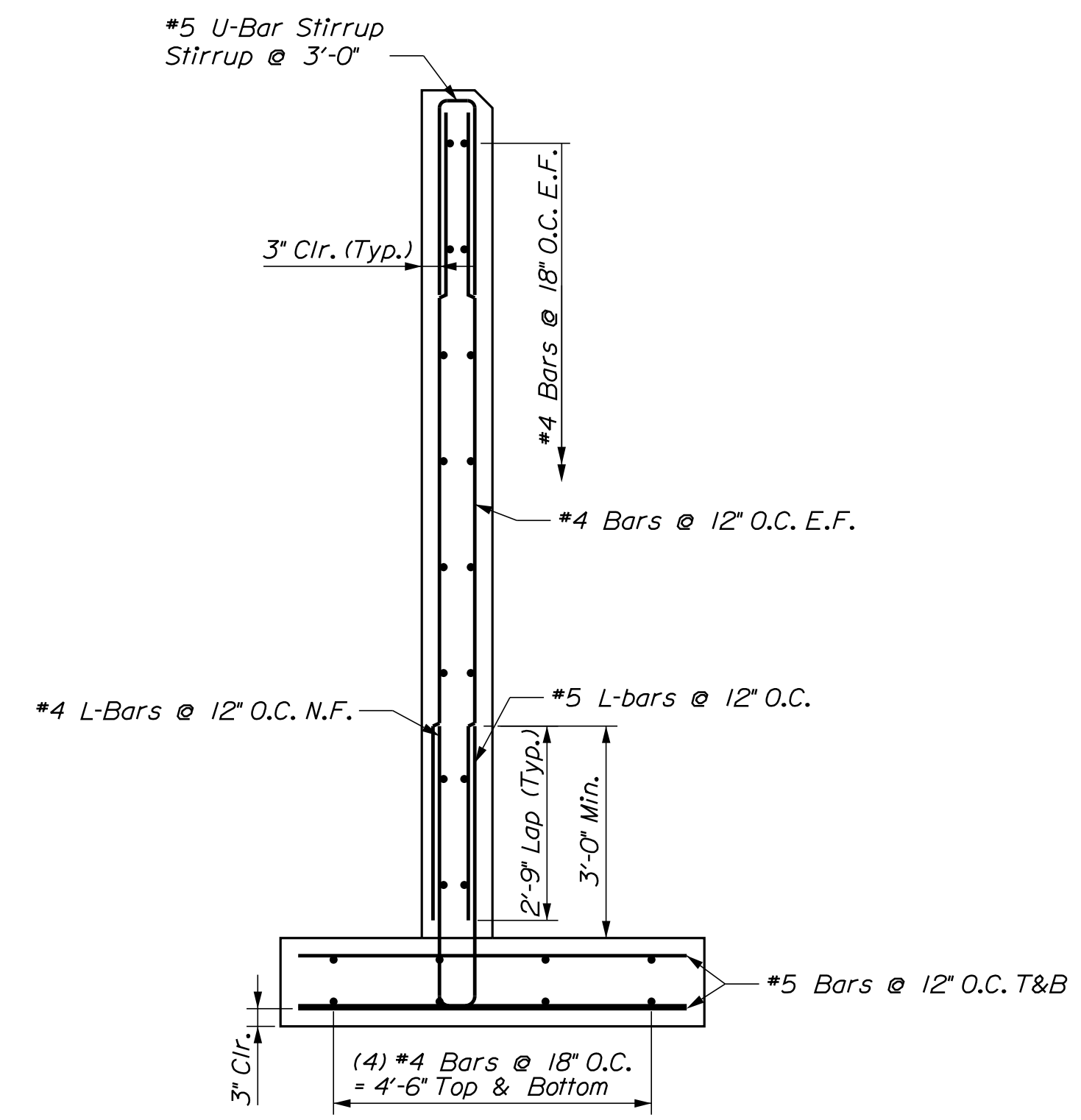
**RANDOLPH MAINTENANCE SALT BUILDING**  
**NORTH BACK WALL DIMENSIONAL DETAILS**

SHEET NUMBER  
**13**  
OF 18





**(A) BACKWALL REINFORCING ELEVATION**  
 1/4" = 1'-0"



**(B) BACKWALL SECTION**  
 1/2" = 1'-0"

See sheet 8 for connection reinforcing

(2) #5 L-bars (1) top, (1) bottom of footing (typ. @ each corner)

Control Joint

#4 Bars @ 1'-6" O.C. E.F.  
 Alternate Break @ C.J.  
 #5 L-bar @ 1'-6" (F.F.)  
 Typ. @ each corner  
 #5 L-bar @ 1'-6" (N.F.)  
 Typ. @ each corner

