

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



FORT KENT MAINTENANCE SALT SHED

SPECIFICATIONS

Design: International Building Code 2009

DESIGN LOADING

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

MATERIALS

Reinforcing Steel ASTM A615, Grade 60, Epoxy Coated
 Structural Steel:
 All Material (except as noted) ASTM A709, Grade 36

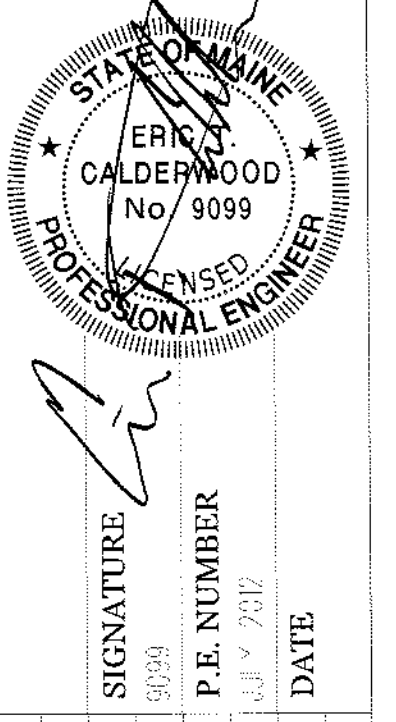
BASIC DESIGN STRESSES

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: *[Signature]*
COMMISSIONER: *[Signature]*
DATE: 7/25/12
CHIEF ENGINEER: *[Signature]*



PROJECT INFORMATION	
PROGRAM	HC-WAY
PROJECT MANAGER	G. MARY, JR.
DESIGNER	G. ZAKAS
PROJECT RESIDENT	CALDERWOOD ENGINEERING
CONTRACT OR PROJECT COMPLETE DATE	

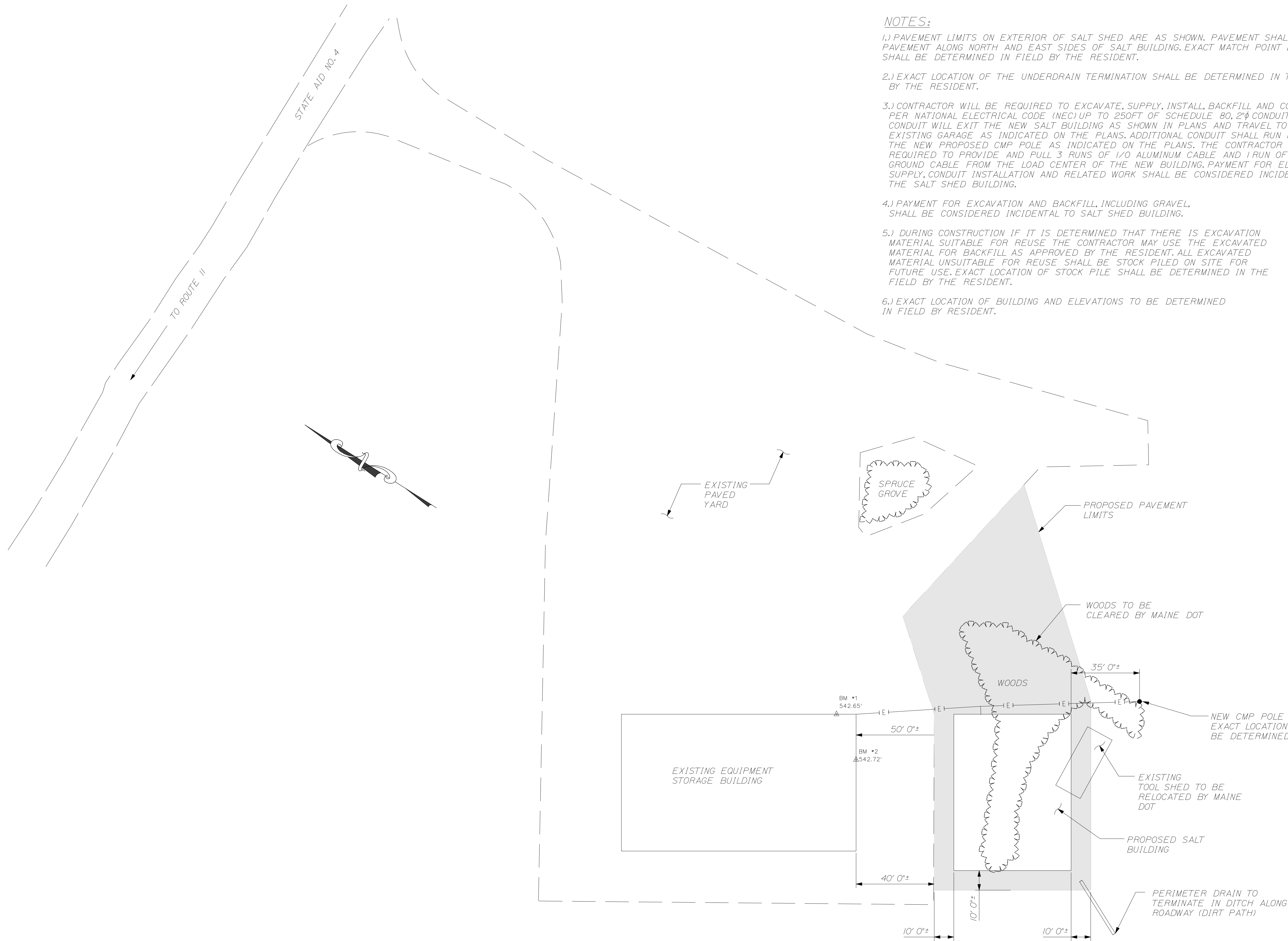
WIN 19830.00

FORT KENT
MAINTENANCE SALT SHED
TITLE SHEET

PROJECT LOCATION:	Mills Rd off Route 161 Fort Kent, Maine
PROGRAM AREA:	Highway Maintenance Program
OUTLINE OF WORK:	Construction of Salt Storage Building

SHEET NUMBER
1
OF 13

Filename: N:\or1\Kent\00...Title.dgn
Division: BFD\05
Username: common
Date: 7/13/2012



NOTES:

- 1.) PAVEMENT LIMITS ON EXTERIOR OF SALT SHED ARE AS SHOWN. PAVEMENT SHALL MATCH EXISTING PAVEMENT ALONG NORTH AND EAST SIDES OF SALT BUILDING. EXACT MATCH POINT EAST OF BUILDING SHALL BE DETERMINED IN FIELD BY THE RESIDENT.
- 2.) EXACT LOCATION OF THE UNDERDRAIN TERMINATION SHALL BE DETERMINED IN THE FIELD BY THE RESIDENT.
- 3.) CONTRACTOR WILL BE REQUIRED TO EXCAVATE, SUPPLY, INSTALL, BACKFILL AND COMPACT, PER NATIONAL ELECTRICAL CODE (NEC) UP TO 250FT OF SCHEDULE 80, 2"Ø CONDUIT. THE CONDUIT WILL EXIT THE NEW SALT BUILDING AS SHOWN IN PLANS AND TRAVEL TO THE EXISTING GARAGE AS INDICATED ON THE PLANS. ADDITIONAL CONDUIT SHALL RUN FROM THE NEW PROPOSED CMP POLE AS INDICATED ON THE PLANS. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE AND PULL 3 RUNS OF 1/0 ALUMINUM CABLE AND 1 RUN OF #6 ALUMINUM 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.
- 4.) PAYMENT FOR EXCAVATION AND BACKFILL, INCLUDING GRAVEL, SHALL BE CONSIDERED INCIDENTAL TO SALT SHED BUILDING.
- 5.) 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.
- 6.) EXACT LOCATION OF BUILDING AND ELEVATIONS TO BE DETERMINED IN FIELD BY RESIDENT.

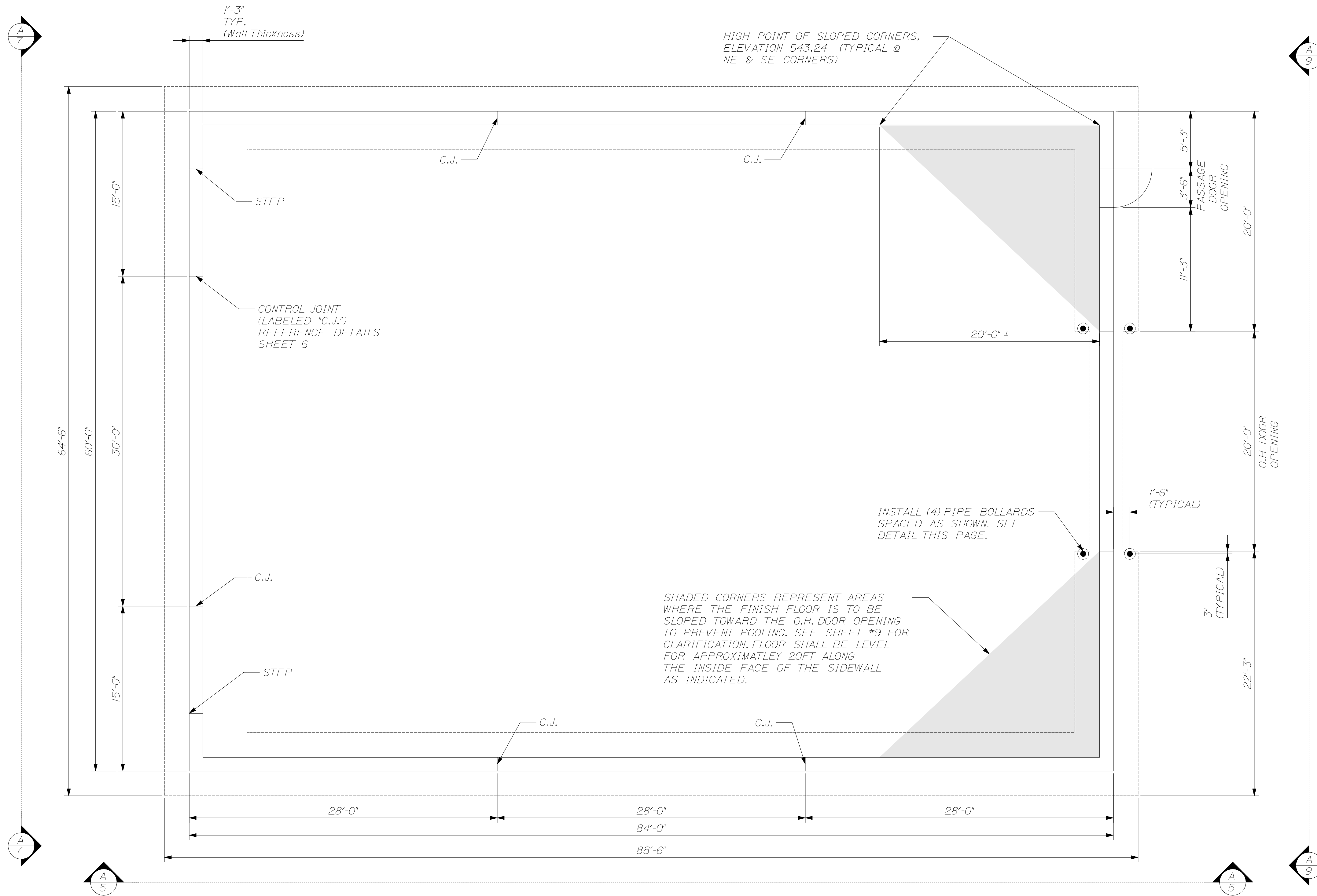
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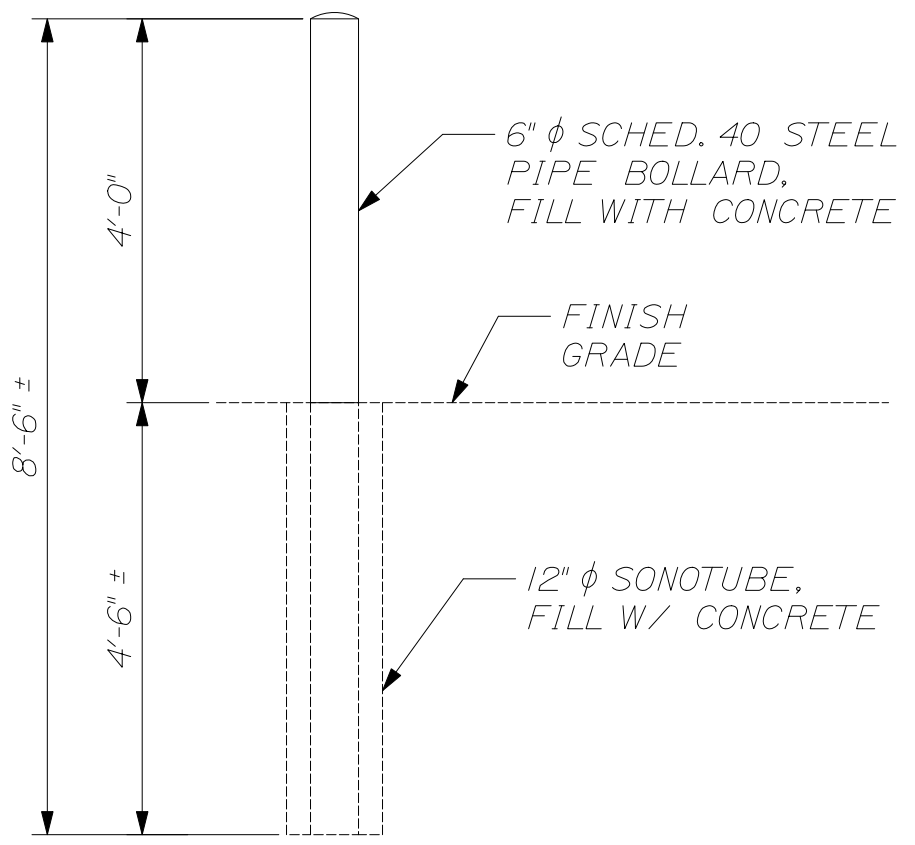
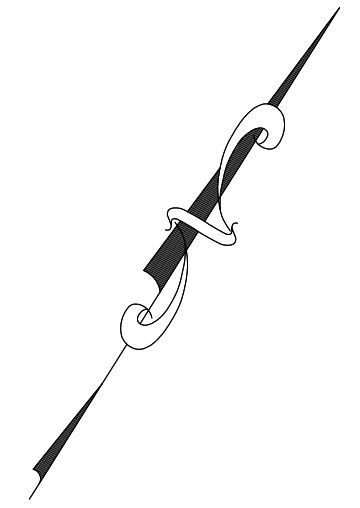
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FORT KENT MAINTANANCE SALT SHED
GENERAL SITE PLAN



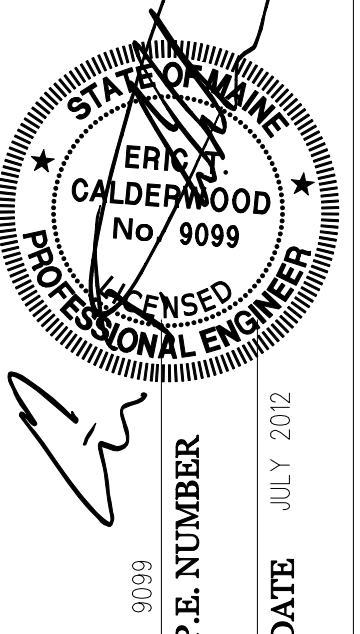


A
3 FOUNDATION PLAN
 3/16" = 1'-0"



