

Job Name: 25-4508 - Georgetown Commons Target
 Job Location: Georgetown, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/27/2026 8:36:26 PM

Tech: Jared - F
 PC: A. Chambers



Structure ID: SSMH 2 (3)

P2 MH048CN42-S

ECC CONE w/ 24" HOLE F/G

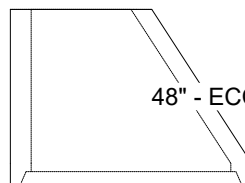
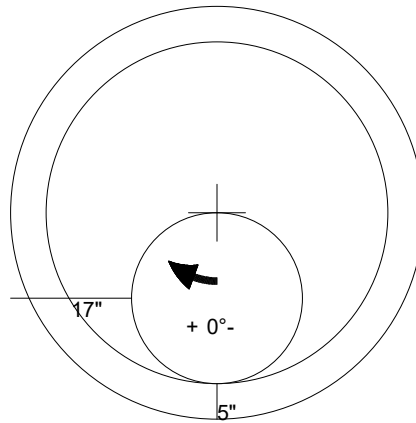
- P4) 24" - CASTING HEIGHT - 7"
- P3) 24" - GRADE RING F/F - 3"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 42"
- P1) 48" - MH BASE T/n - 36"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 1) 48" - Conseal CS-102 1.00" (Double)
- 2) A-Lok - 0285

0 lb
 202 lb
 3200 lb
 3782 lb
 0 lb
 1440 lb
 2 lb
 271 lb
 0 lb
 2 lb

 Structure Total: 8900 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS.
 4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).

 REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.



48" - ECC CONE w/ 24" HOLE F/G - 42" - (P2)

Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: Groove

Wall Thickness: 5"

Height (Ext): 42"

Weight (Net): 3200 lb
 Volume (Net): 0.5cu.yd

Job Name: 25-4508 - Georgetown Commons Target
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 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/27/2026 8:36:44 PM

Tech: Jared - F
 PC: A. Chambers



Structure ID: SSMH 3 (2)

P1 MH048BA24

MH BASE T/n

- P5) 24" - CASTING HEIGHT - 7"
- P4) 24" - GRADE RING F/F - 4"
- P3) 48" - ECC CONE w/ 24" HOLE F/G - 24"
- P2) 48" - MH RISER T/G - 36"
- P1) 48" - MH BASE T/n - 24"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 2) 48" - Conseal CS-102 1.00" (Double)
- 2) A-Lok - 0285
- 1) A-Lok - 0200

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS.
 4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).

REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

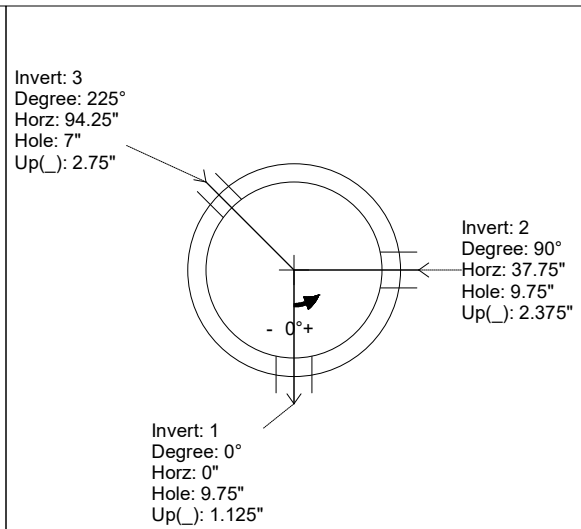
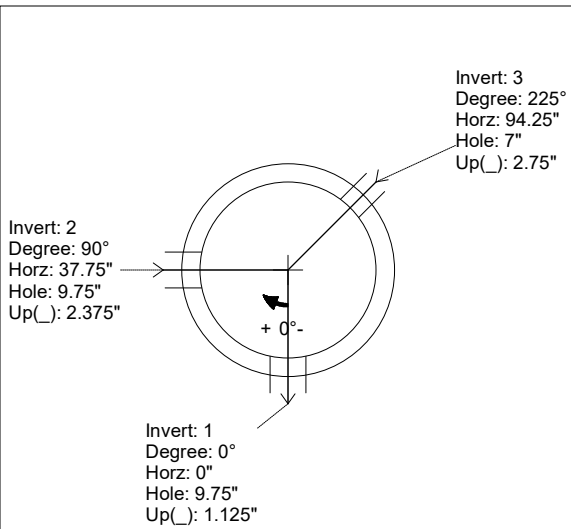
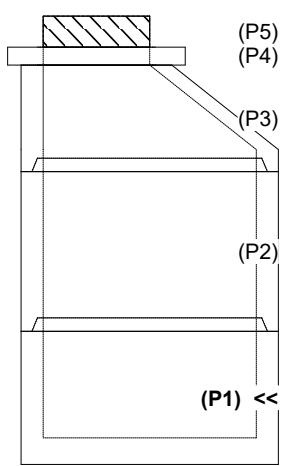
Structure Total: 8978 lb

Rim: 873.07' Rim to Invert: 7.85' Slack: 1.2" Sump: 2" Step Position:

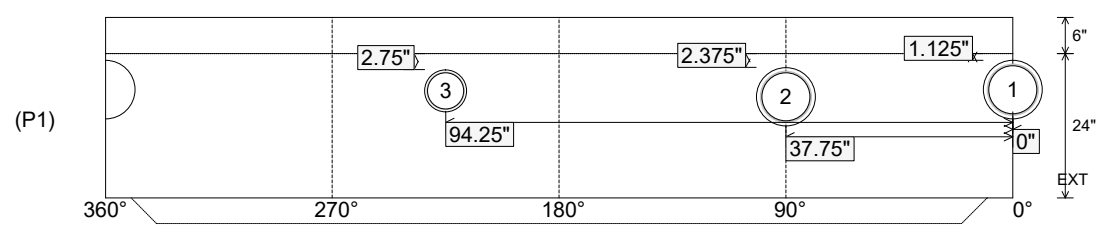
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	865.22'	0°	0"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	1.125"	0"
Invert 2	865.32'	90°	45.5"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	2.375"	0"
Invert 3	865.32'	225°	113.875"	6" PVC SDR35	6.25"	A-Lok 0200	7"	7.025"	2.75"	0"
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: 5" Floor Height: 6"	Height (Int): 24" Height (Ext): 30"	Weight (Net): 2928 lb Volume (Net): 0.75cu.yd
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Job Name: 25-4508 - Georgetown Commons Target
 Job Location: Georgetown, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/27/2026 8:36:44 PM

Tech: Jared - F
 PC: A. Chambers



Structure ID: SSMH 3 (2)

P1 MH048BA24

MH BASE T/n

- P5) 24" - CASTING HEIGHT - 7"
- P4) 24" - GRADE RING F/F - 4"
- P3) 48" - ECC CONE w/ 24" HOLE F/G - 24"
- P2) 48" - MH RISER T/G - 36"
- P1) 48" - MH BASE T/n - 24"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT**
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 2) 48" - Conseal CS-102 1.00" (Double)
- 2) A-Lok - 0285
- 1) A-Lok - 0200

0 lb
 270 lb
 1550 lb
 2515 lb
 2928 lb
 0 lb
 1440 lb
 2 lb
 271 lb
 0 lb
 2 lb
 1 lb

 Structure Total: 8978 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS.
 4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).

REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

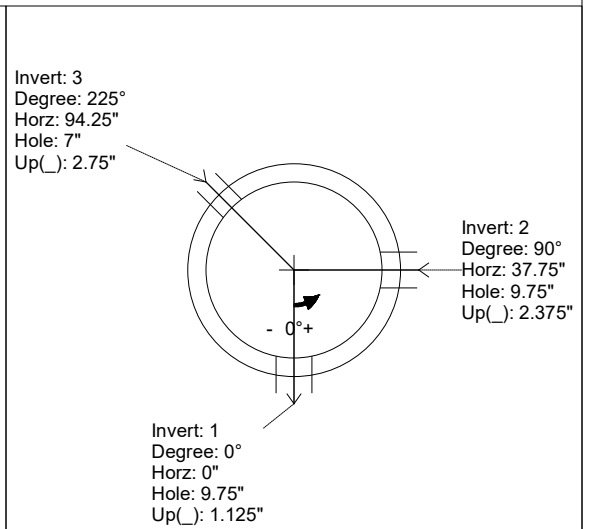
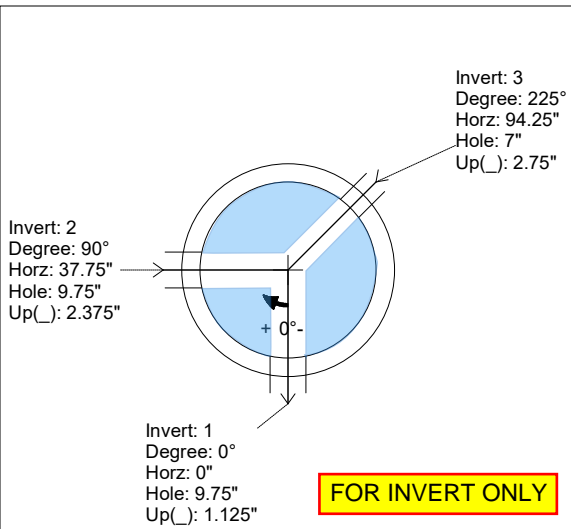
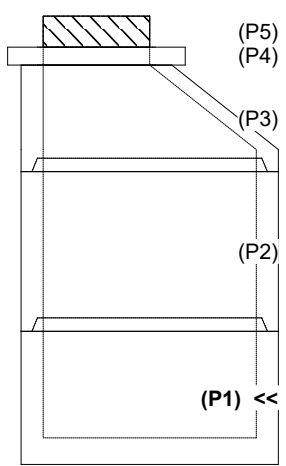
Structure Total: 8978 lb

Rim: 873.07' Rim to Invert: 7.85' Slack: 1.2" Sump: 2" Step Position:

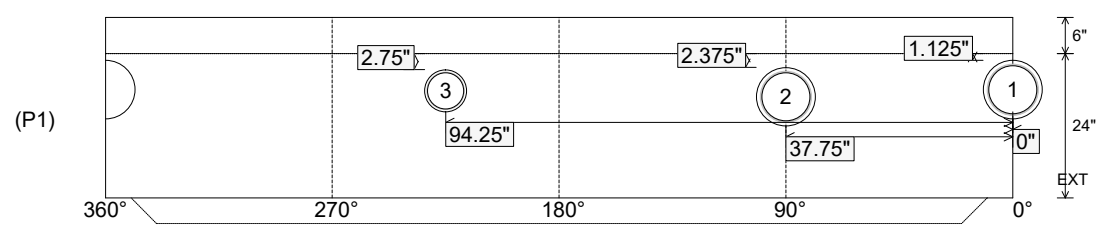
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	865.22'	0°	0"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	1.125"	0"
Invert 2	865.32'	90°	45.5"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	2.375"	0"
Invert 3	865.32'	225°	113.875"	6" PVC SDR35	6.25"	A-Lok 0200	7"	7.025"	2.75"	0"
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: 5" Floor Height: 6"	Height (Int): 24" Height (Ext): 30"	Weight (Net): 2928 lb Volume (Net): 0.75cu.yd
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Job Name: 25-4508 - Georgetown Commons Target
 Job Location: Georgetown, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/27/2026 8:36:26 PM

Tech: Jared - F
 PC: A. Chambers



Structure ID: SSMH 3 (2)

P3 MH048CN24-S

ECC CONE w/ 24" HOLE F/G

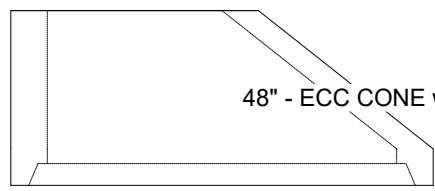
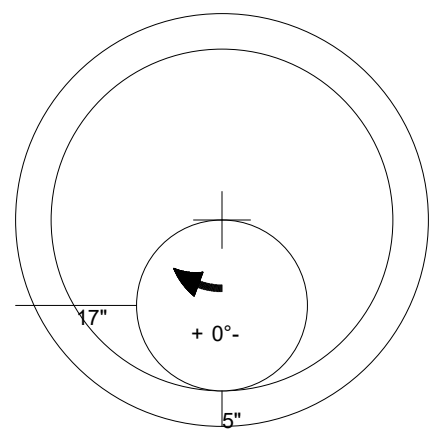
- P5) 24" - CASTING HEIGHT - 7"
- P4) 24" - GRADE RING F/F - 4"
- P3) 48" - ECC CONE w/ 24" HOLE F/G - 24"
- P2) 48" - MH RISER T/G - 36"
- P1) 48" - MH BASE T/h - 24"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 2) 48" - Conseal CS-102 1.00" (Double)
- 2) A-Lok - 0285
- 1) A-Lok - 0200

0 lb
 270 lb
 1550 lb
 2515 lb
 2928 lb
 0 lb
 1440 lb
 2 lb
 271 lb
 0 lb
 2 lb
 1 lb

 Structure Total: 8978 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS.
 4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).

 REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.



Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 5"	Height (Ext): 24"	Weight (Net): 1550 lb Volume (Net): 0.33cu.yd
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Job Name: 25-4508 - Georgetown Commons Target
 Job Location: Georgetown, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/28/2026 11:25:30 AM

Tech: Jared - F
 PC: A. Chambers



Structure ID: 7 (10)

P1 MH048BAVF

MH BASE Custom Ht T/n

- P3) 24" x 36" - CASTING HEIGHT - 6"
- P2) 48" - MH FLAT TOP w/24"x36" Hole F/G - 12"
- P1) 48" - MH BASE Custom Ht T/n - 47"
- 1) CASTING - HOE 470 SET LV (F/G/H)
- 1) 48" - Conseal CS-102 1.00"
- 1) 24" x 36" - Conseal CS-102 1.00"
- 2) Hole - 30

0 lb
 1300 lb
 3982 lb
 394 lb
 0 lb
 0 lb
 0 lb

 Structure Total: 5676 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS AND NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE 470 SET LV (F/G/H)).

REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

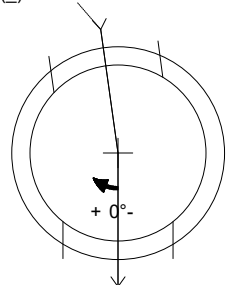
Rim: 871' Rim to Invert: 5.3' Slack: 0.5' Sump: 1.9' Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (↓)	Offset
Invert 1	865.7'	0°	0"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 2	865.7'	172°	87"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

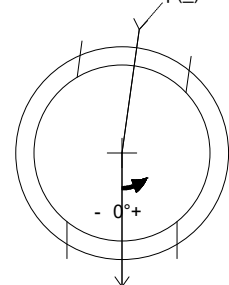
RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

Invert: 2
 Degree: 172°
 Horz: 72"
 Hole: 30"
 Up(↓): 0"

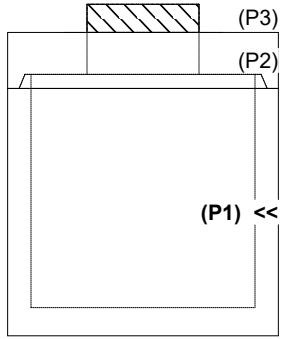


Invert: 2
 Degree: 172°
 Horz: 72"
 Hole: 30"
 Up(↓): 0"

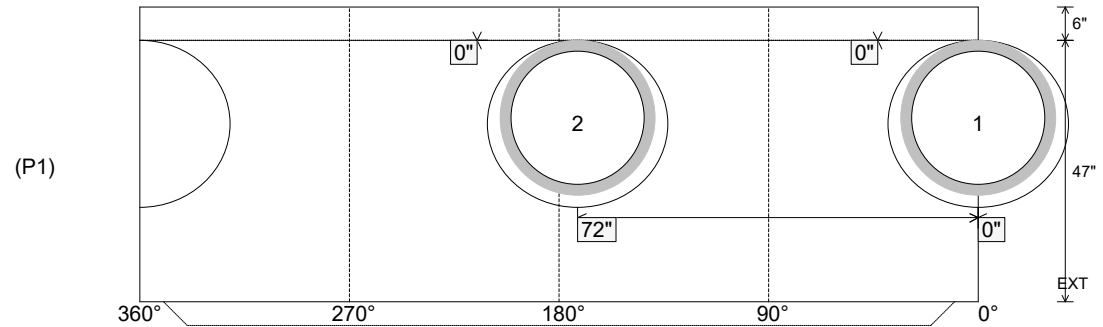


Invert: 1
 Degree: 0°
 Horz: 0"
 Hole: 30"
 Up(↓): 0"

Invert: 1
 Degree: 0°
 Horz: 0"
 Hole: 30"
 Up(↓): 0"



INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Tongue
 Seam Dn: n/a

Wall Thickness: 5"
 Floor Height: 6"

Height (Int): 47"
 Height (Ext): 53"

Weight (Net): 3982 lb
 Volume (Net): 1.02cu.yd

Job Name: 25-4508 - Georgetown Commons Target
 Job Location: Georgetown, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/28/2026 11:25:30 AM

Tech: Jared - F
 PC: A. Chambers



Structure ID: 6 (9)

P1 MH048BAVF

MH BASE Custom Ht T/n

- P3) 24" x 36" - CASTING HEIGHT - 6"
- P2) 48" - MH FLAT TOP w/24"x36" Hole F/G - 12"
- P1) 48" - MH BASE Custom Ht T/n - 43"
- 1) CASTING - HOE 470 SET LV (F/G/H)
- 1) 48" - Conseal CS-102 1.00"
- 1) 24" x 36" - Conseal CS-102 1.00"
- 2) Hole - 30
- 1) Hole - 10

0 lb
 1300 lb
 3669 lb
 394 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb
 Structure Total: 5363 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS AND NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE 470 SET LV (F/G/H)).

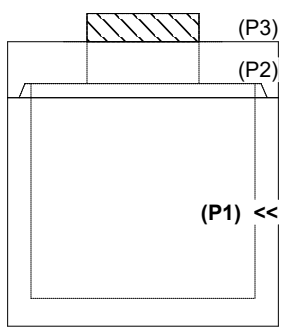
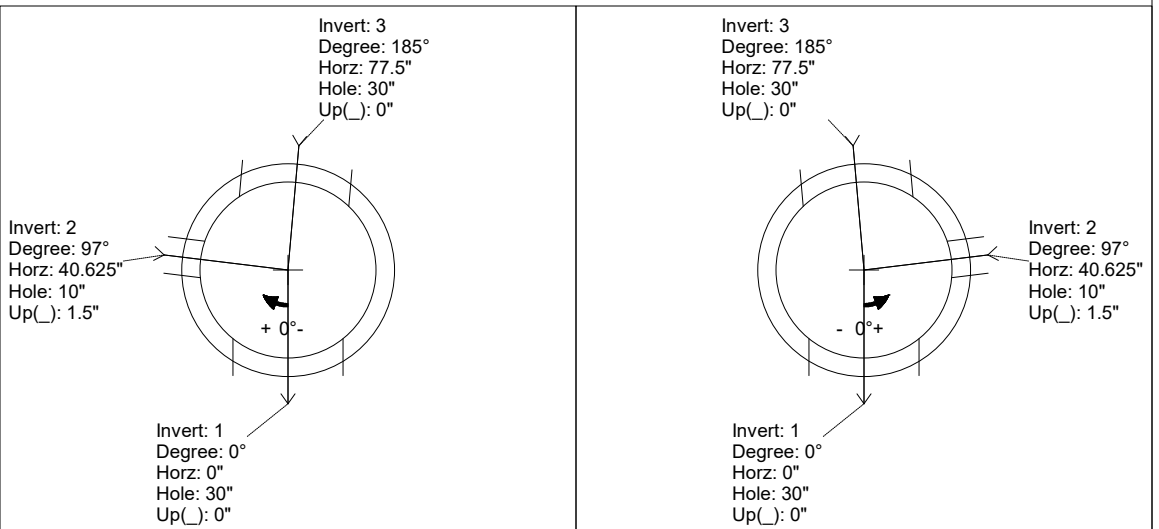
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 871' Rim to Invert: 5' Slack: 0.9" Sump: 1.9" Step Position:

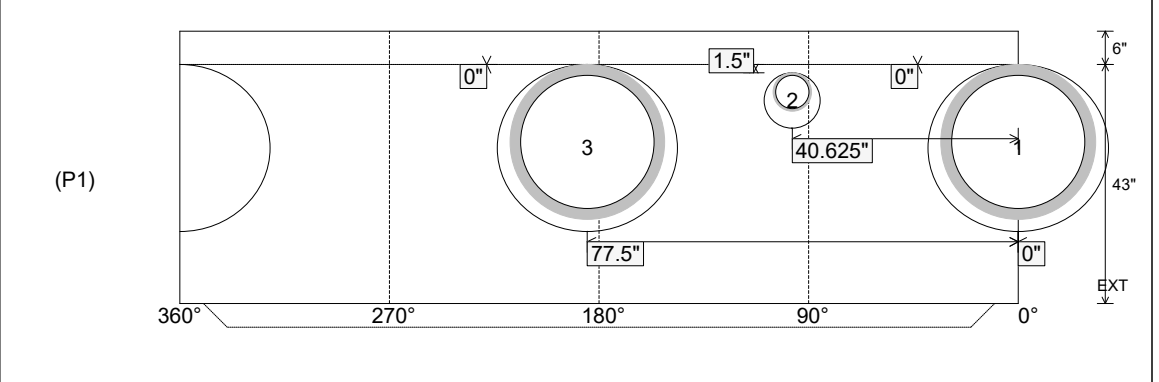
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	866'	0°	0"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 2	866'	97°	49.125"	6" HDPE	6.9"	Hole 10	10"	10.074"	1.5"	0"
Invert 3	866'	185°	93.625"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 4										
Invert 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: 5" Floor Height: 6"	Height (Int): 43" Height (Ext): 49"	Weight (Net): 3669 lb Volume (Net): 0.94cu.yd
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Job Name: 25-4508 - Georgetown Commons Target
 Job Location: Georgetown, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/28/2026 11:25:38 AM

Tech: Jared - F
 PC: A. Chambers



Structure ID: 104 (33)

P1 MH048BA60

MH BASE T/n

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - MH FLAT TOP w/ 24" ECC Hole F/G - 12"
- P1) 48" - MH BASE T/n - 60"
- 1) CASTING - HOE MC-375 F/C Storm
- 1) 48" - Conseal CS-102 1.00"
- 2) Hole - 30
- 1) Hole - 20
- 5) MH Step ML-10-TDS-NCR - 10"

0 lb
 1561 lb
 4754 lb
 271 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb
 Structure Total: 6586 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE MC-375 F/C STORM).

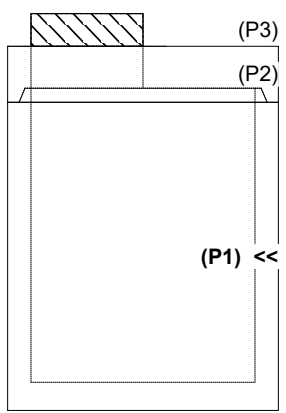
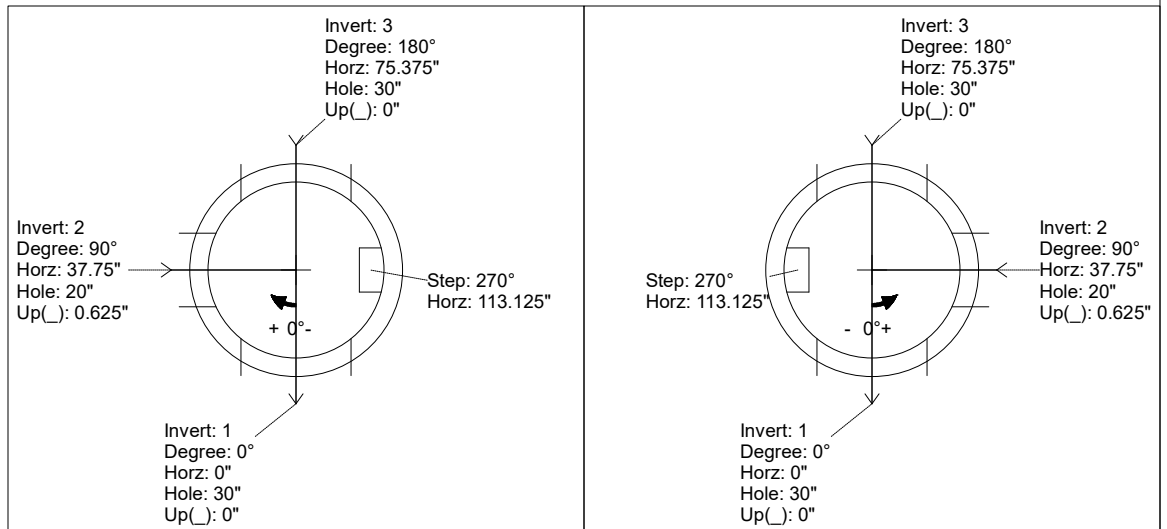
 REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 874.6' Rim to Invert: 6.5' Slack: 0.9" Sump: 1.9" Step Position: 270°

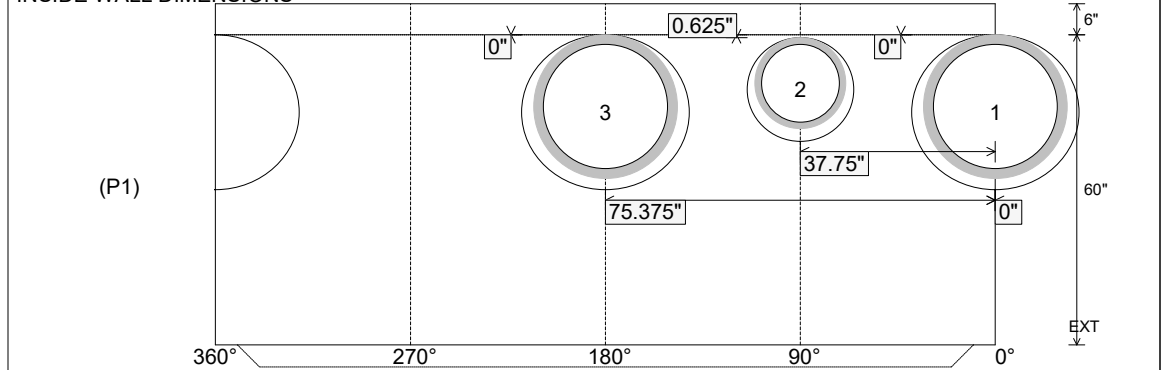
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (↓)	Offset
Invert 1	868.1'	0°	0"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 2	868.1'	90°	45.5"	15" HDPE	17.6"	Hole 20	20"	20.629"	0.625"	0"
Invert 3	868.1'	180°	91.125"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 4										
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: 5" Floor Height: 6"	Height (Int): 60" Height (Ext): 66"	Weight (Net): 4754 lb Volume (Net): 1.21cu.yd
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Job Name: 25-4508 - Georgetown Commons Target
 Job Location: Georgetown, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/28/2026 11:25:38 AM

Tech: Jared - F
 PC: A. Chambers



Structure ID: 103 (26)

P1 MH048BA48

MH BASE T/n

- P3) 24" x 30" - CASTING HEIGHT - 6"
- P2) 48" - MH FLAT TOP w/24"x30" Hole F/G - 12"
- P1) 48" - MH BASE T/n - 48"
- 1) CASTING - HOE 360 Set (F/G/H)
- 1) 48" - Conseal CS-102 1.00"
- 1) 24" x 30" - Conseal CS-102 1.00"
- 2) Hole - 30
- 1) Hole - 16

0 lb
 1935 lb
 3966 lb
 362 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb

 Structure Total: 6263 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS AND NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE 360 SET (F/G/H)).