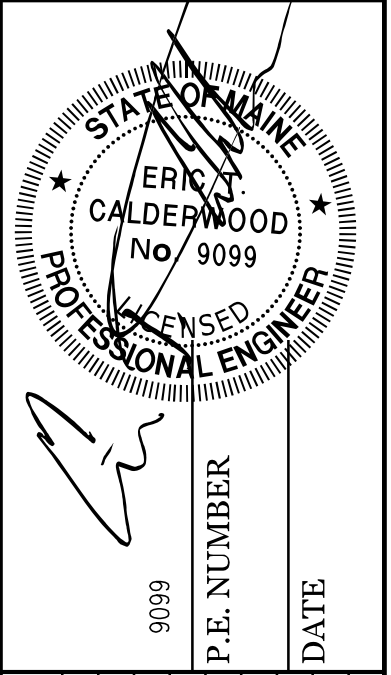
#4 Bars @ 18" O.C. top & bottom

#5 L-bars @ 12" O.C. far face

#5 Bars @ 12" O.C. top & bottom

#4 L-bars @ 12" O.C. near face

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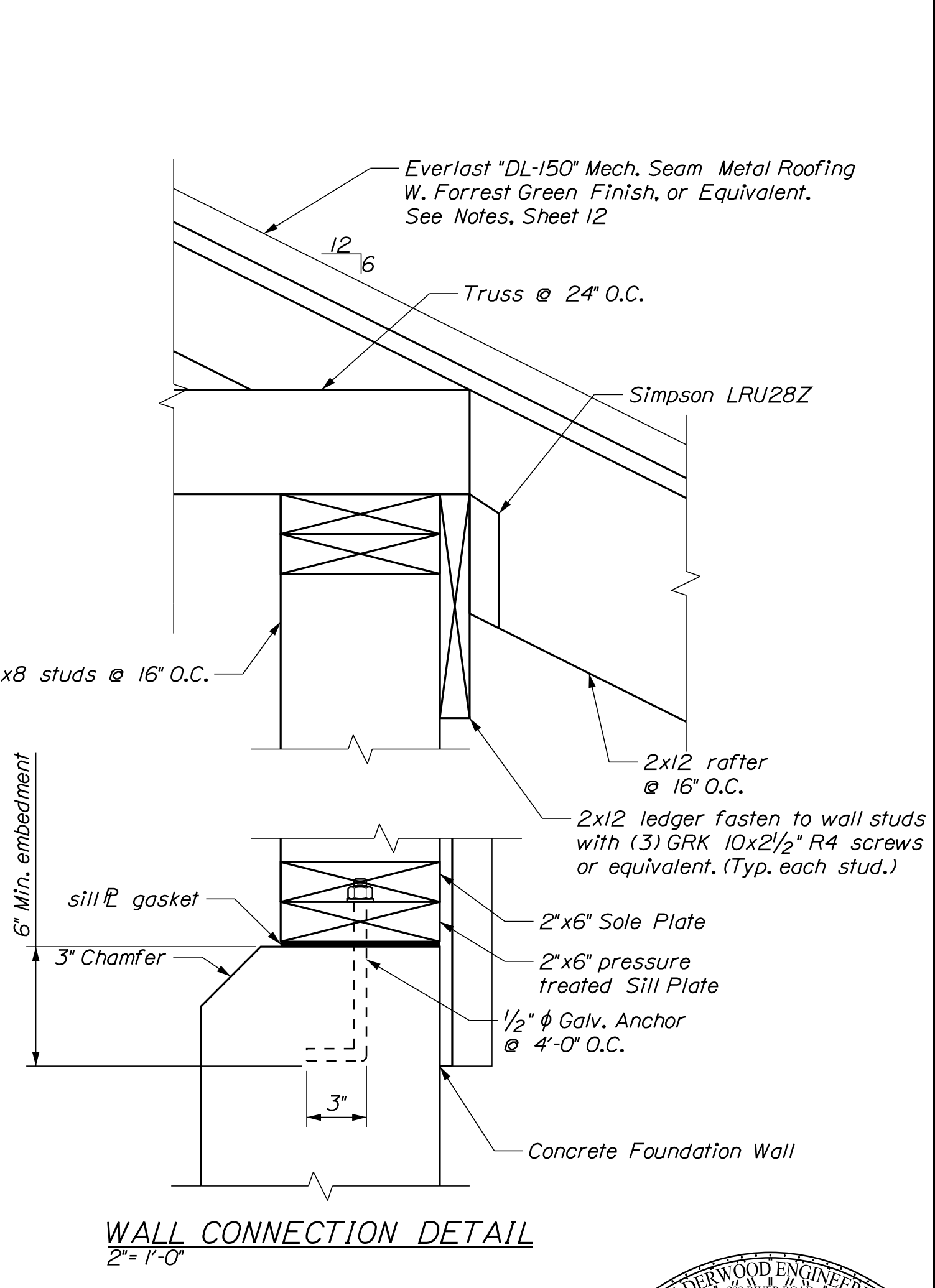
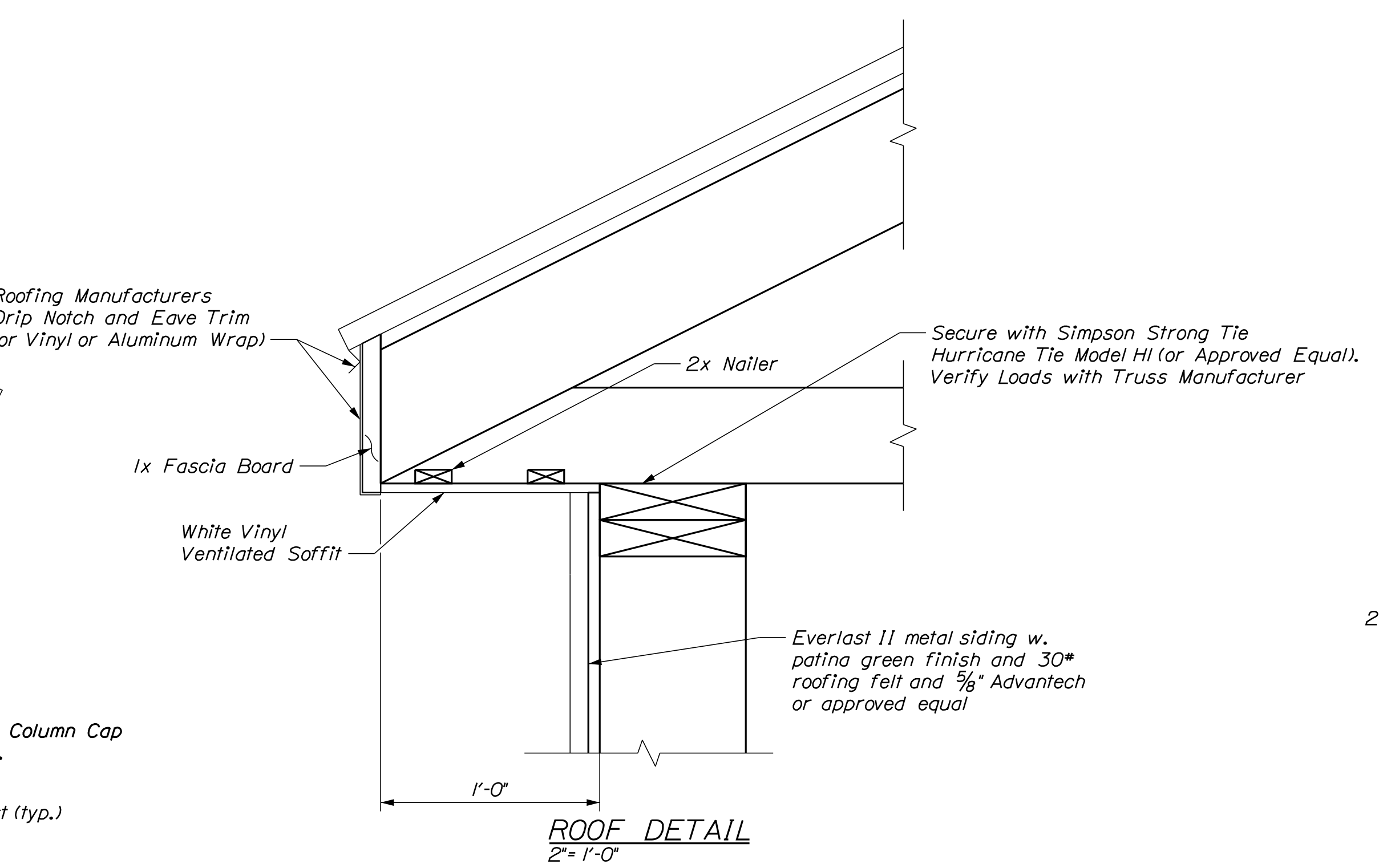