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

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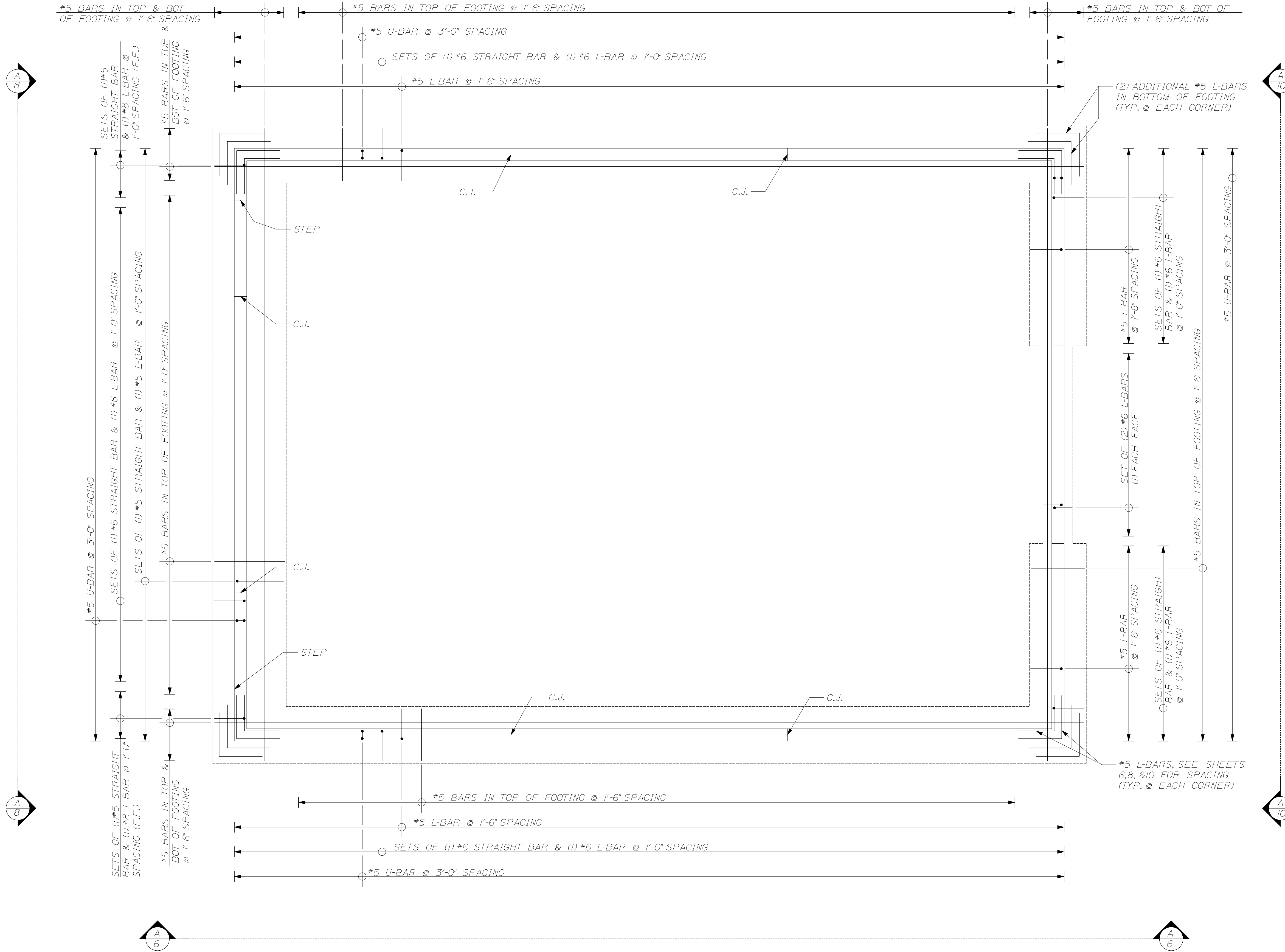
FORT KENT MAINTENANCE SALT SHED
 FOUNDATION PLAN

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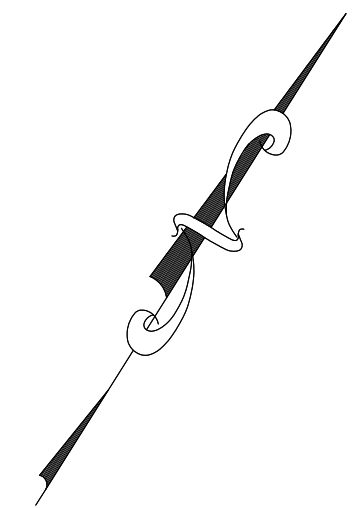
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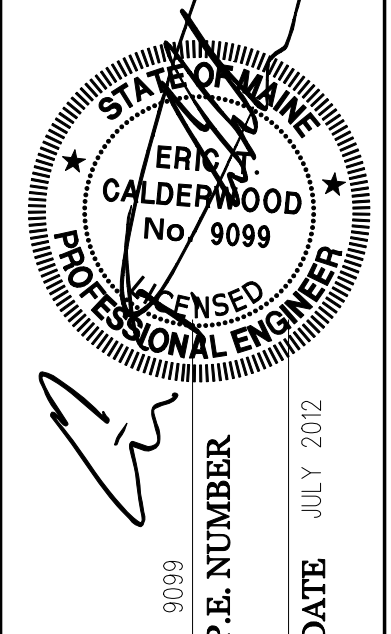


NOTE: HORIZONTAL REINFORCING STEEL IN FOUNDATION WALL NOT SHOWN, SEE SHEETS 6, 8, & 10 FOR DETAILS NOT SHOWN HERE.

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



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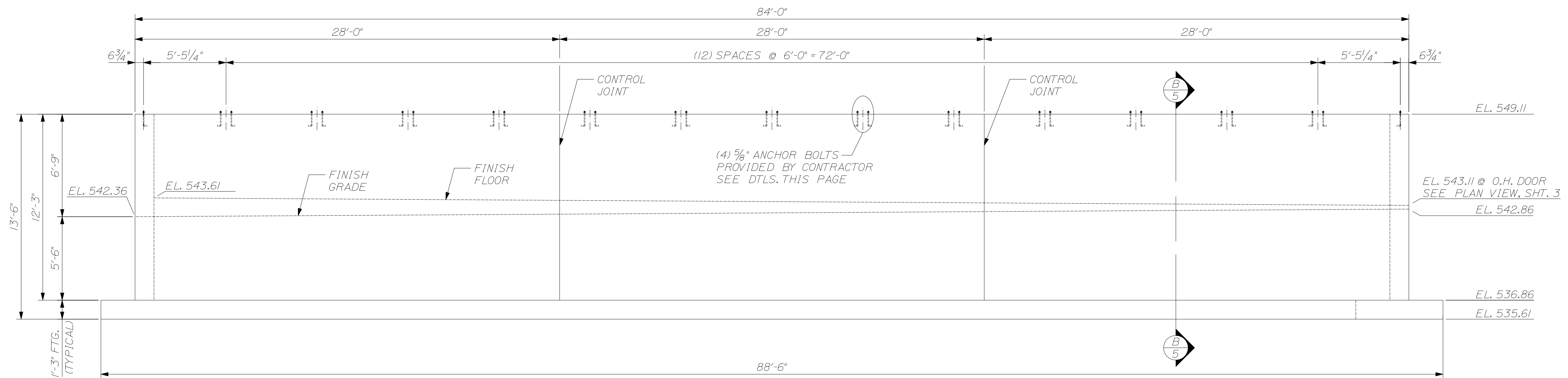


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FOUNDATION REINFORCING PLAN

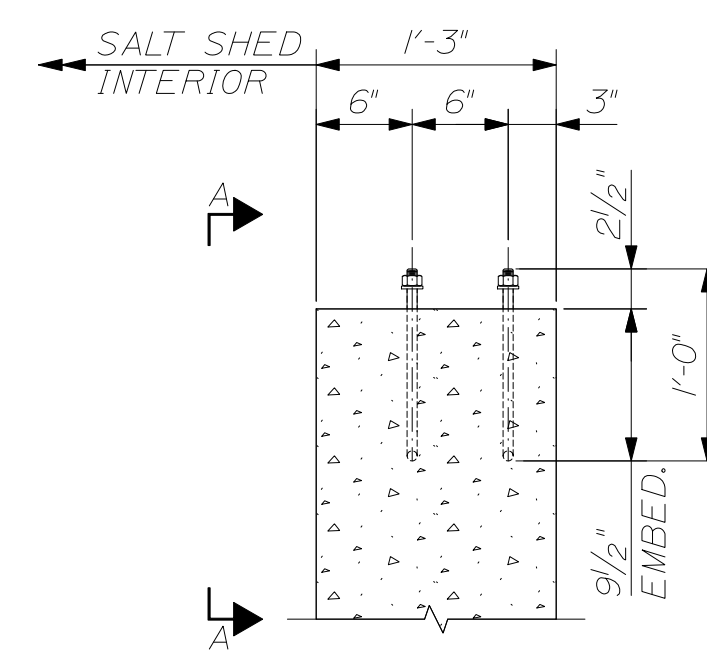
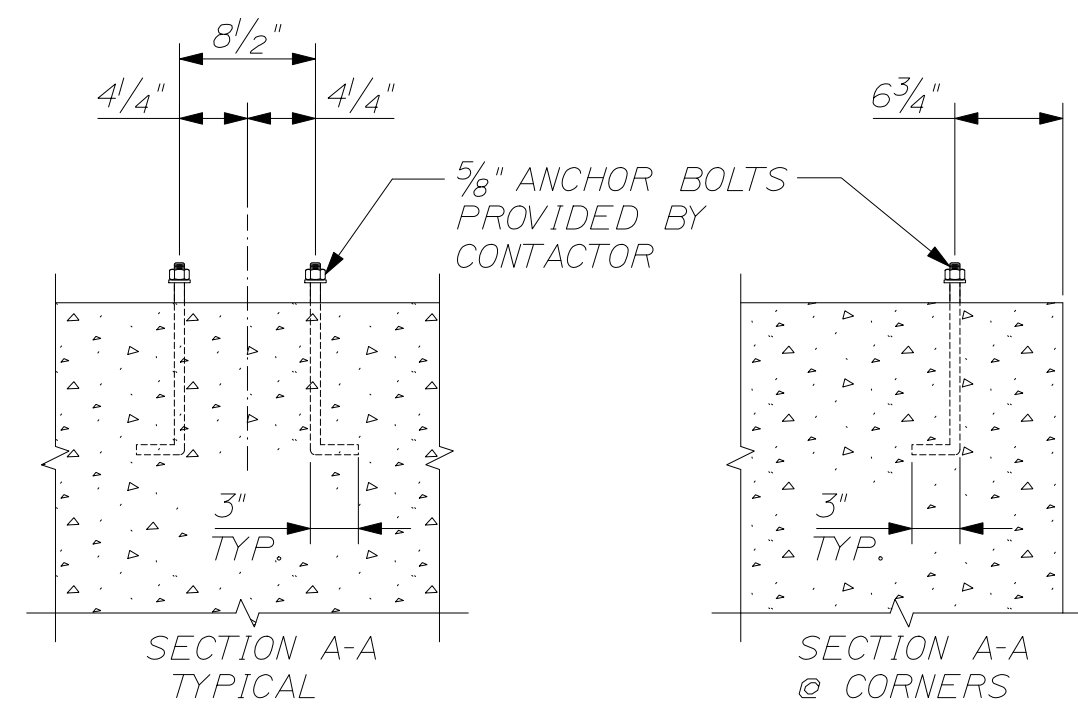
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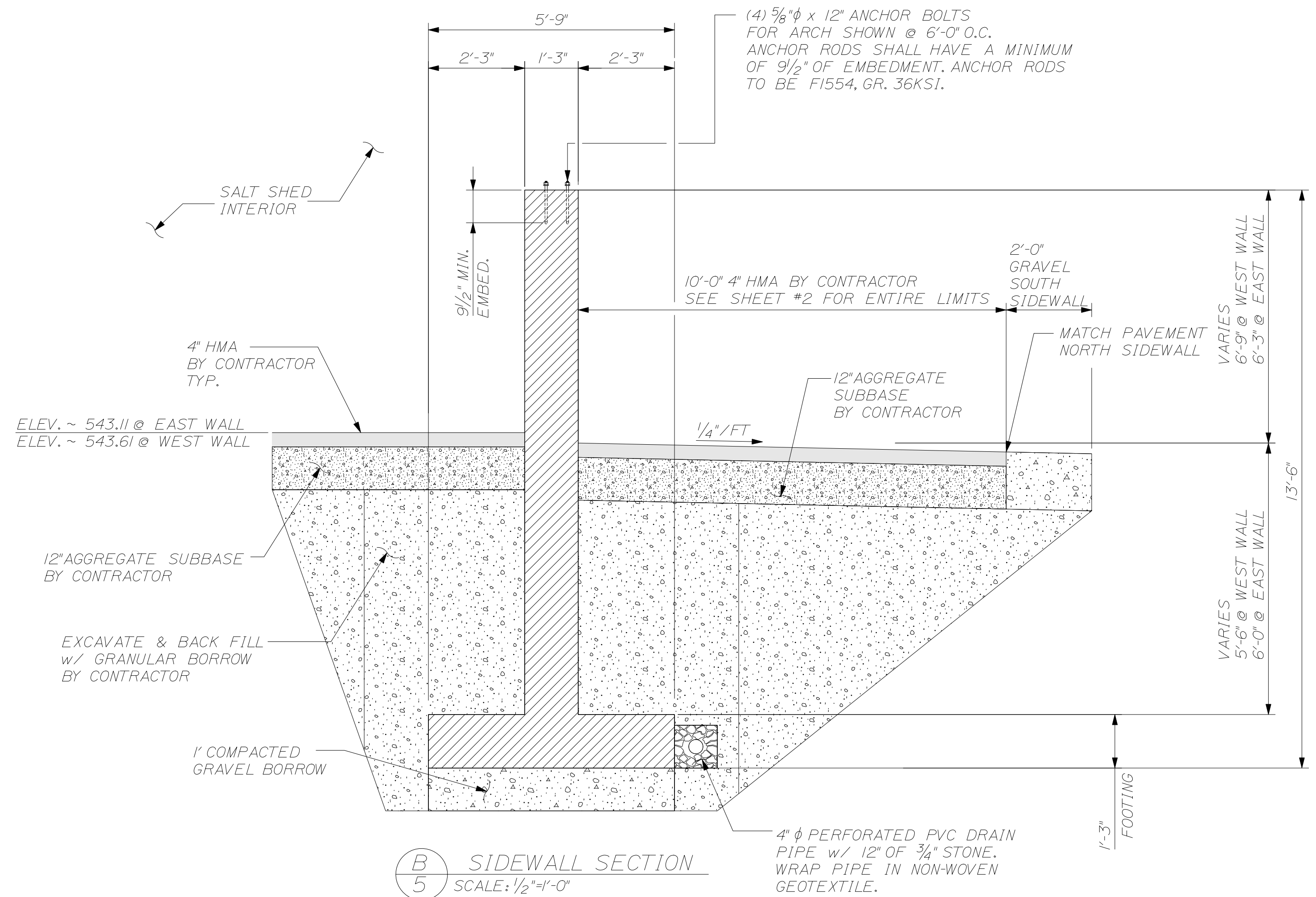


(A) 5 SIDEWALL ELEVATION
 SCALE: 1/4" = 1'-0"
 TYPICAL FOR NORTH AND SOUTH SIDEWALLS
 ARCHES NOT SHOWN

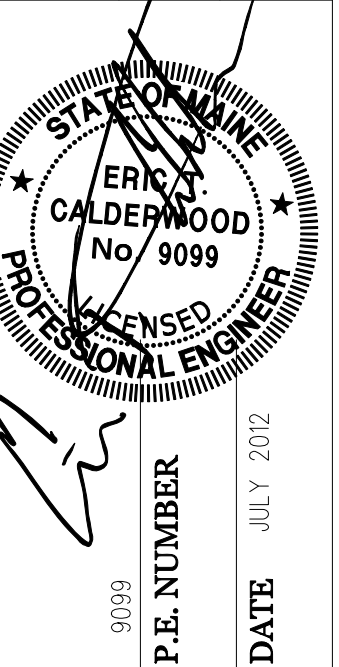
NOTE:
 ACTUAL ANCHOR BOLT LAYOUT TO BE COORDINATED WITH THE LAMINATED ARCH MANUFACTURER. GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING LAYOUT OF ANCHOR BOLTS WITH ARCH BASE PLATES TO ENSURE A PROPER FIT.