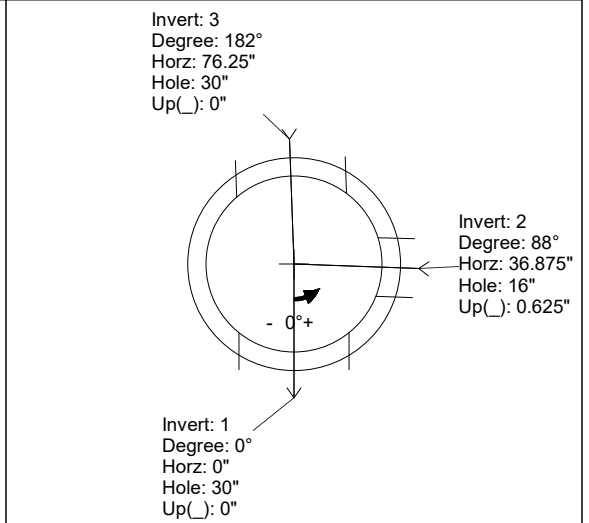
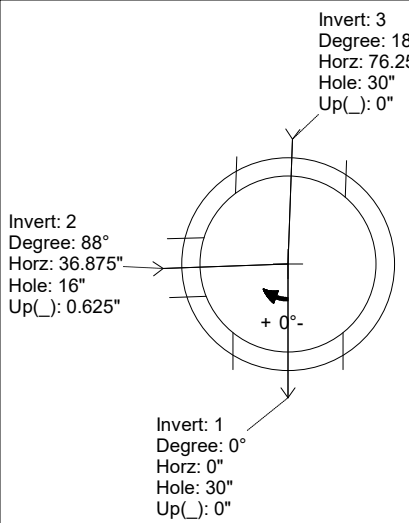
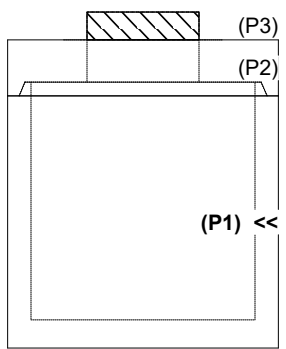
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 873.85' Rim to Invert: 5.4' Slack: 0.7' Sump: 1.9' Step Position:

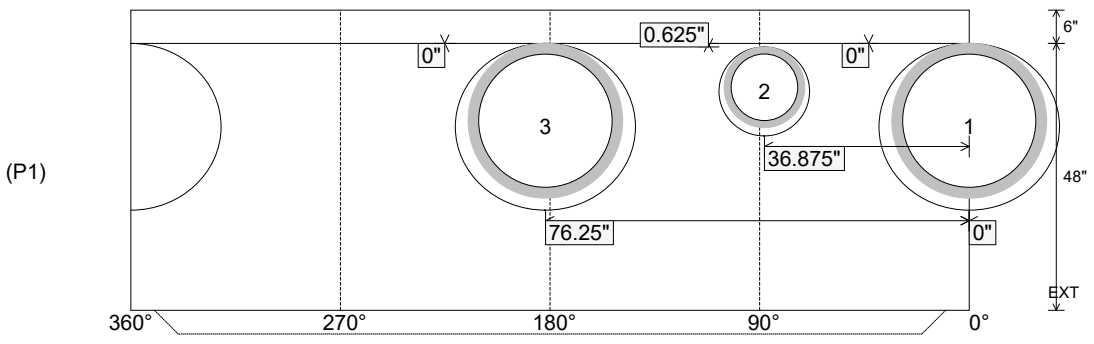
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	868.45'	0°	0"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 2	868.45'	88°	44.5"	12" HDPE	14.5"	Hole 16	16"	16.312"	0.625"	0"
Invert 3	868.45'	182°	92.125"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 4										
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: 5" Floor Height: 6"	Height (Int): 48" Height (Ext): 54"	Weight (Net): 3966 lb Volume (Net): 1.01cu.yd
----------------------------------	---------------------------------	--	--	--

Job Name: 24-1164 Paddy's Run Flood PS
 Job Location: Louisville, Ky.
 Contractor: Core & Main LP (Lou)

Plant: Beaver Dam, Ky.
 5/18/2026 8:15:55 AM

Tech: S. Felletter
 PC:



Structure ID: Storm MH

P1 MH048LD12S

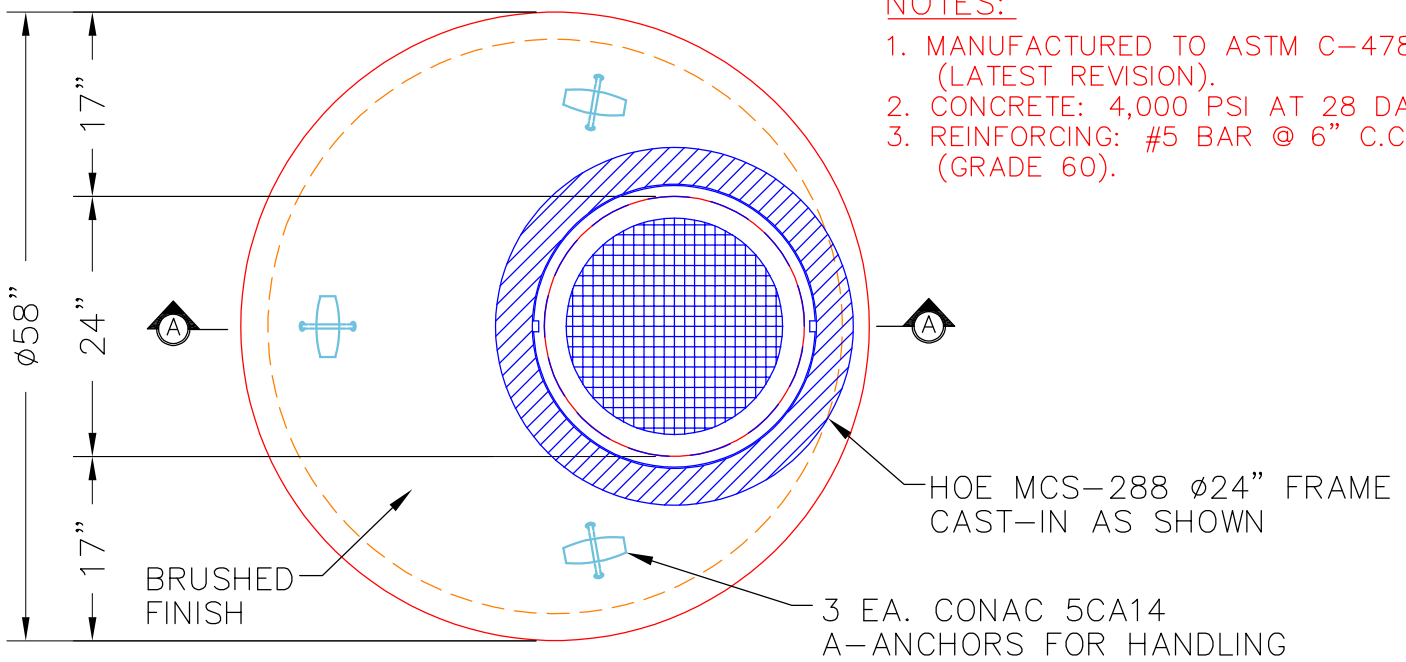
MH FLAT TOP SPECIAL (MCS-288) F/G

- P1) 48" - MH FLAT TOP SPECIAL (MCS-288) F/G - 12"
 1) CASTING - HOE MCS-288 Cover Storm
 1) CASTING - HOE MCS-288 Frame
 1) This Structure Includes a Cast-in Item

1593 lb
 125 lb
 123 lb
 0 lb

 Structure Total: 1841 lb

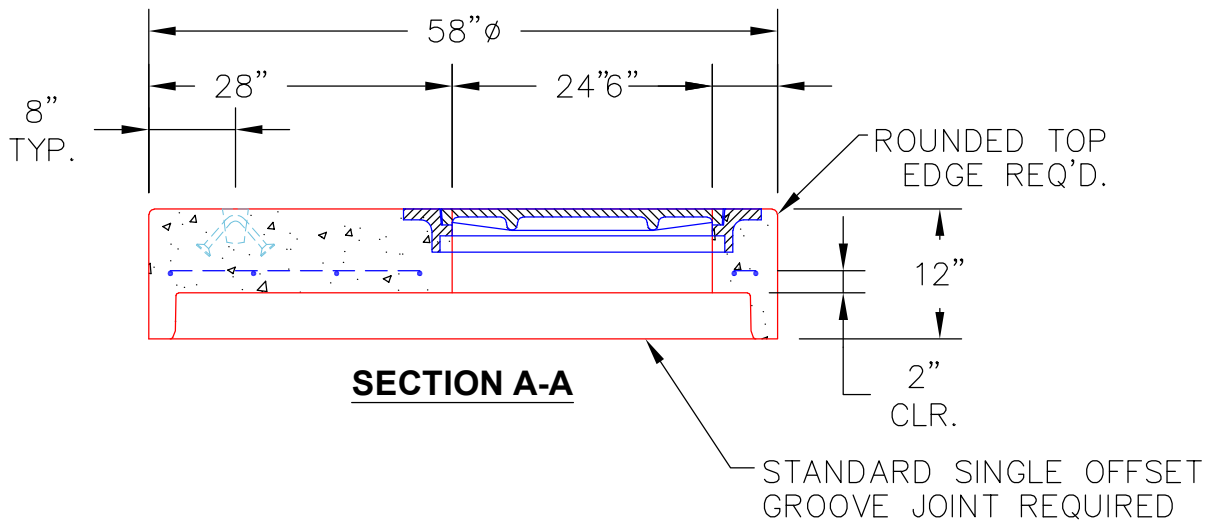
- Structure Notes:** 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE MCS-288). CAST-IN.
 REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.



NOTES:

1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" C.C. E.W. (GRADE 60).

