

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



CARIBOU MAINTENANCE SALT SHED

SPECIFICATIONS

Design: International Building Code 2009

DESIGN LOADING

Live Load ----- Impact of 30,000lb Vehicle @ Endwall Concrete Only
 Ground Snow Load ----- 100psf
 Wind Load ----- 90mph
 ----- Exposure C, Category I

MATERIALS

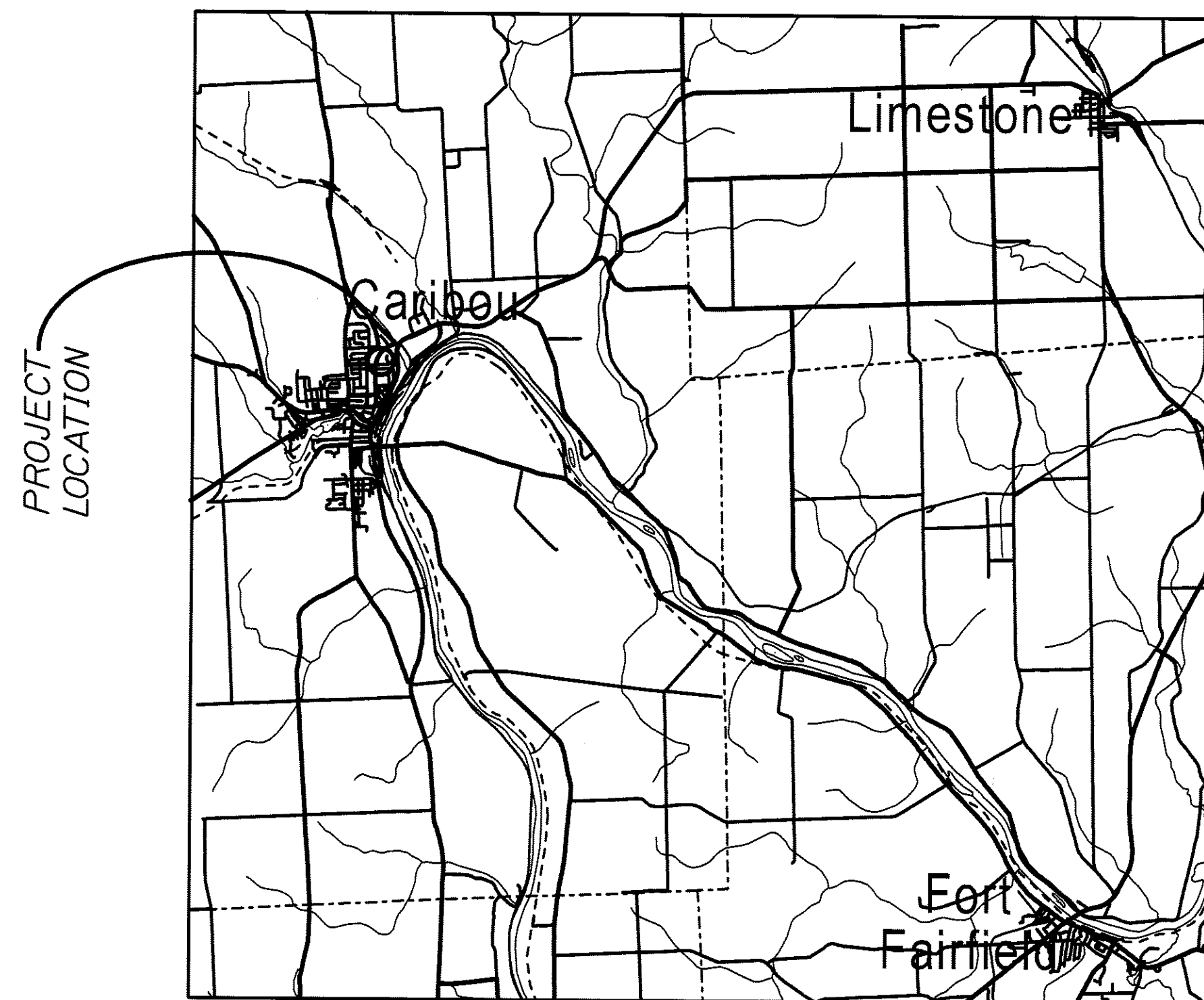
Reinforcing Steel ----- ASTM A615, Grade 60
 Structural Steel:
 All Material (except as noted) ----- ASTM A709, Grade 50
 High Strength Bolts ----- ASTM A325, Type I

BASIC DESIGN STRESSES

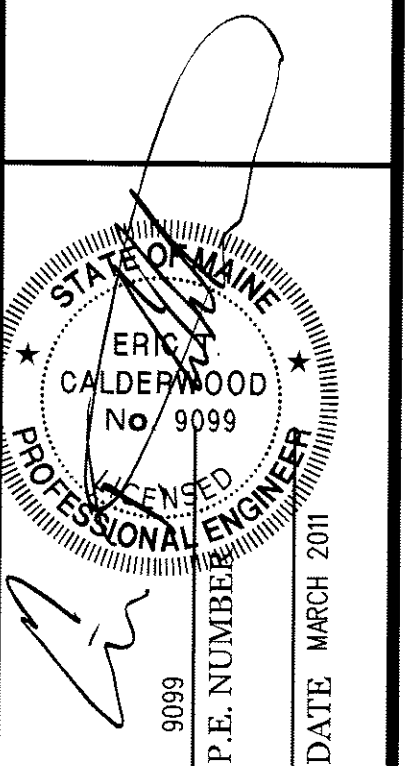
Concrete ----- $f'c = 4,350$ psi
 Reinforcing Steel ----- $f_y = 60,000$ psi

LIST OF DRAWINGS

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STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER: <i>[Signature]</i>	5/8/11	5-5-11
CHIEF ENGINEER: <i>[Signature]</i>		



DESIGN-DETAILED	CHECKED-REVIEWED	OK	BY	DATE
			JHM	MAR 2011
			ETC	
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

**CARIBOU MAINT.
SALT SHED
GENERAL SITE PLAN**

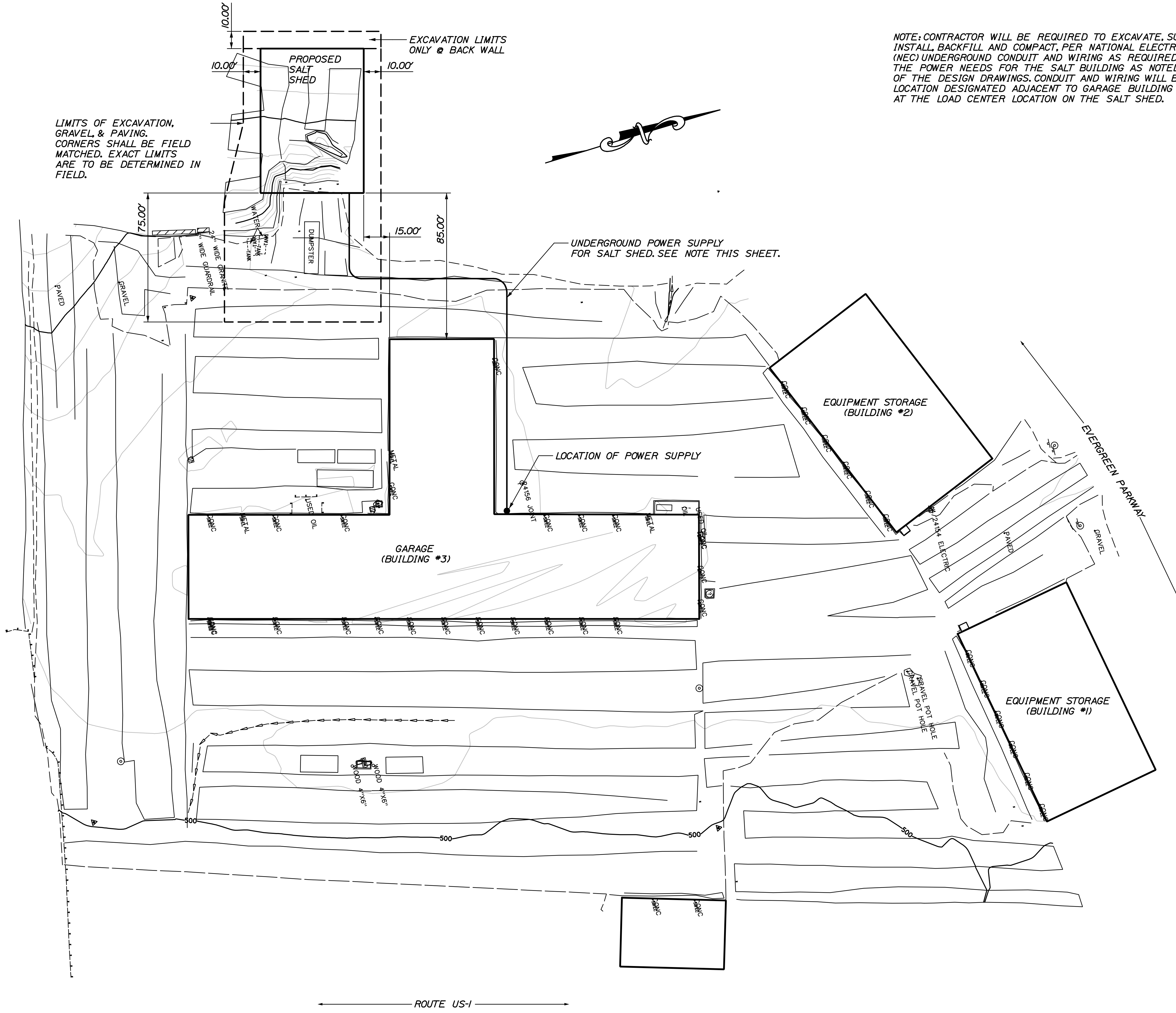
SHEET NUMBER
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Date: 5/4/2011

Username: common

Filename: ... \CARIBOU\001_Title.dgn Workgroup: Structures Division





NOTE: CONTRACTOR WILL BE REQUIRED TO EXCAVATE, SUPPLY, INSTALL, BACKFILL AND COMPACT, PER NATIONAL ELECTRICAL CODE (NEC) UNDERGROUND CONDUIT AND WIRING AS REQUIRED TO SATISFY THE POWER NEEDS FOR THE SALT BUILDING AS NOTED ON SHEET 13 OF THE DESIGN DRAWINGS. CONDUIT AND WIRING WILL BEGIN AT THE LOCATION DESIGNATED ADJACENT TO GARAGE BUILDING #3 AND TERMINATE AT THE LOAD CENTER LOCATION ON THE SALT SHED.

CALDERWOOD ENGINEERING, ETC.
 STRUCTURAL ENGINEERING • DETAILING SERVICES
 222 RIVER RD, RICHMOND, ME 04857 PH/FX (207) 737-2007/(207) 737-2008
 PREPARED FOR: STATE OF MAINE DOT
 CARIBOU ME SALT SHED
 CEE 029-ST-11

9099
 P.E. NUMBER
 DATE: MARCH 2011

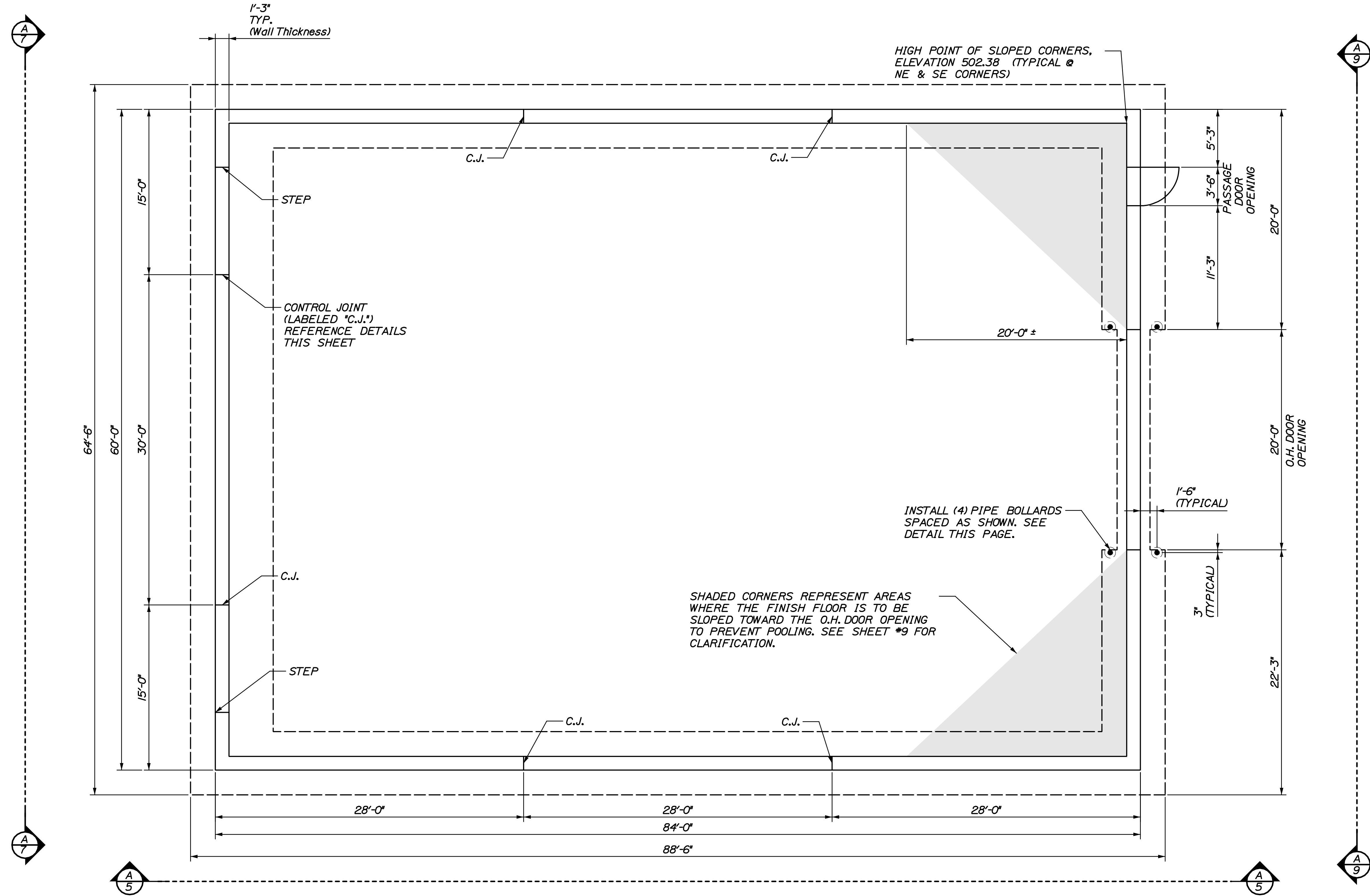
ERIK CALDERWOOD
 No. 9099
 LICENSED PROFESSIONAL ENGINEER