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



(B) 5 SIDEWALL SECTION
 SCALE: 1/2" = 1'-0"



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FORT KENT MAINTANANCE SALT SHED
 NORTH & SOUTH SIDEWALL
 DIMENSIONAL DETAILS

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5

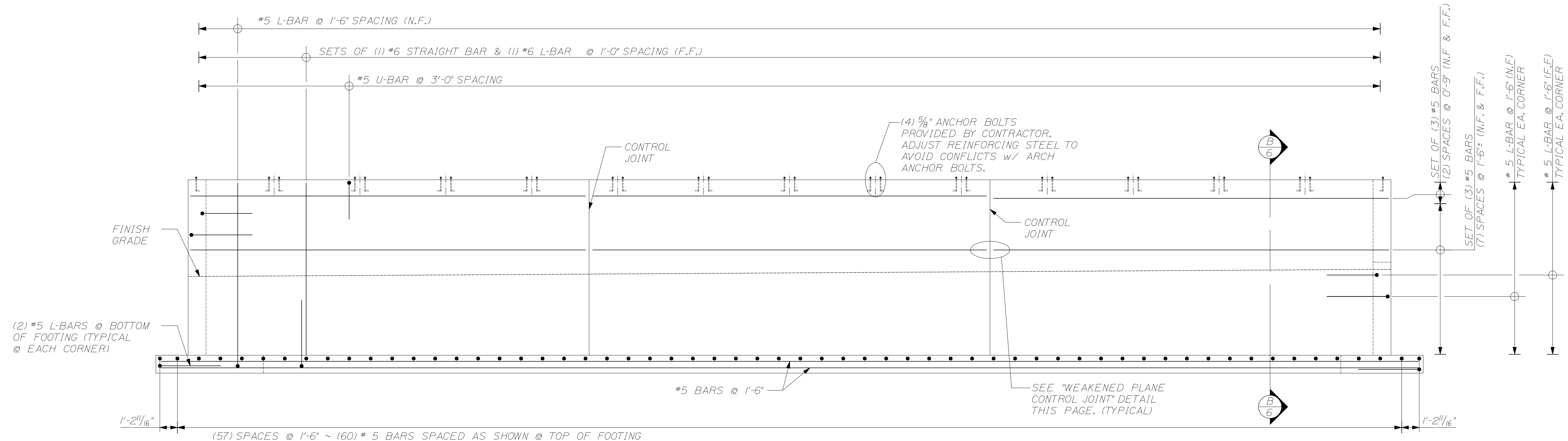
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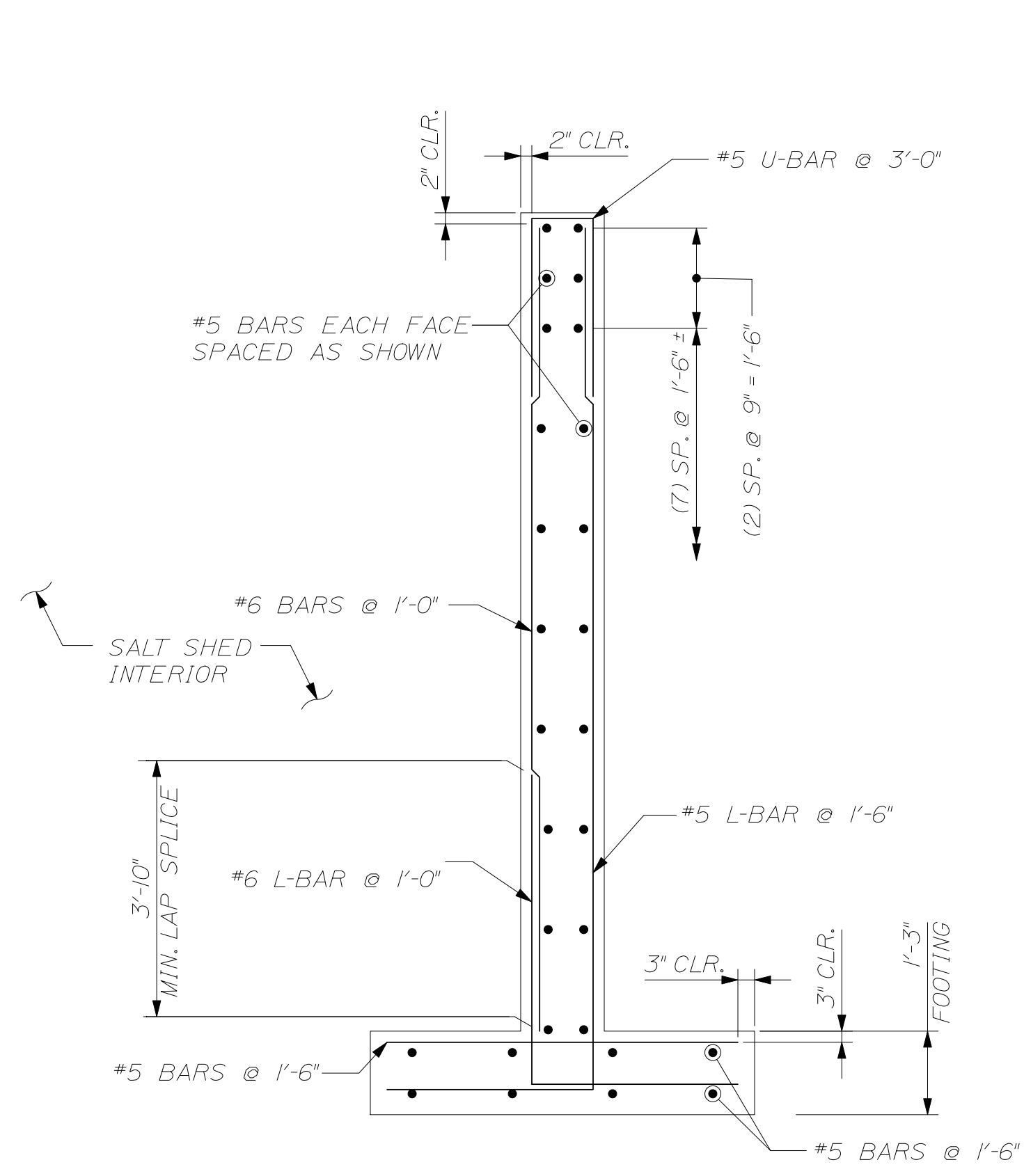
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Username: common

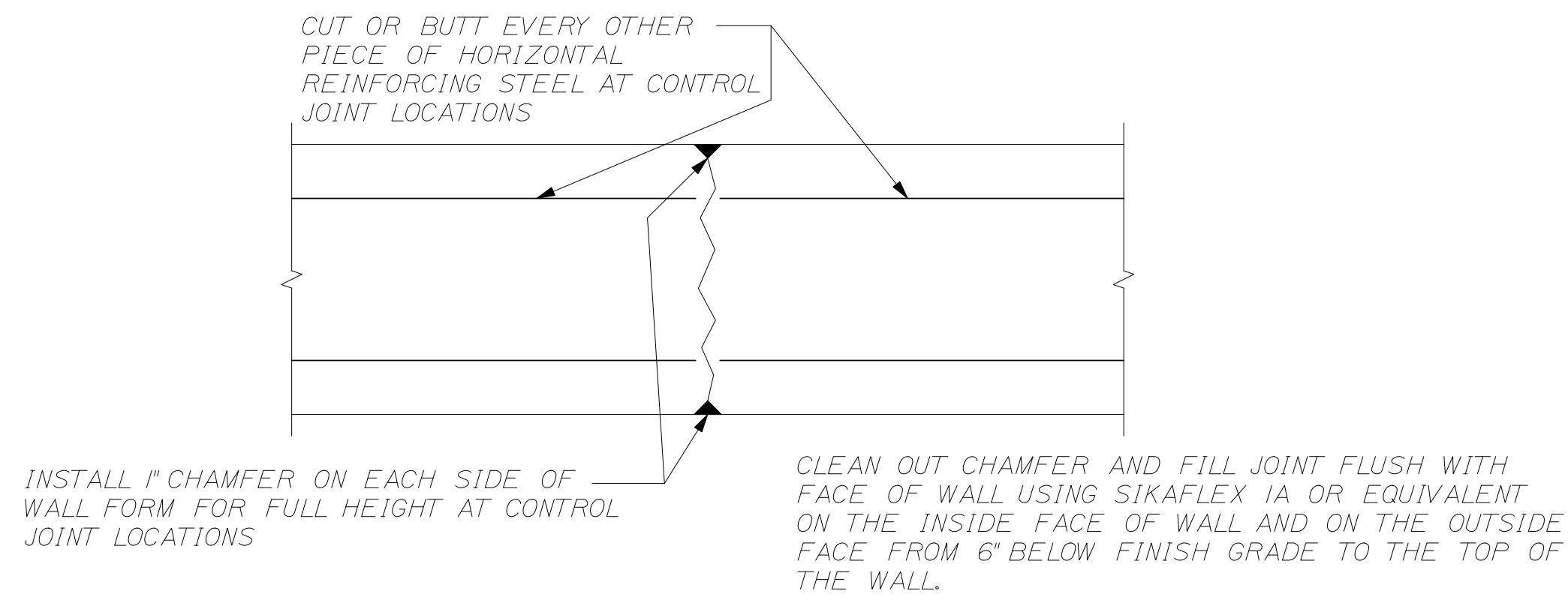
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(A) SIDEWALL REINFORCING
 SCALE: 1/4" = 1'-0"
 TYPICAL FOR NORTH AND SOUTH SIDEWALLS
 ARCHES NOT SHOWN



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



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

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FORT KENT MAINTENANCE SALT SHED
 NORTH & SOUTH SIDEWALL REINFORCING DETAILS

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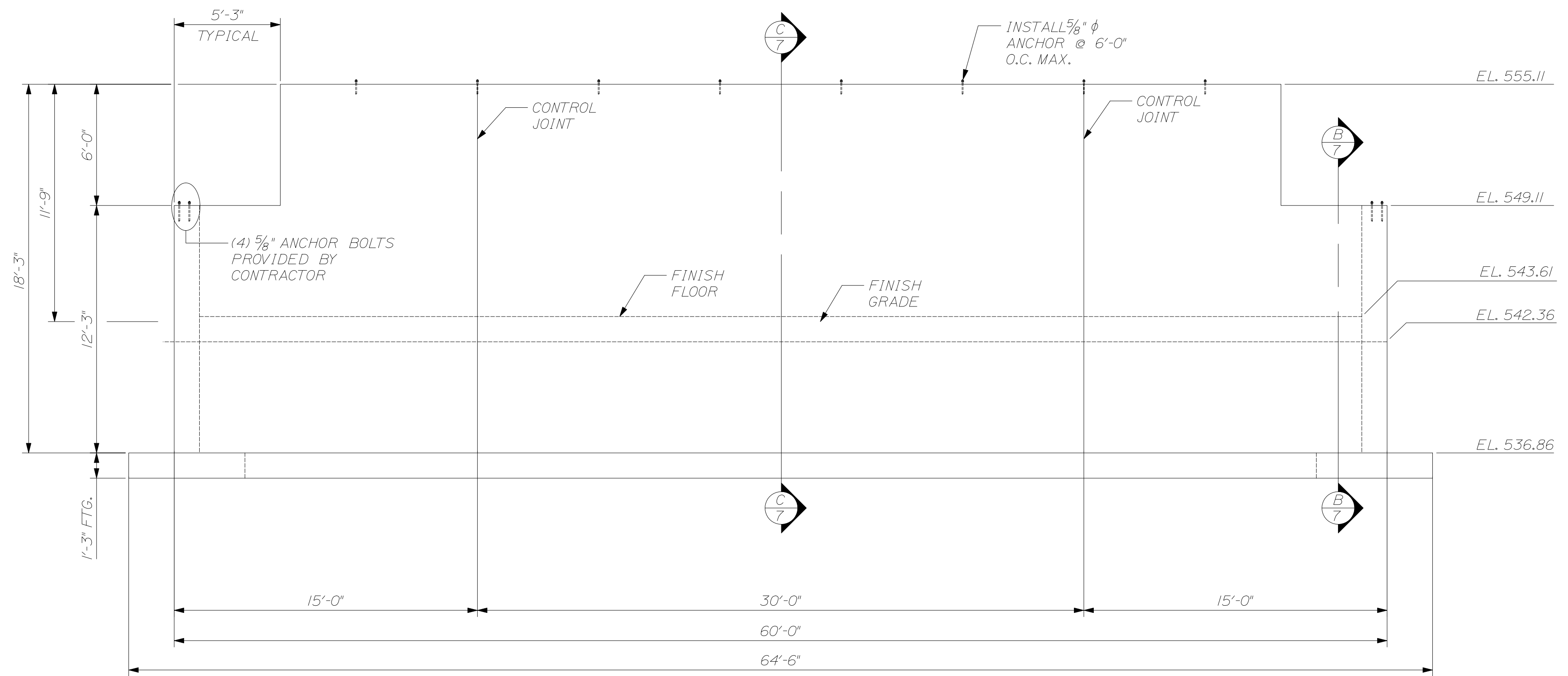


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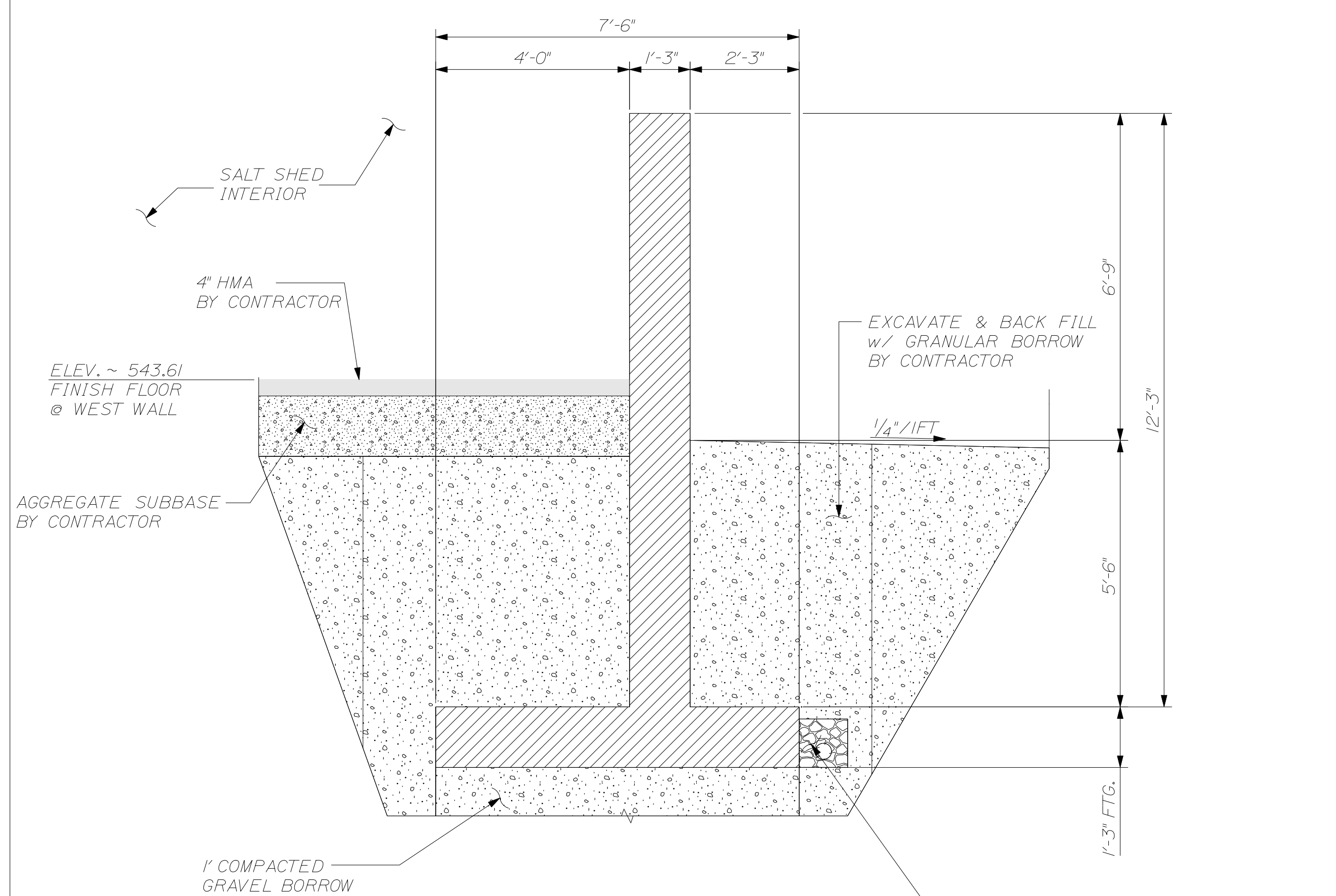
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Workgroup: Structures Division