PLAN VIEW



SECTION A-A

Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: Groove

Wall Thickness: 5"

Height (Ext): 12"

Weight (Net): 1593 lb
 Volume (Net): 0.41cu.yd

Job Name: 23-2404 Hampton Hills (Phase 1)
 Job Location: Richmond, KY
 Contractor: Seven Earthmovers LLC

Plant: 100

5/20/2026 5:51:07 PM

Tech: J. Horsley

PC: C. Golf



Structure ID: SSMH AA-6

P1 MH048BAVF

MH BASE Custom Ht T/n

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 42"
- P1) 48" - MH BASE Custom Ht T/n - 29"
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) CASTING - HOE MC-350 F/C Sanitary
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) 24" - Conseal CS-102 1.00" (Double)
- 2) PSX - 12-08 NYLO
- 6) MH Step ML-10-TDS-NCR - 10"

0 lb
 3200 lb
 3260 lb
 1440 lb
 0 lb
 0 lb
 305 lb
 0 lb
 0 lb
 0 lb
 16 lb
 0 lb

 Structure Total: 8221 lb

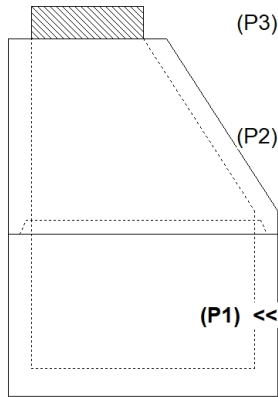
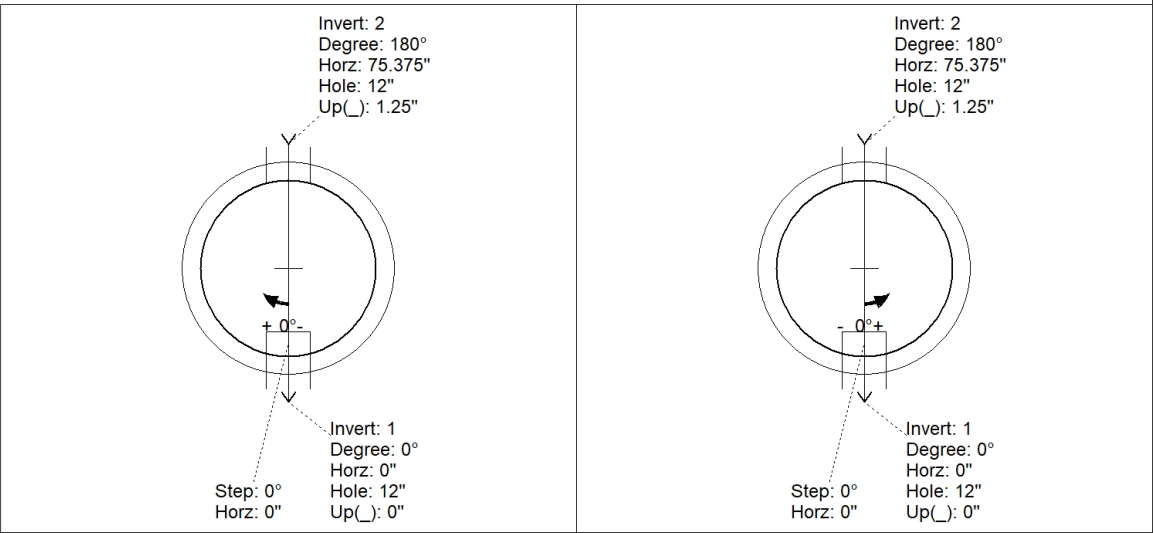
Structure Notes: 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. CASTING BY ICAST (HOE MC-350 F/C) SHIPPED LOOSE.
 REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 909.32' Rim to Invert: 6.39' Slack: 0.68" Sump: 2" Step Position: 0°

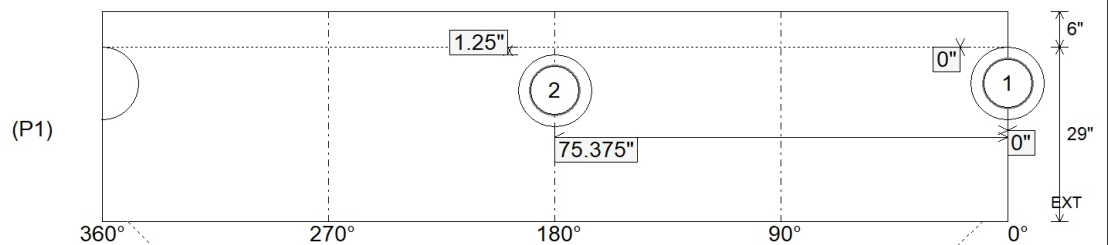
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	902.93'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	903.03'	180°	91.125"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 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: 5"
 Floor Height: 6"

Height (Int): 29"
 Height (Ext): 35"

Weight (Net): 3260 lb
 Volume (Net): 0.83cu.yd

Job Name: 23-2404 Hampton Hills (Phase 1)
 Job Location: Richmond, KY
 Contractor: Seven Earthmovers LLC

Plant: 100

5/20/2026 5:51:07 PM

Tech: J. Horsley

PC: C. Golf



Structure ID: SSMH AA-6

P1A MH048BAVF

MH BASE Custom Ht T/n

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 42"
- P1) 48" - MH BASE Custom Ht T/n - 29"
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) CASTING - HOE MC-350 F/C Sanitary
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) 24" - Conseal CS-102 1.00" (Double)
- 2) PSX - 12-08 NYLO
- 6) MH Step ML-10-TDS-NCR - 10"

0 lb
 3200 lb
 3260 lb
 1440 lb
 0 lb
 0 lb
 305 lb
 0 lb
 0 lb
 0 lb
 16 lb
 0 lb

 Structure Total: 8221 lb

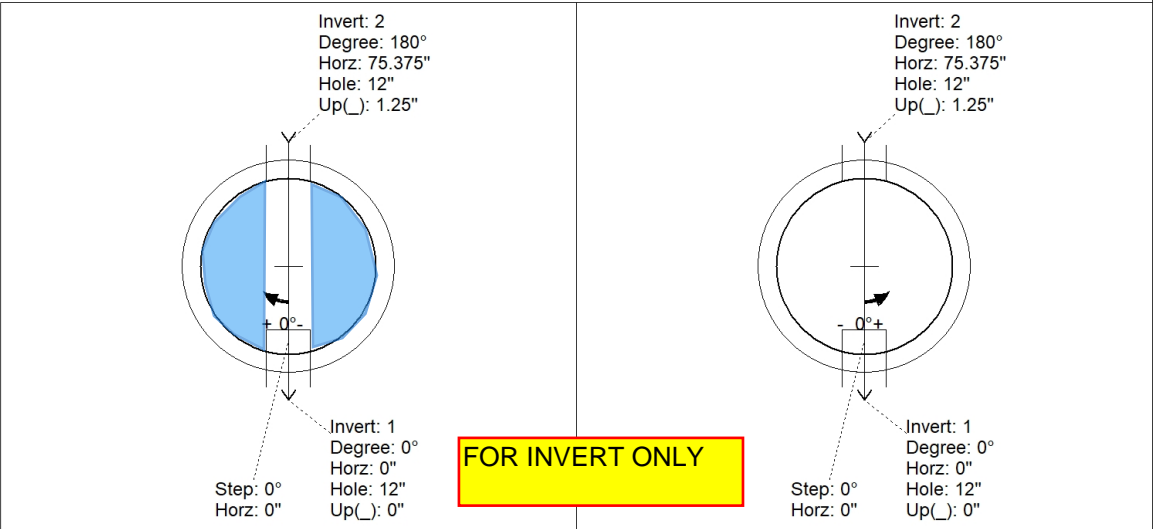
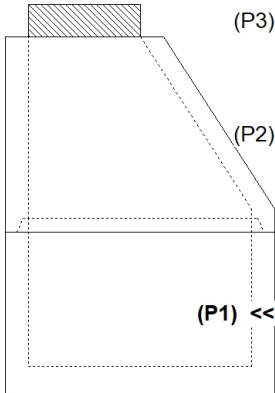
Structure Notes: 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. CASTING BY ICAST (HOE MC-350 F/C) SHIPPED LOOSE.
 REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 909.32' Rim to Invert: 6.39' Slack: 0.68" Sump: 2" Step Position: 0°

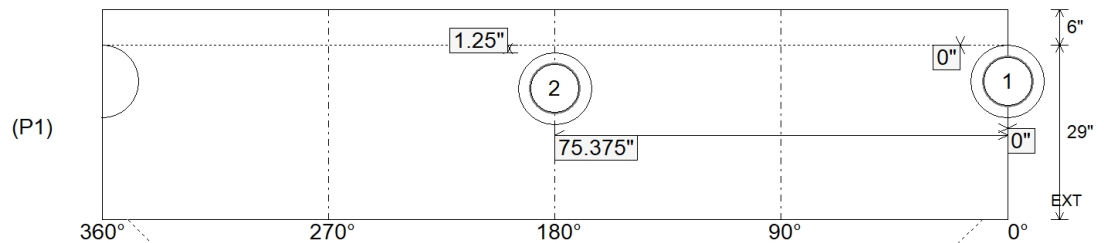
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	902.93'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	903.03'	180°	91.125"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 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: 5"
 Floor Height: 6"

Height (Int): 29"
 Height (Ext): 35"

Weight (Net): 3260 lb
 Volume (Net): 0.83cu.yd

Job Name: 23-2404 Hampton Hills (Phase 1)
 Job Location: Richmond, KY
 Contractor: Seven Earthmovers LLC

Plant: 100

5/19/2026 12:59:28 PM

Tech: J. Horsley

PC: C. Golf



Structure ID: SSMH AA-8

P1 MH048BAVF

MH BASE Custom Ht T/n

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 30"
- P1) 48" - MH BASE Custom Ht T/n - 19"
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) CASTING - HOE MC-350 F/C Sanitary
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) PSX - 12-08 NYLO
- 1) PSX - 12-06 NYLO
- 4) MH Step ML-10-TDS-NCR - 10"

0 lb
 2050 lb
 2562 lb
 1440 lb
 0 lb
 0 lb
 305 lb
 0 lb
 8 lb
 8 lb
 0 lb

 Structure Total: 6373 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-350 F/C) SHIPPED LOOSE.

REINFORCING PER ASTM A615 (GRADE 60).

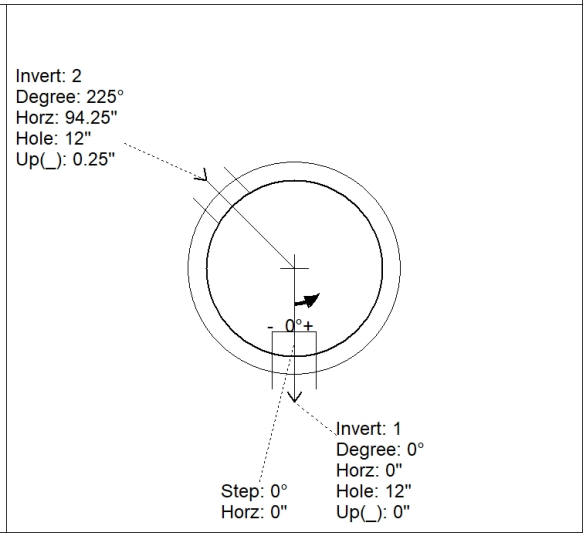
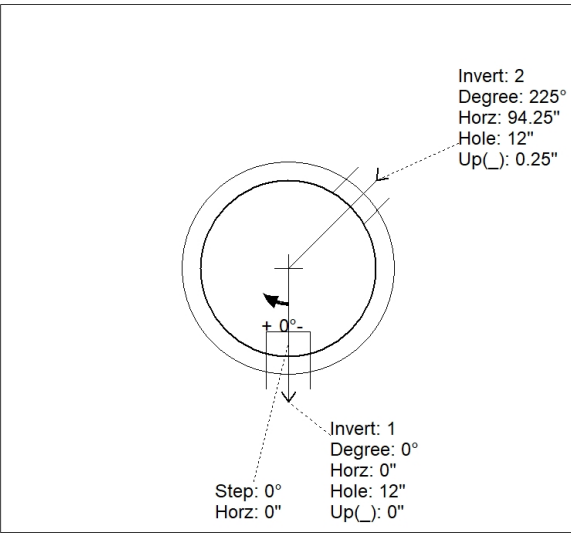
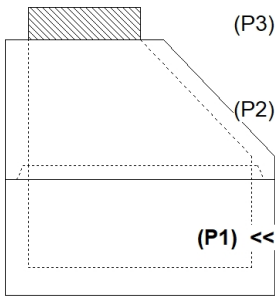
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 913.7' Rim to Invert: 4.5' Slack: 0" Sump: 2" Step Position: 0°

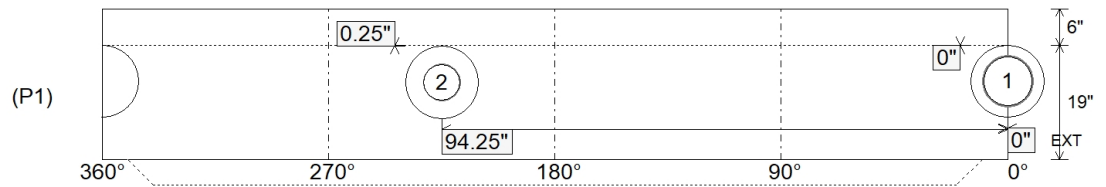
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	909.2'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	909.3'	225°	113.875"	6" PVC SDR35	6.25"	PSX 12-06 NYLO	12"	12.129"	0.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 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: 5"
 Floor Height: 6"

Height (Int): 19"
 Height (Ext): 25"

Weight (Net): 2562 lb
 Volume (Net): 0.65cu.yd

Job Name: 23-2404 Hampton Hills (Phase 1)
 Job Location: Richmond, KY
 Contractor: Seven Earthmovers LLC

Plant: 100

5/19/2026 12:59:28 PM

Tech: J. Horsley

PC: C. Golf



Structure ID: SSMH AA-8

P1A MH048BAVF

MH BASE Custom Ht T/n

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 30"
- P1) 48" - MH BASE Custom Ht T/n - 19"
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) CASTING - HOE MC-350 F/C Sanitary
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) PSX - 12-08 NYLO
- 1) PSX - 12-06 NYLO
- 4) MH Step ML-10-TDS-NCR - 10"

0 lb
 2050 lb
 2562 lb
 1440 lb
 0 lb
 0 lb
 305 lb
 0 lb
 8 lb
 8 lb
 0 lb

 Structure Total: 6373 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. CASTING BY ICAST (HOE MC-350 F/C) SHIPPED LOOSE.

