

Structure ID: Gate Str

P1 BX7272-12W12F-BAVF

BOX BASE 12inW, 12inF, Variable Ht T/n

P3) 72" x 72" - CASTING HEIGHT - 0"
 P2) 72" x 72" - BOX RISER 12inW, Variable Ht F/G - 50"
 P1) 72" x 72" - BOX BASE 12inW, 12inF, Variable Ht T/n - 70"
 1) SECONDARY POUR
 1) 72" x 72" - Conseal CS-102 1.00" (Double)
 2) Kor-N-Seal2 - S206-42

0 lb
16917 lb
30173 lb
0 lb
0 lb
13 lb
Structure Total: 47103 lb

Structure Notes:
 1. PER ASTM C-913 SPECS
 2. CONCRETE: 4,000 PSI AT 28 DAYS
 3. REINFORCEMENT: PER ATTACHED DESIGN BY WINFORD A. PETRONE, P.E. - 2" MIN. REBAR CLEARANCE (TYP)
 4. FLOOR SLOPE TO OUTLET BY OTHERS
 5. ALUM GRATING & ANGLE GRATE SEAT SUPPLIED BY OTHERS
 6. SLIDE GATE BY OTHERS
 7. WET STICK #5 VERTICAL WALL BARS @ 12" C.C. E.W. (GRADE 60) PER REINFORCEMENT DRAWINGS "SK-2/4" & "SK-3/4" OUT OF FLOOR FOR WALL POUR TIE-IN

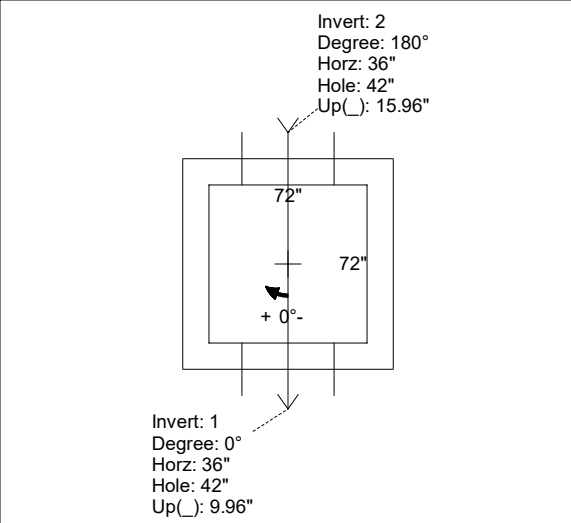
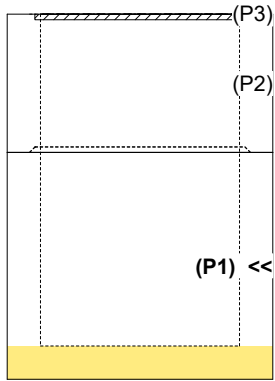
FIRST POUR (FLOOR): 9,280 LBS
SECOND POUR (WALLS): 20,893 LBS

Rim: 409' Rim to Invert: 8.92' Slack: 0" Sump: 12.96" Step Position:

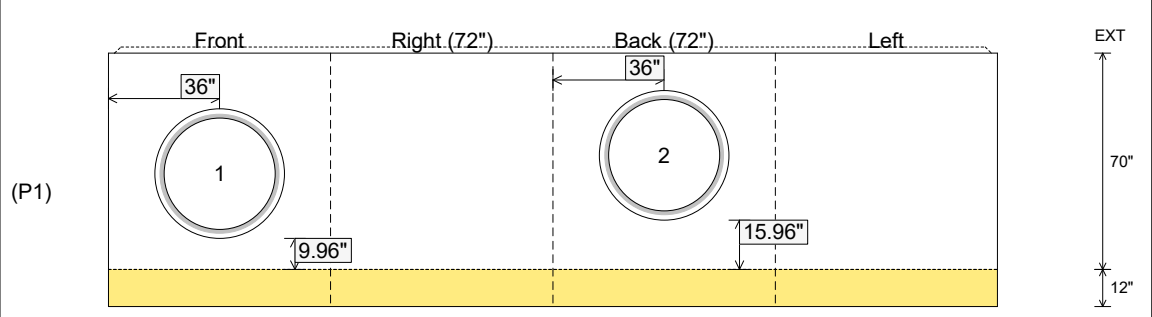
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	400.08'	0°	48"	36" DI	38.5"	Kor-N-Seal2 S206-42	42"	42"	9.96"	0"
Invert 2	400.58'	180°	48"	36" DI	38.5"	Kor-N-Seal2 S206-42	42"	42"	15.96"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