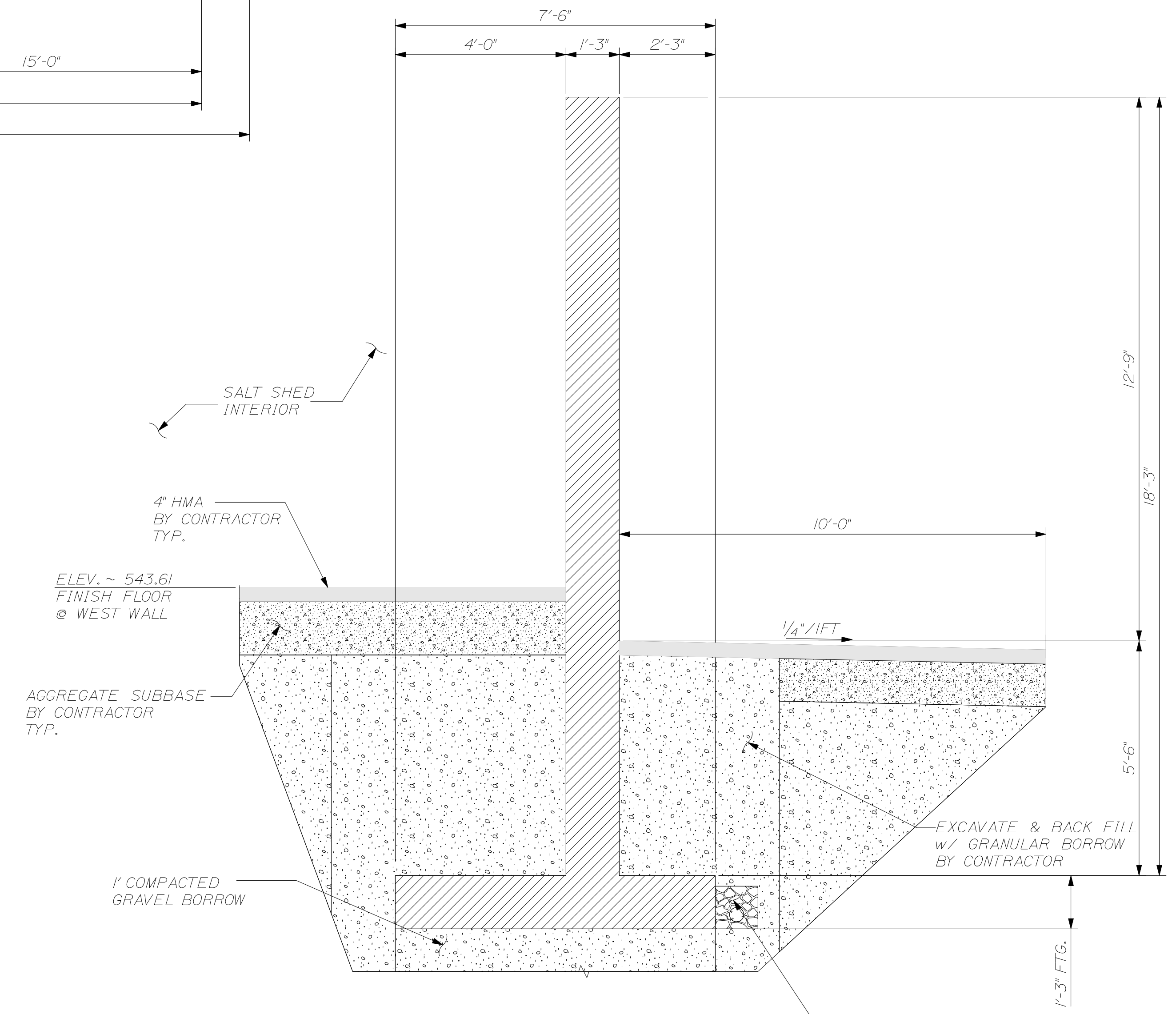
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(A) WEST END WALL ELEVATION
 SCALE: 1/4" = 1'-0"

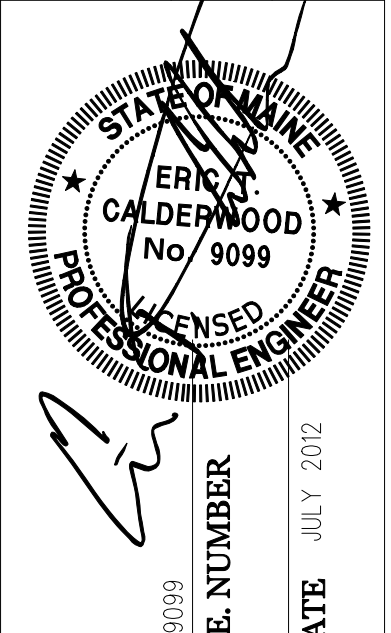


(B) WEST END WALL SECTION
 SCALE: 1/2" = 1'-0"



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

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FORT KENT MAINTENANCE SALT SHED
 WEST END WALL
 DIMENSIONAL DETAILS

SHEET NUMBER

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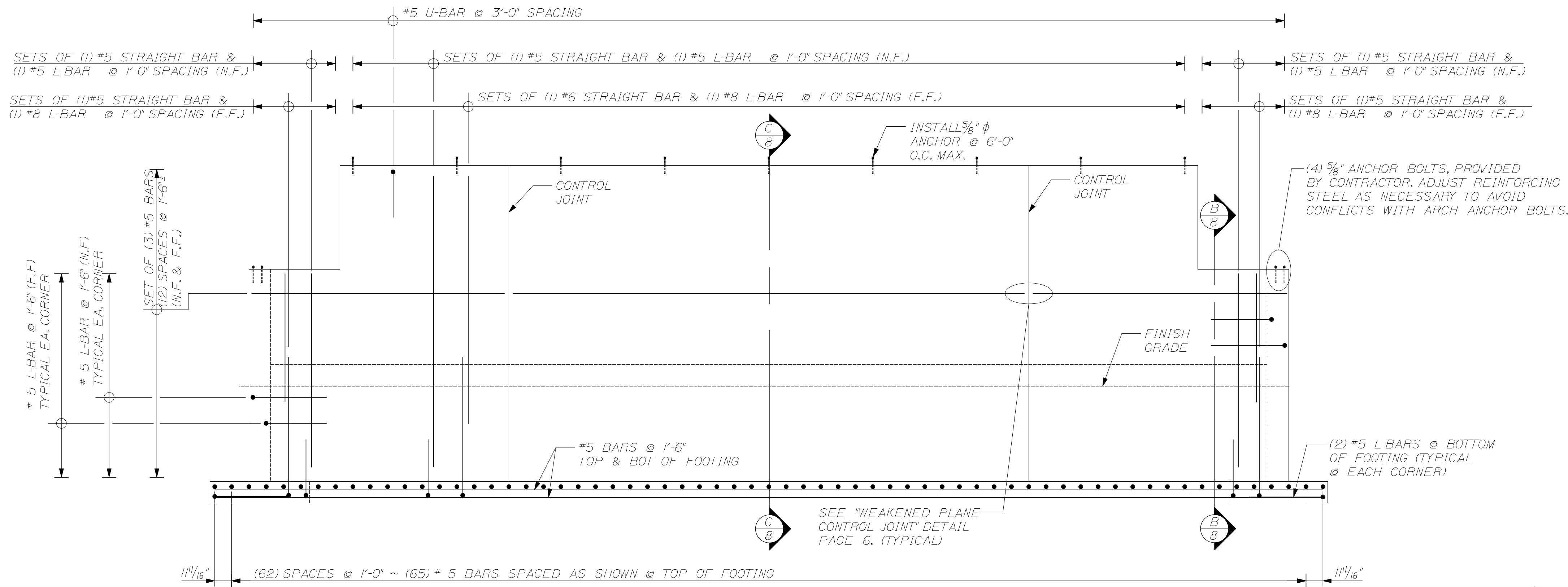
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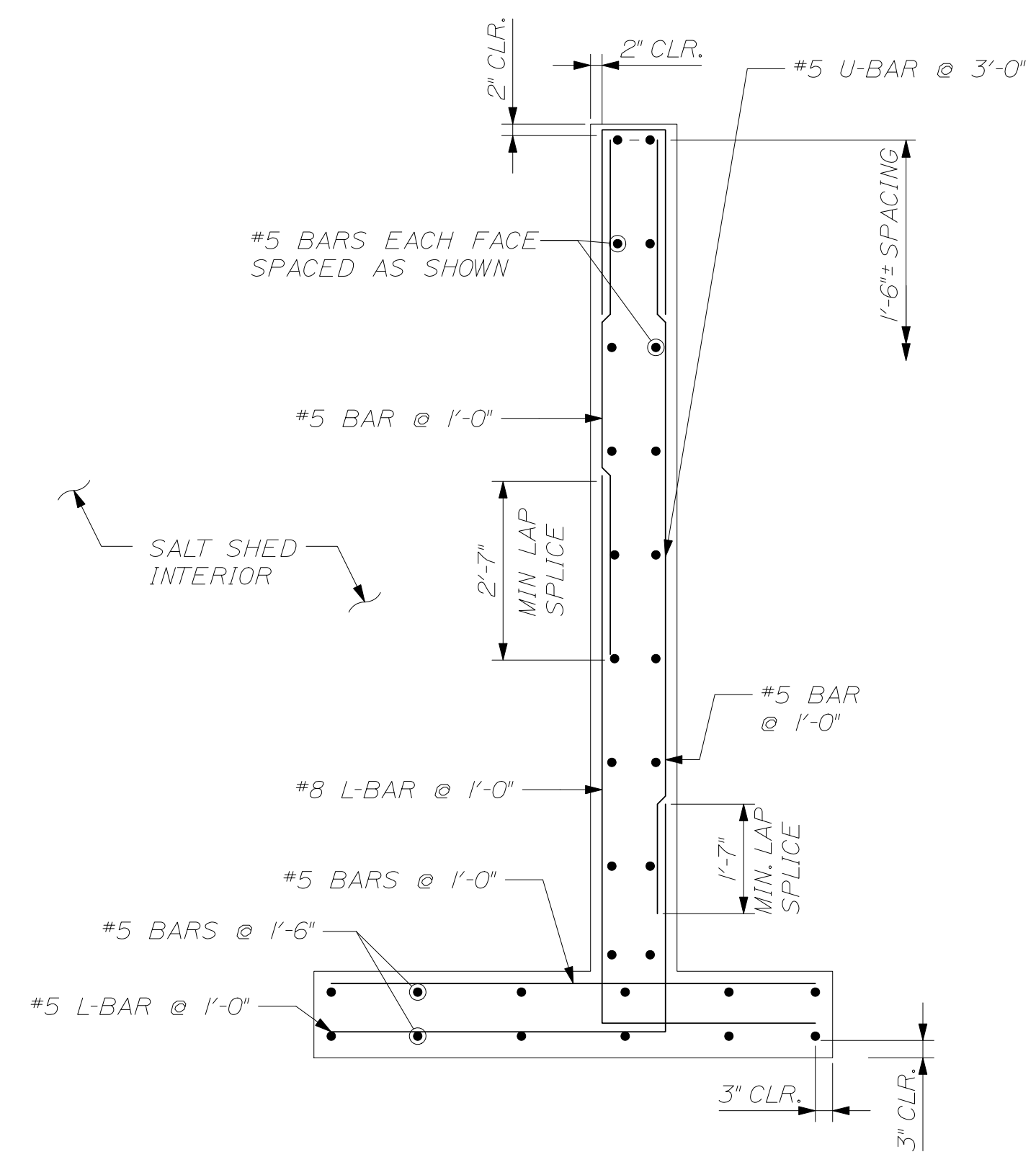
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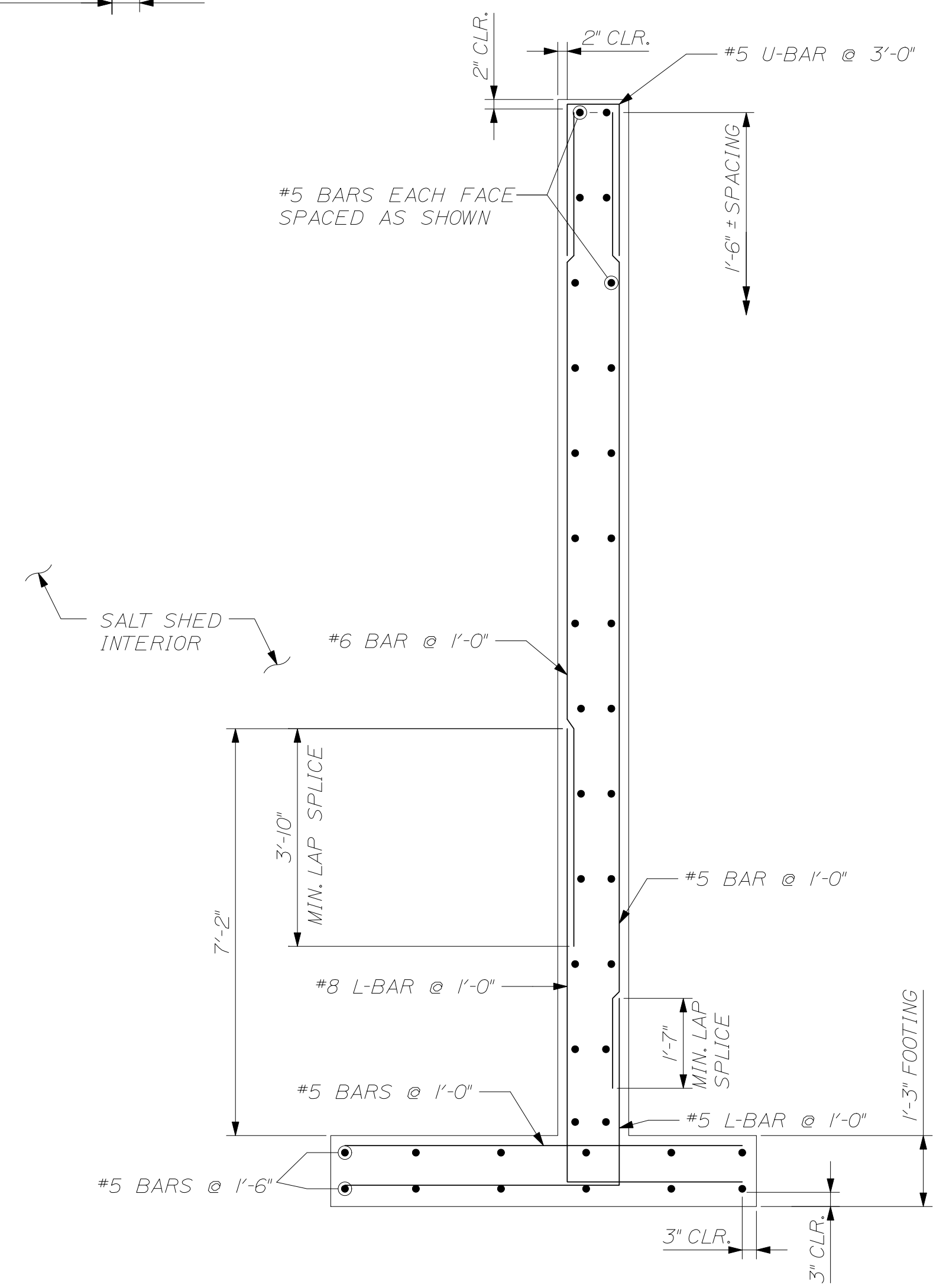
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A WEST END WALL REINFORCING
SCALE: $\frac{1}{4}" = 1'-0"$



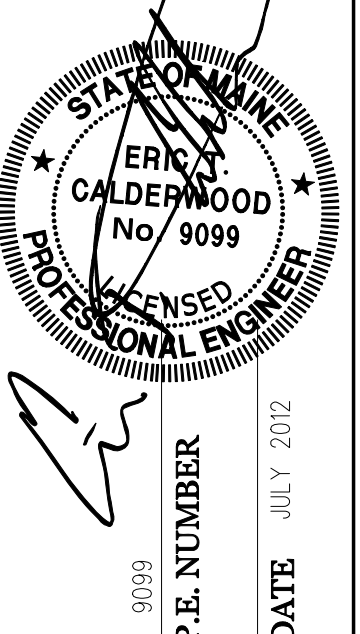
B WEST END WALL REINFORCING SECTION
SCALE: $\frac{1}{2}" = 1'-0"$