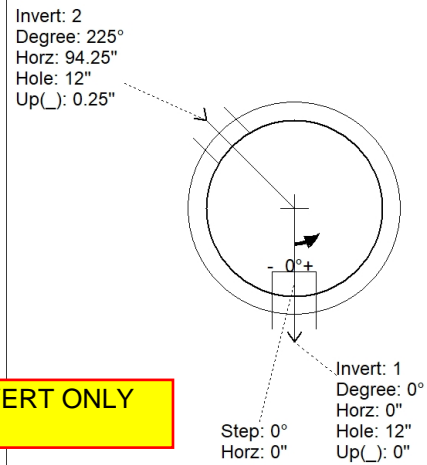
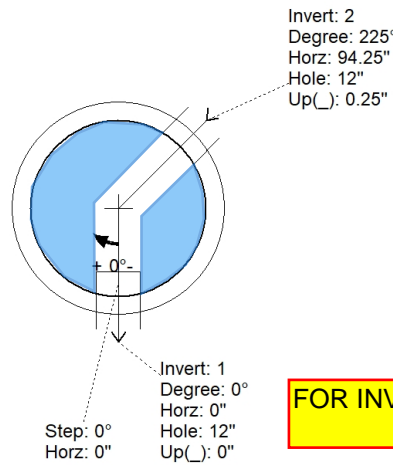
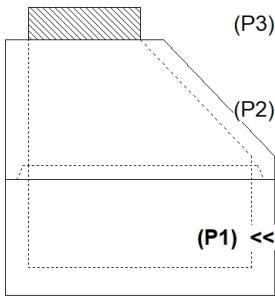
REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 913.7' Rim to Invert: 4.5' Slack: 0" Sump: 2" Step Position: 0°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	909.2'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	909.3'	225°	113.875"	6" PVC SDR35	6.25"	PSX 12-06 NYLO	12"	12.129"	0.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

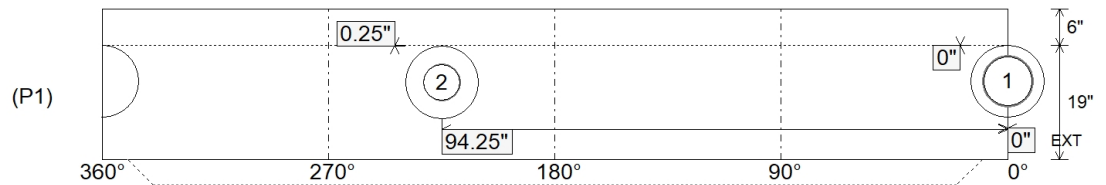
RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



FOR INVERT ONLY

INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Tongue
 Seam Dn: n/a

Wall Thickness: 5"
 Floor Height: 6"

Height (Int): 19"
 Height (Ext): 25"

Weight (Net): 2562 lb
 Volume (Net): 0.65cu.yd

Job Name: 23-2404 Hampton Hills (Phase 1)
 Job Location: Richmond, KY
 Contractor: Seven Earthmovers LLC

Plant: 100

5/19/2026 12:59:28 PM

Tech: J. Horsley

PC: C. Golf



Structure ID: SSMH AA-7

P1 MH048BAVF

MH BASE Custom Ht T/n

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 24"
- P1) 48" - MH BASE Custom Ht T/n - 25"
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) CASTING - HOE MC-350 F/C Sanitary
- 1) 48" - Conseal CS-102 1.00" (Double)
- 2) PSX - 12-08 NYLO
- 3) MH Step ML-10-TDS-NCR - 10"

0 lb
 1550 lb
 2981 lb
 1440 lb
 0 lb
 0 lb
 305 lb
 0 lb
 16 lb
 0 lb

 Structure Total: 6292 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-350 F/C) SHIPPED LOOSE.

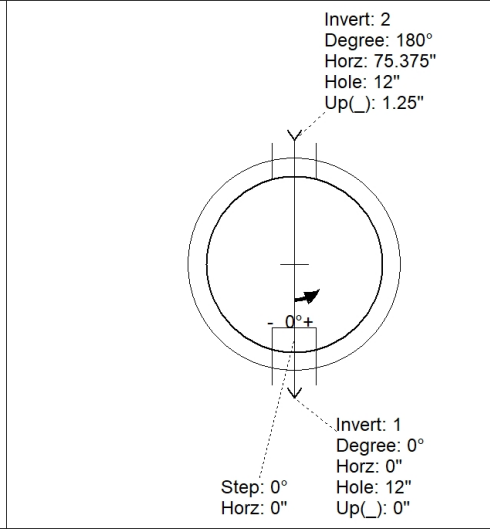
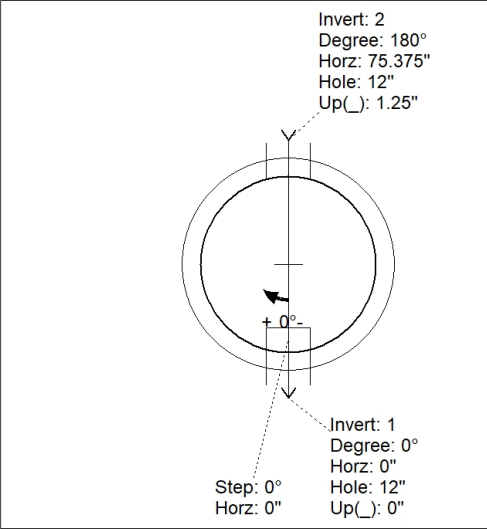
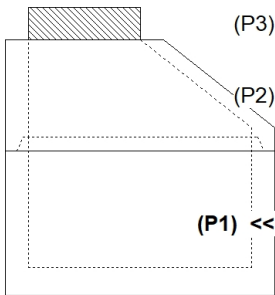
REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 908.96' Rim to Invert: 4.5' Slack: 0" Sump: 2" Step Position: 0°

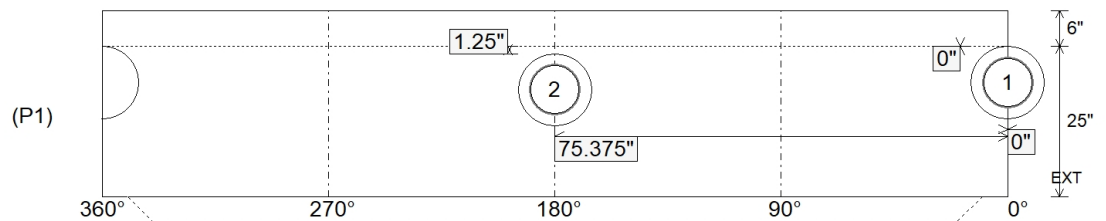
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	904.46'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	904.56'	180°	91.125"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 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: 5"
 Floor Height: 6"

Height (Int): 25"
 Height (Ext): 31"

Weight (Net): 2981 lb
 Volume (Net): 0.76cu.yd

Job Name: 23-2404 Hampton Hills (Phase 1)
 Job Location: Richmond, KY
 Contractor: Seven Earthmovers LLC

Plant: 100

5/19/2026 12:59:28 PM

Tech: J. Horsley

PC: C. Golf



Structure ID: SSMH AA-7

P1A MH048BAVF

MH BASE Custom Ht T/n

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 24"
- P1) 48" - MH BASE Custom Ht T/n - 25"
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) CASTING - HOE MC-350 F/C Sanitary
- 1) 48" - Conseal CS-102 1.00" (Double)
- 2) PSX - 12-08 NYLO
- 3) MH Step ML-10-TDS-NCR - 10"

0 lb
 1550 lb
 2981 lb
 1440 lb
 0 lb
 0 lb
 305 lb
 0 lb
 16 lb
 0 lb

 Structure Total: 6292 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-350 F/C) SHIPPED LOOSE.

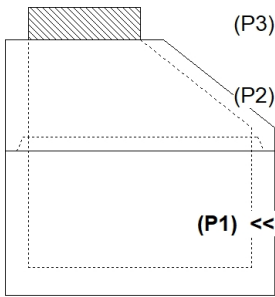
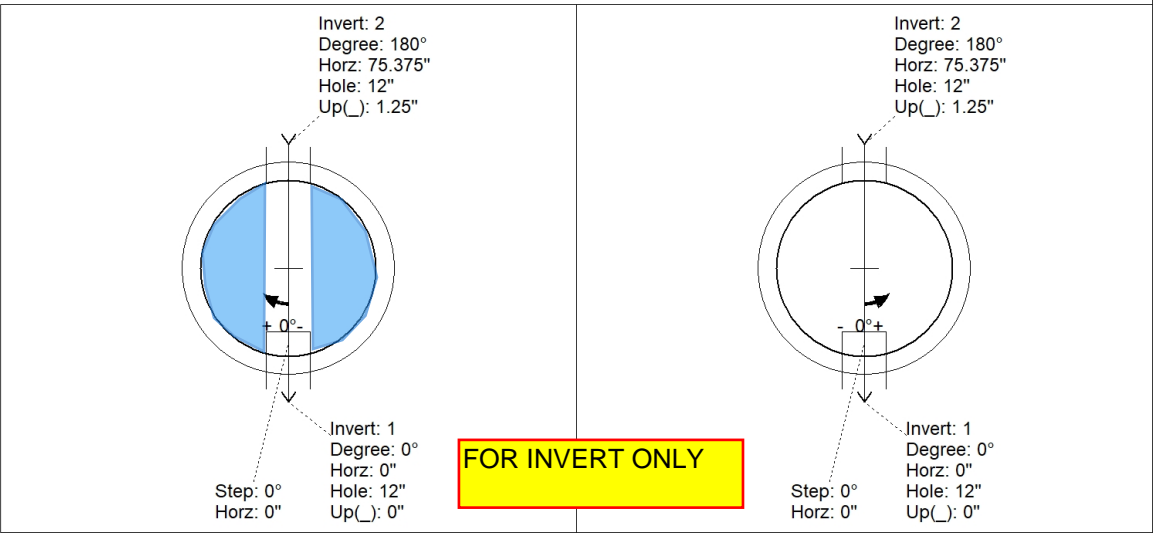
REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 908.96' Rim to Invert: 4.5' Slack: 0" Sump: 2" Step Position: 0°

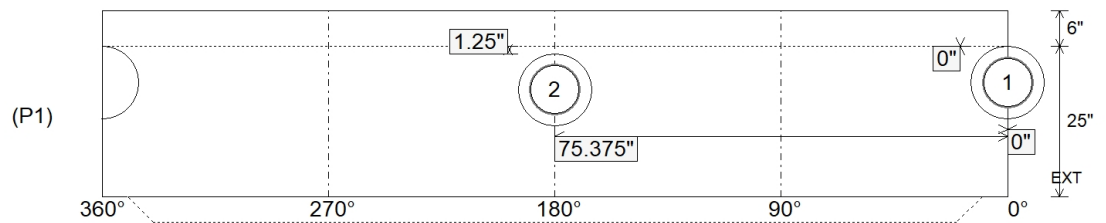
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	904.46'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	904.56'	180°	91.125"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 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: 5"
 Floor Height: 6"

Height (Int): 25"
 Height (Ext): 31"

Weight (Net): 2981 lb
 Volume (Net): 0.76cu.yd

Job Name: 26-1952 - HCWD 2 Fire Station Sanitary Sewer Extension
 Job Location: Glendale, KY
 Contractor: Phillips Bros. Construction, LLC

Plant: 100

5/27/2026 10:49:03 AM

Tech: J. Horsley

PC: T. Ryan



Structure ID: A SS-MHD

P3 MH048RS36SCDARED

MH RISER w/DROP/ConBlock-CDA Red T/G

- P6) 24" - CASTING HEIGHT - 7"
- P5) 24" - GRADE RING w/ConBlock-CDA Red F/F - 4"
- P4) 48" - MH FLAT TOP w/24" Hole ECC w/ConBlock-CDA Red F/G - 12"
- P3) 48" - MH RISER w/DROP/ConBlock-CDA Red T/G - 36"
- P2) 48" - MH RISER w/DROP/ConBlock-CDA Red T/G - 48"
- P1) 48" - MH BASE w/DROP/ConBlock-CDA Red T/n - 30"
- 1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT
- 1) CASTING - HOE MC-315 F/C Sanitary
- 3) 48" - Conseal CS-102 1.00" (Double)
- 1) PSX - 12-08 NYLO
- 1) Drop Elbow - 8" PVC
- 1) Drop Tee - 8" PVC
- 9) MH Step ML-10-TDS-NCR - 10"

- 0 lb
- 270 lb
- 1580 lb
- 2491 lb
- 3353 lb
- 3354 lb
- 0 lb
- 0 lb
- 1440 lb
- 258 lb
- 0 lb
- 8 lb
- 0 lb
- 0 lb
- 0 lb