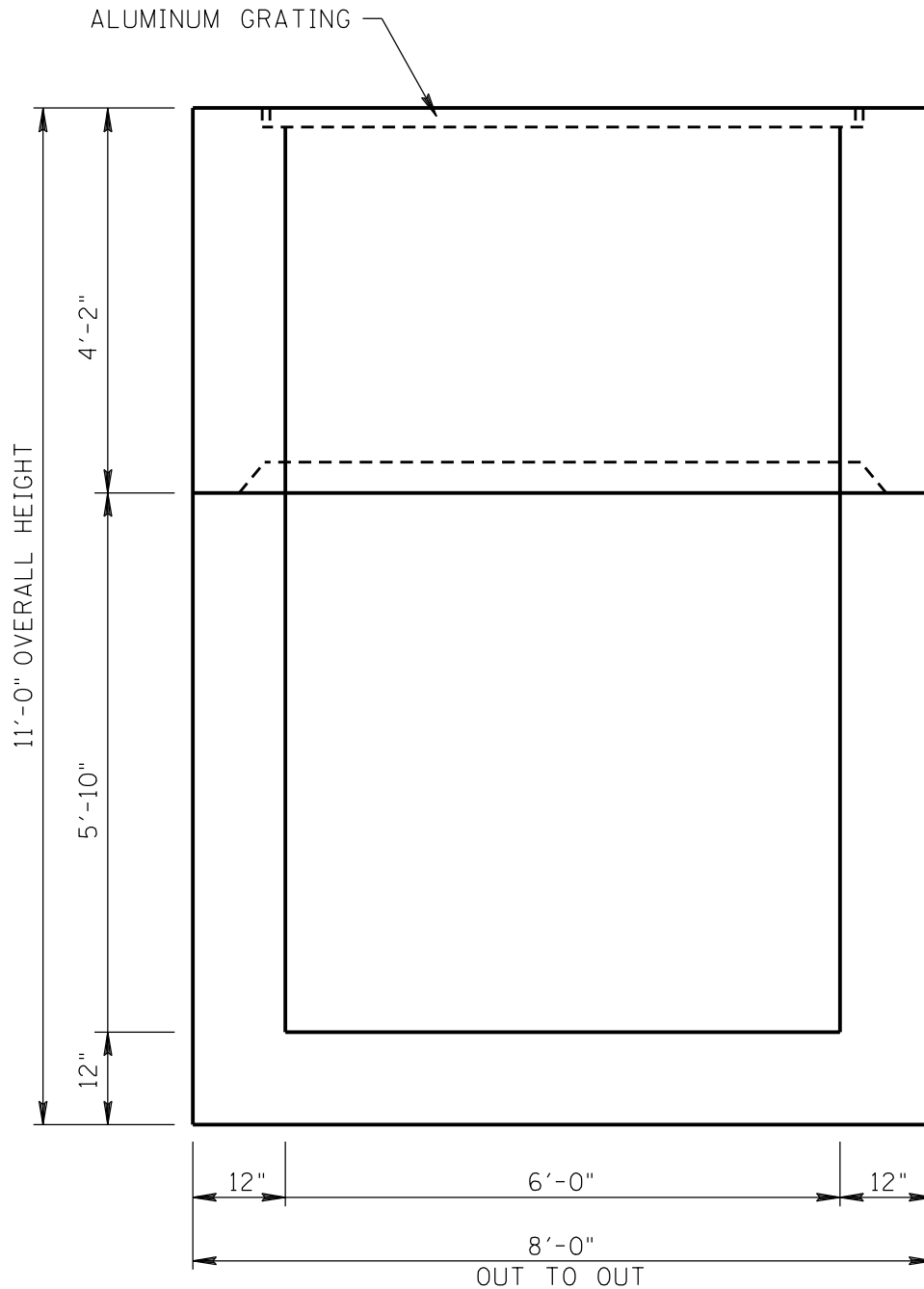
INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 12" Floor Height: 12"	Height (Int): 70" Height (Ext): 82"	Weight (Net): 30173 lb Volume (Net): 7.71cu.yd
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NOTE: SEE "PRECAST VAULTS: DESIGN SUBMITTALS, CONCRETE COMPONENTS" SHEET FOR SUMMARY OF BUILDING AND DESIGN CODES, MATERIALS REQUIREMENTS, AND DESIGN LOADS.

NOTE: SEE ICAST WORKING DRAWINGS FOR ADDITIONAL INFORMATION.