C WEST END WALL REINFORCING SECTION
SCALE: $\frac{1}{2}" = 1'-0"$



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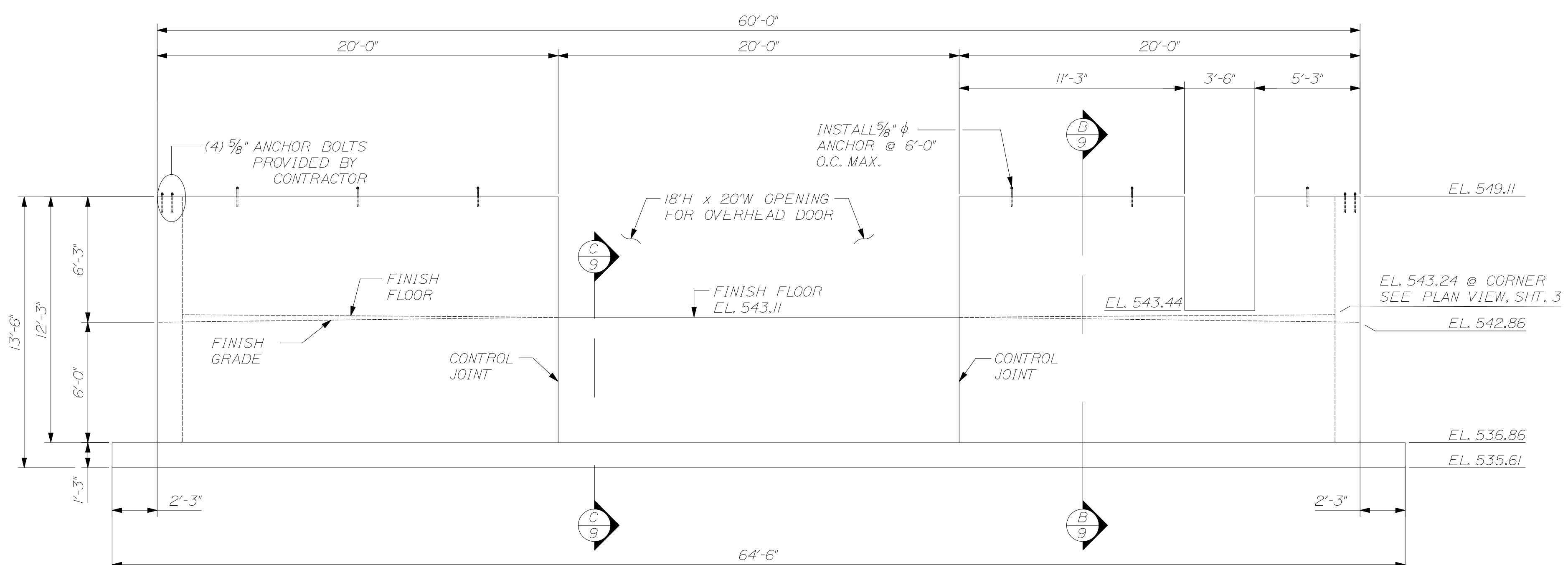
FORT KENT MAINTENANCE SALT SHED
WEST END WALL REINFORCING DETAILS

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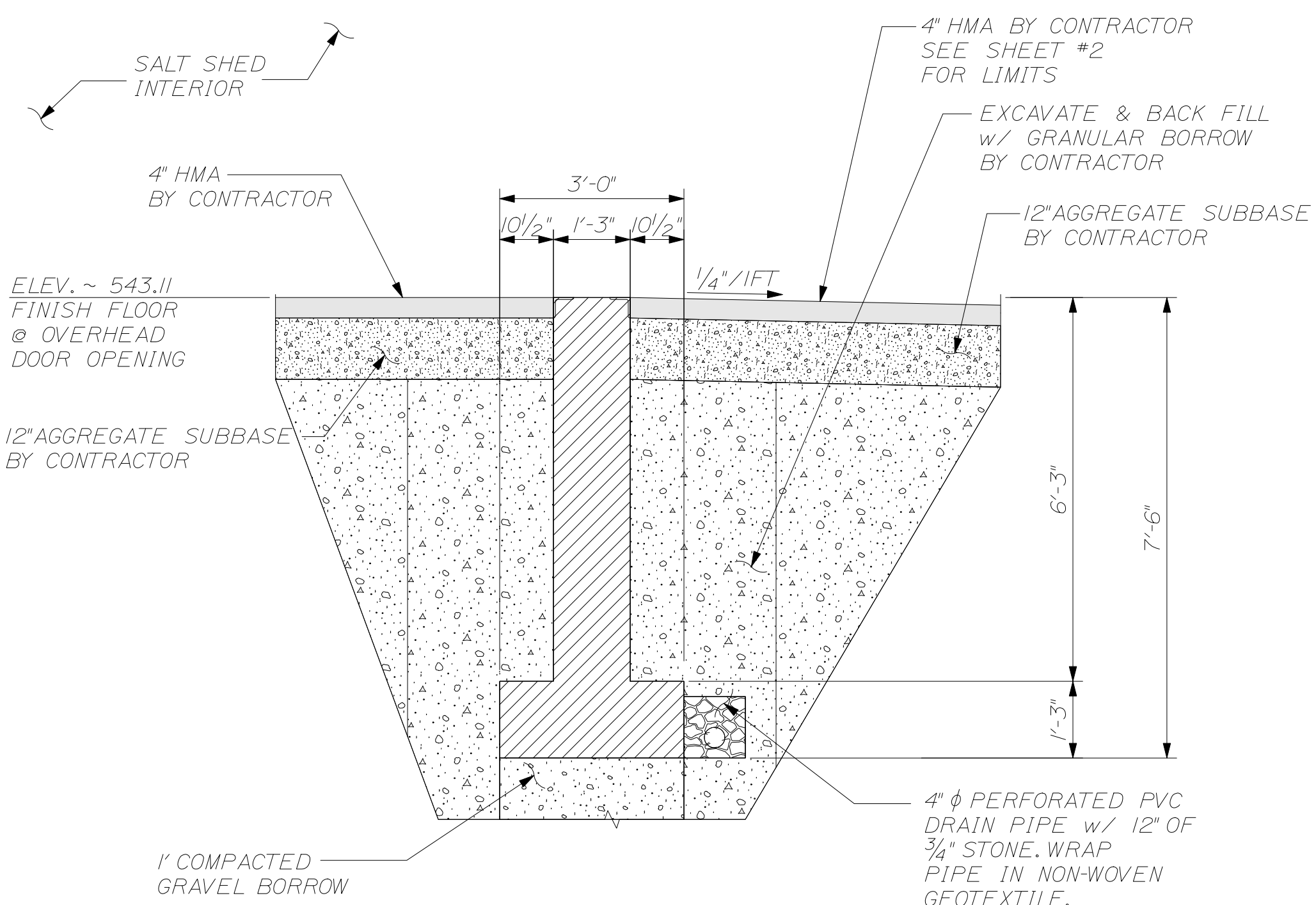
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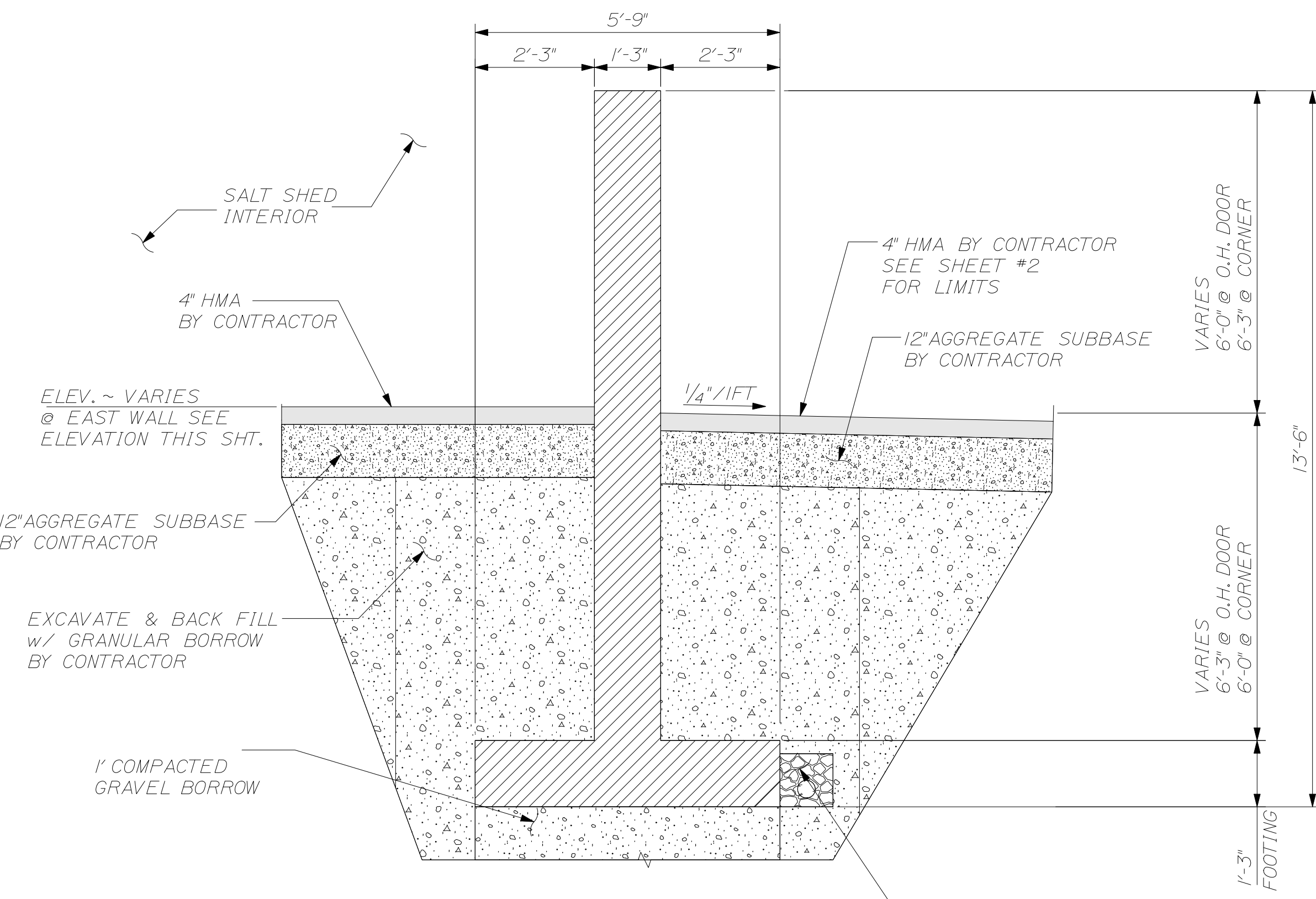
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(A) EAST END WALL ELEVATION
 SCALE: 1/4" = 1'-0"

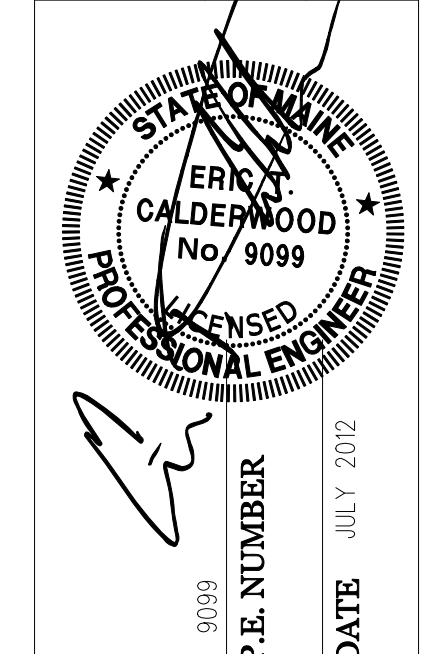


(C) SECTION @ OVERHEAD DOOR
 SCALE: 1/2" = 1'-0"



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

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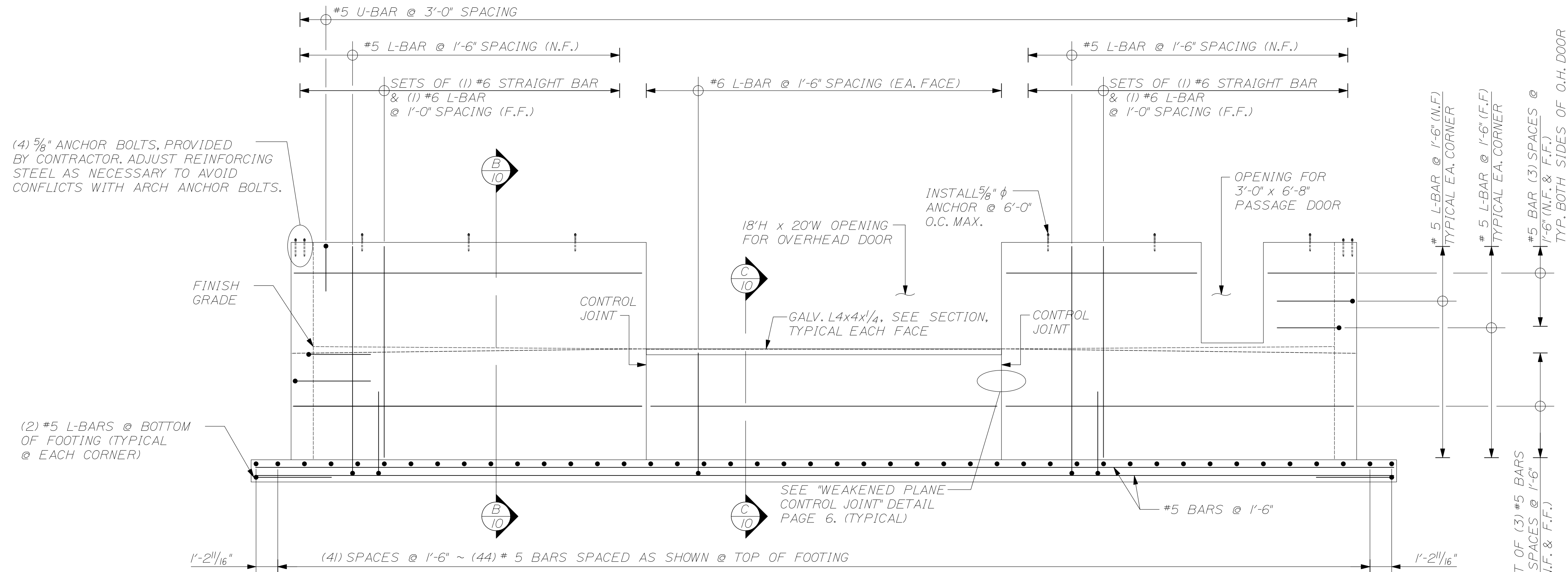