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CHECKED/REVIEWED	MAR 2011	JUN ETC
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

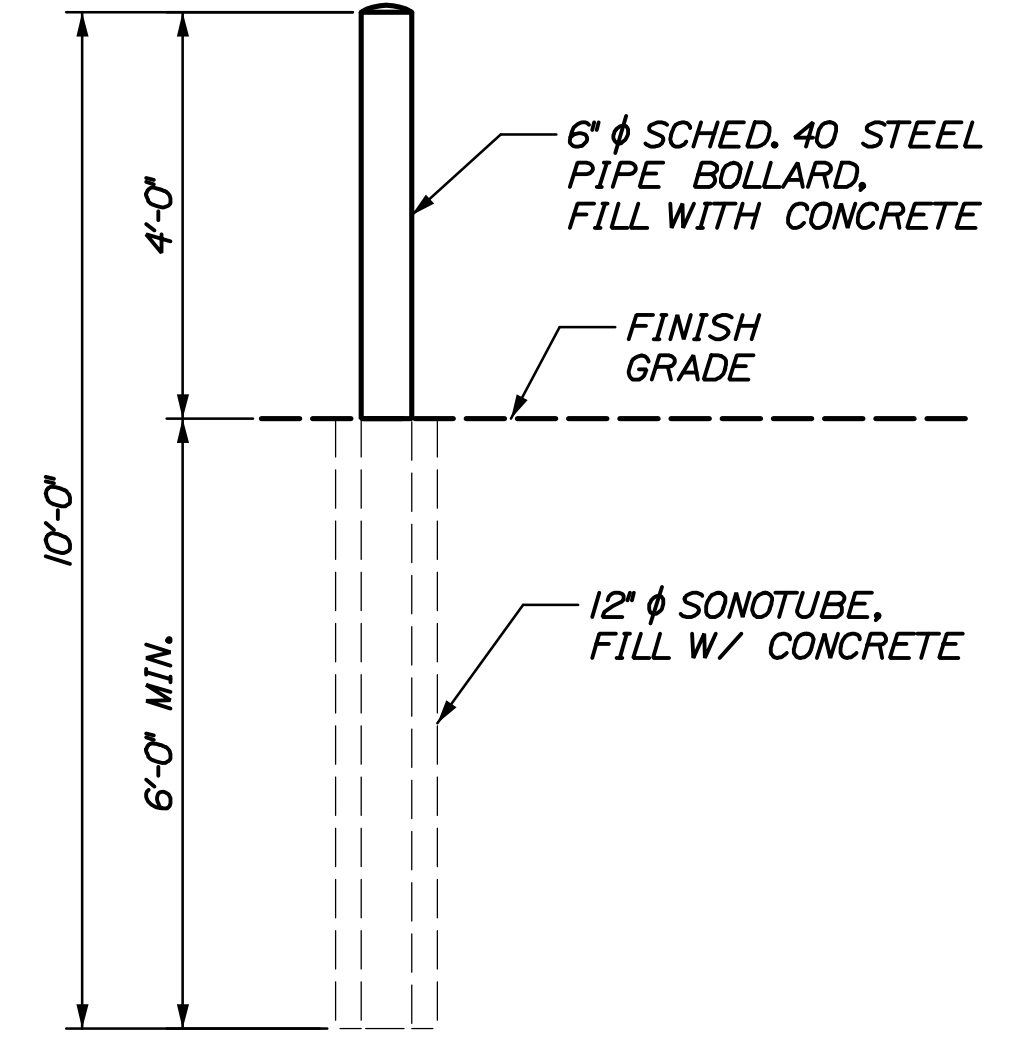
CARIBOU MAINTANANCE
 SALT SHED
 GENERAL SITE PLAN

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 2





FOUNDATION PLAN
 3/16" = 1'-0"



PIPE BOLLARD DETAIL
 SCALE: 1/2" = 1'-0"

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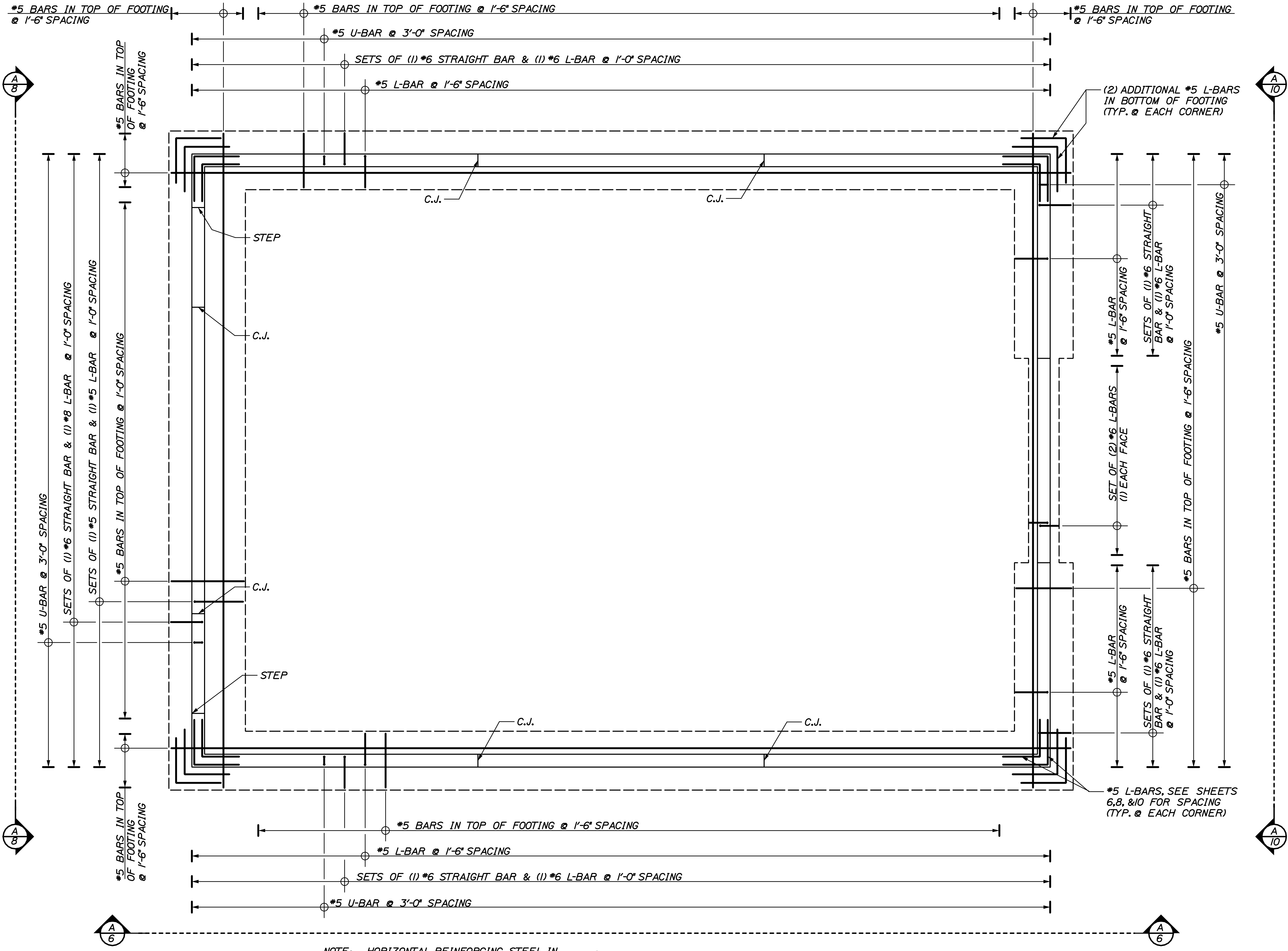
9099
 P.E. NUMBER
 DATE: MARCH 2011

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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CARIBOU MAINTANANCE SALT SHED FOUNDATION PLAN

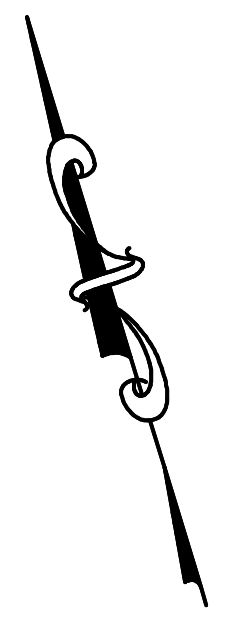
SHEET NUMBER
3





NOTE: HORIZONTAL REINFORCING STEEL IN FOUNDATION WALL NOT SHOWN, SEE SHEETS 6, 8, & 10 FOR DETAILS NOT SHOWN HERE.

A REINFORCING PLAN
4 3/16" = 1'-0"



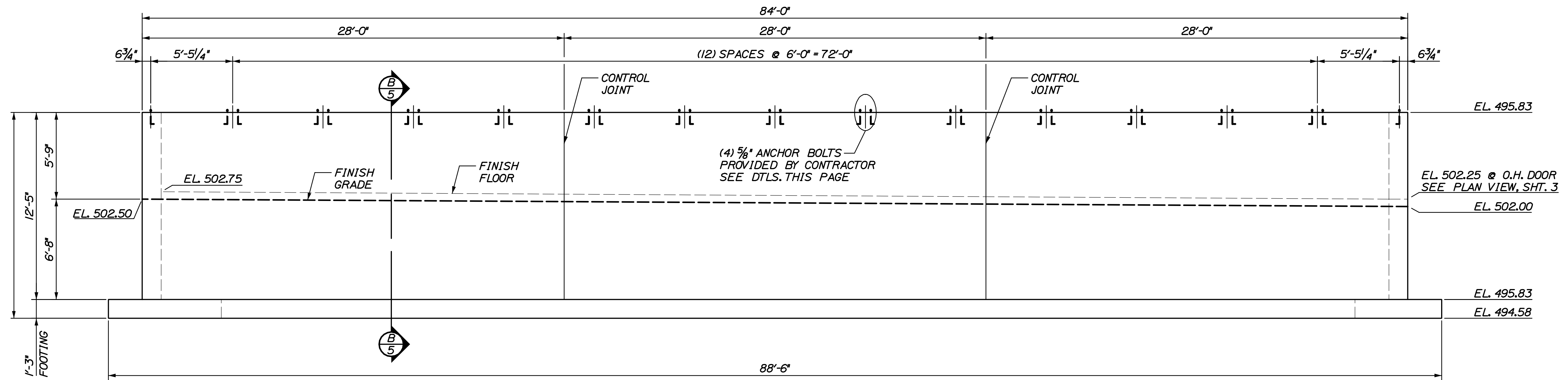
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PROJECT: CARIBOU ME SALT SHED		DATE: MARCH 2011	
DRAWN BY: ERIK CALDERWOOD No. 9099		P.E. NUMBER: 9099	
CHECKED/REVIEWED: JUN ETC		DATE: MAR 2011	
DESIGN/DETAILS: OK		REVISIONS: 1 2 3 4 FIELD CHANGES	
CARIBOU MAINTANANCE SALT SHED		REINFORCING PLAN	
SHEET NUMBER 4		SEE 029-ST-11	