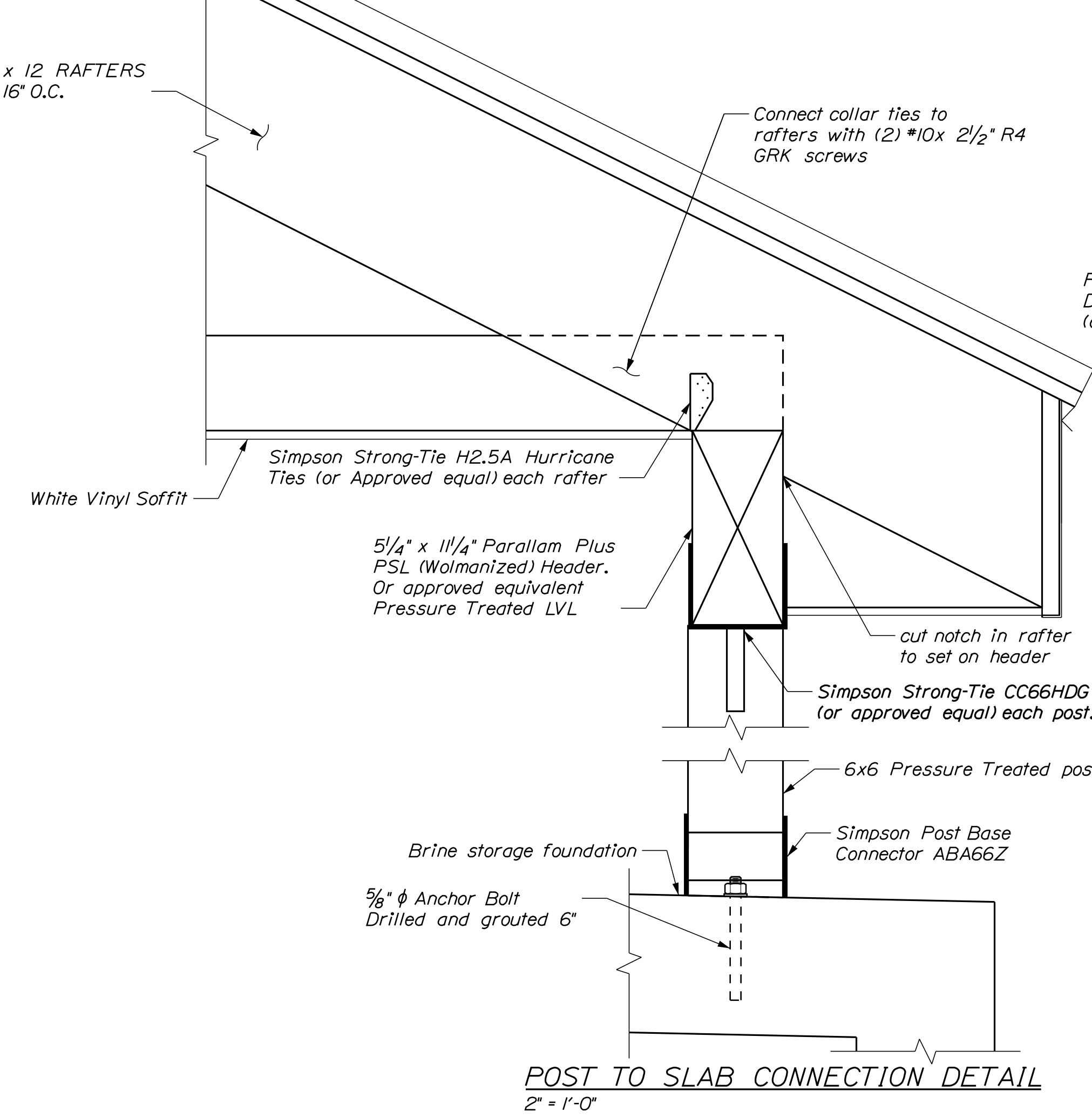
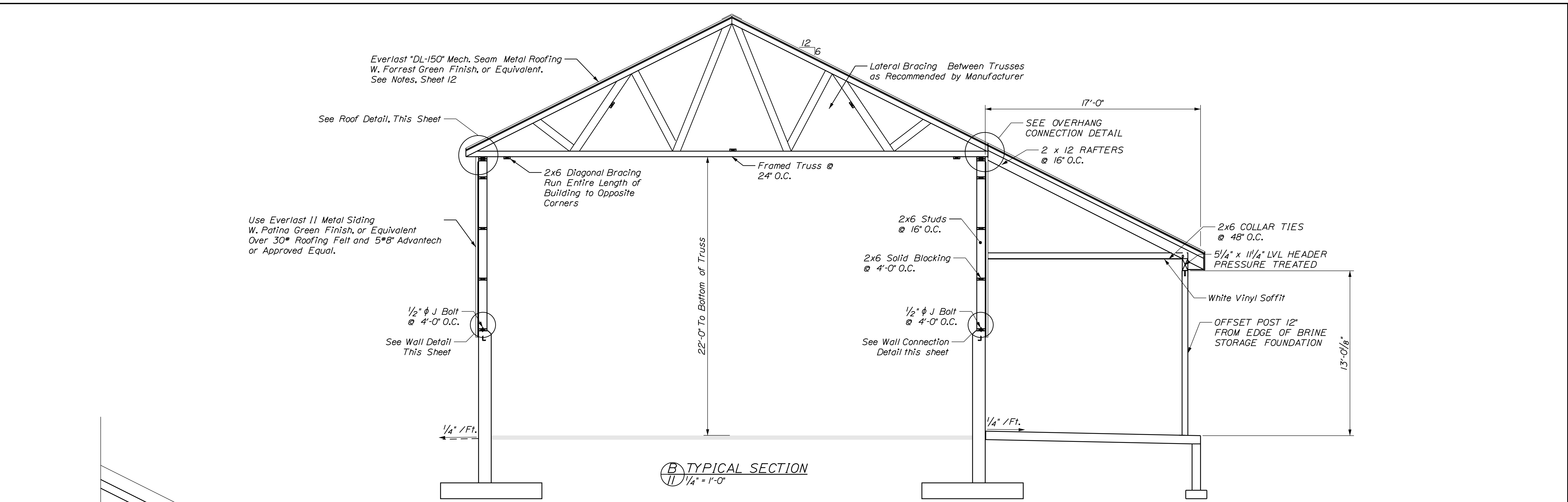
**RANDOLPH MAINTENANCE  
 SALT BUILDING**  
**NORTH BACK WALL  
 REINFORCING DETAILS**