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FORT KENT SALT SHED
 EAST END WALL
 DIMENSIONAL DETAILS

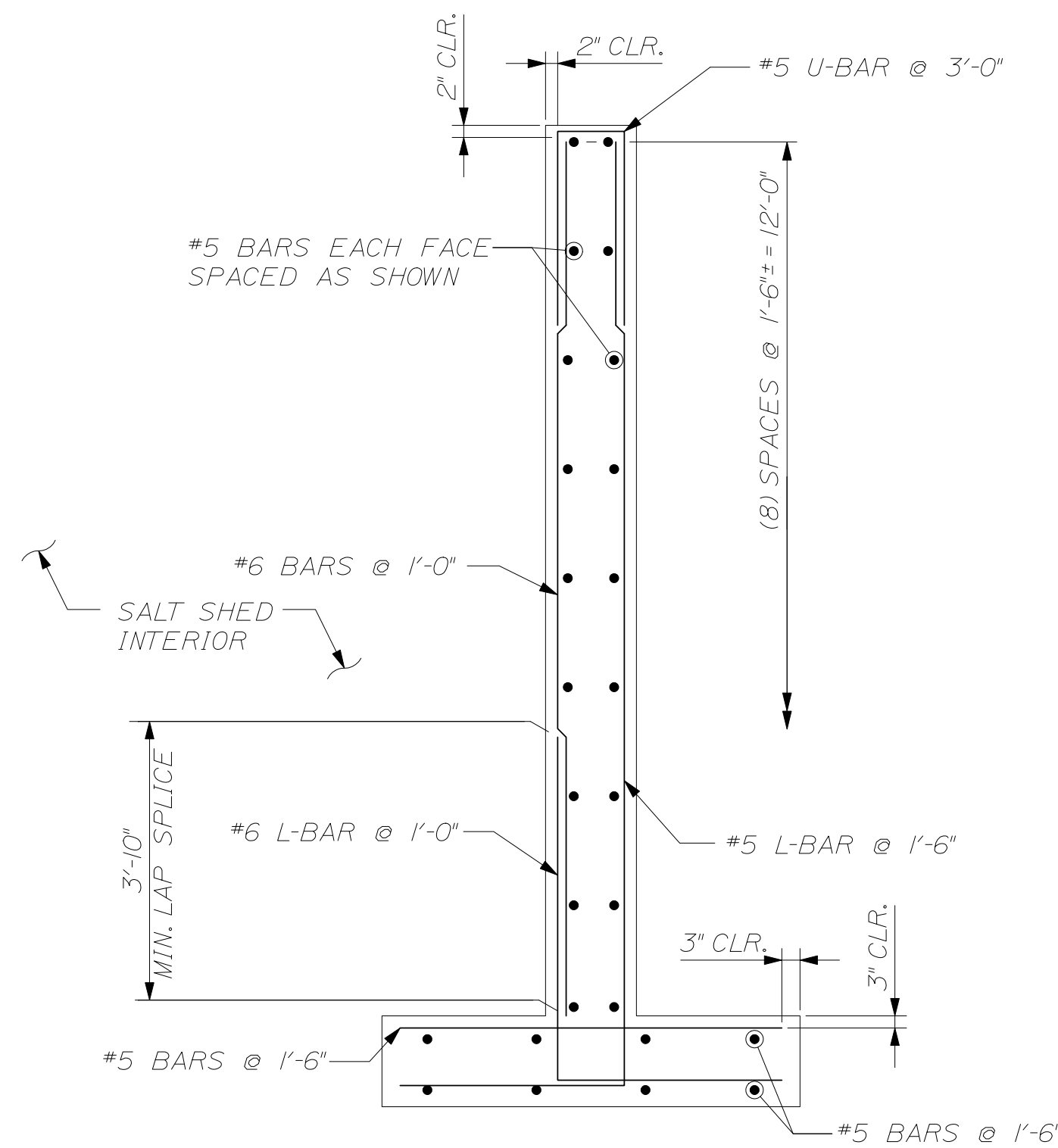
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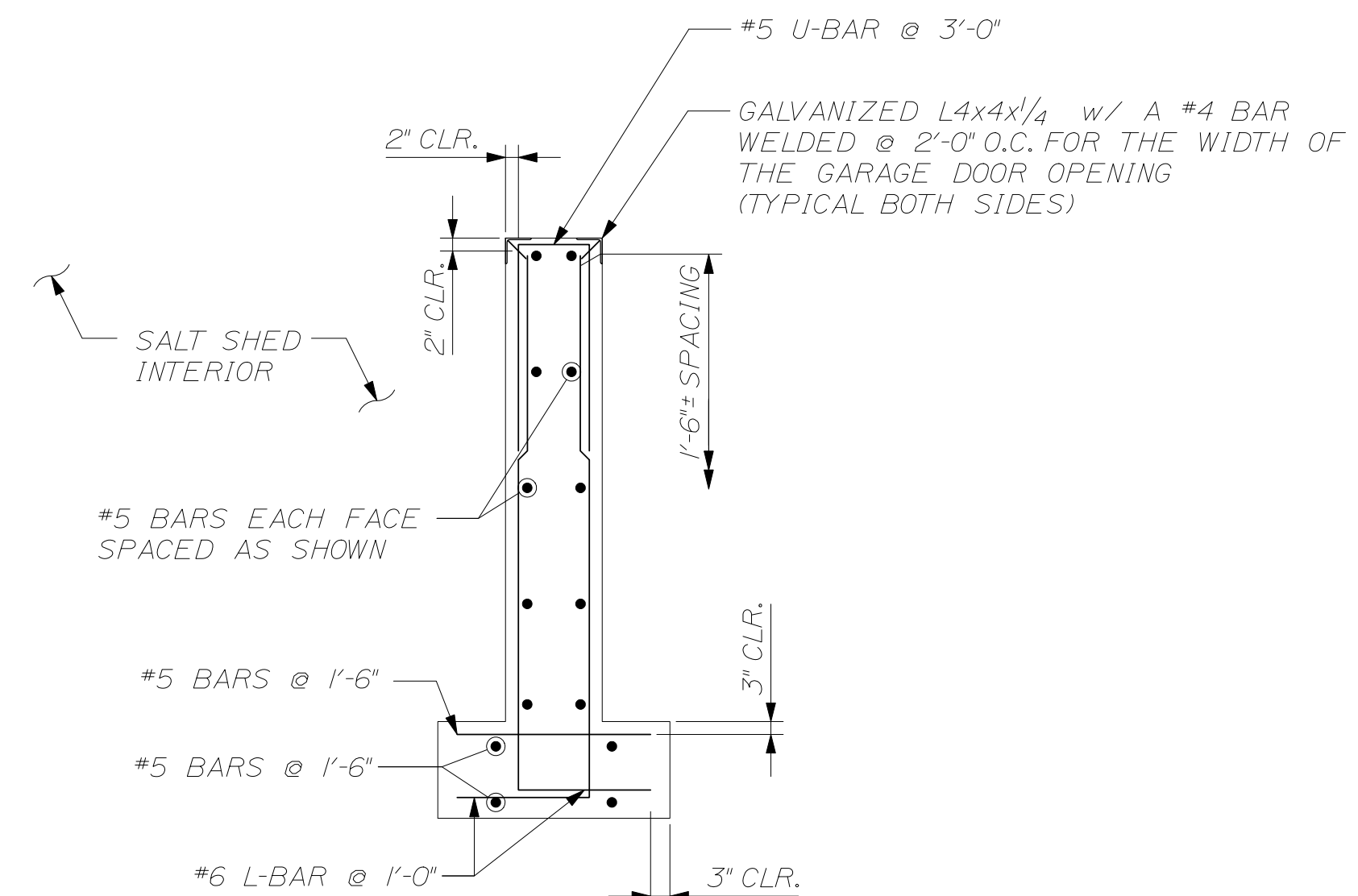


NOTE: CUT REINFORCING STEEL AS NECESSARY AT DOOR OPENINGS

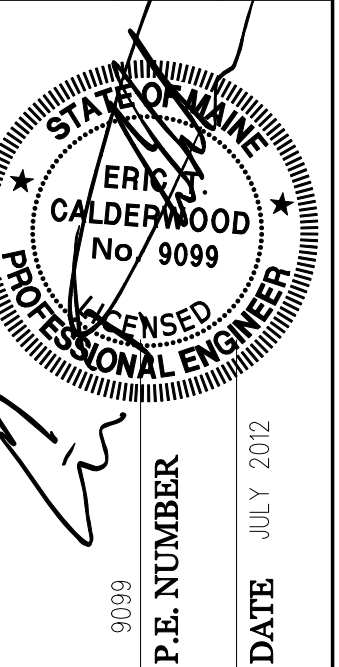
(A) EAST END WALL REINFORCING
SCALE: 1/4" = 1'-0"



(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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EAST END WALL REINFORCING DETAILS

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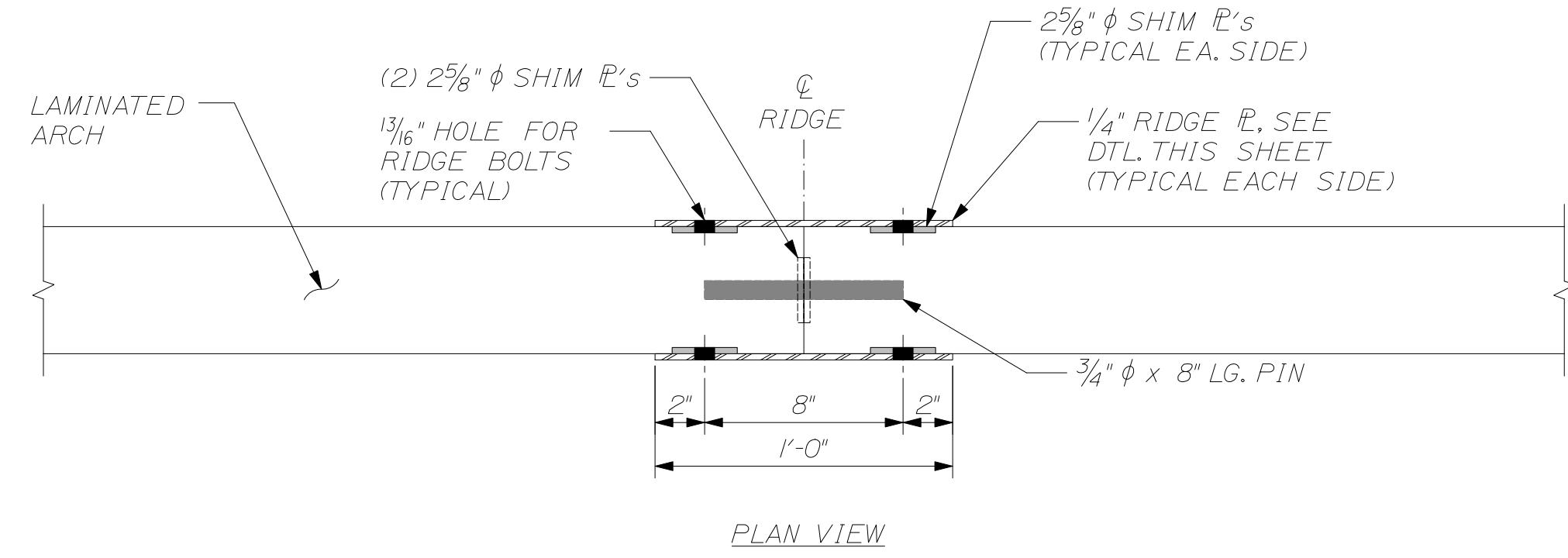


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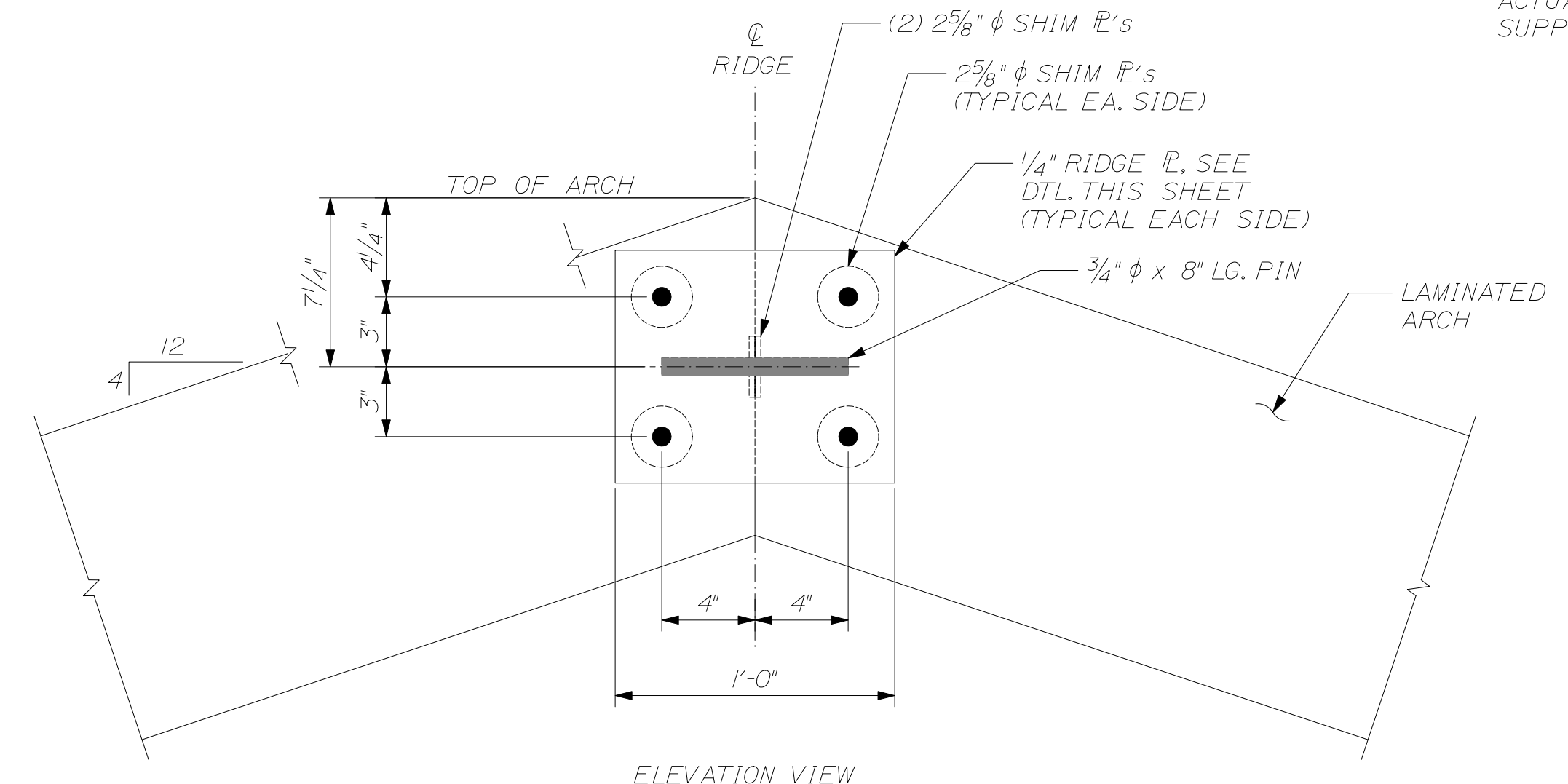
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Workgroup: Structures Division