Structure Notes:

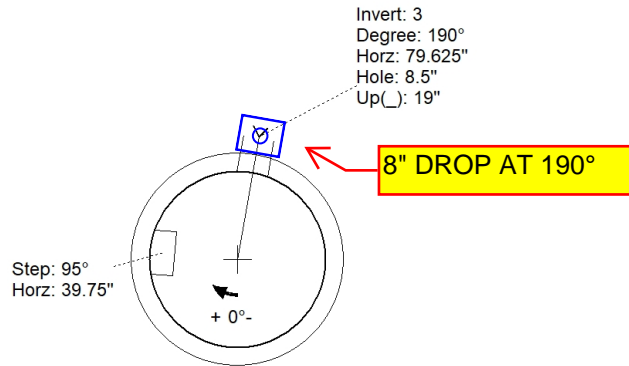
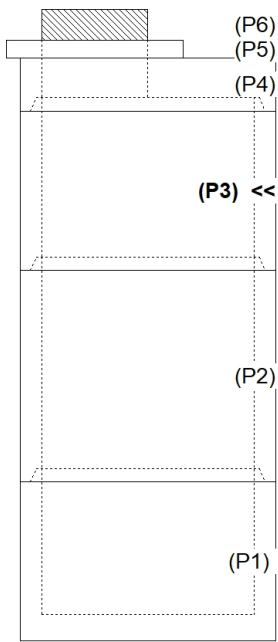
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY OTHERS (HOE MC-315 F/C SANITARY).
4. EXTERERIOR DROPE ASSEMBLY AT 190°

REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB = H20 LOADING.
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

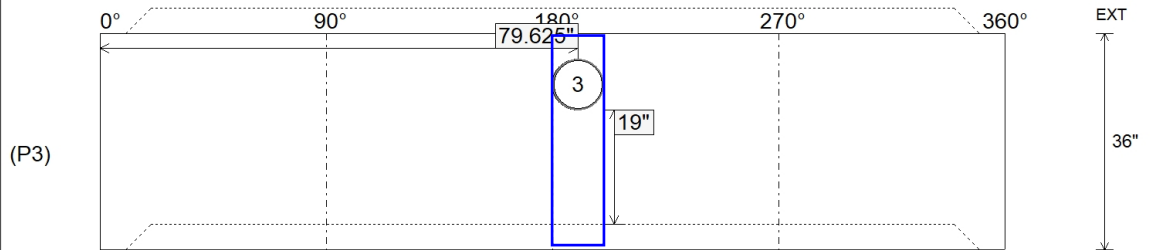
Rim: 723.5' Rim to Invert: 11.29' Slack: 1.48" Sump: 3" Structure Total: 12754 lb Step Position: 95°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1										
Invert 2										
Invert 3	720.42'	190°	96.125"	8" PVC SDR26	8.5"	Drop Tee 8" PVC	8.5"	8.545"	19"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: Groove	Wall Thickness: 5" Floor Height: 0"	Height (Int): 36" Height (Ext): 36"	Weight (Net): 2491 lb Volume (Net): 0.64cu.yd
----------------------------------	------------------------------------	--	--	--

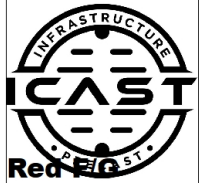
Job Name: 26-1952 - HCWD 2 Fire Station Sanitary Sewer Extension
 Job Location: Glendale, KY
 Contractor: Phillips Bros. Construction, LLC

Plant: 100

5/27/2026 10:50:12 AM

Tech: J. Horsley

PC: T. Ryan



Structure ID: A SS-MHD

P4 MH048LD12CDARED

MH FLAT TOP w/24" Hole ECC w/ConBlock-CDA Red F/G

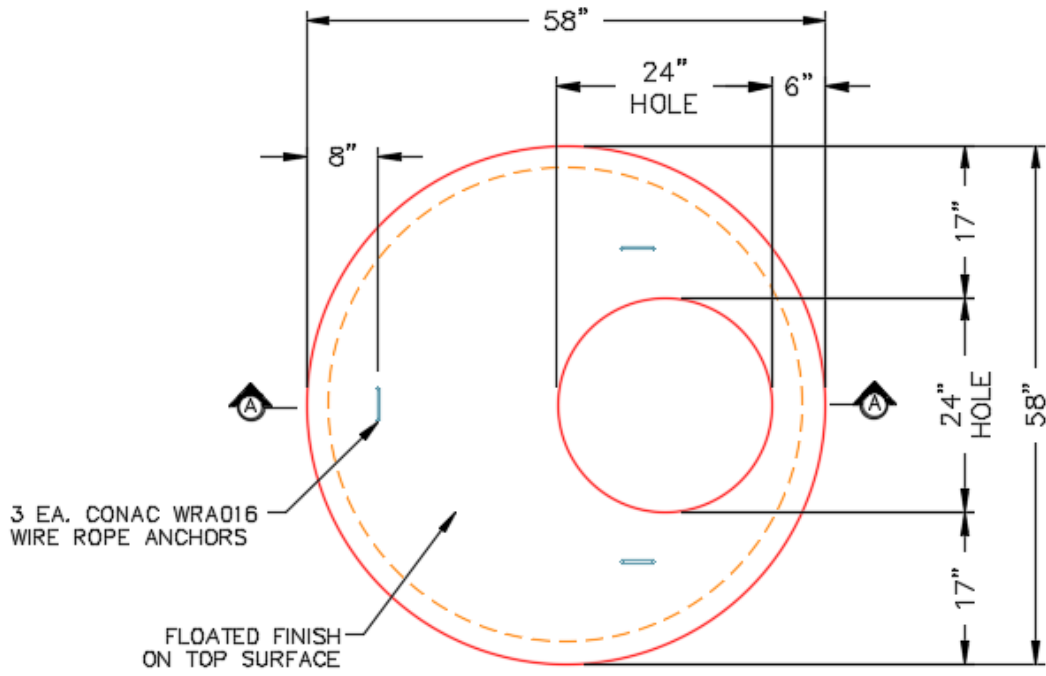
- P6) 24" - CASTING HEIGHT - 7"
- P5) 24" - GRADE RING w/ConBlock-CDA Red F/F - 4"
- P4) 48" - MH FLAT TOP w/24" Hole ECC w/ConBlock-CDA Red F/G - 12"
- P3) 48" - MH RISER w/DROP/ConBlock-CDA Red T/G - 36"
- P2) 48" - MH RISER w/DROP/ConBlock-CDA Red T/G - 48"
- P1) 48" - MH BASE w/DROP/ConBlock-CDA Red T/n - 30"
- 1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT
- 1) CASTING - HOE MC-315 F/C Sanitary
- 3) 48" - Conseal CS-102 1.00" (Double)
- 1) PSX - 12-08 NYLO
- 1) Drop Elbow - 8" PVC
- 1) Drop Tee - 8" PVC
- 9) MH Step ML-10-TDS-NCR - 10"

0 lb
 270 lb
 1580 lb
 2491 lb
 3353 lb
 3354 lb
 0 lb
 0 lb
 1440 lb
 258 lb
 0 lb
 8 lb
 0 lb
 0 lb
 0 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. CASTING BY OTHERS (HOE MC-315 F/C SANITARY).
 4. EXTERERIOR DROPE ASSEMBLY AT 190°

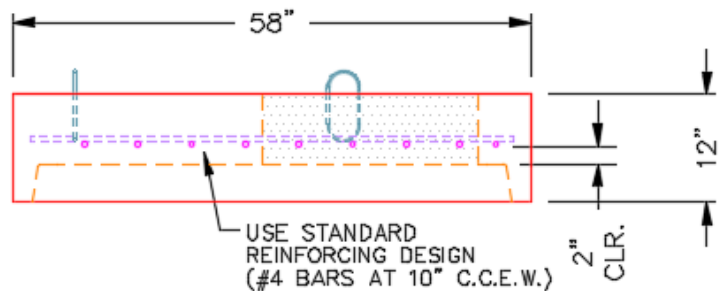
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB = H20 LOADING.
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Structure Total: 12754 lb



PLAN VIEW

CONBLOCK-CDA RED ADMIXTURE REQUIRED



SECTION A-A

Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 5"	Height (Ext): 12"	Weight (Net): 1580 lb Volume (Net): 0.39cu.yd
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Job Name: 26-1952 - HCWD 2 Fire Station Sanitary Sewer Extension
 Job Location: Glendale, KY
 Contractor: Phillips Bros. Construction, LLC

Plant: 100

Tech: J. Horsley

5/27/2026 10:39:33 AM

PC: T. Ryan



Structure ID: C SS-MH

P1 MH048BA30CDARED

MH BASE w/ConBlock-CDA Red T/n

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - MH FLAT TOP w/24" Hole ECC w/ConBlock-CDA Red F/G - 12"
- P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 30"
- 1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT
- 1) CASTING - HOE MC-315 F/C Sanitary
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) 24" - Conseal CS-102 1.00" (Double)
- 2) PSX - 12-08 NYLO
- 2) MH Step ML-10-TDS-NCR - 10"

0 lb
 1580 lb
 3330 lb
 0 lb
 0 lb
 1440 lb
 258 lb
 0 lb
 0 lb
 16 lb
 0 lb

 Structure Total: 6624 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. ADMIXTURE = CONBLOCK CDA RED.
4. CASTING ICAST (HOE MC-315 F/C SANITARY)

REINFORCING PER ASTM A615 (GRADE 60).

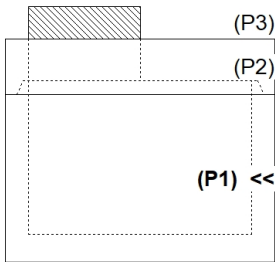
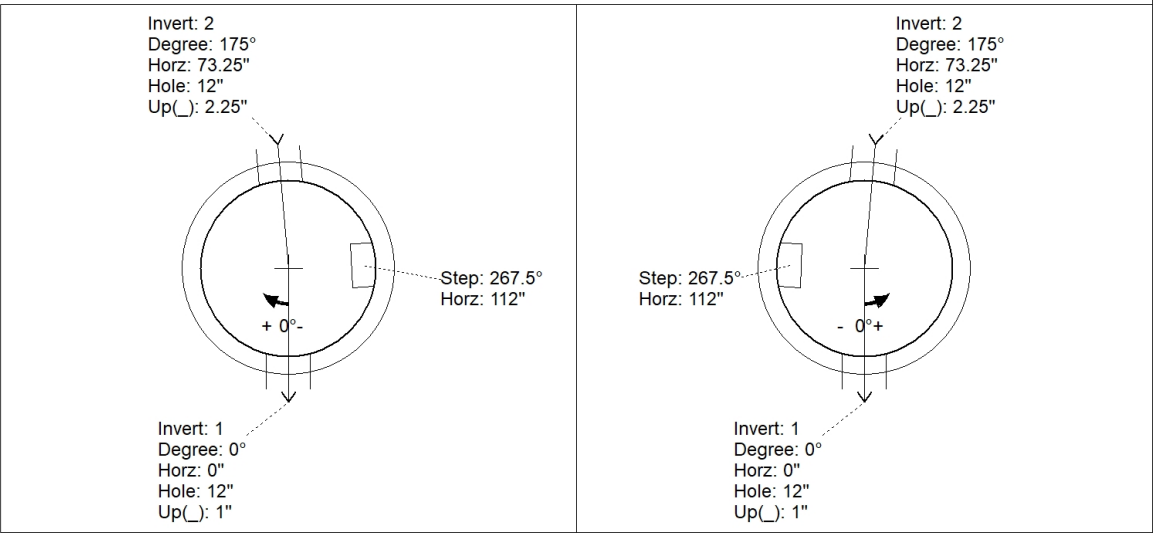
- TOP SLAB = H20 LOADING.
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 732.9' Rim to Invert: 4' Slack: 2" Sump: 3" Step Position: 267.5°

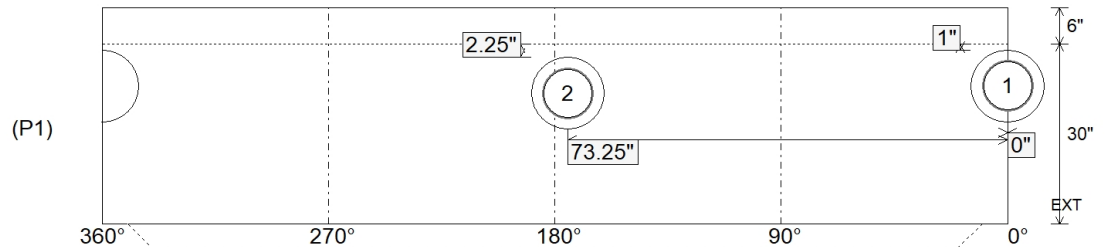
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	728.9'	0°	0"	8" PVC SDR26	8.5"	PSX 12-08 NYLO	12"	12.129"	1"	0"
Invert 2	729'	175°	88.625"	8" PVC SDR26	8.5"	PSX 12-08 NYLO	12"	12.129"	2.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
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: 5"
 Floor Height: 6"

Height (Int): 30"
 Height (Ext): 36"

Weight (Net): 3330 lb
 Volume (Net): 0.85cu.yd

Job Name: 26-1952 - HCWD 2 Fire Station Sanitary Sewer Extension
 Job Location: Glendale, KY
 Contractor: Phillips Bros. Construction, LLC

Plant: 100

Tech: J. Horsley

5/27/2026 10:39:33 AM

PC: T. Ryan



Structure ID: C SS-MH

P1A MH048BA30CDARED

MH BASE w/ConBlock-CDA Red T/n

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - MH FLAT TOP w/24" Hole ECC w/ConBlock-CDA Red F/G - 12"
- P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 30"
- 1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT
- 1) CASTING - HOE MC-315 F/C Sanitary
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) 24" - Conseal CS-102 1.00" (Double)
- 2) PSX - 12-08 NYLO
- 2) MH Step ML-10-TDS-NCR - 10"

- 0 lb
- 1580 lb
- 3330 lb
- 0 lb
- 0 lb
- 1440 lb
- 258 lb
- 0 lb
- 0 lb
- 16 lb
- 0 lb
-
- Structure Total: 6624 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. ADMIXTURE = CONBLOCK CDA RED.
4. CASTING ICAST (HOE MC-315 F/C SANITARY)

REINFORCING PER ASTM A615 (GRADE 60).