SHEET NUMBER

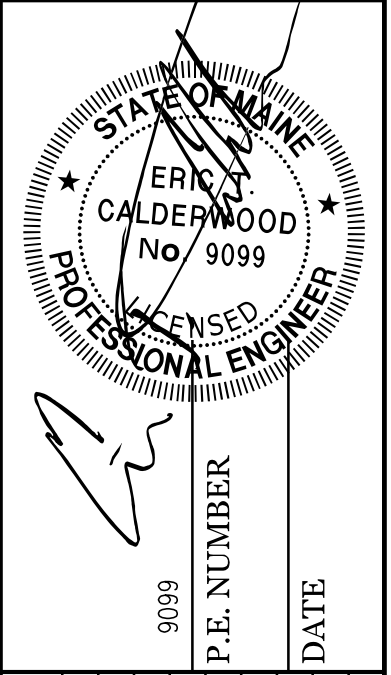
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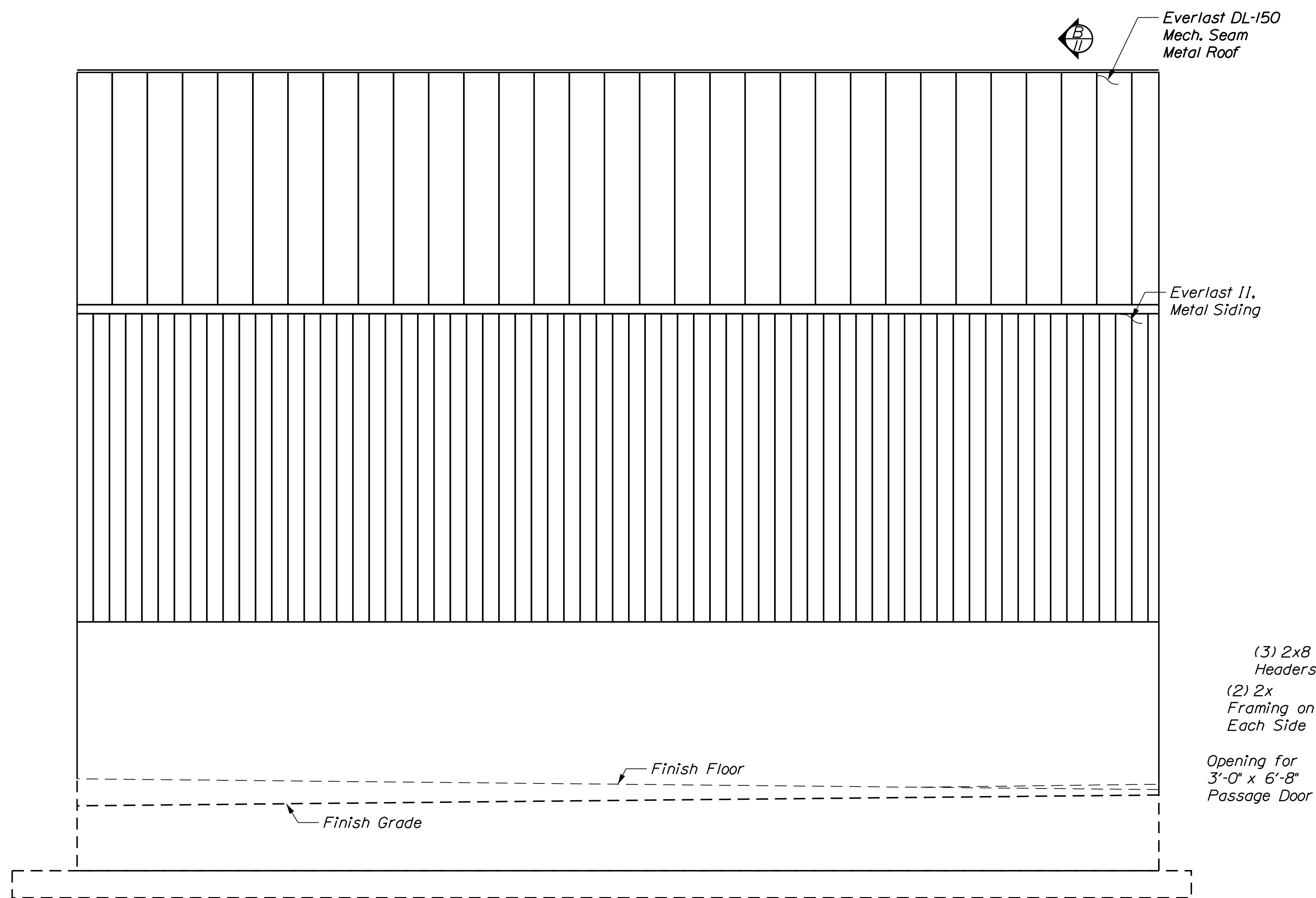