Date: 5/4/2011

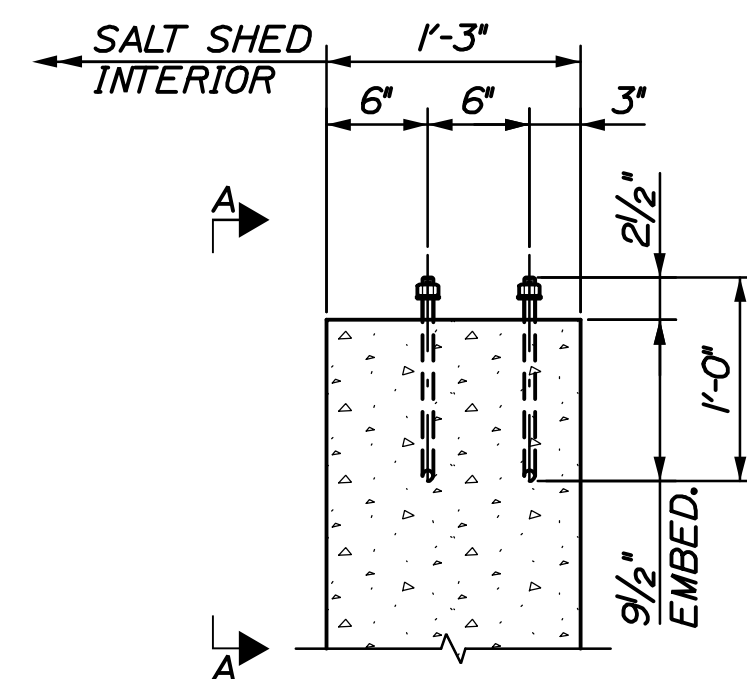
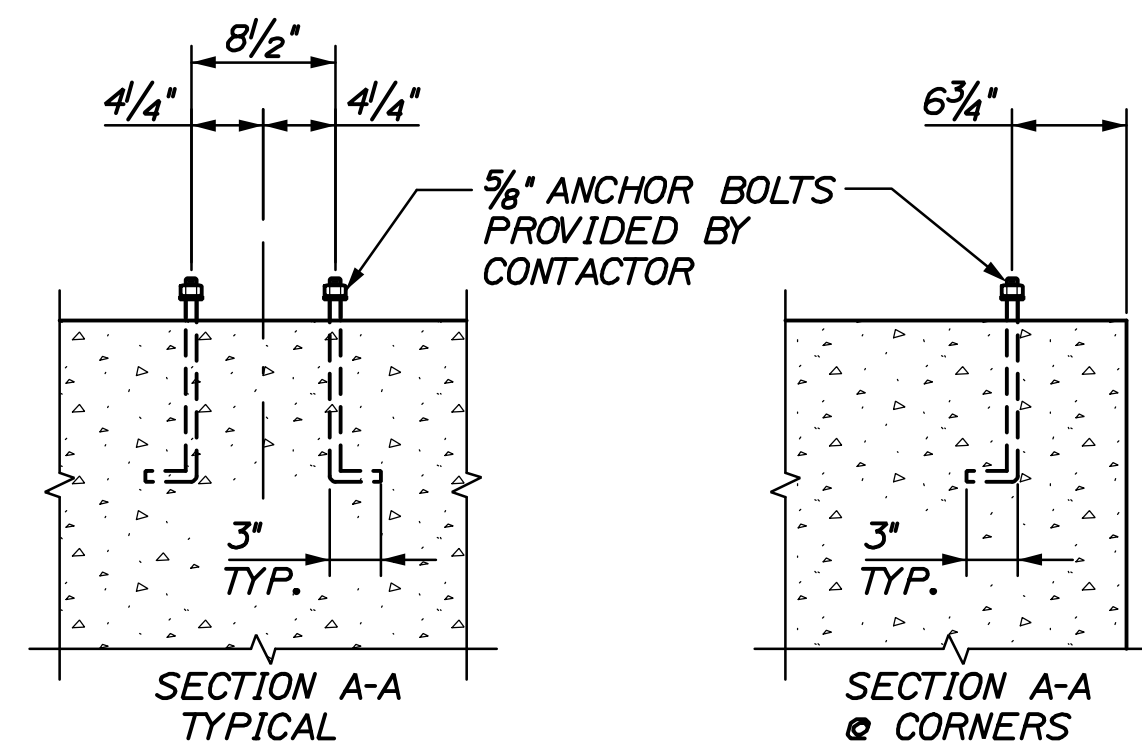
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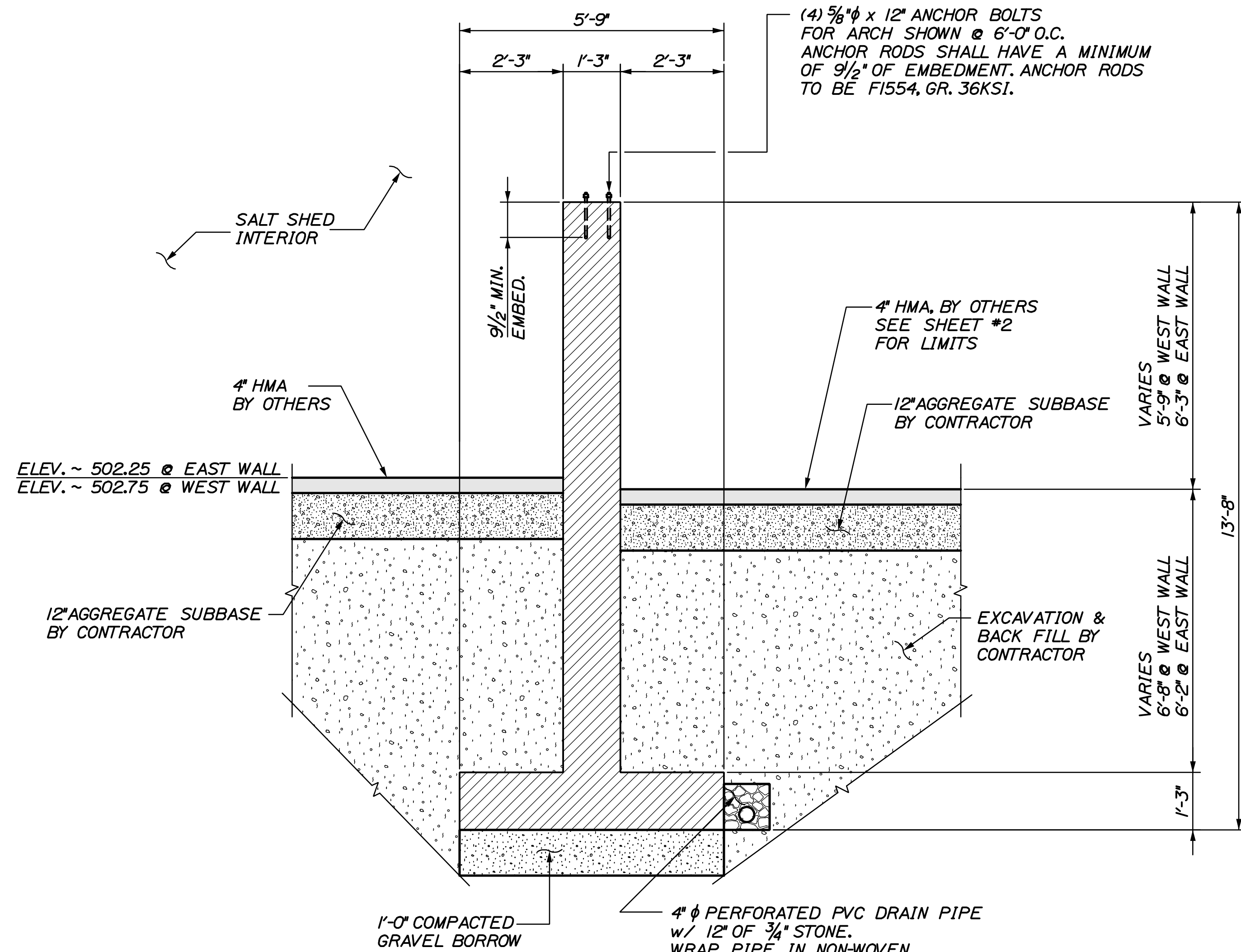


(A) SIDEWALL ELEVATION
 SCALE: 1/4" = 1'-0"
 TYPICAL FOR NORTH AND SOUTH SIDEWALLS
 ARCHES NOT SHOWN

NOTE:
 ACTUAL ANCHOR BOLT LAYOUT TO BE COORDINATED WITH THE LAMINATED ARCH MANUFACTURER. GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING LAYOUT OF ANCHOR BOLTS WITH ARCH BASE PLATES TO ENSURE A PROPER FIT.



ANCHOR BOLT DETAIL
 SCALE: 1" = 1'-0"



(B) SIDEWALL SECTION
 SCALE: 1/2" = 1'-0"

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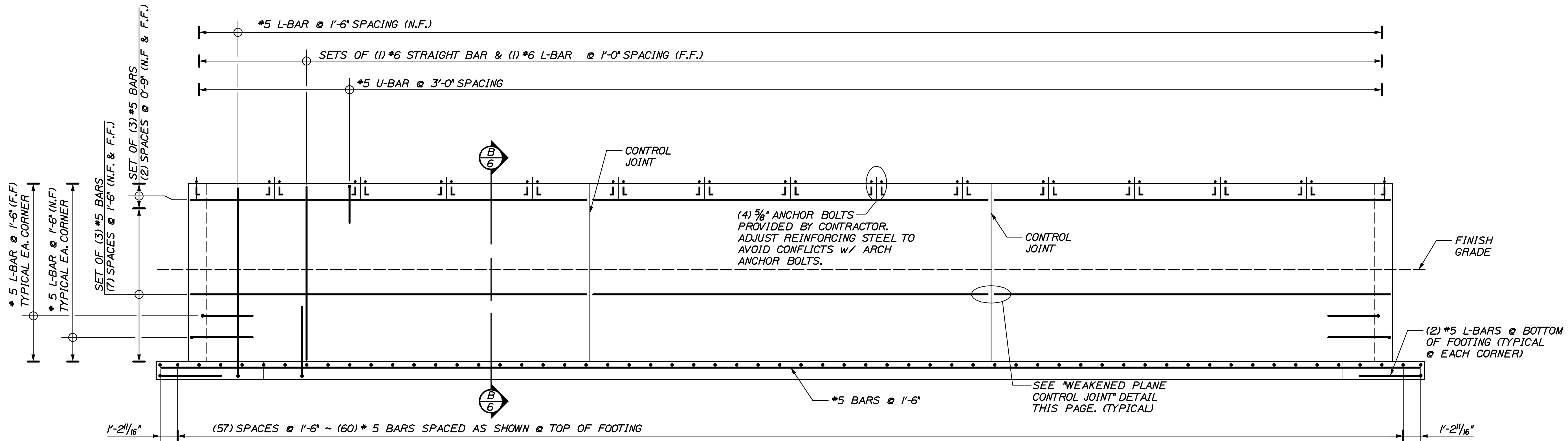
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REVISIONS 1	
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REVISIONS 3	
REVISIONS 4	

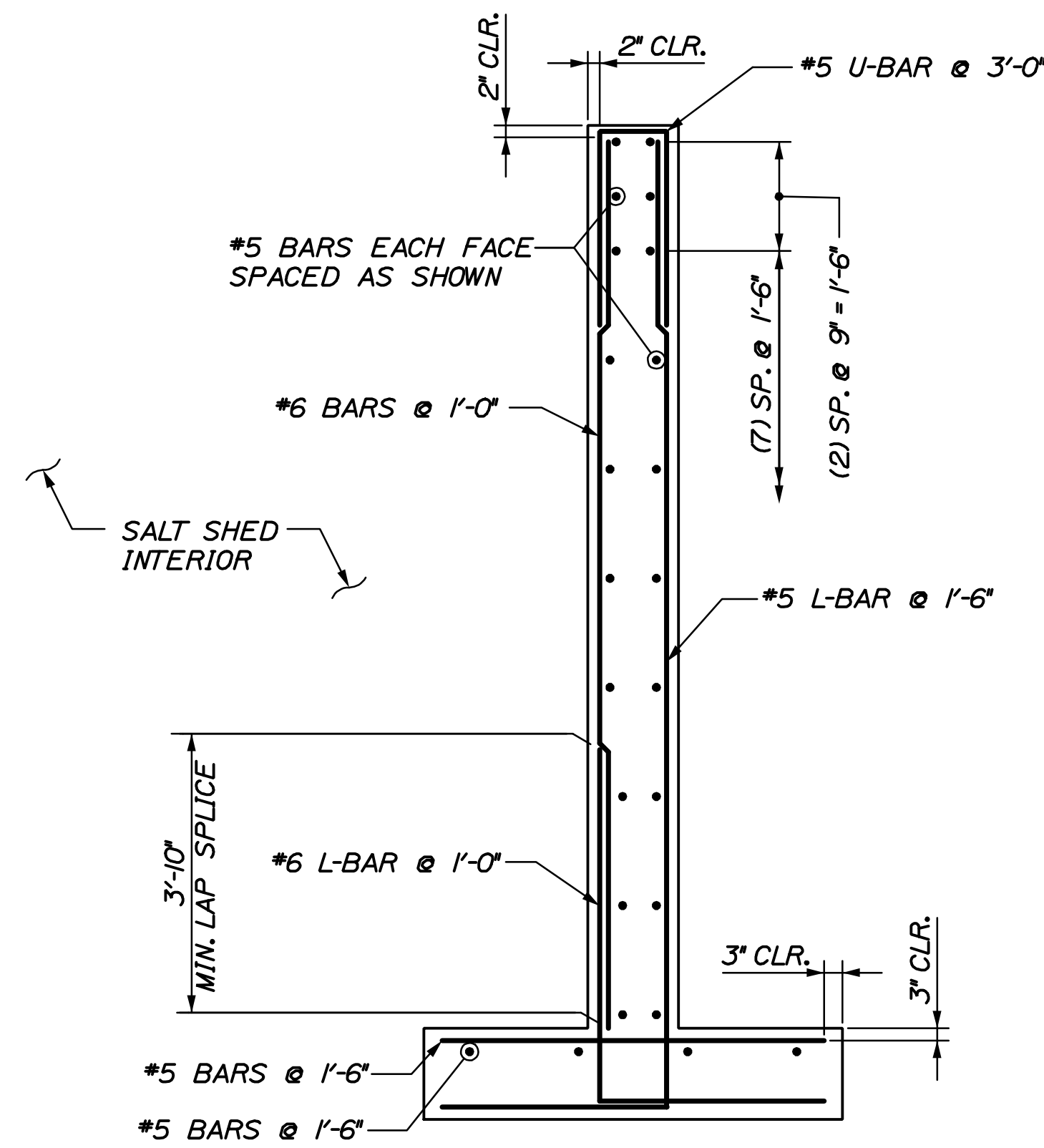
CARIBOU MAINTANANCE SALT SHED
NORTH & SOUTH SIDEWALL DIMENSIONAL DETAILS

SHEET NUMBER
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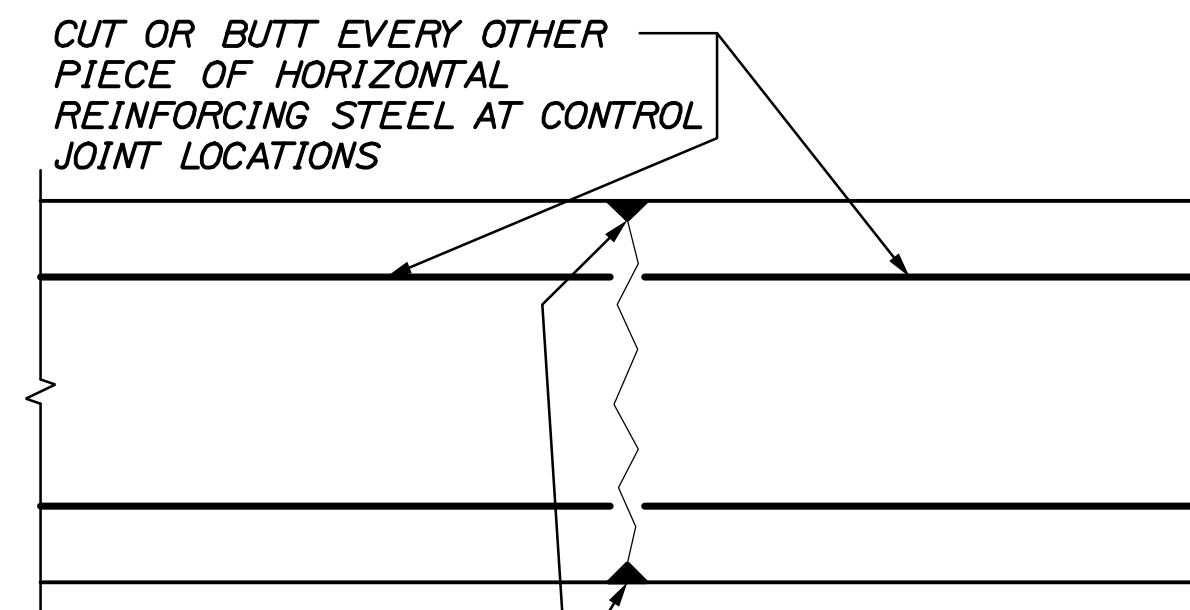