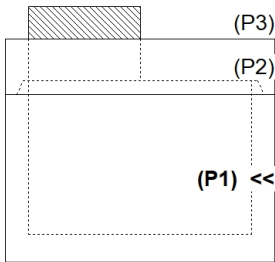
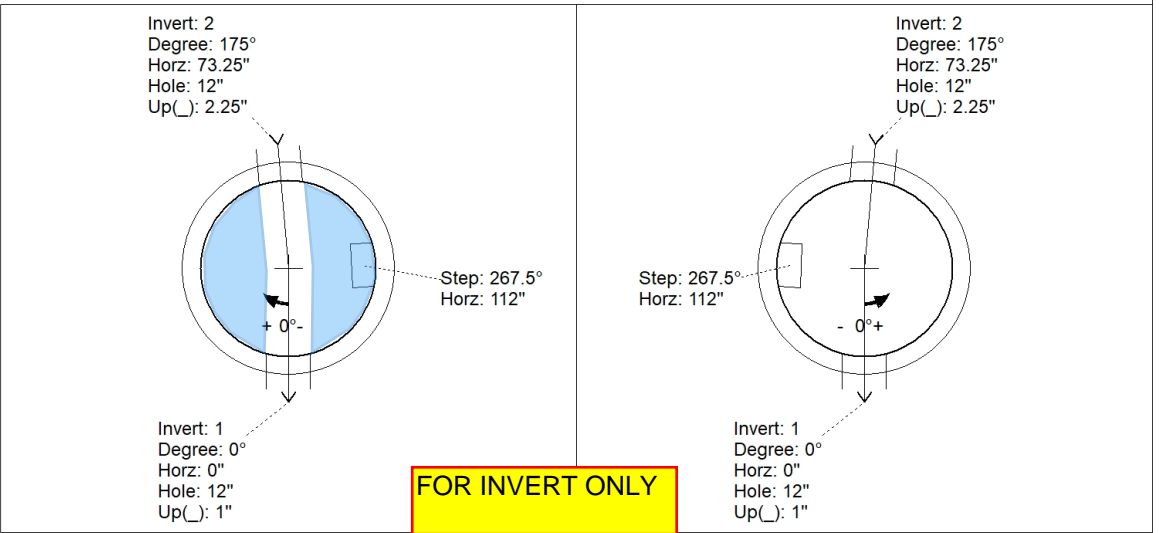
- TOP SLAB = H20 LOADING.
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 732.9' Rim to Invert: 4' Slack: 2" Sump: 3" Step Position: 267.5°

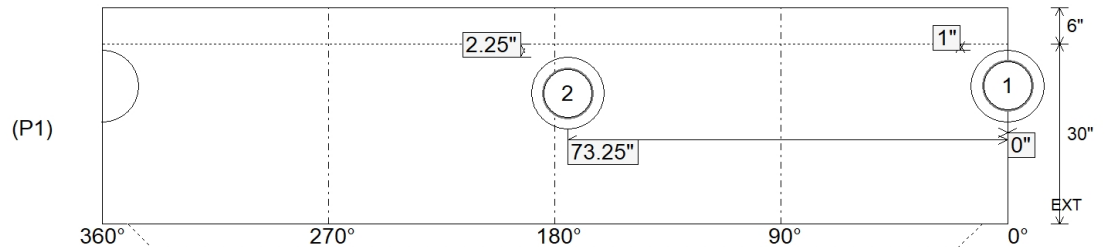
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	728.9'	0°	0"	8" PVC SDR26	8.5"	PSX 12-08 NYLO	12"	12.129"	1"	0"
Invert 2	729'	175°	88.625"	8" PVC SDR26	8.5"	PSX 12-08 NYLO	12"	12.129"	2.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
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: 5"
Floor Height: 6"

Height (Int): 30"
Height (Ext): 36"

Weight (Net): 3330 lb
Volume (Net): 0.85cu.yd

Structure ID: D SS-MH

P1 MH048BA24CDARED

MH BASE w/ConBlock-CDA Red T/n

P3) 24" - CASTING HEIGHT - 7" P2) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30" P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 24" 1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT 1) CASTING - HOE MC-315 F/C Sanitary 1) 48" - Conseal CS-102 1.00" (Double) 1) 24" - Conseal CS-102 1.00" (Double) 2) PSX - 12-08 NYLO 5) MH Step ML-10-TDS-NCR - 10"	0 lb 1961 lb 2911 lb 0 lb 0 lb 1440 lb 258 lb 0 lb 0 lb 16 lb 0 lb ----- Structure Total: 6586 lb
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Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. ADMIXTURE = CONBLOCK CDA RED.
4. CASTING BY OTHERS (HOE MC-315 F/C SANITARY)

REINFORCING PER ASTM A615 (GRADE 60).

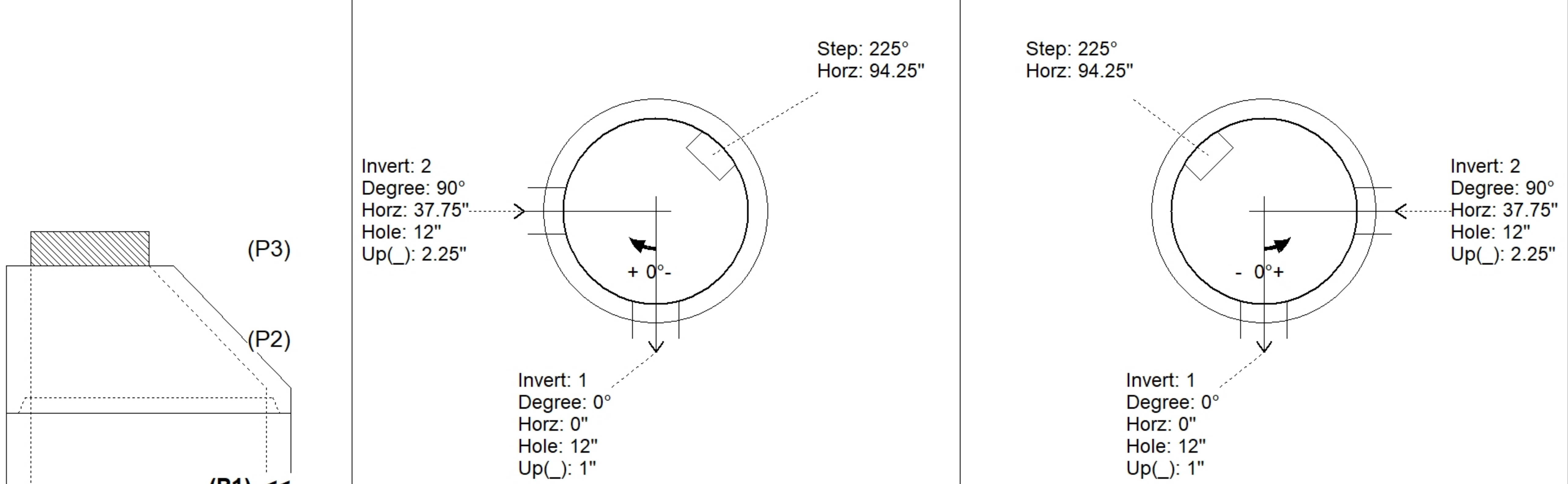
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 736.2' Rim to Invert: 5' Slack: 2" Sump: 3" Step Position: 225°

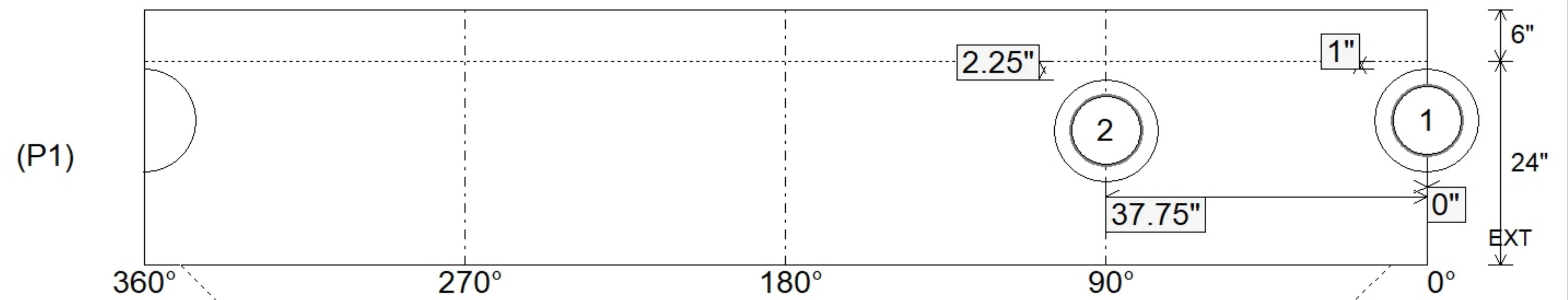
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	731.2'	0°	0"	8" PVC SDR26	8.5"	PSX 12-08 NYLO	12"	12.129"	1"	0"
Invert 2	731.3'	90°	45.5"	8" PVC SDR26	8.5"	PSX 12-08 NYLO	12"	12.129"	2.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
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: 5" Floor Height: 6"	Height (Int): 24" Height (Ext): 30"	Weight (Net): 2911 lb Volume (Net): 0.74cu.yd
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Job Name: 26-1227 - Project Colt
 Job Location: Evansville, IN
 Contractor: Russell's Excavating

Plant: 100
 5/12/2026 11:30:52 AM

Tech: Jared - F
 PC: A. Chambers



Structure ID: 301-8 MHC

P2 MH048LD12ECC

MH FLAT LID w/24in ECC Hole F/G

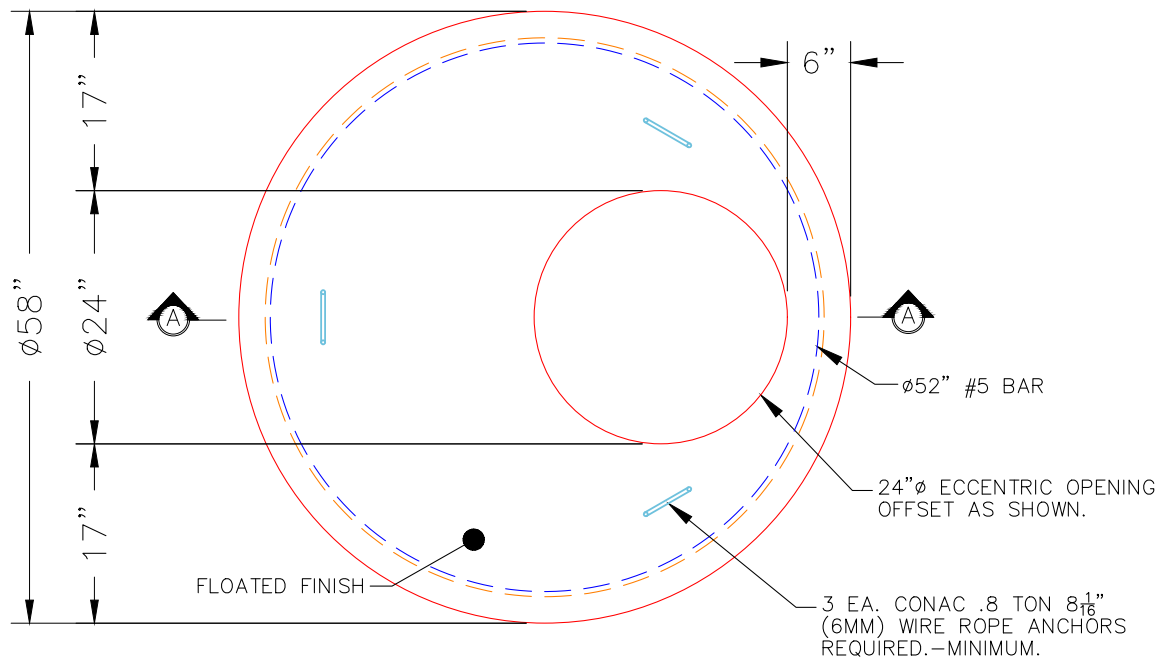
- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - MH FLAT LID w/24in ECC Hole F/G - 12"
- P1) 48" - MH BASE T/n - 36"
- 1) CASTING - HOE MC-315 F/C Storm
- 1) 48" - Conseal CS-102 1.00"
- 2) Hole - 24
- 3) MH Step ML-10-TDS-NCR - 10"