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MAR 2020	JUH	2
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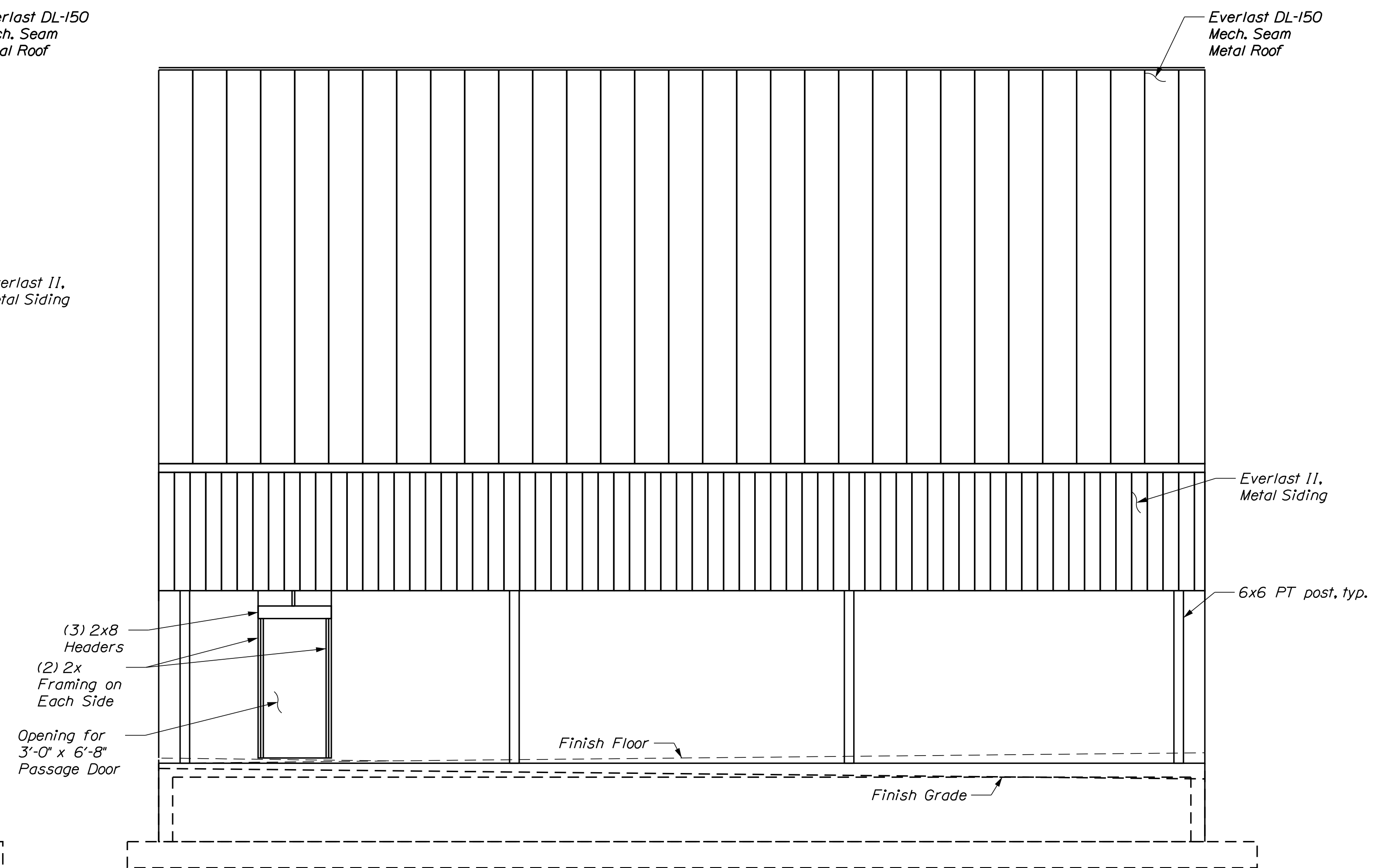
**RANDOLPH MAINTENANCE SALT BUILDING**  
**FRAMING DETAILS**