TYPICAL ELEVATION VIEW

NOTE: SEE ICAST WORKING DRAWINGS FOR OPENING SIZES AND LOCATIONS

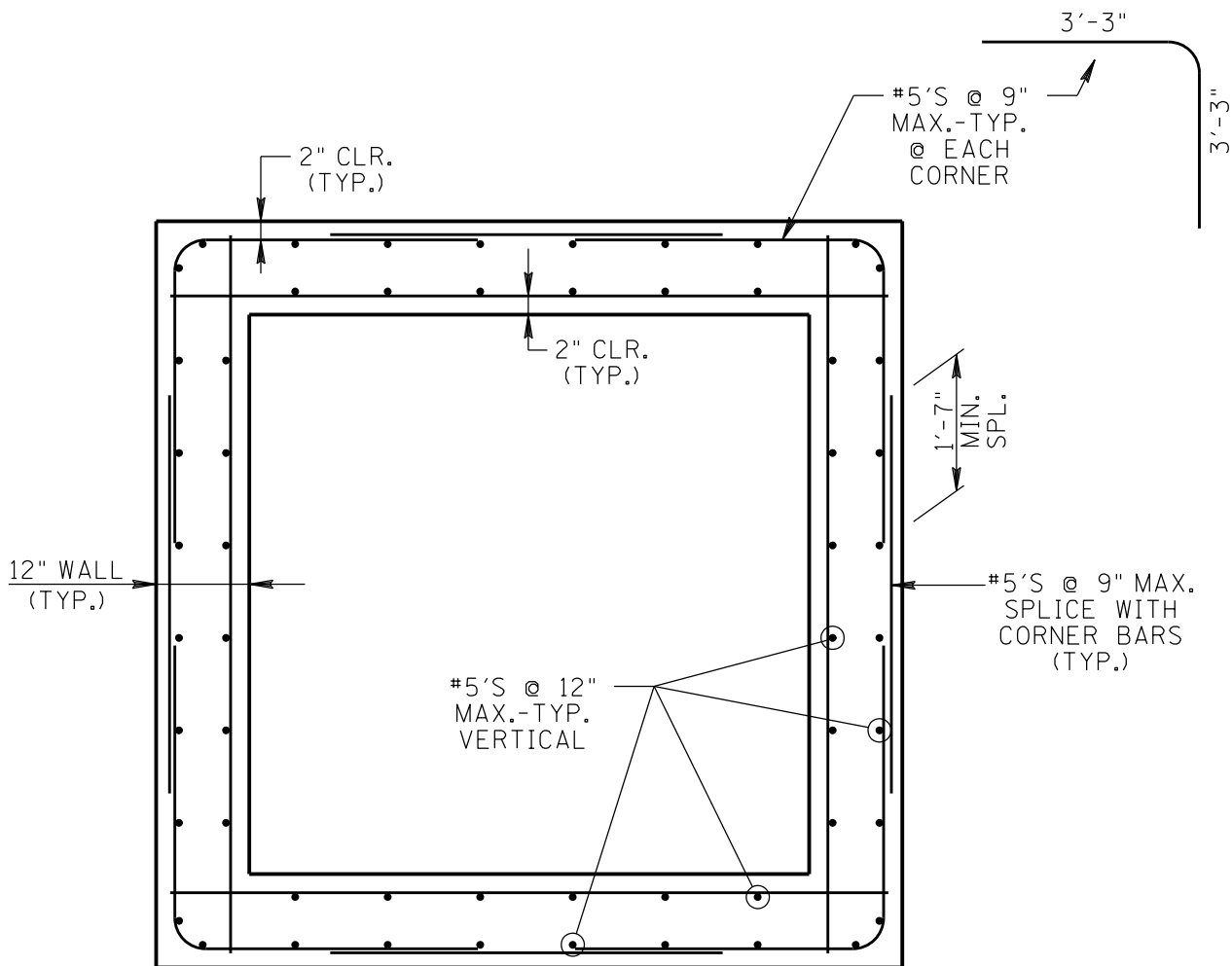
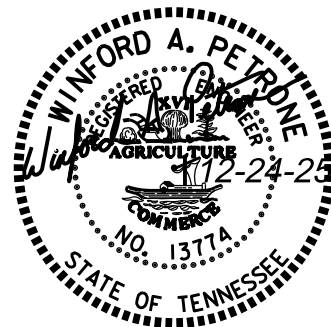
SK-1/4

6'-0" X 6'-0" PRECAST LIFT GATE STRUCTURE: GENERAL ELEVATION

HVUD WTP EXPANSION

NOTE: SEE "PRECAST VAULTS: DESIGN SUBMITTALS, CONCRETE COMPONENTS" SHEET FOR SUMMARY OF BUILDING AND DESIGN CODES, MATERIALS REQUIREMENTS, AND DESIGN LOADS.