A **6** SIDEWALL REINFORCING
 SCALE: 1/4" = 1'-0"
 TYPICAL FOR NORTH AND SOUTH SIDEWALLS
 ARCHES NOT SHOWN



B **6** SIDEWALL REINFORCING SECTION
 SCALE: 1/2" = 1'-0"

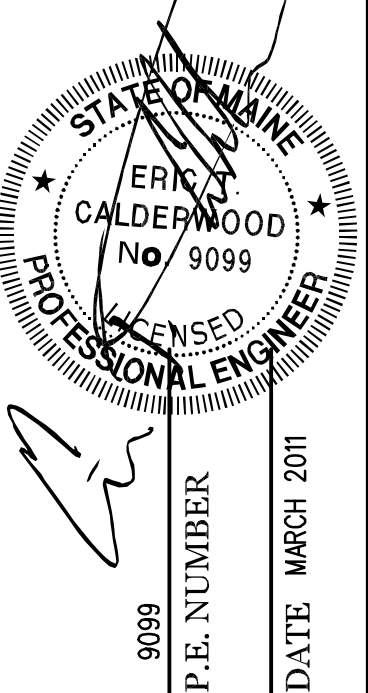


INSTALL 1" CHAMFER ON EACH SIDE OF WALL FORM FOR FULL HEIGHT AT CONTROL JOINT LOCATIONS

CLEAN OUT CHAMFER AND FILL JOINT FLUSH WITH FACE OF WALL USING SIKAFLEX 1A OR EQUIVALENT ON THE INSIDE FACE OF WALL AND ON THE OUTSIDE FACE FROM 6" BELOW FINISH GRADE TO THE TOP OF THE WALL.

WEAKENED PLANE CONTROL JOINT
 SCALE: 1/2" = 1'-0"

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REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

CARIBOU MAINTANANCE SALT SHED
NORTH & SOUTH SIDEWALL REINFORCING DETAILS

SHEET NUMBER

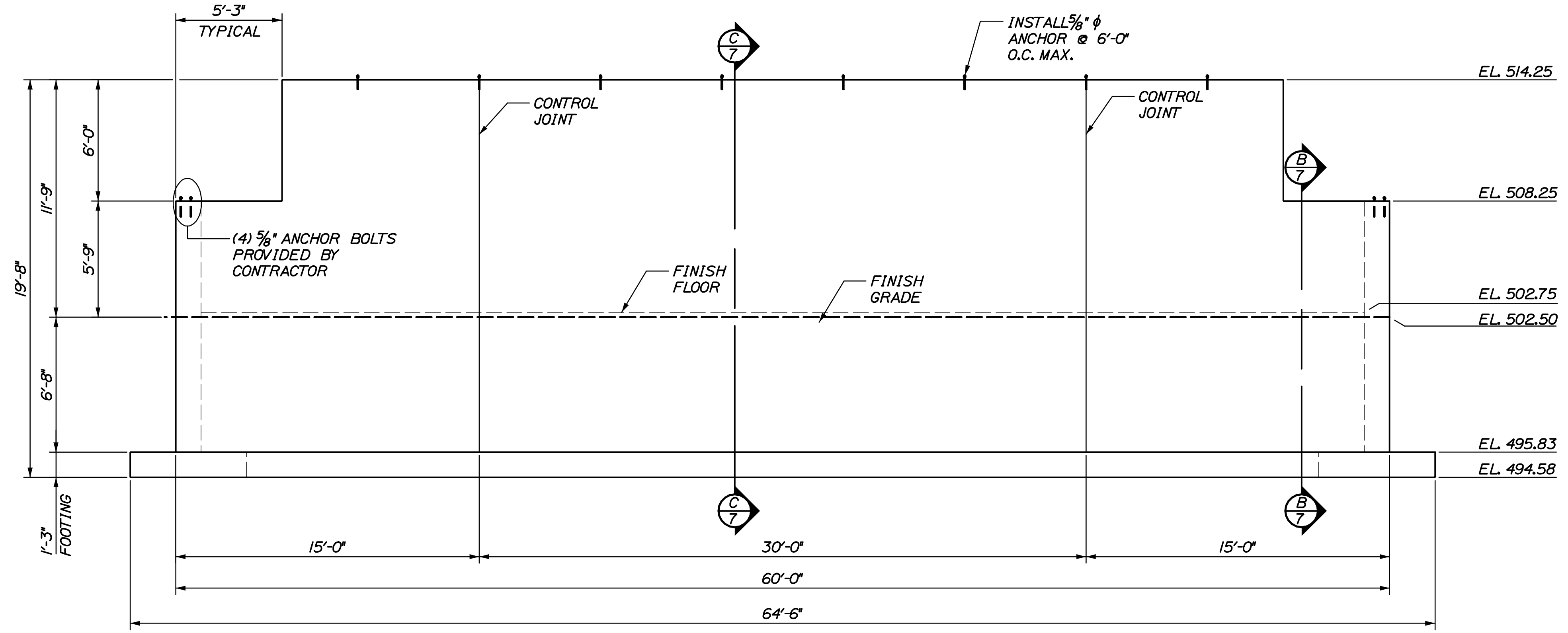
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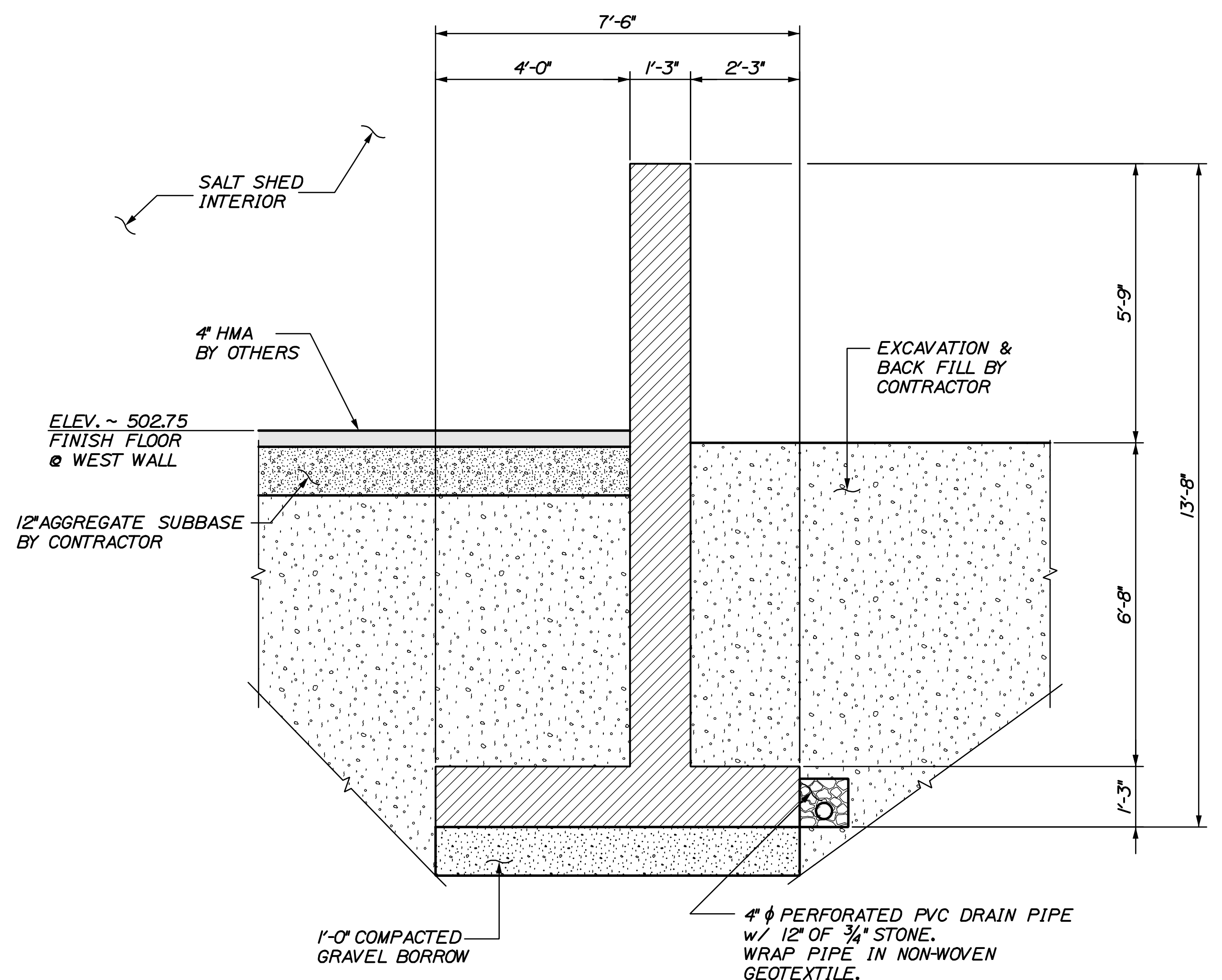
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Username: common

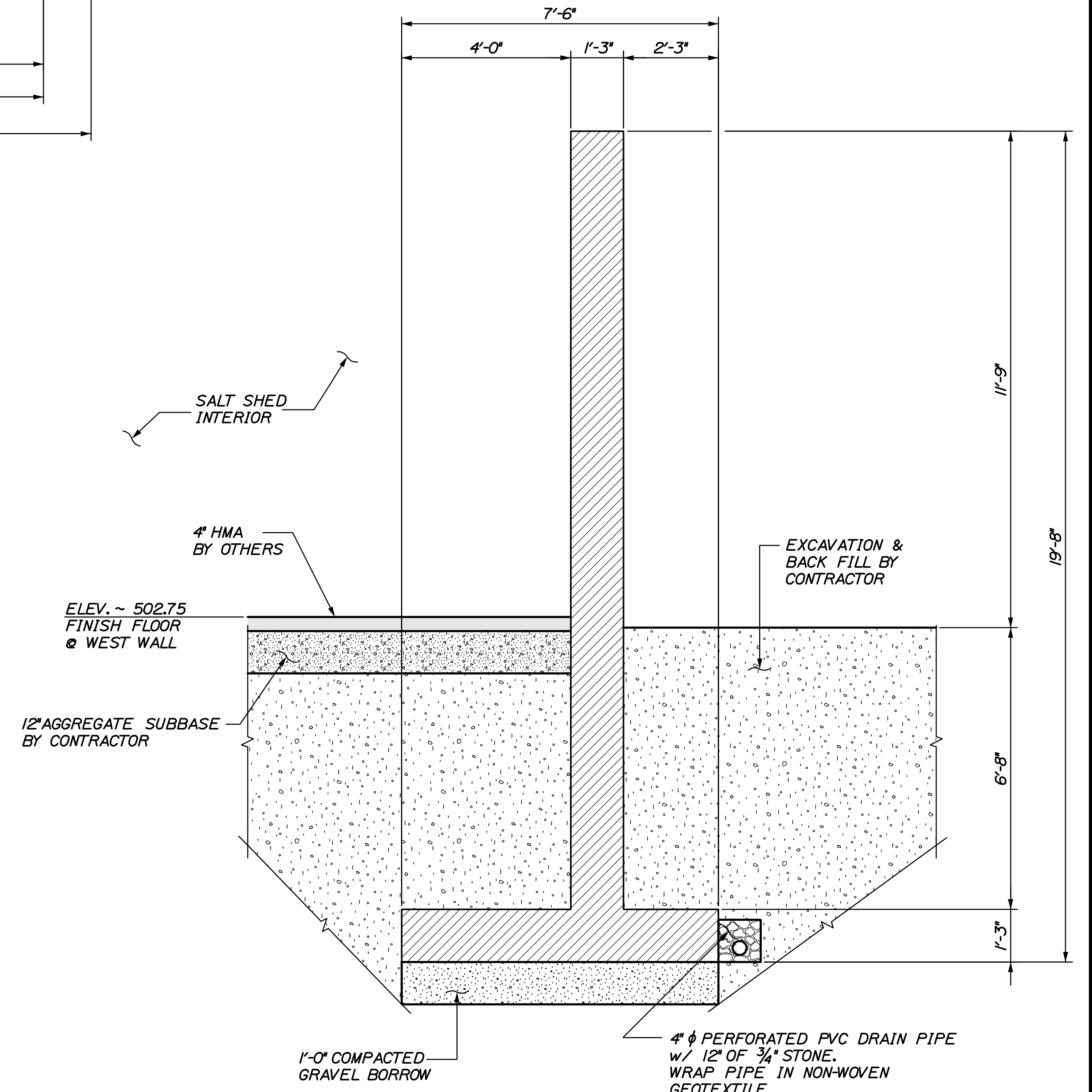
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(A) WEST END WALL ELEVATION
SCALE: 1/4" = 1'-0"



(C) WEST END WALL SECTION
SCALE: 1/2" = 1'-0"



(B) WEST END WALL SECTION
SCALE: 1/2" = 1'-0"

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CARIBOU ME SALT SHED
CEE 029-ST-11

ERIK CALDERWOOD
No. 9099
LICENSED PROFESSIONAL ENGINEER

P.E. NUMBER 9099
DATE: MARCH 2011

DESIGN/DETAIL/ED	DATE
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REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