SHEET NUMBER  
**15**  
 OF 18





**A** WEST SIDEWALL ELEVATION  
 16) 1/4" = 1'-0"



**A** EAST SIDEWALL ELEVATION  
 14) 1/4" = 1'-0"

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		REVISIONS 4
		FIELD CHANGES

RANDOLPH MAINTENANCE  
 SALT BUILDING

SIDEWALL ELEVATIONS

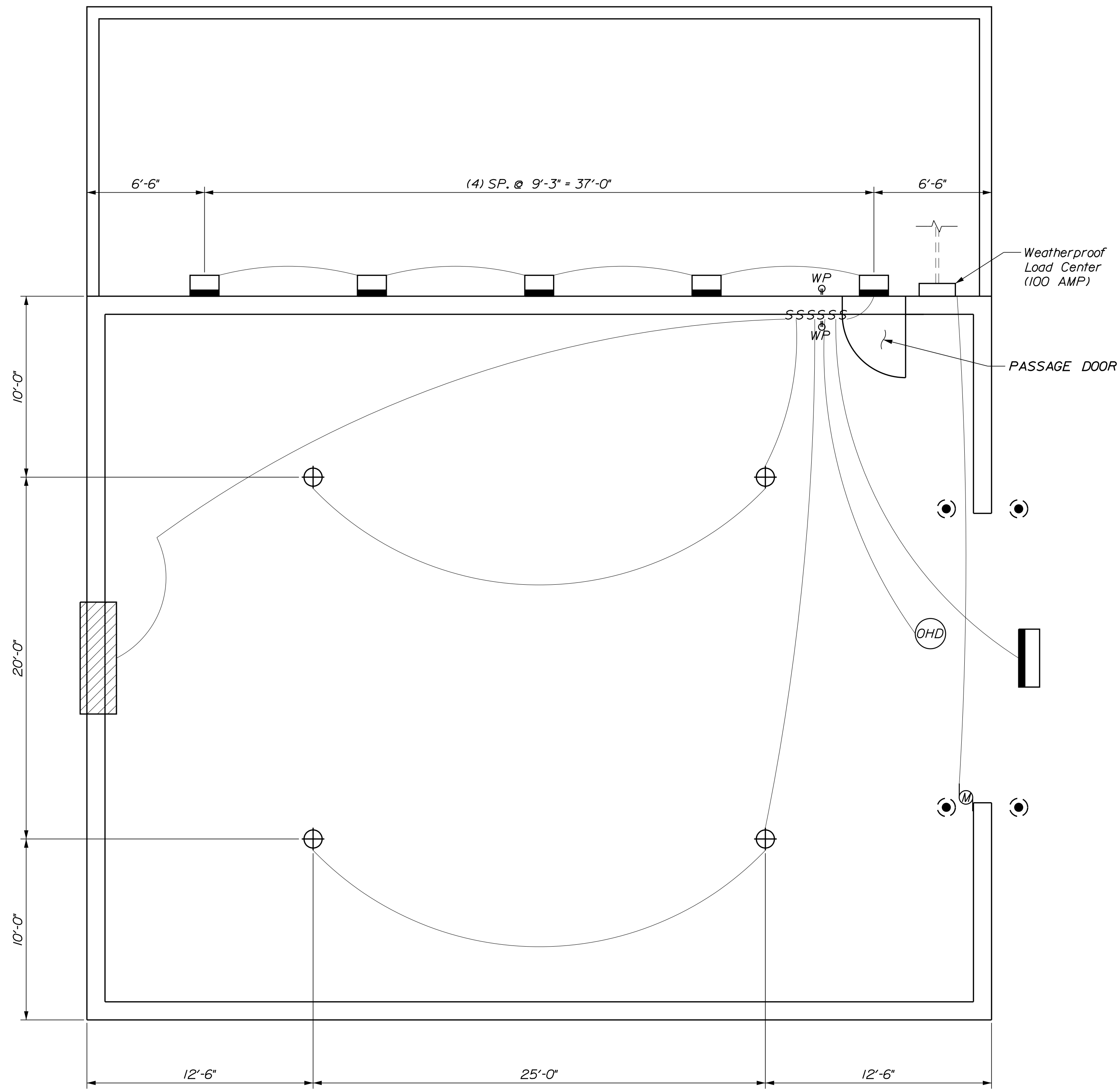
SHEET NUMBER

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**ELECTRICAL FLOOR PLAN**  
 1/4" = 1'-0"

ELECTRICAL LEGEND	
	H.E. WILLIAMS, 5" DEEP, FULLY ENCLOSED INDUSTRIAL LIGHT FIXTURE MODEL *92-8-454T5H-A-EB2/2-SSLATCH-SSMB W/ ATTACHED HUBBELL FIXTURE MOUNTED OCCUPANCY SENSORS
	LED FLOOD LIGHT CPL NFFLDC40T I29W ON DAY/NIGHT SENSOR
	RECESSED LED LIGHTS SHALL BE ON MOTION SENSOR
	WEATHERPROOF SWITCH
	GFCI RECEPTACLE W/ WEATHERPROOF COVER
	OVERHEAD DOOR OPERATOR