Filename: \$file\$

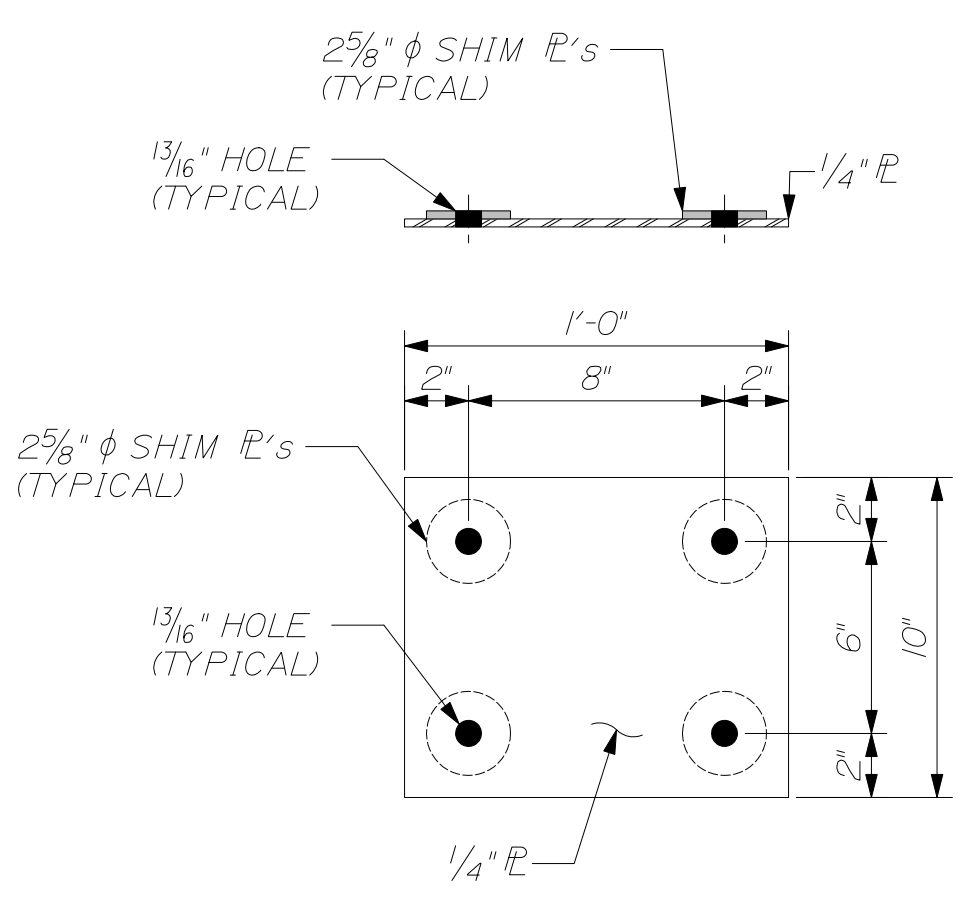


PLAN VIEW



ELEVATION VIEW

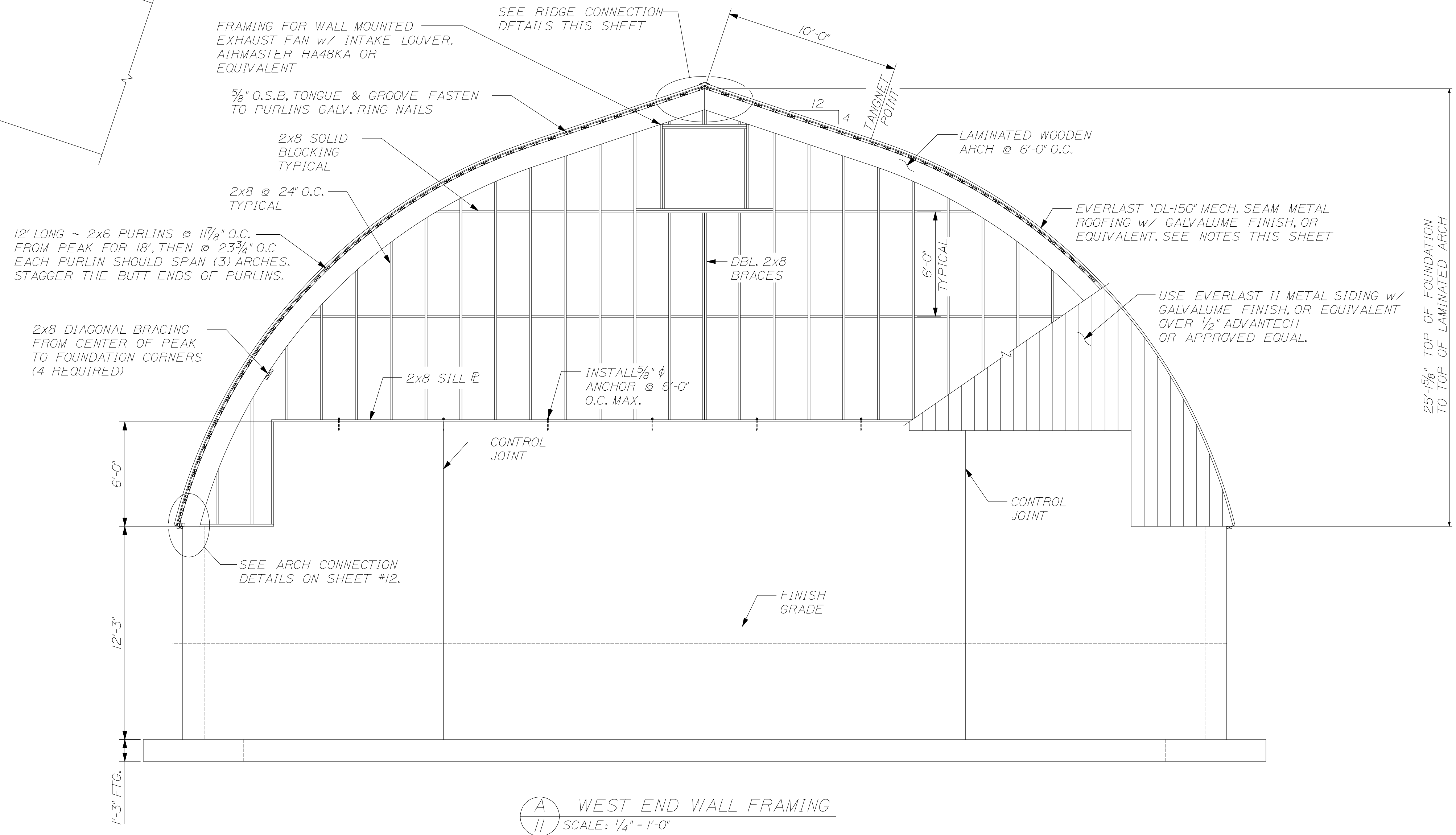
SCALE: 2" = 1'-0"



SCALE: 2" = 1'-0"

NOTE:
 RIDGE CONNECTION PLATE SHOWN IS AN EXAMPLE.
 COORDINATE WITH ARCH MANUFACTURER FOR
 ACTUAL PLATE TO BE USED.

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.

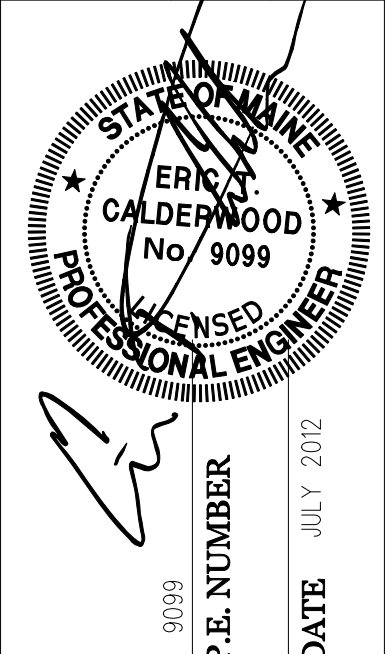


SCALE: 1/4" = 1'-0"

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 AND ALSO BETWEEN THE CONCRETE WALL AND THE GABLE ENDS.
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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FORT KENT SALT SHED
 WEST END WALL
 FRAMING DETAILS

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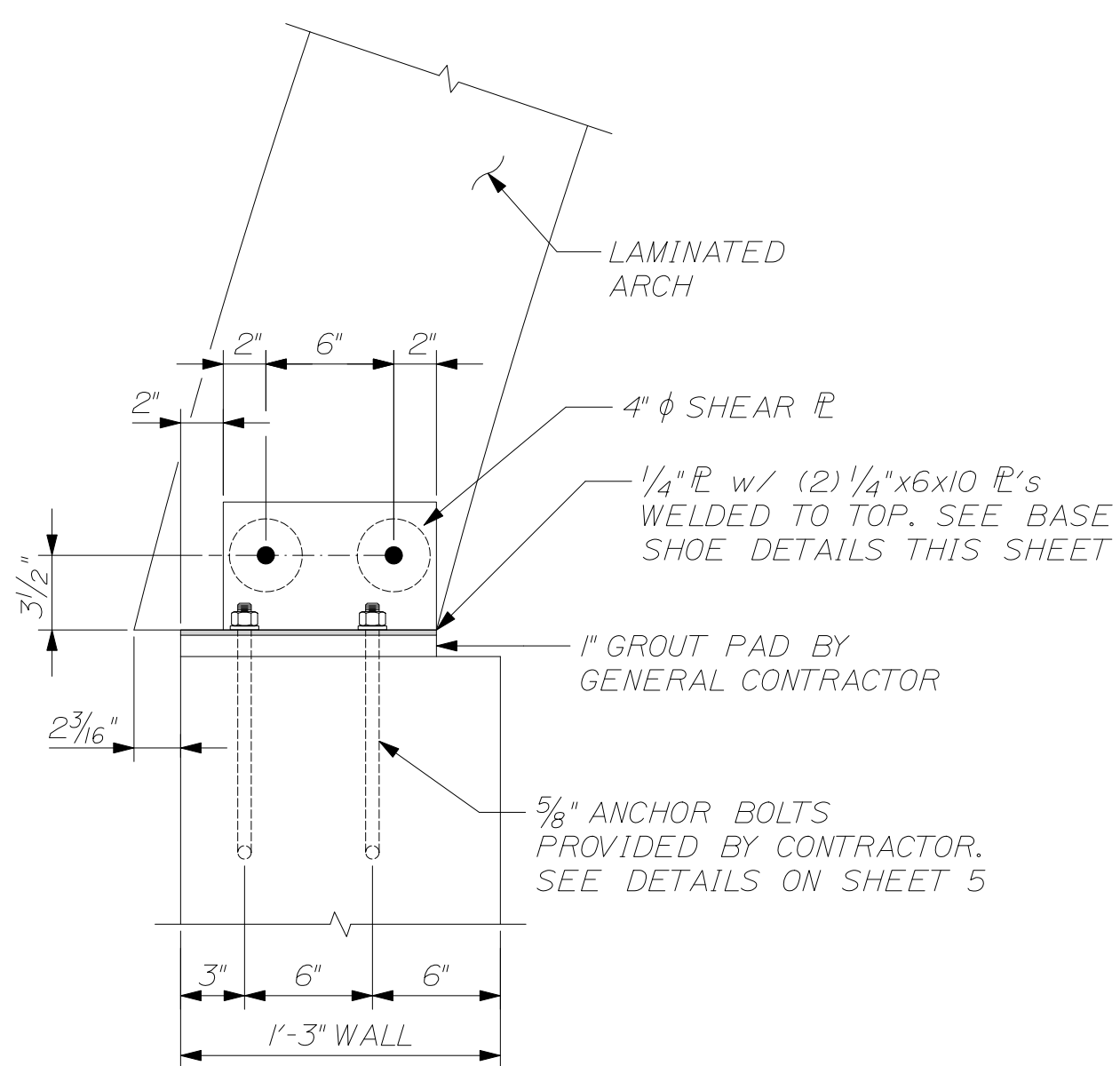
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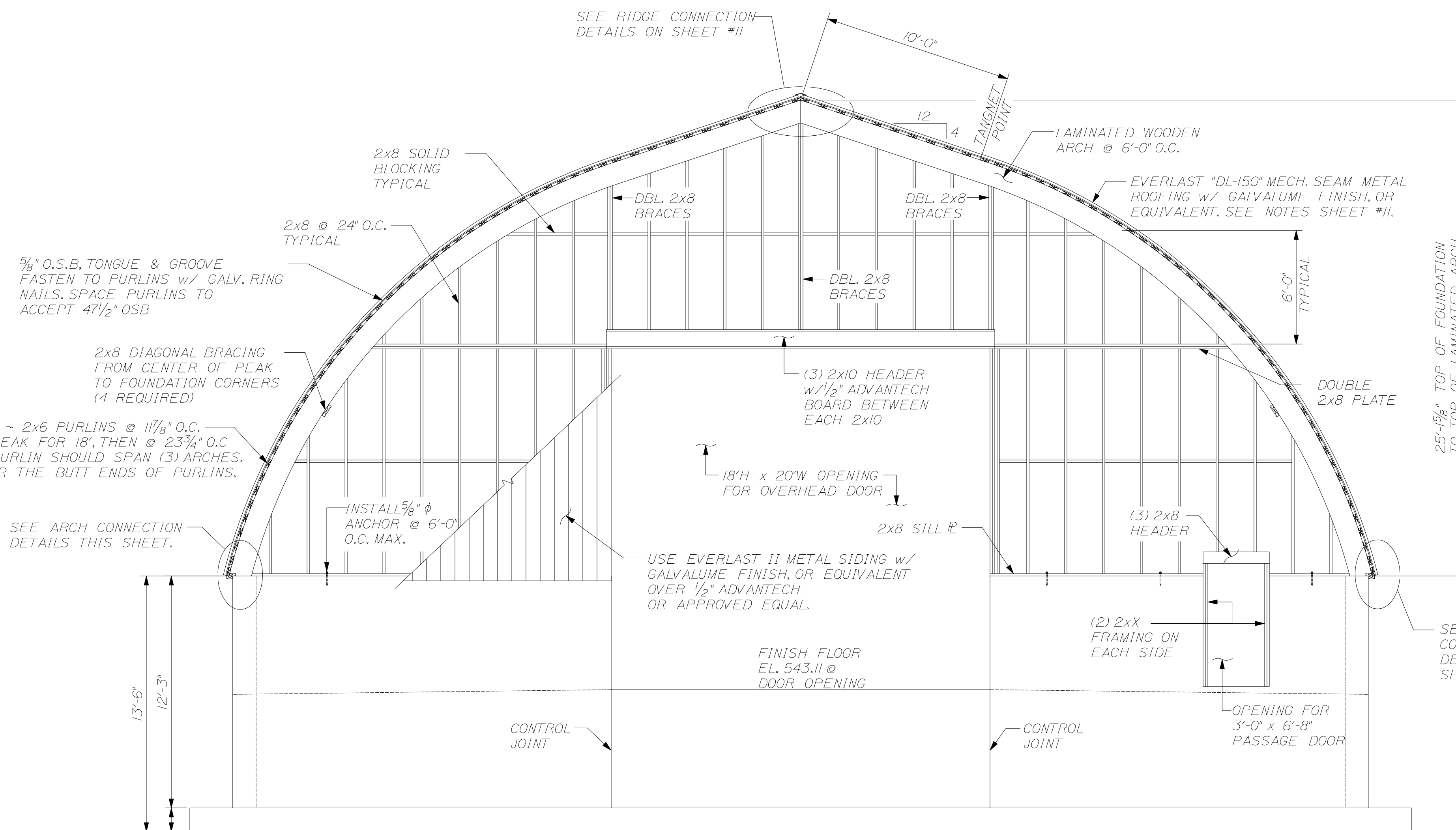
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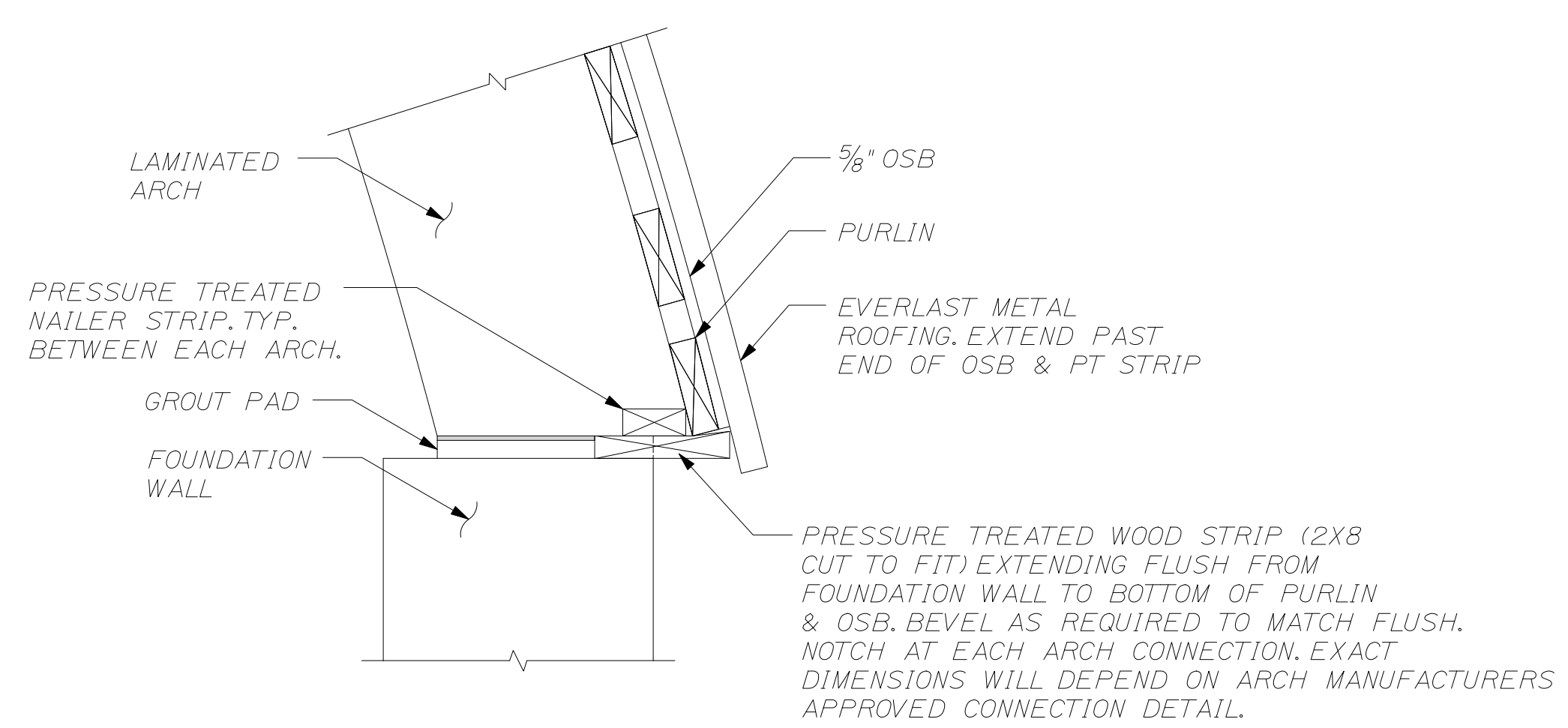