CARIBOU MAINTANANCE SALT SHED

WEST END WALL DIMENSIONAL DETAILS

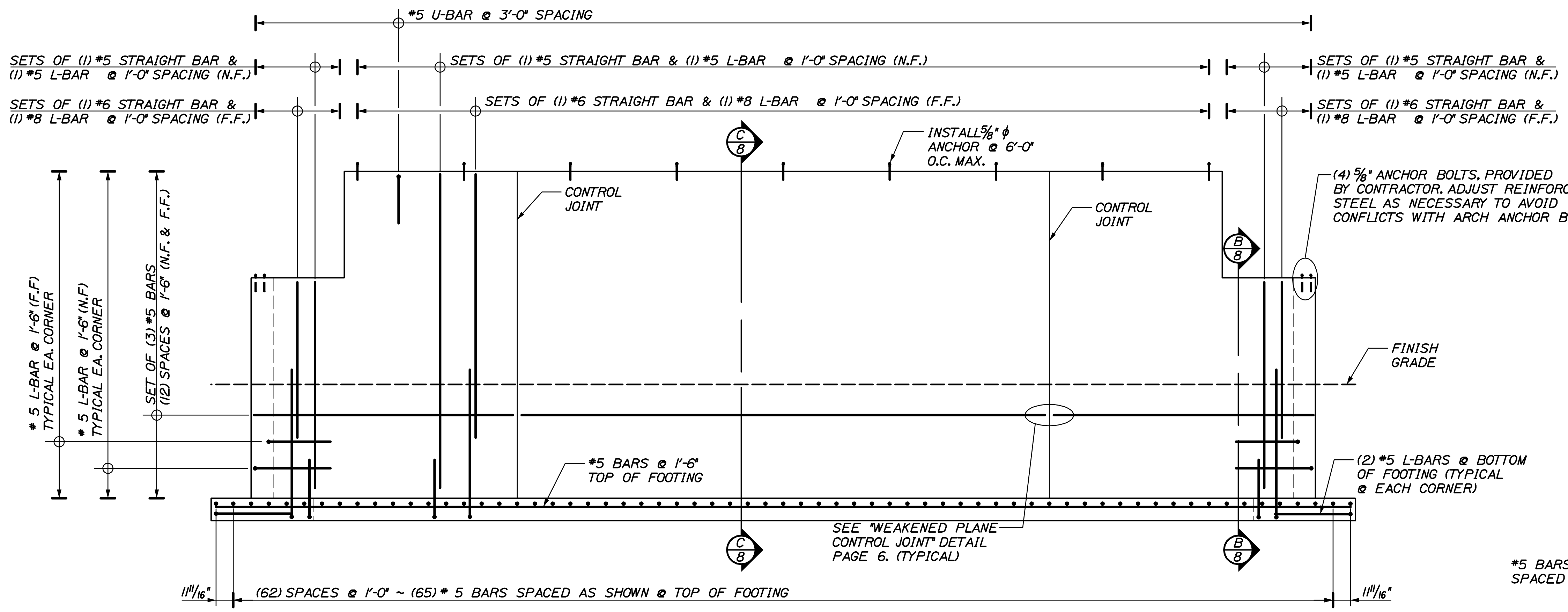
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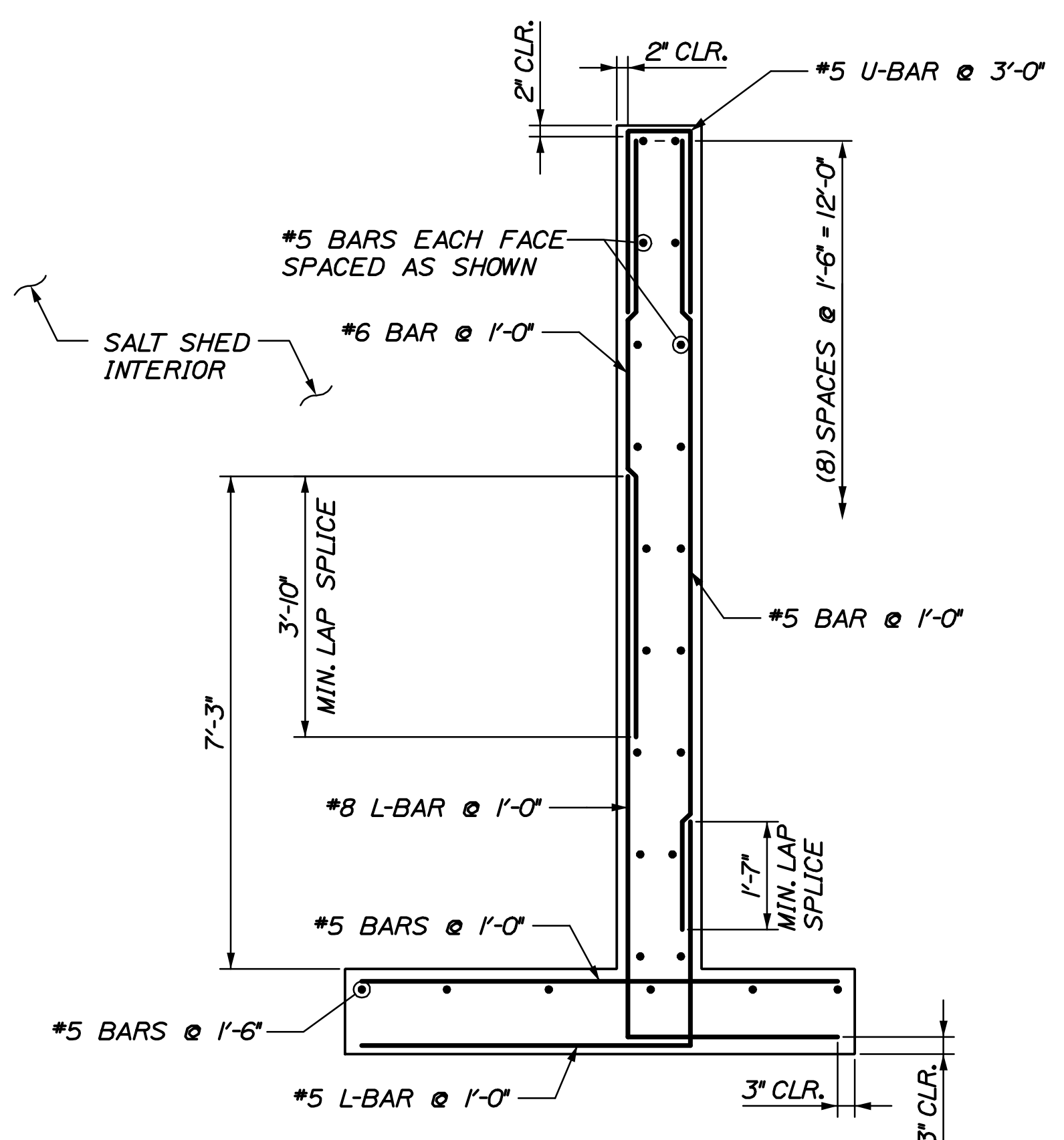
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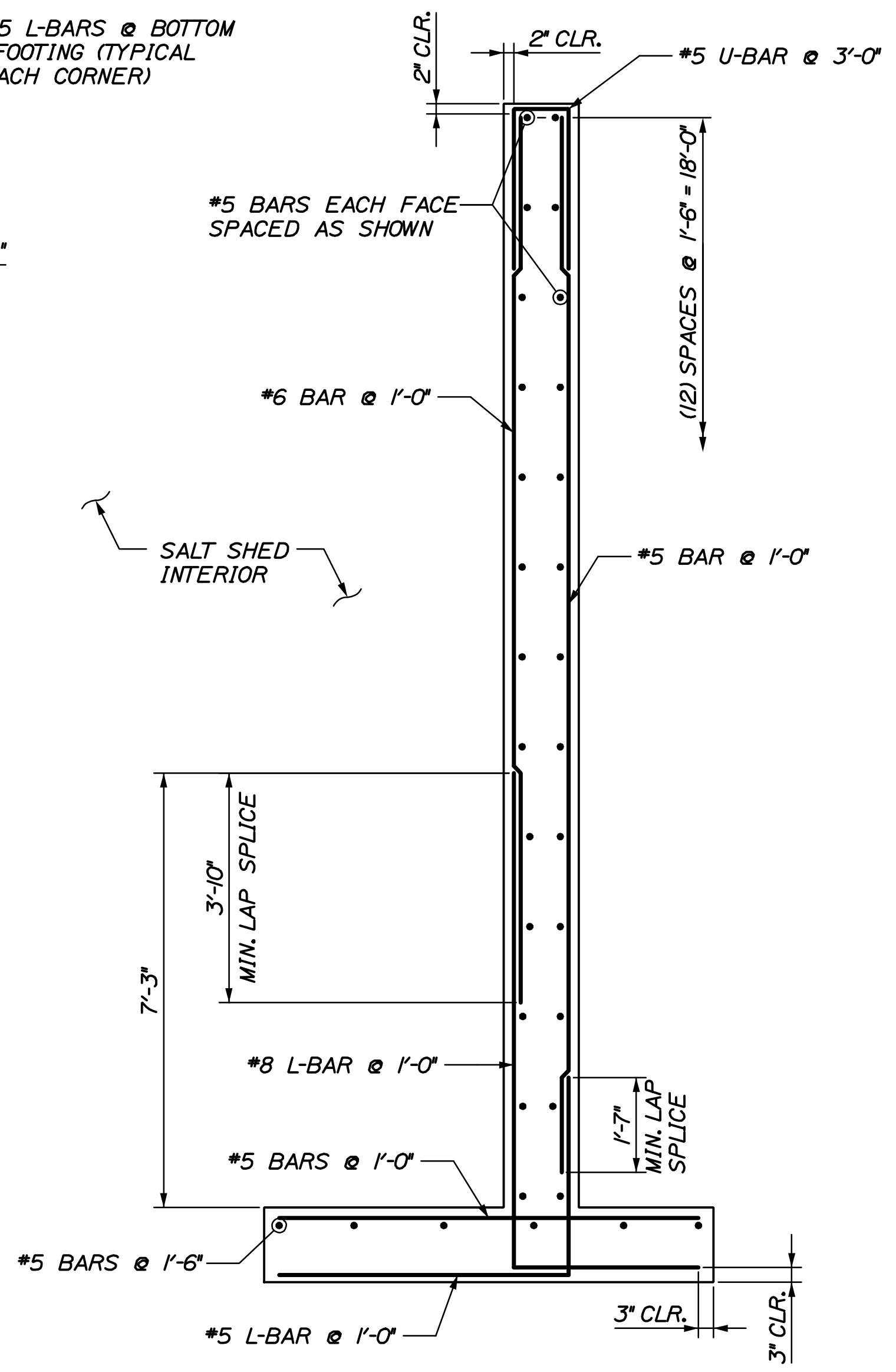
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(A) WEST END WALL REINFORCING
 SCALE: 1/4" = 1'-0"



(B) WEST END WALL REINFORCING SECTION
 SCALE: 1/2" = 1'-0"



(C) WEST END WALL REINFORCING SECTION
 SCALE: 1/2" = 1'-0"

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ERICK CALDERWOOD
 No. 9099
 LICENSED PROFESSIONAL ENGINEER
 P.E. NUMBER 9099
 DATE: MARCH 2011

DESIGN DETAIL	DATE	BY	CHK	REVISED	REVISIONS
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REVIEWED					REVISIONS 2
					REVISIONS 3
					REVISIONS 4
					FIELD CHANGES