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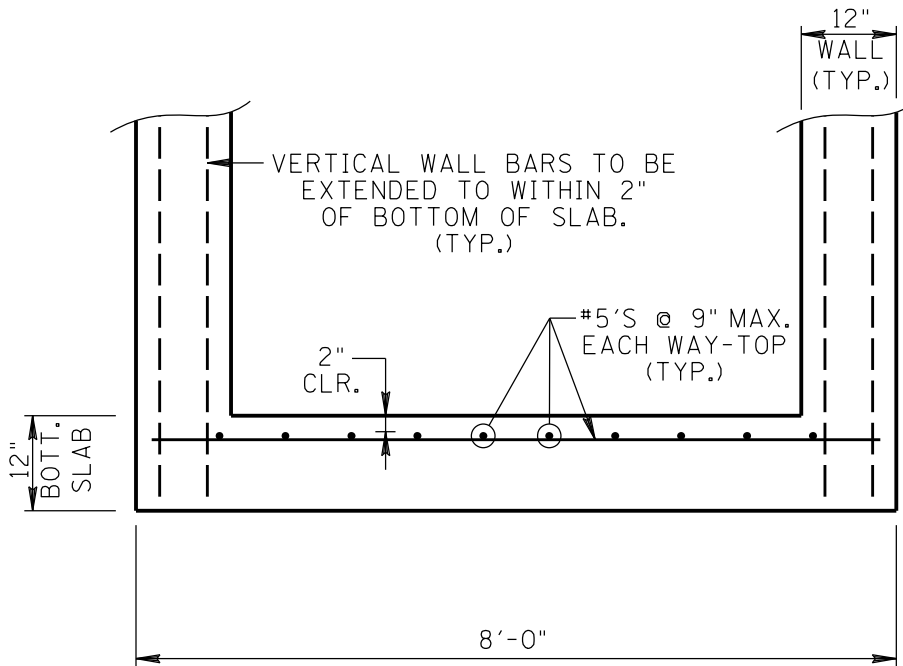
TYPICAL SECTION THRU WALL
SHOWING REINFORCEMENT

SK-2/4

6'-0"X6'-0" PRECAST LIFT GATE STRUCTURE: WALL SECTION
HVUD WTP EXPANSION

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BOTTOM SLAB SECTION

SHOWING REINFORCEMENT

NOTE: HORIZONTAL WALL REINFORCEMENT NOT SHOWN FOR CLARITY.

SK-3/4

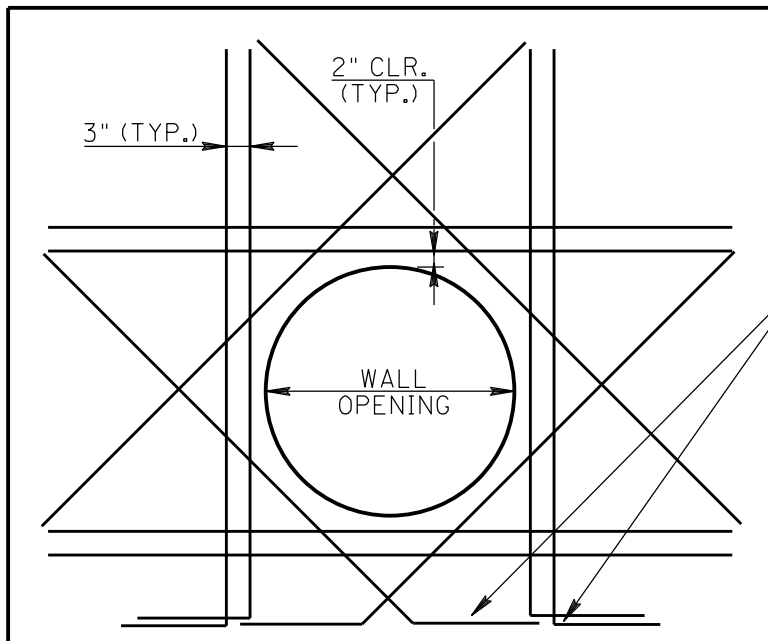
6'-0"X6'-0" PRECAST LIFT GATE STRUCTURE: BOTTOM SLAB
HVUD WTP EXPANSION

NOTE: SEE "PRECAST CONCRETE JUNCTION BOXES AND PRECAST BOX CULVERTS" SHEET FOR SUMMARY OF BUILDING AND DESIGN CODES, MATERIALS REQUIREMENTS, AND DESIGN LOADS.

NOTE: ICAST WORKING DRAWINGS FOR ADDITIONAL INFORMATION.



TOP OF
PRECAST



IF SPECIFIED LENGTHS
OF OPENING BARS
INTERSECT OUTSIDE
OF CONCRETE, BEND
THE ADD'L. OPENING
BARS TO FIT. (TYP.)