	EXHAUST FAN

POWER TO BE INSTALLED UNDERGROUND.

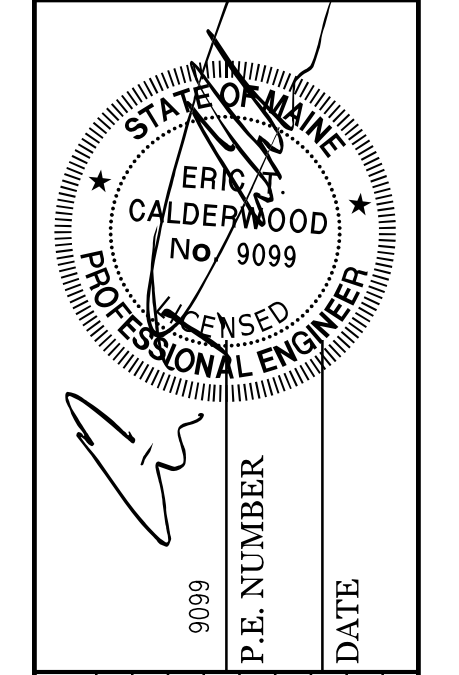
CONTRACTOR WILL BE REQ'D TO EXCAVATE, SUPPLY, INSTALL, BACKFILL, AND COMPACT PER NATIONAL ELECTRICAL CODE (NEC) APPROXIMATELY 50 FT. OF 2" UNDERGROUND CONDUIT. SEE SHEET 2 FOR DETAILS.

CONDUIT SHALL BE INSTALLED BELOW GRADE. EACH END OF THE CONDUIT SHALL BE CAPPED AND PROTRUDE ABOVE FINISH GRADE BY 2 FT.

FAN ON BACKWALL, OHD OPENER AND LIGHTS SHALL BE WIRED AND HOOKED UP FOR POWER AS INDICATED.

SUSPEND ALL INTERIOR LIGHTS A MIN. OF 1'-0" BELOW THE BOTTOM CHORD OF THE FRAMED TRUSS.

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DATE	BY	REVISIONS
MAR 2020	BIC	1
MAR 2020	JUH	2
	MAC	3
	ETC	4
		FIELD CHANGES

**RANDOLPH MAINTENANCE SALT BUILDING**  
**ELECTRICAL PLAN**

SHEET NUMBER  
**18**  
 OF 18