CARIBOU MAINTANANCE
 SALT SHED
 WEST END WALL
 REINFORCING DETAILS

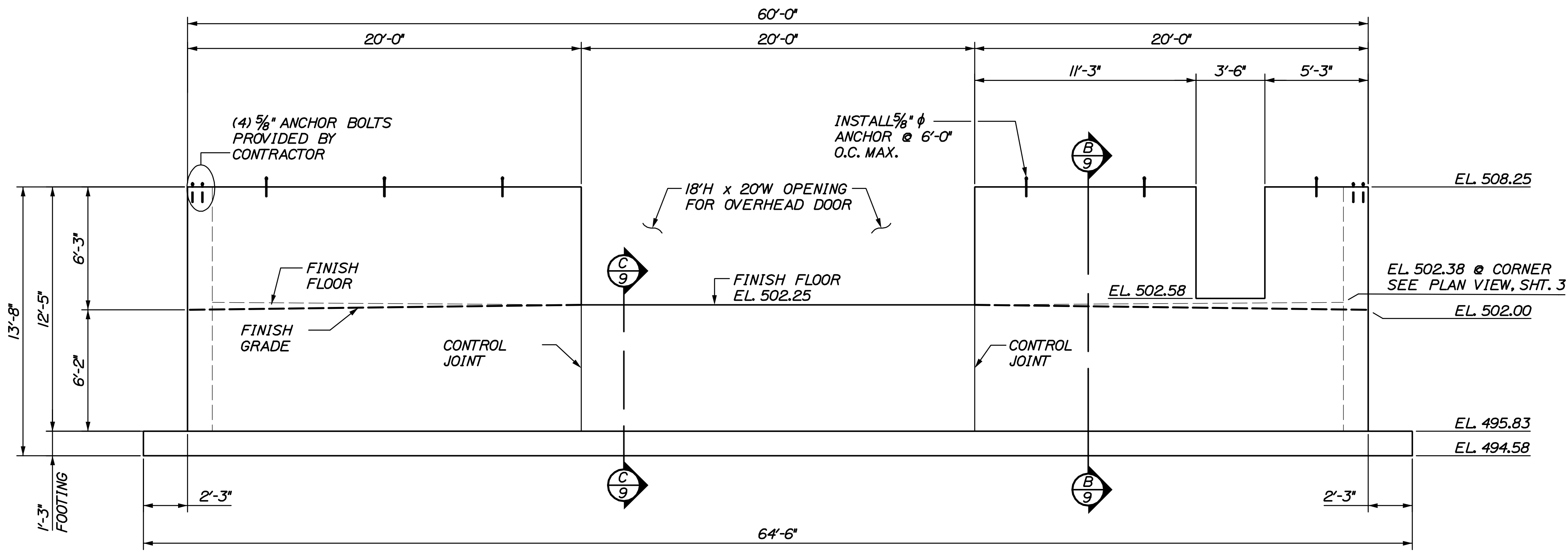
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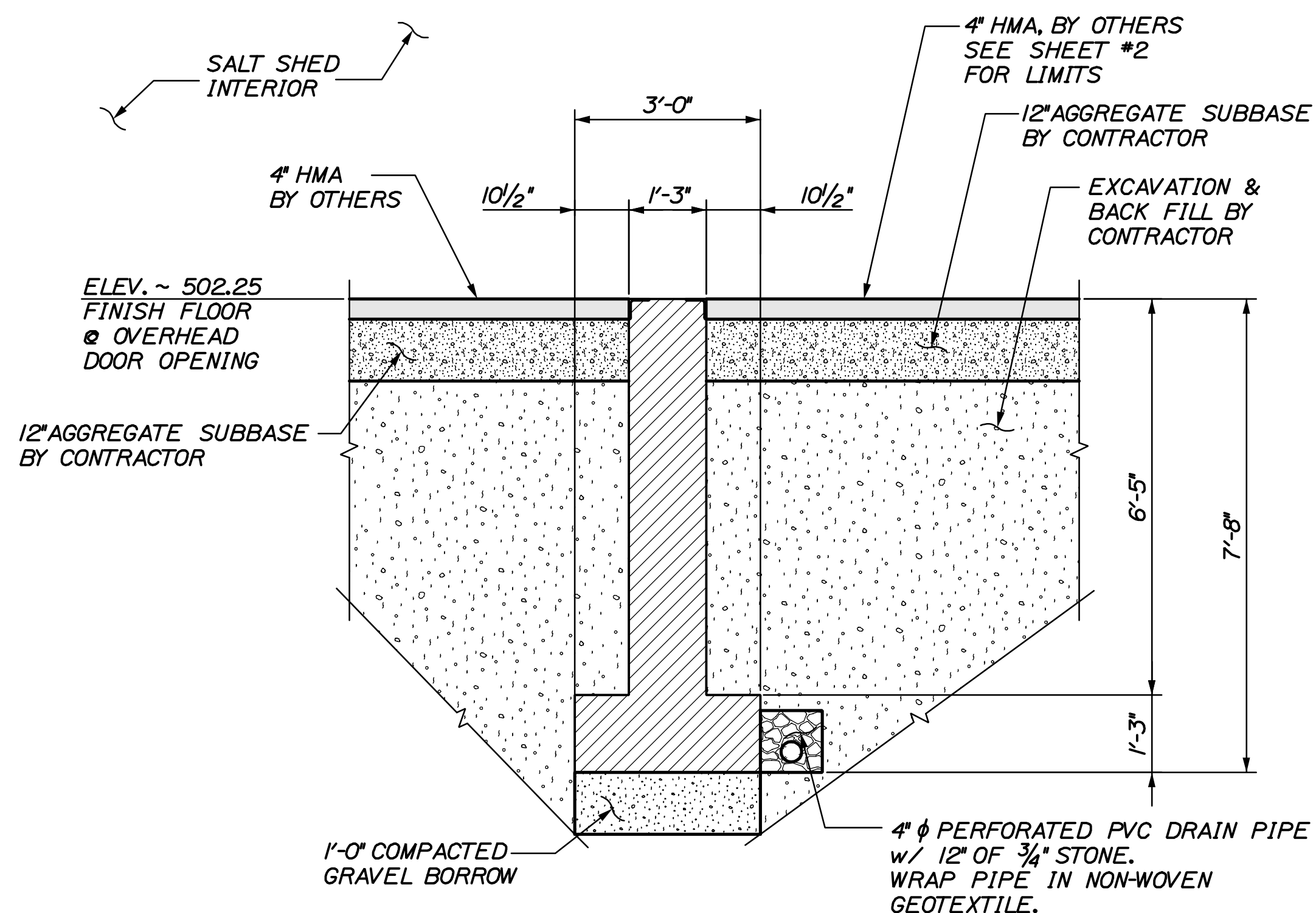
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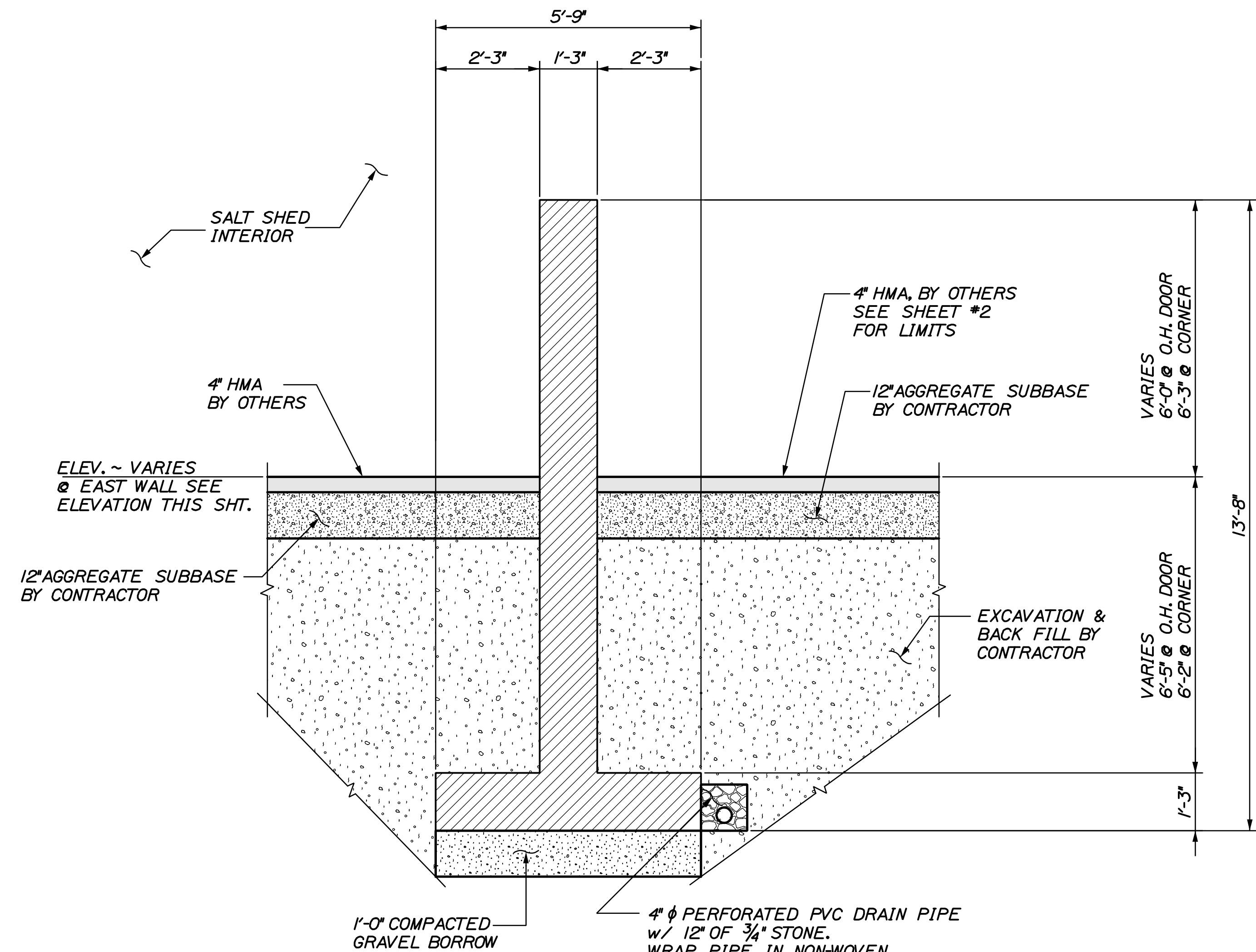
Filename: ... \caribou\009_EastWall_DWG.dwg Group: Structures Division



(A) EAST END WALL ELEVATION
 SCALE: 1/4" = 1'-0"



(C) SECTION @ OVERHEAD DOOR
 SCALE: 1/2" = 1'-0"



(B) EAST END WALL SECTION
 SCALE: 1/2" = 1'-0"

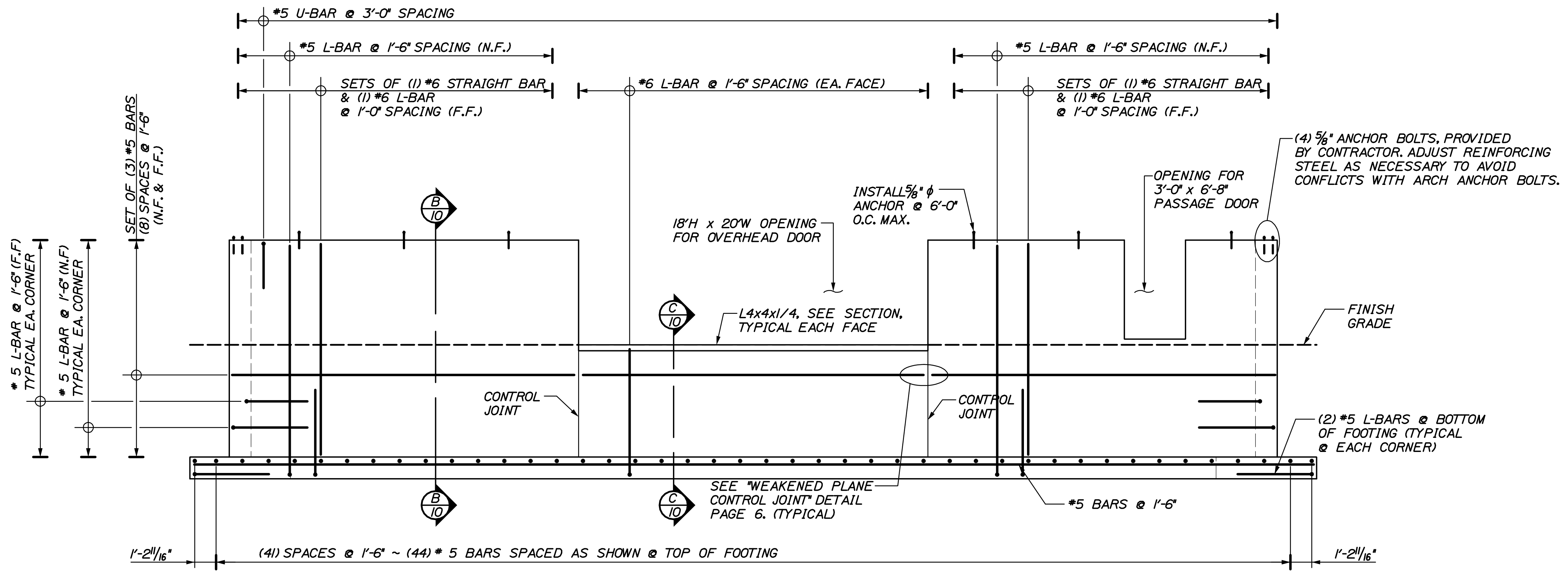
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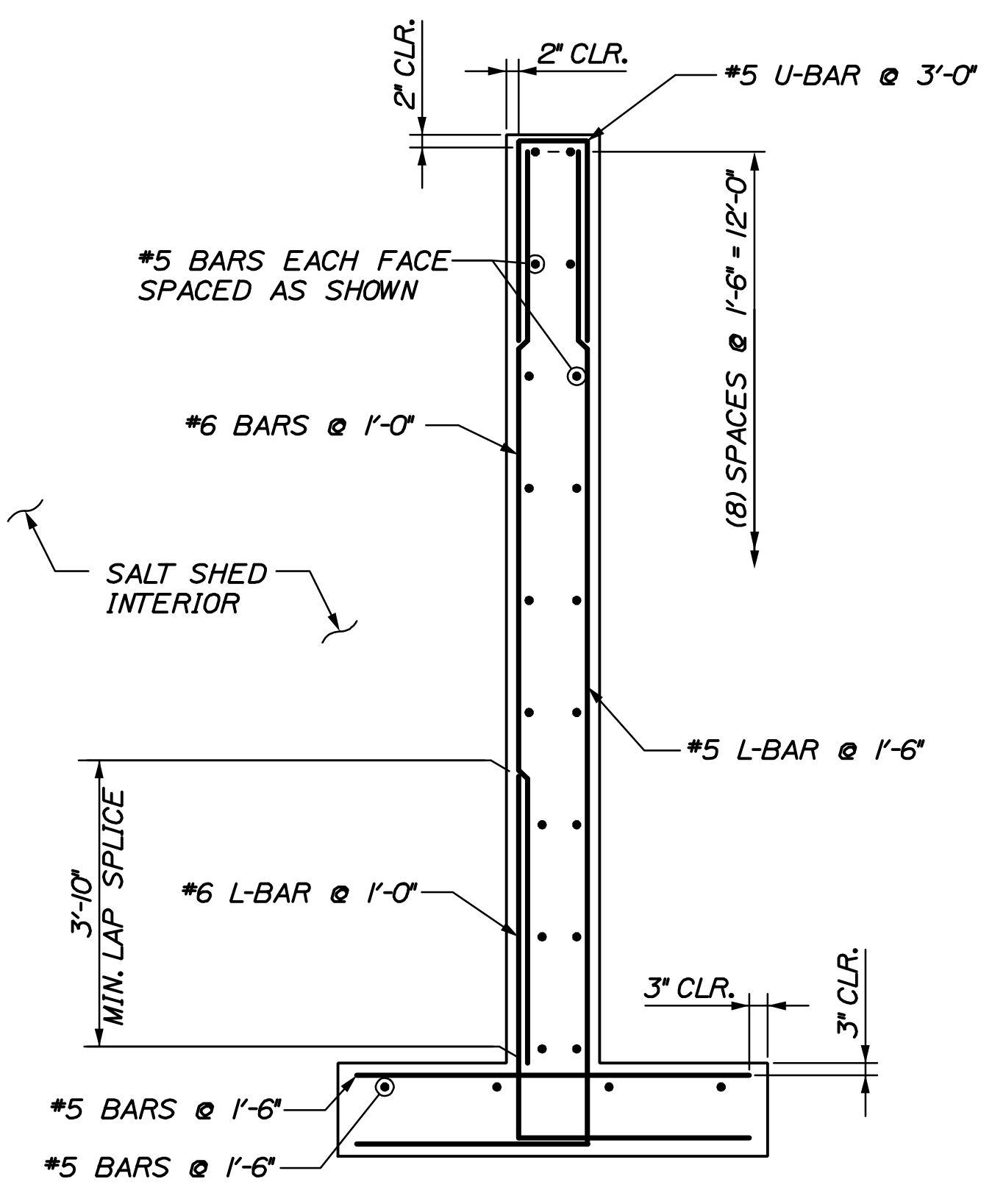
CARIBOU MAINTANANCE
 SALT SHED
 EAST END WALL
 DIMENSIONAL DETAILS