BOTT. OF
PRECAST

ADDITIONAL REINFORCEMENT @ WALL OPENINGS

ADDITIONAL REINFORCEMENT REQUIRED:

1. ALONG EACH SIDE OF OPENING:
2- #5'S HORIZONTAL TOP AND BOTTOM
AND 2-#5'S VERTICAL EACH SIDE
 2. DIAGONALLY:
1-#5 @ EACH FACE DIAGONALLY
(4 PER OPENING)
- LENGTH OF EACH ADDITIONAL BAR=HOLE DIA.
PLUS 5'-0", CENTER ADDITIONAL BARS
ON CENTER OF OPENINGS.

PROVIDE ADDITIONAL OPENING BARS NEAR INSIDE
AND OUTSIDE FACES AT EACH OPENING.

SK-4/4

6'-0"X6'-0" PRECAST LIFT GATE STRUCTURE: REINF. @ OPENINGS
HVUD WTP EXPANSION

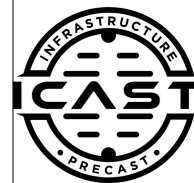
Job Name: 24-1498B - Harpeth Valley Slide Gate Structure
 Job Location: Nashville, TN
 Contractor: Garney Companies, Inc.

Plant: Beaver Dam, KY

Tech: K. Cardwell

12/29/2025 7:41:50 AM

PC: J. Jarvis



Structure ID: Gate Str

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 Structure Total: 47103 lb

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 2. CONCRETE: 4,000 PSI AT 28 DAYS
 3. REINFORCEMENT: PER ATTACHED DESIGN BY WINFORD A. PETRONE, P.E. - 2" MIN. REBAR CLEARANCE (TYP)
 4. FLOOR SLOPE TO OUTLET BY OTHERS
 5. ALUM GRATING & ANGLE GRATE SEAT SUPPLIED BY OTHERS
 6. SLIDE GATE BY OTHERS
 7. LIFTERS: 4 EA. 8CA18 CONAC A-ANCHORS FOR PLANT & FIELD HANDLING - INSTALLED IN 90° & 270° WALLS, MIN. 16" FROM TOP OF WALLS
 8. ADDITIONAL REINFORCEMENT REQUIRED AROUND OPENINGS PER REINFORCEMENT DRAWING "SK-4/4"

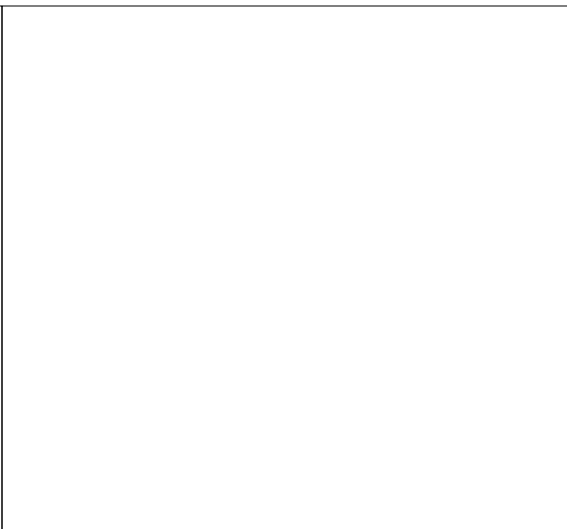
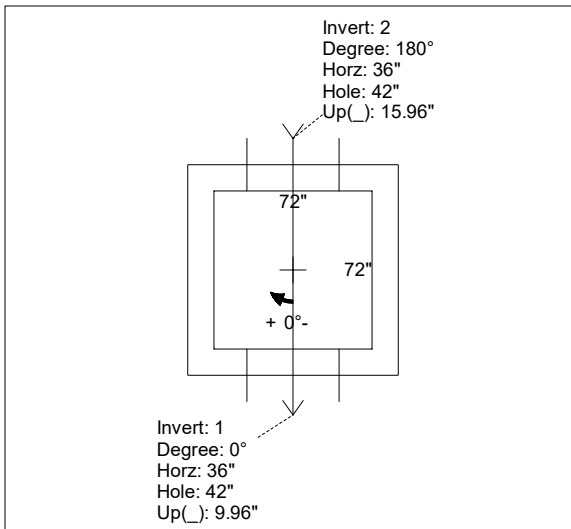
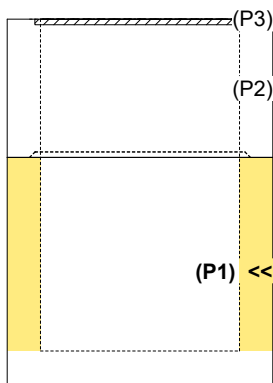
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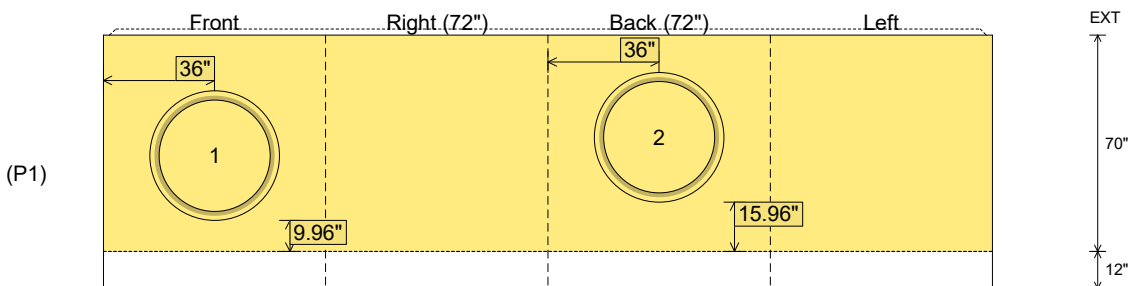
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RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Tongue
 Seam Dn: n/a