TYPICAL ARCH TO FOUNDATION CONNECTION
SCALE: 1/2" = 1'-0"

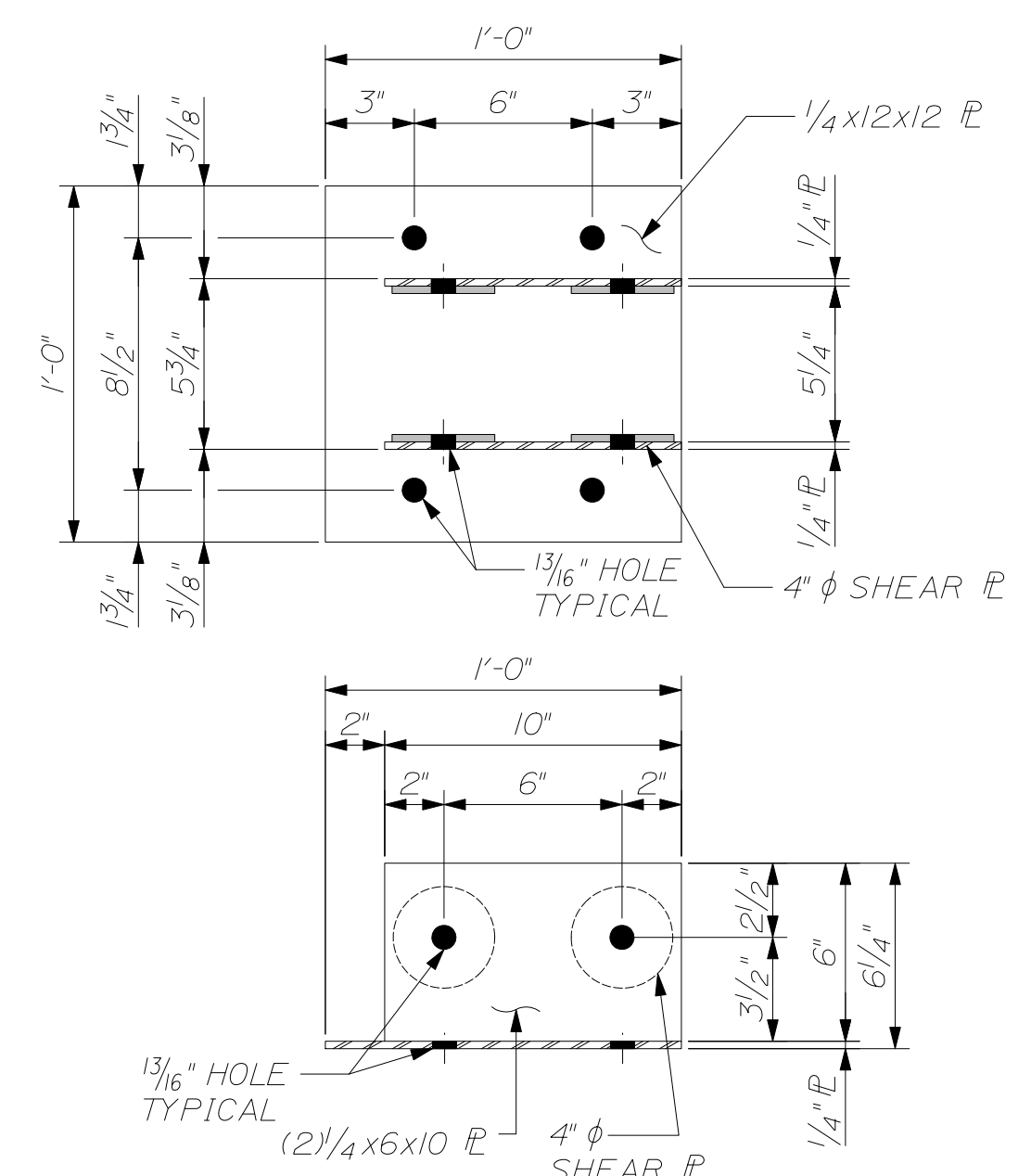
NOTE: DEPENDING ON SIZE AND TYPE OF ARCH SELECTED, ANCHOR BOLT LAYOUT MAY CHANGE. ACTUAL ANCHOR BOLT LAYOUT TO BE COORDINATED WITH THE LAMINATED ARCH MANUFACTURER. GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING LAYOUT OF ANCHOR BOLTS WITH ARCH BASE PLATES TO ENSURE A PROPER FIT. BASE SHOES, SHEAR PLATES, AND ARCH BOLTS TO BE DESIGNED AND SUPPLIED BY ARCH MANUFACTURER.



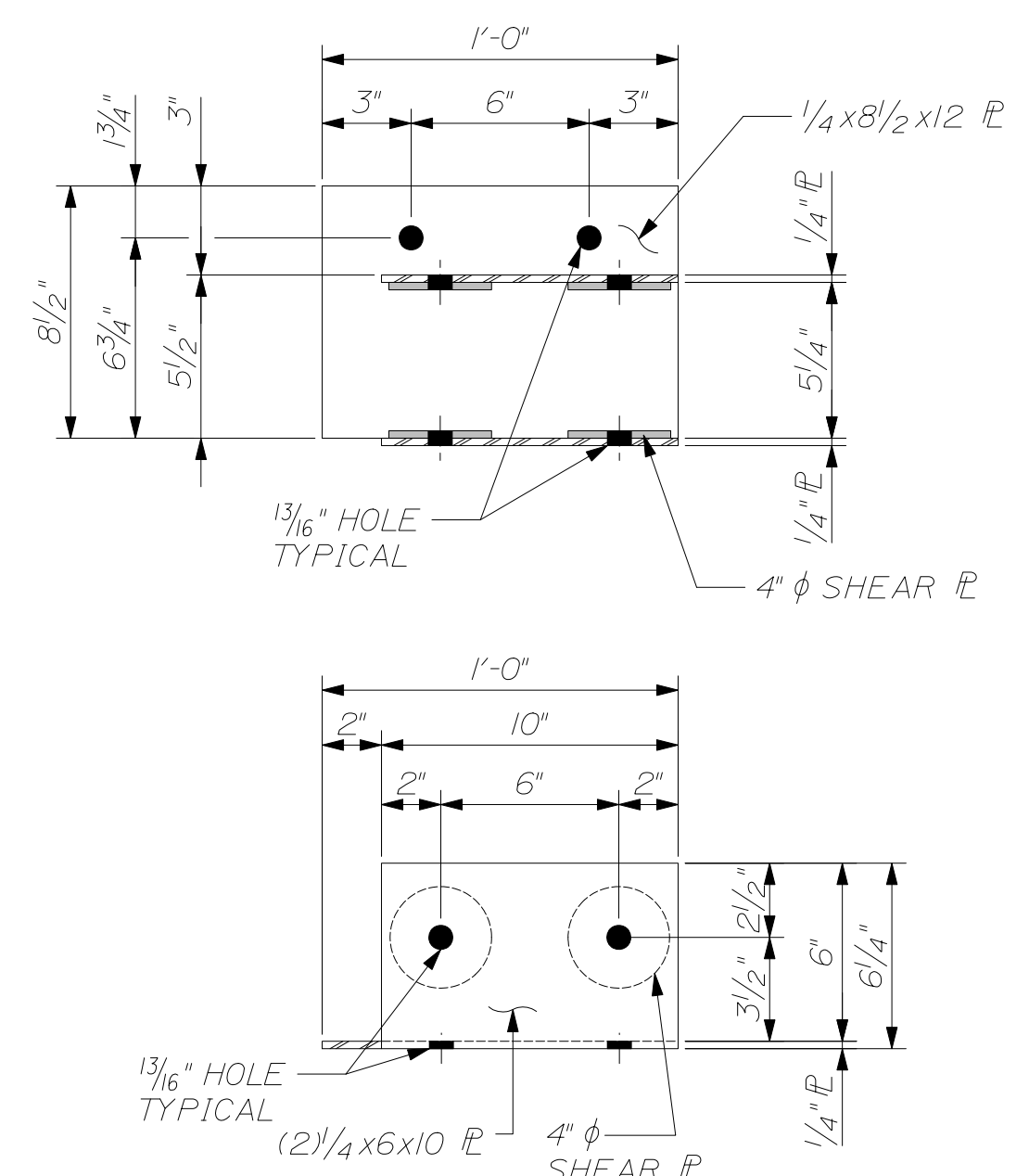
A EAST END WALL FRAMING
SCALE: 1/4" = 1'-0"



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



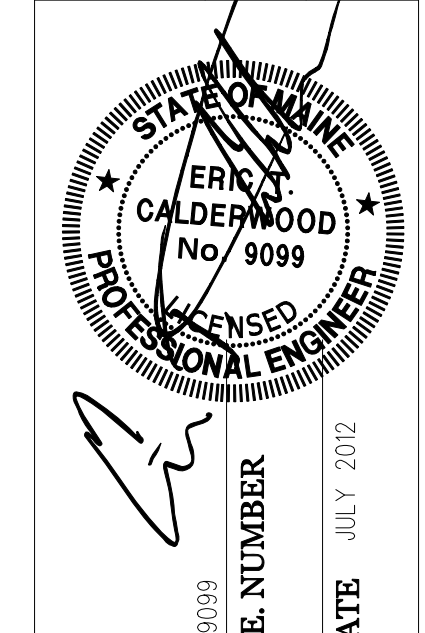
TYPICAL BASE SHOE (EXAMPLE ONLY)
SCALE: 2" = 1'-0"



CORNER BASE SHOE (EXAMPLE ONLY)
SCALE: 2" = 1'-0"

NOTE: BASE SHOES SHOWN ARE EXAMPLES. COORDINATE WITH ARCH MANUFACTURER FOR ACTUAL SHOES TO BE USED.

CALDERWOOD ENGINEERING, ETC.
STRUCTURAL ENGINEERING • DETAILING SERVICES
222 RIVER ROAD, RICHMOND, ME 04357 PH: (207) 737-2007 FAX: (207) 737-2008
PREPARED FOR: STATE OF MAINE DOT
FORT KENT ME SALT SHED WIN 19830.00



DESIGN-DETAILED	DATE	BY	REVISIONS
CHECKED-REVIEWED	JUL 2012	OCK	1
			2
			3
			4
			FIELD CHANGES

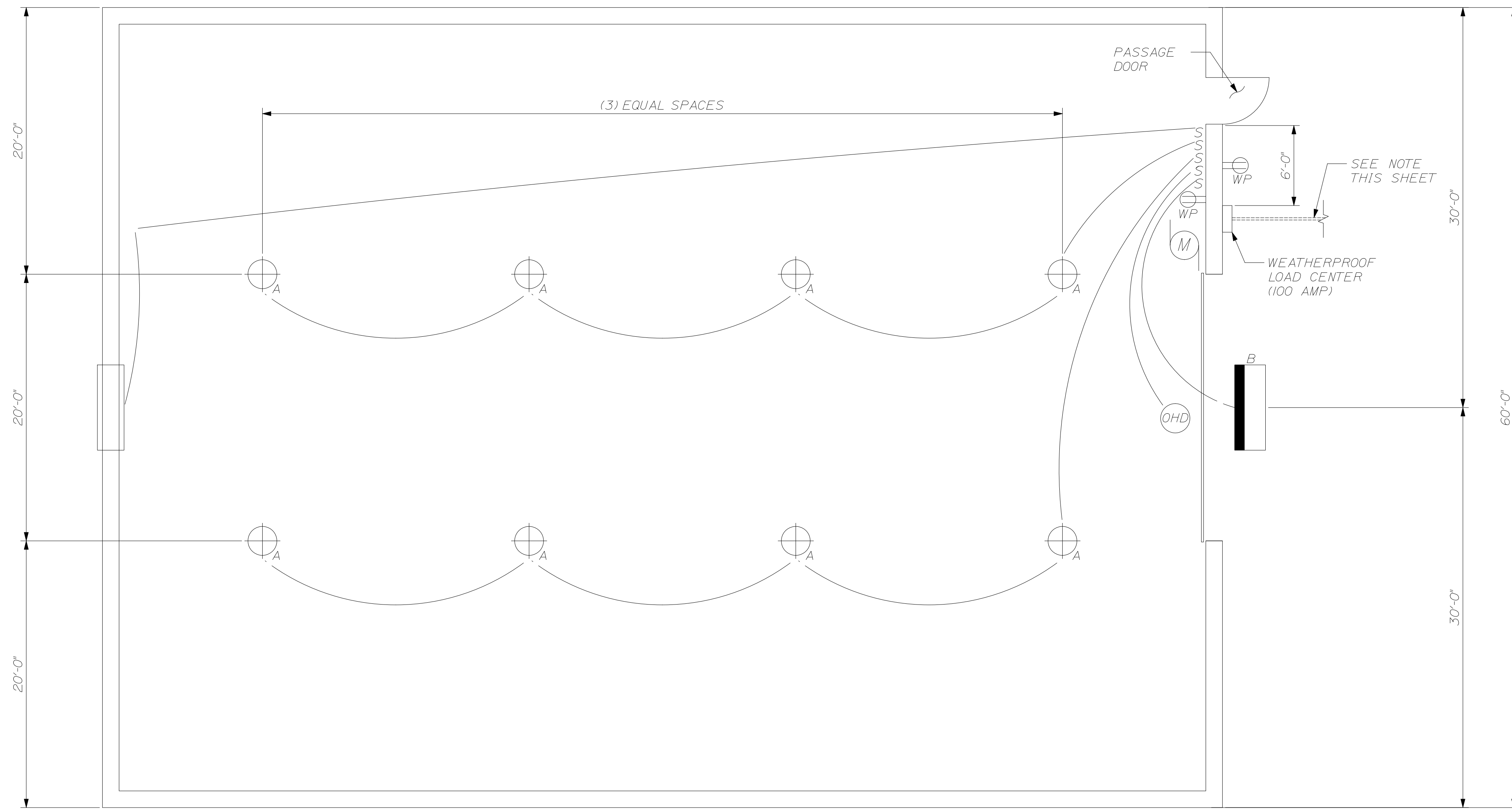
FORT KENT SALT SHED
MAINTENANCE SALT SHED
EAST END WALL FRAMING DETAILS

SHEET NUMBER

12

OF 13





A
13 $\frac{3}{16}''=1'-0''$ ELECTRICAL FLOOR PLAN

ELECTRICAL LEGEND	
	H.E. WILLIAMS, 5' DEEP, FULLY ENCLOSED INDUSTRIAL LIGHT FIXTURE, MODEL #92-8-45415H-A-EB2/2-SSLATCH-SSMB W/ ATTACHED HUBBELL FIXTURE MOUNTED OCCUPANCY SENSORS
	250W METAL HALLIDE FLOOD LIGHT EQUIV. TO LUMARK NIGHTHAWK III W/ PHOTOCELL AND SWITCH.
	WEATHERPROOF SWITCH
	GFCI RECEPTACLE W/ WEATHERPROOF COVER
	OVERHEAD DOOR OPERATOR
	EXHAUST FAN

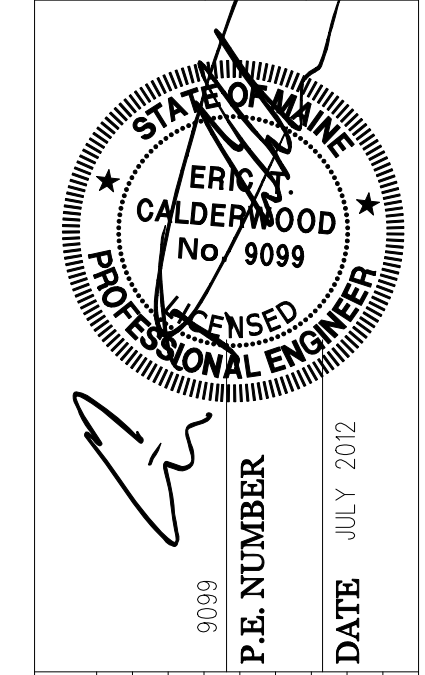
POWER TO BE INSTALLED UNDERGROUND IF POSSIBLE. CONTRACTOR SHALL PRICE AS SUCH.

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

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

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

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DESIGN-DETAILED	CHECKED-REVIEWED	DATE	BY
		JUL 2012	OCK
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
			FIELD CHANGES

FORT KENT MAINTANANCE SALT SHED
 ELECTRICAL PLAN

SHEET NUMBER
 13
 OF 13