SHEET NUMBER
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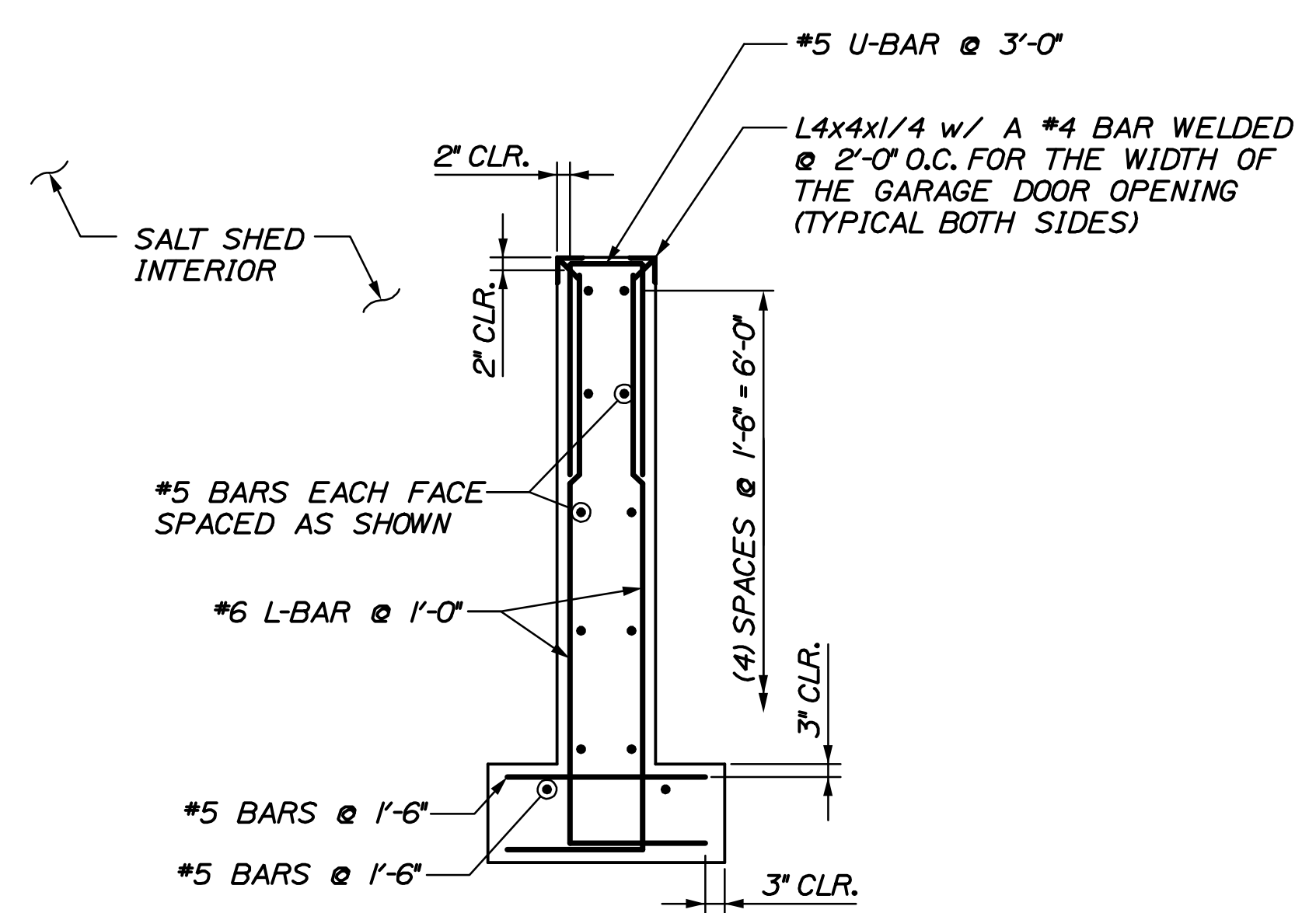


NOTE: CUT REINFORCING STEEL AS NECESSARY AT DOOR OPENINGS

A EAST END WALL REINFORCING
SCALE: 1/4" = 1'-0"

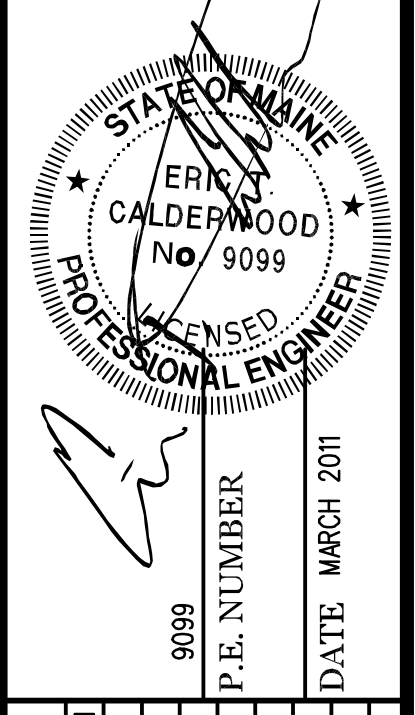


B EAST END WALL REINFORCING SECTION
SCALE: 1/2" = 1'-0"



C EAST END WALL REINFORCING SECTION
SCALE: 1/2" = 1'-0"

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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
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CARIBOU MAINTANANCE
SALT SHED
EAST END WALL
REINFORCING DETAILS

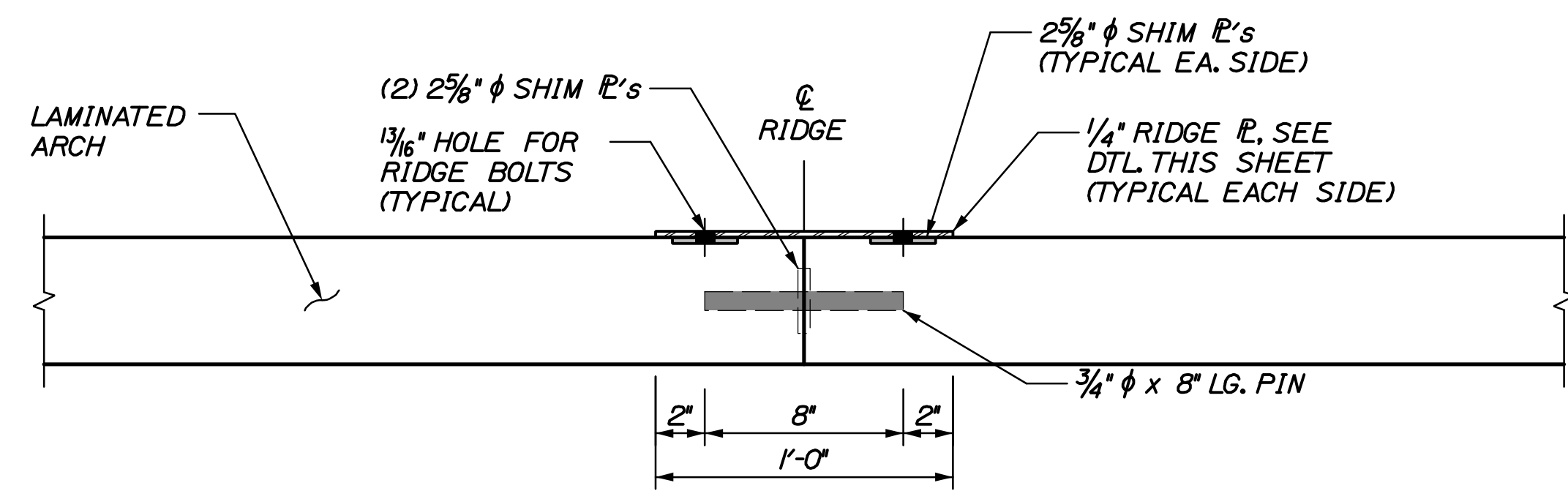
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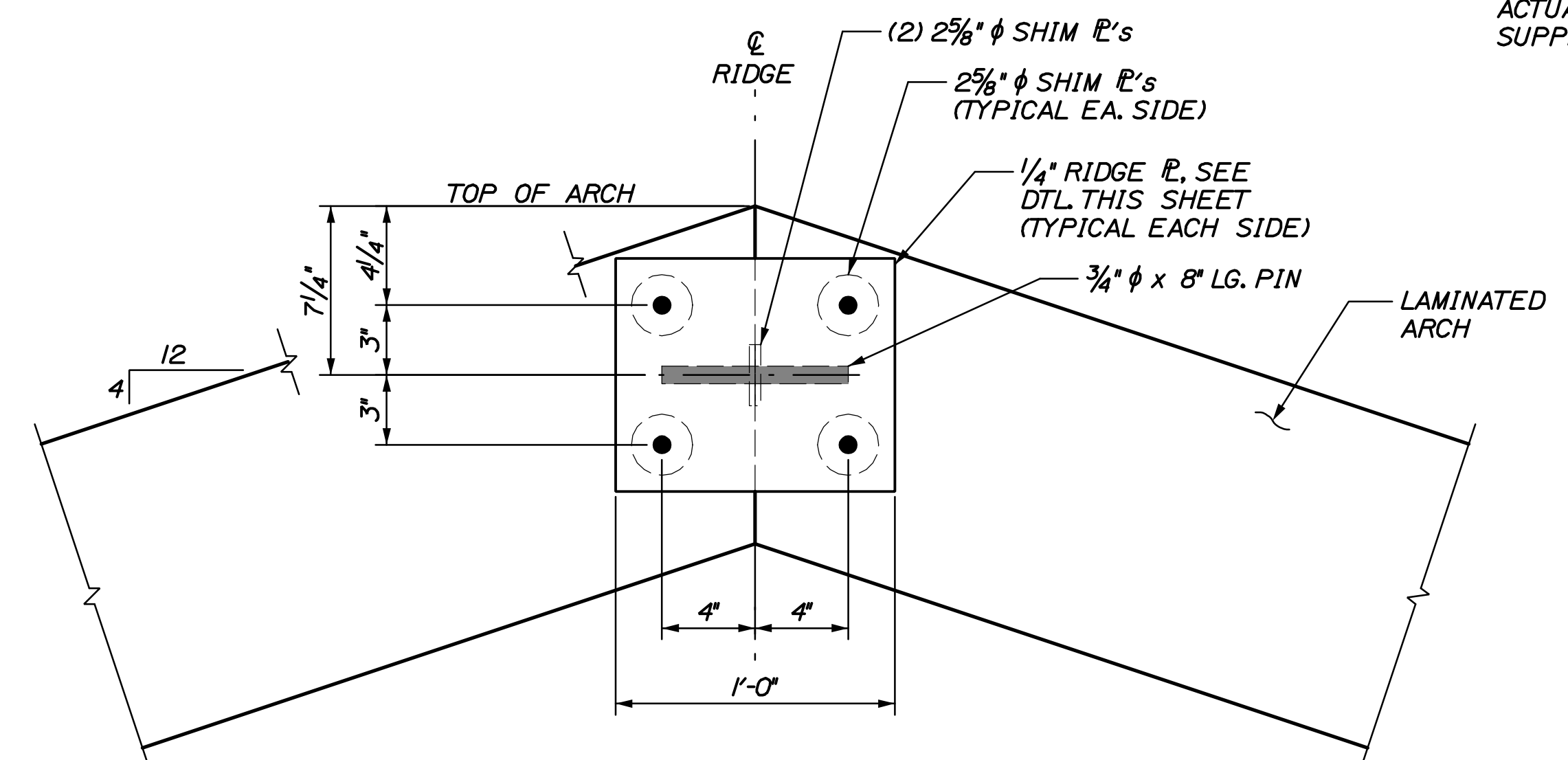
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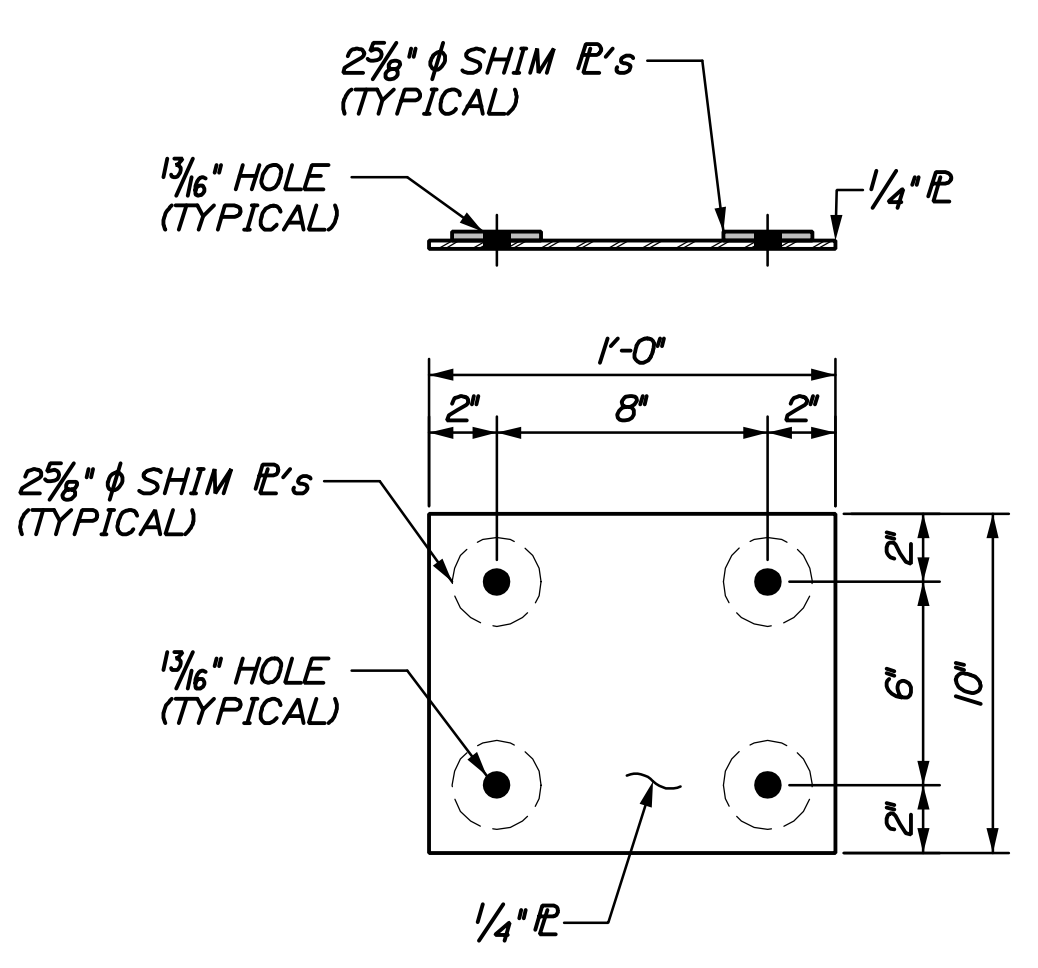