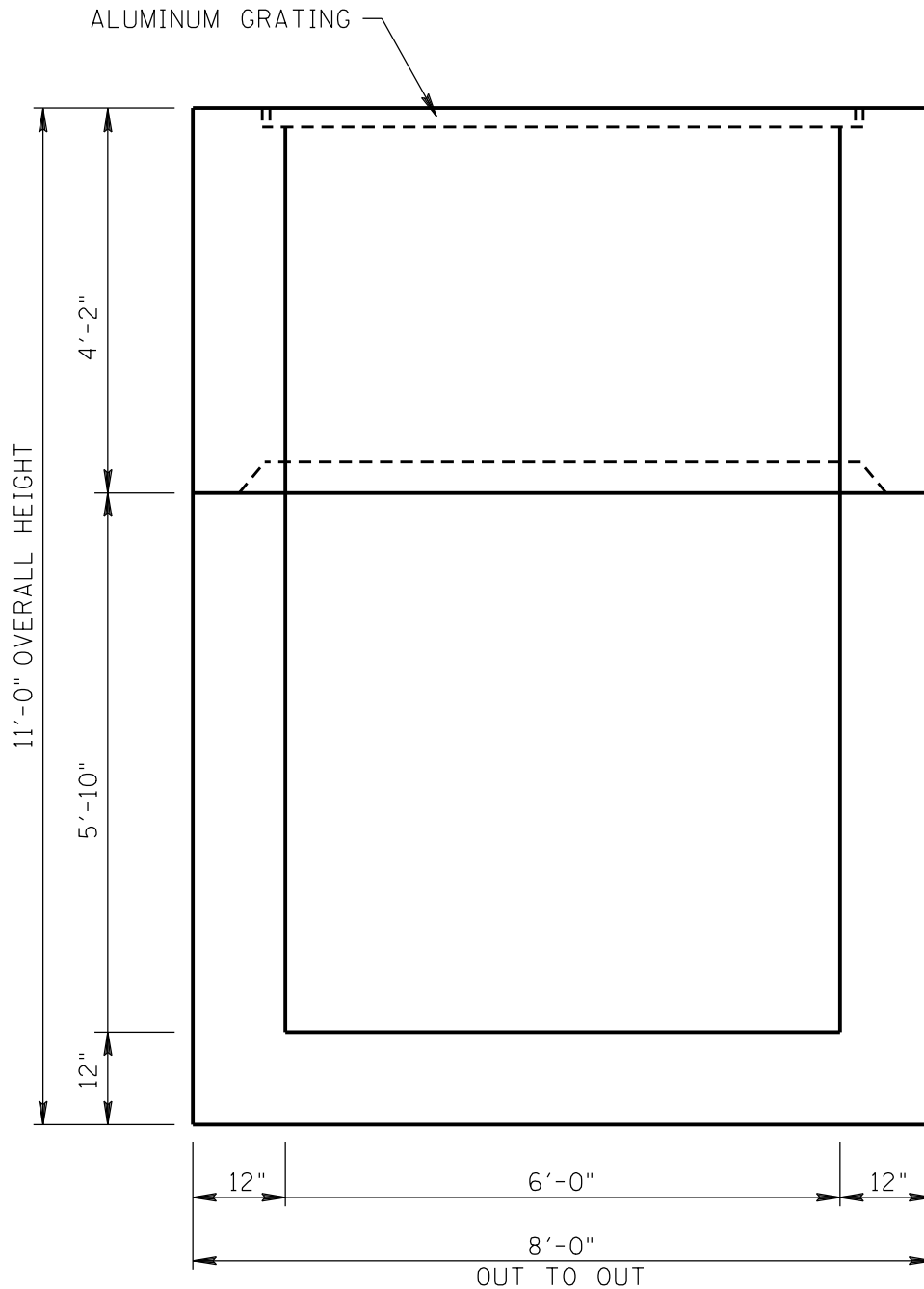
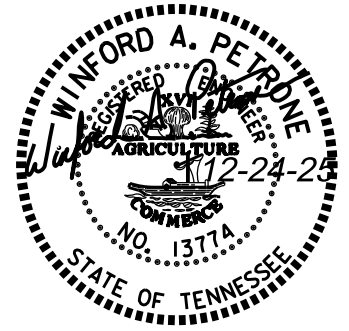
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 Floor Height: 12"