PLAN VIEW



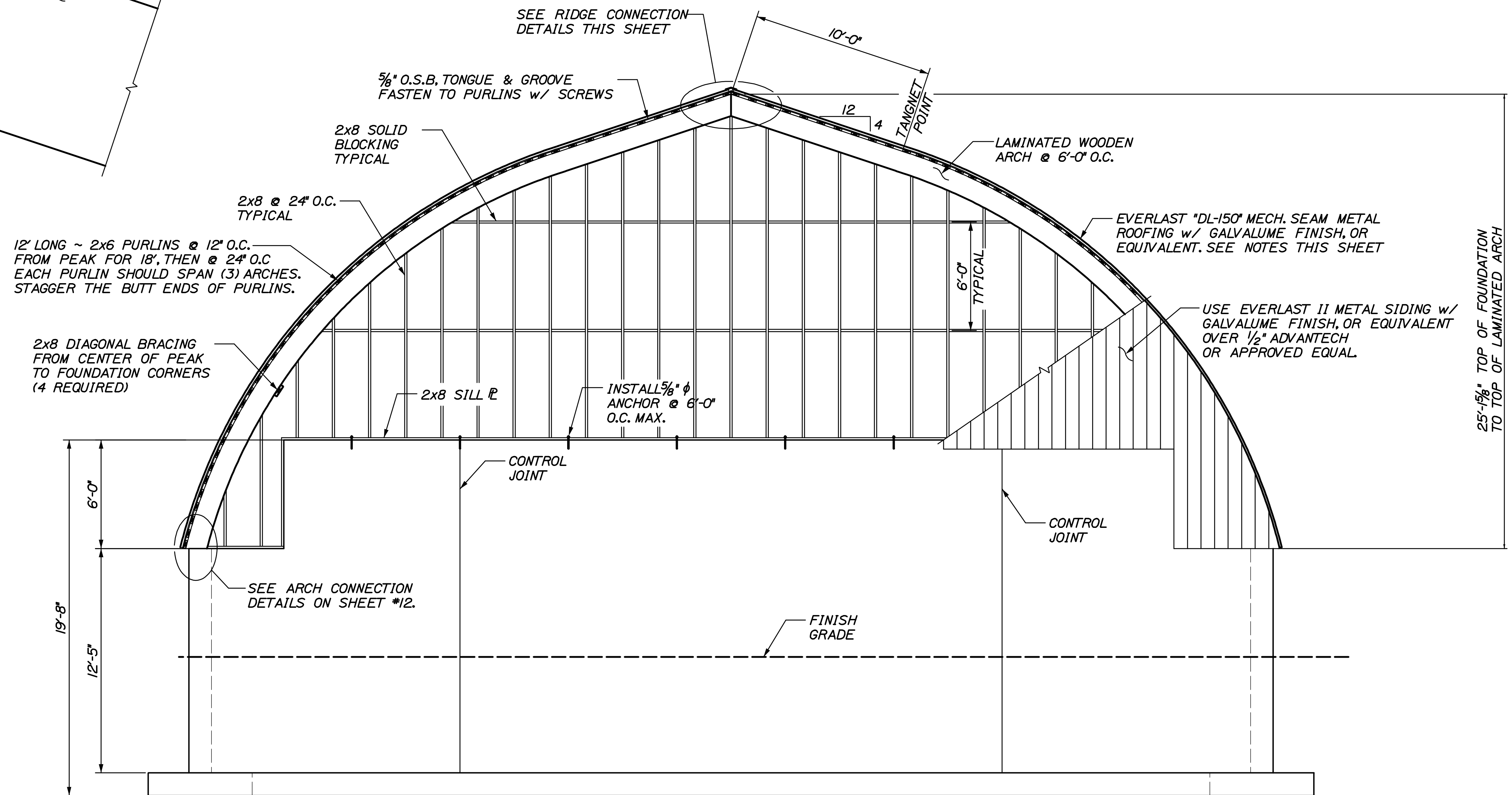
ELEVATION VIEW

RIDGE CONNECTION
SCALE: 2" = 1'-0"



RIDGE CONNECTION PLATE
SCALE: 2" = 1'-0"

NOTE:
DEPENDING ON SIZE AND TYPE OF ARCH SELECTED, LOCATION OF CONNECTION BOLTS AND AND PINS AT THE RIDGE MAY CHANGE. ACTUAL RIDGE CONNECTION TO BE DESIGNED AND SUPPLIED BY ARCH MANUFACTURER.



A WEST END WALL FRAMING
SCALE: 1/4" = 1'-0"

METAL ROOFING NOTES:

1. THE SALT SHED IS TO BE ROOFED WITH THE EVERLAST DL-150 PRODUCT, OR AN EQUIVALENT PRODUCT. THIS PRODUCT USES DOUBLE-LOCK STANDING SEAM ROOF PANELS.
2. THE FINISH IS TO BE BARE GALVALUME.
3. THE PANELS ARE TO BE DELIVERED TO THE JOB SITE BY THE SUPPLIER IN STRAIGHT, UNFORMED PANELS. THE SUPPLIER WILL THEN FORM THE PANELS ON SITE TO THE SHAPE AND RADIUS OF THE ROOF. THE CONTRACTOR MAY BE REQUIRED TO PROVIDE ADDITIONAL MAN-POWER TO THE SUPPLIER TO AID IN MOVING THE PANELS.
4. NO BUTT SEAMS WILL BE ALLOWED ON THE ROOF. THE PANELS WILL BE FORMED FROM 1 PIECE THAT BEGINS AT THE BOTTOM OF THE ROOF AND CONTINUES ALL THE WAY TO THE RIDGE.
5. NO EXPOSED FASTENERS WILL BE ALLOWED ON THE ROOF PANELS.
6. PANELS MUST BE INSTALLED IN A SEQUENTIAL PATTERN.
7. A 30# ROOFING FELT OR AN APPROVED EQUAL SHOULD BE INSTALLED OVER SUBSTRATE PRIOR TO INSTALLATION OF PANELS.
8. PANELS MUST BE LOCKED IN THE FIELD BY A MECHANICAL SEAMER.
9. IF PANELS REQUIRE STORAGE BEFORE BEING INSTALLED, THEY SHOULD BE STORED IN A WELL-VENTILATED, DRY PLACE WHERE NO MOISTURE CAN COME IN CONTACT WITH THEM. IF STORED OUTSIDE, COVER WITH VENTED TARP OR WATERPROOF PAPER COVER (NOT PLASTIC). KEEP MATERIAL OFF THE GROUND.

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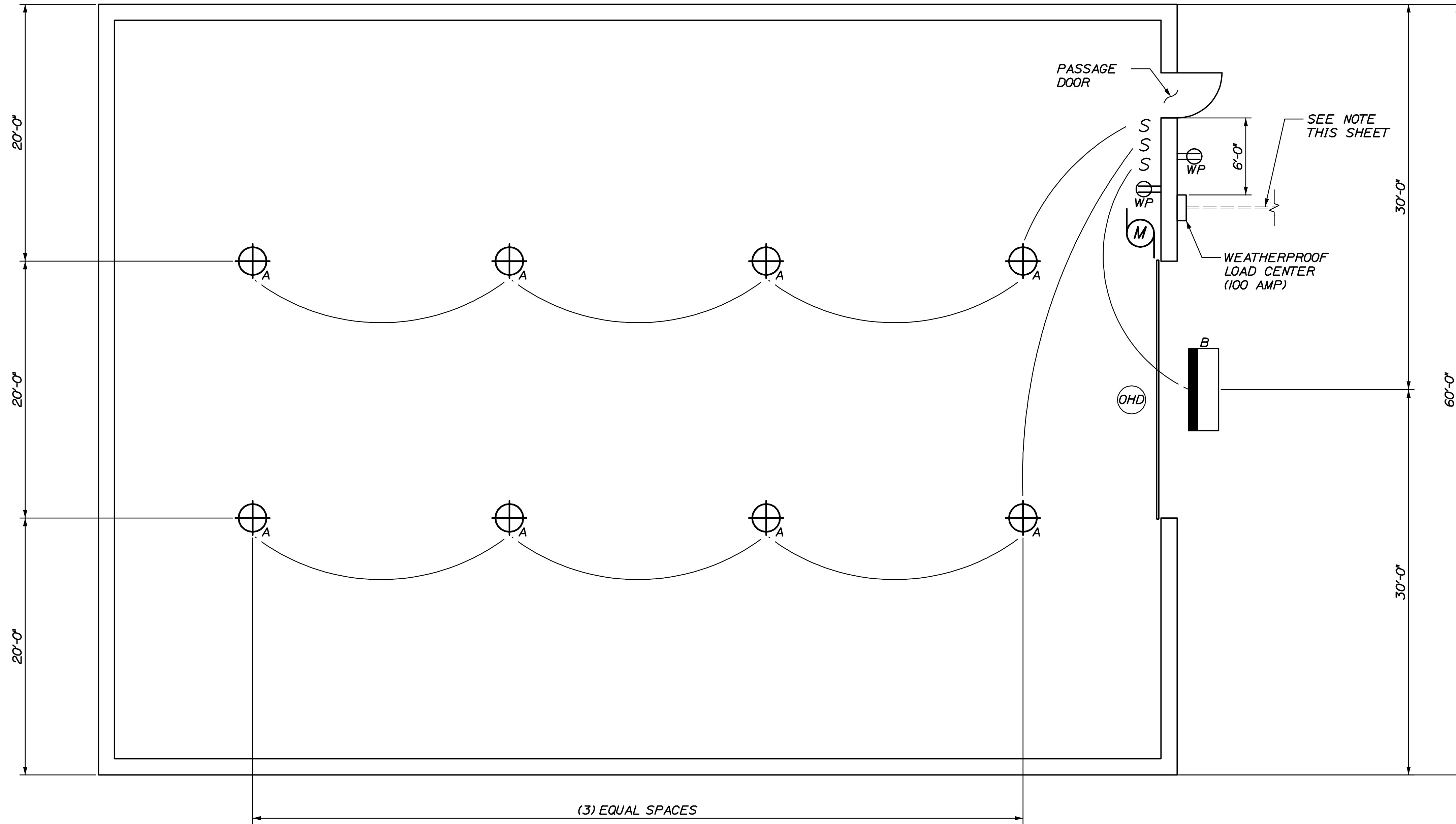
PREPARED FOR:
P.E. NUMBER 9099
DATE: MARCH 2011

ERICK CALDERWOOD
No. 9099
LICENSED PROFESSIONAL ENGINEER

DATE	BY	DESCRIPTION
MAR 2011	JUN ETC	DESIGN/DETAIL
	OKK	CHECKED/REVIEWED
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		REVISIONS 3
		REVISIONS 4
		FIELD CHANGES

CARIBOU MAINTANANCE SALT SHED
WEST END WALL FRAMING DETAILS

SHEET NUMBER
11



A
7 ELECTRICAL FLOOR PLAN
3/16"=1'-0"

ELECTRICAL LEGEND	
	H.F. WILLIAMS, 5' DEEP, FULLY ENCLOSED INDUSTRIAL LIGHT FIXTURE, MODEL #92-B-45415H-A-EB2/2-SSLATCH-SSMB W/ ATTACHED HUBBELL FIXTURE MOUNTED OCCUPANCY SENSORS
	250W METAL HALIDE FLOOD LIGHT EQUIV. TO LUMARK NIGHAWK III W/ PHOTOCELL AND SWITCH.
	WEATHERPROOF SWITCH
	GFCI RECEPTACLE W/ WEATHERPROOF COVER
	OVERHEAD DOOR OPERATOR

CONTRACTOR WILL BE REQUIRED TO EXCAVATE, SUPPLY, INSTALL, BACKFILL, AND COMPACT, PER NATIONAL ELECTRICAL CODE (NEC) AN ADDITIONAL 250 FT OF 2" UNDERGROUND CONDUIT.

CONDUIT SHALL BE INSTALLED BELOW GRADE. IT SHALL ORIGINATE FROM THE SAME LOCATION AS THE SALT BUILDING CONDUIT AND WILL TERMINATE IN A LOCATION DETERMINED BY OWNER.

EACH END OF CONDUIT SHALL BE CAPPED AND PROTRUDE ABOVE FINISH GRADE BY 2 FEET.

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DESIGNED: [] CHECKED: [] REVISIONS 1 [] REVISIONS 2 [] REVISIONS 3 [] REVISIONS 4 [] FIELD CHANGES []	P.E. NUMBER: 9099 DATE: MARCH 2011
BY: [] DATE: MAR 2011	
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SHEET NUMBER 13	