Height (Int): 70"
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NOTE: SEE "PRECAST VAULTS: DESIGN SUBMITTALS, CONCRETE COMPONENTS" SHEET FOR SUMMARY OF BUILDING AND DESIGN CODES, MATERIALS REQUIREMENTS, AND DESIGN LOADS.

NOTE: SEE ICAST WORKING DRAWINGS FOR ADDITIONAL INFORMATION.



TYPICAL ELEVATION VIEW

NOTE: SEE ICAST WORKING DRAWINGS FOR OPENING SIZES AND LOCATIONS

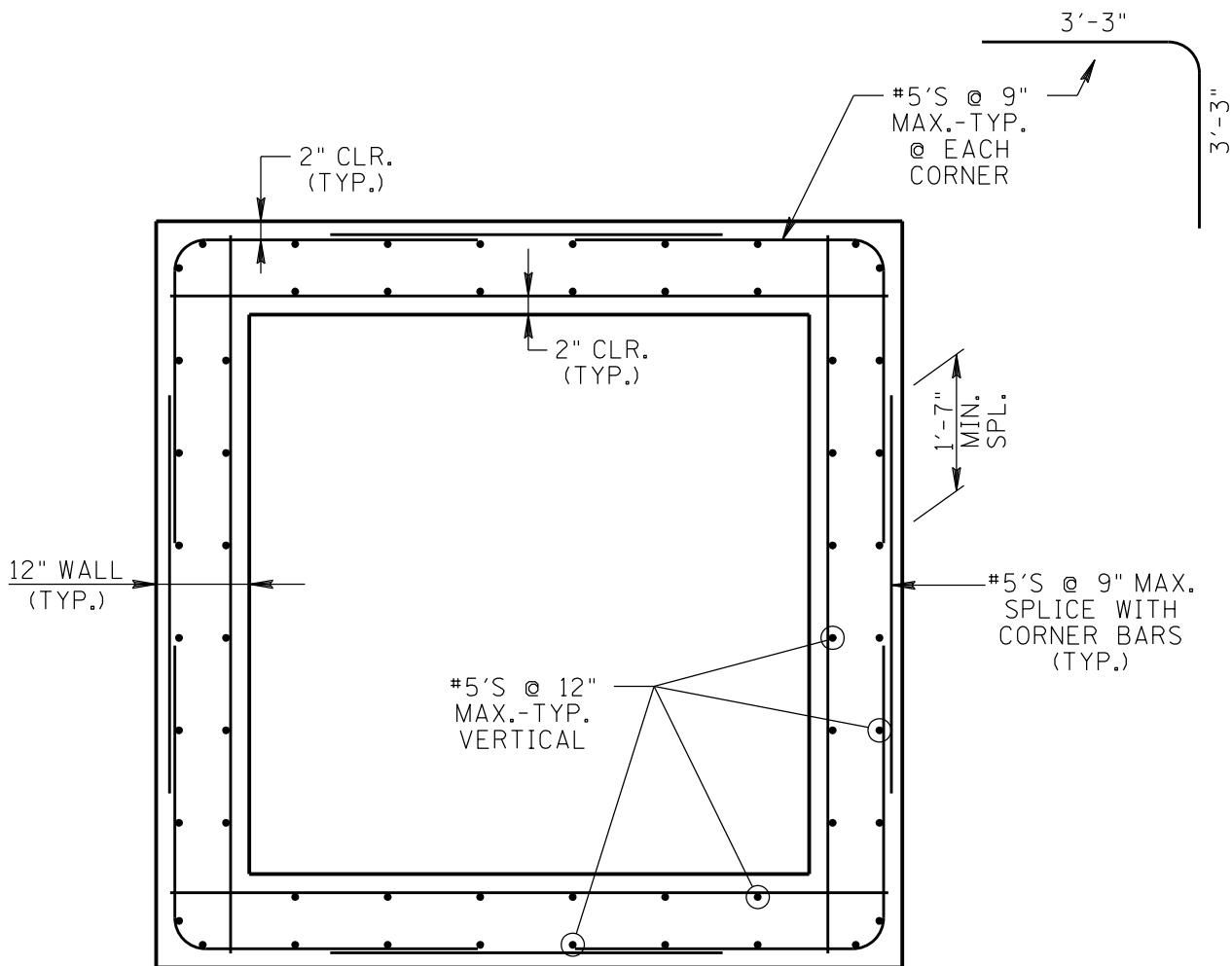
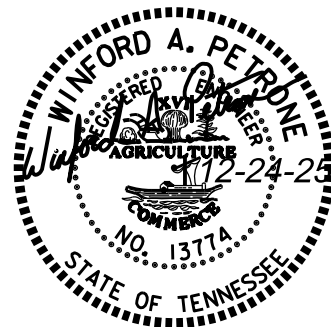
SK-1/4

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HVUD WTP EXPANSION

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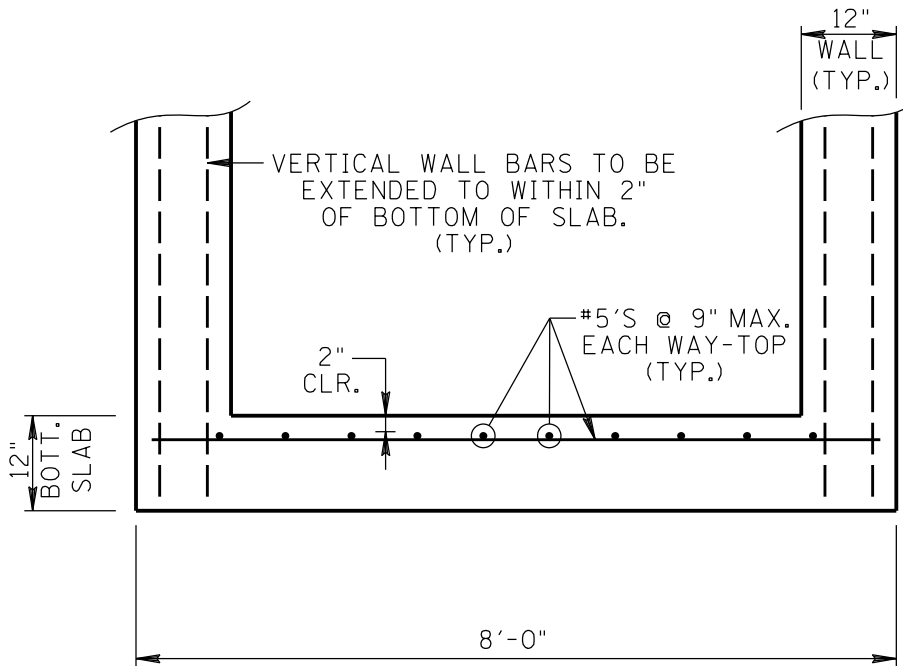
TYPICAL SECTION THRU WALL
SHOWING REINFORCEMENT

SK-2/4

6'-0"X6'-0" PRECAST LIFT GATE STRUCTURE: WALL SECTION
HVUD WTP EXPANSION

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BOTTOM SLAB SECTION

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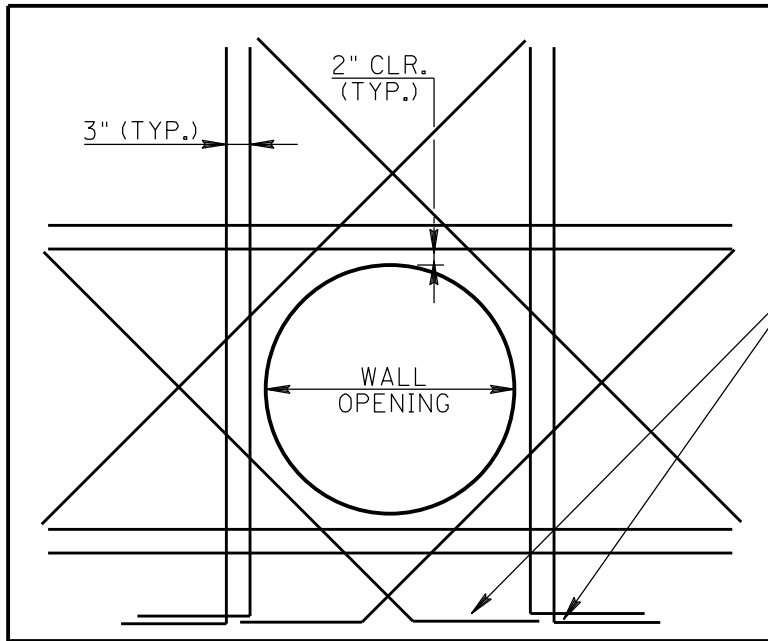
6'-0"X6'-0" PRECAST LIFT GATE STRUCTURE: BOTTOM SLAB
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