0 lb
 1561 lb
 3451 lb
 258 lb
 0 lb
 0 lb
 0 lb

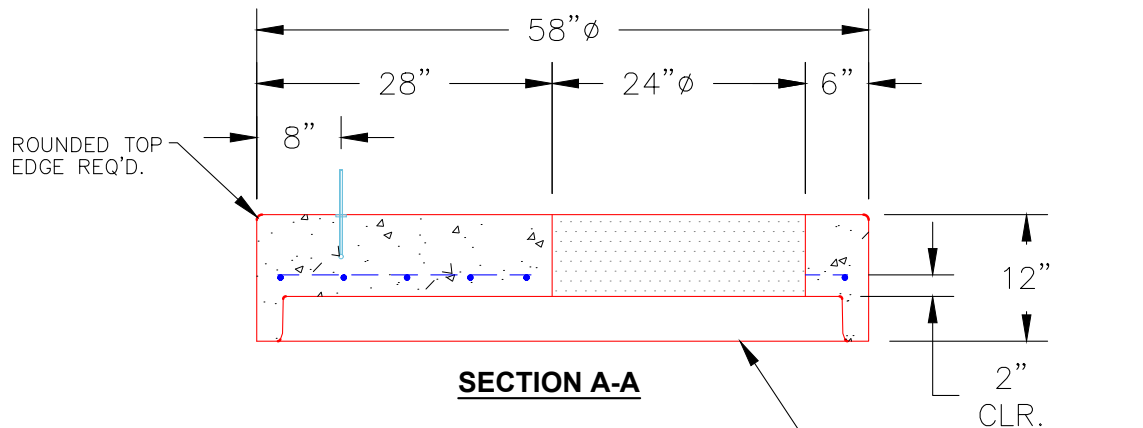
 Structure Total: 5270 lb

- Structure Notes:**
1. INDOT MH TYPE C / ASTM C478 SPEC'S.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE MC-315 F/C STORM).

REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .12)
 - FLOOR (As .62) #5 BARS AT 6" C.C.E.W.



PLAN VIEW



SECTION A-A

NOTES:

1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" O.C. E.W. (GRADE 60).

Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 5"	Height (Ext): 12"	Weight (Net): 1561 lb Volume (Net): 0.4cu.yd
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Job Name: 26-1227 - Project Colt
 Job Location: Evansville, IN
 Contractor: Russell's Excavating

Plant: 100
 5/12/2026 11:30:52 AM

Tech: Jared - F
 PC: A. Chambers



Structure ID: 302-7 MHC

P2 MH048LD07-24X36RECT

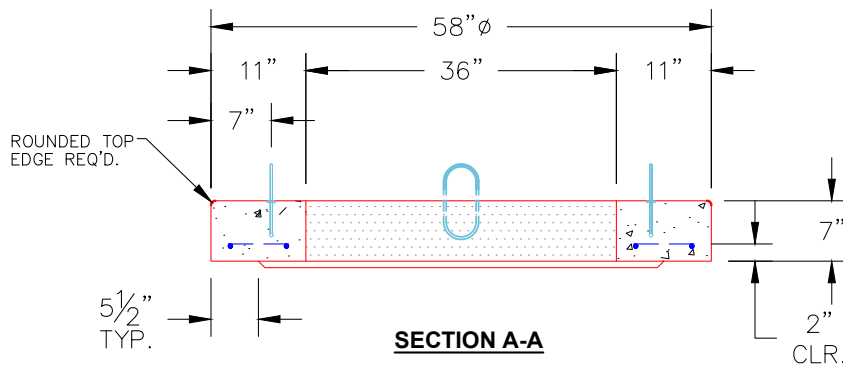
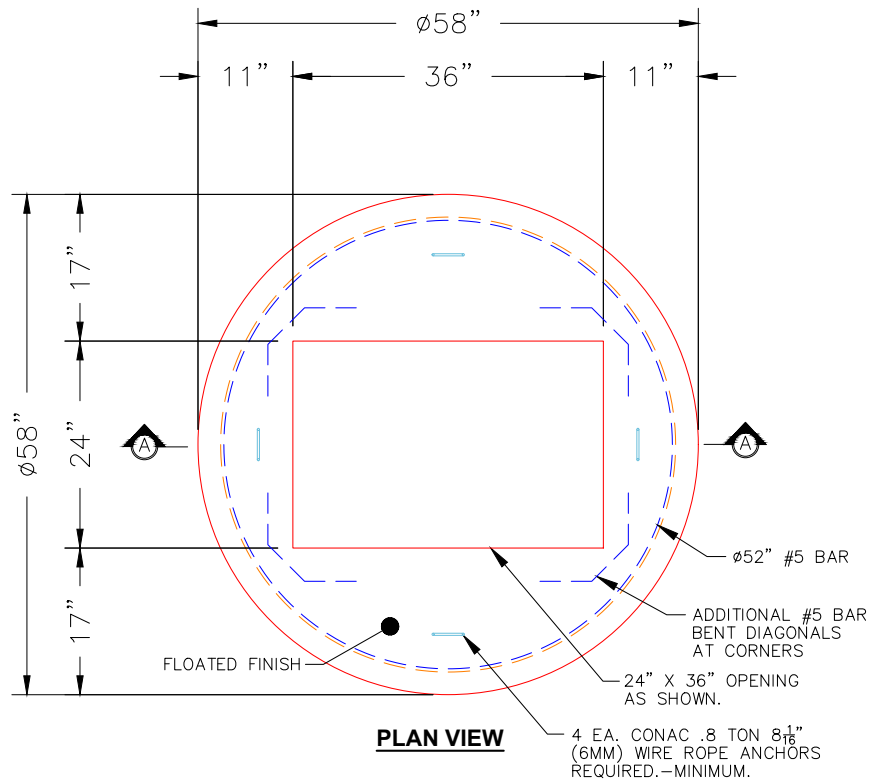
MH FLAT TOP w/24"x36" Hole F/F

- P3) 24" x 36" - CASTING HEIGHT - 4"
- P2) 48" - MH FLAT TOP w/24"x36" Hole F/F - 7"
- P1) 48" - MH BASE Custom Ht F/n - 69"
- 1) CASTING - HOE 518 F/G
- 1) 48" - Conseal CS-102 1.00"
- 1) 24" x 36" - Conseal CS-102 1.00"
- 2) Hole - 24
- 1) Hole - 16
- 2) Hole - 6
- 6) MH Step ML-10-TDS-NCR - 10"

0 lb
 1044 lb
 5646 lb
 354 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb
 Structure Total: 7045 lb

Structure Notes:
 1. INDOT MH TYPE C / ASTM C478 SPEC'S.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE 518 F/G).

 REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .12)
 - FLOOR (As .62) #5 BARS AT 6" C.C.E.W.



NOTES:

- 1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
- 2. CONCRETE: 4,000 PSI AT 28 DAYS.
- 3. REINFORCING: #5 BAR @ 6" O.C. E.W. (GRADE 60).

Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Flat	Wall Thickness: 5"	Height (Ext): 7"	Weight (Net): 1044 lb Volume (Net): 0.27cu.yd
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Job Name: 25-4508 - Georgetown Commons Target
 Job Location: Georgetown, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/28/2026 11:25:32 AM

Tech: Jared - F
 PC: A. Chambers



Structure ID: 10 (13)

P1 MH060BAVF

MH BASE Custom Ht T/n

- P3) 24" x 36" - CASTING HEIGHT - 6"
- P2) 60" - MH FLAT TOP w/24"x36" Hole F/G - 13"
- P1) 60" - MH BASE Custom Ht T/n - 55"
- 1) CASTING - HOE 470 SET LV (F/G/H)
- 1) 60" - Conseal CS-102 1.00"
- 1) 24" x 36" - Conseal CS-102 1.00"
- 2) Hole - 38"

0 lb
 3499 lb
 7255 lb
 394 lb
 0 lb
 0 lb
 0 lb

 Structure Total: 11148 lb

- Structure Notes:**
1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS AND NO INVERT CHANNEL..
 4. CASTING BY ICAST (HOE 470 SET LV (F/G/H)).

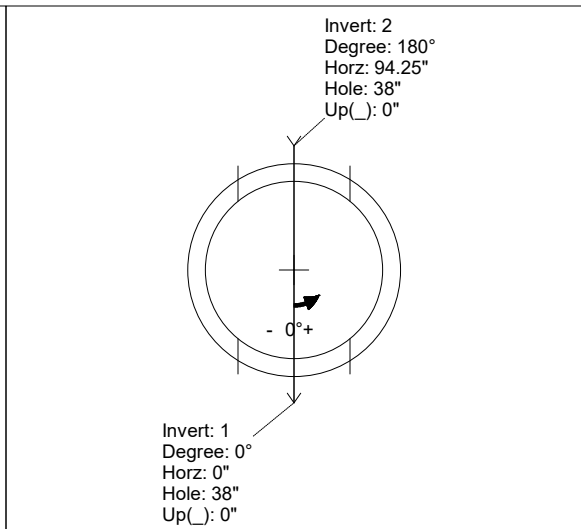
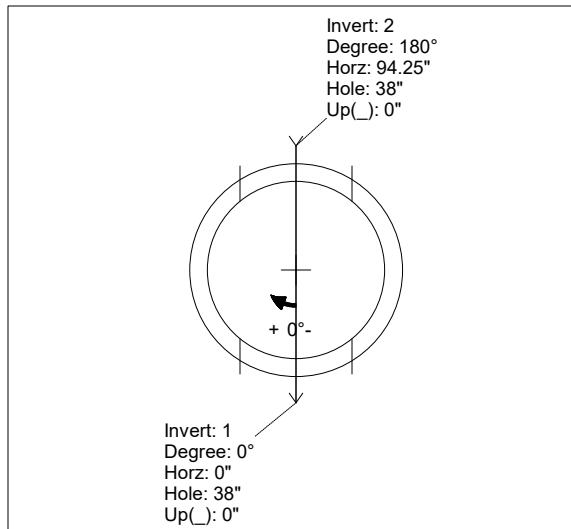
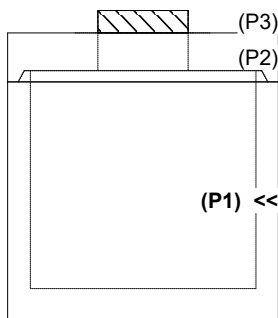
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .18)
 - FLOOR (As .37) #5 BARS AT 10" C.C.E.W.

Rim: 871' Rim to Invert: 6' Slack: 0.55" Sump: 2.55" Step Position:

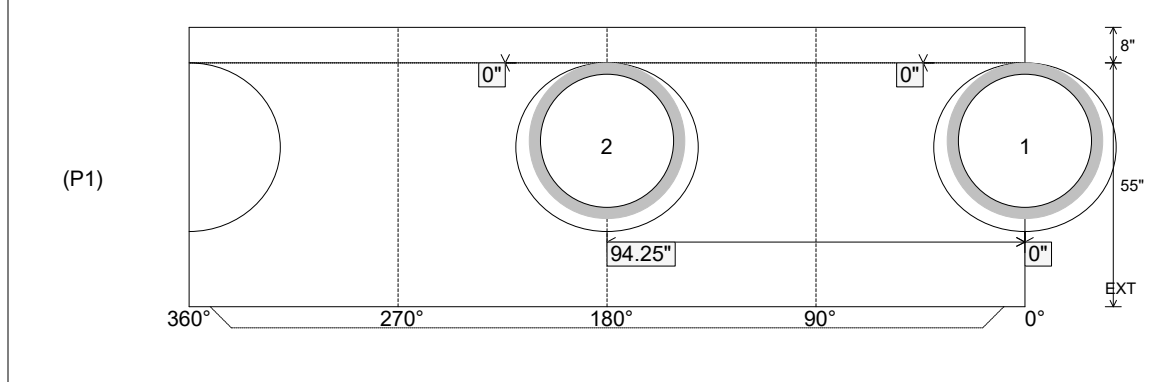
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	865'	0°	0"	30" HDPE	35.1"	Hole 38	38"	41.151"	0"	0"
Invert 2	865'	180°	113.125"	30" HDPE	35.1"	Hole 38	38"	41.151"	0"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
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: 6" Floor Height: 8"	Height (Int): 55" Height (Ext): 63"	Weight (Net): 7255 lb Volume (Net): 1.85cu.yd
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Job Name: 26-1227 - Project Colt
 Job Location: Evansville, IN
 Contractor: Russell's Excavating

Plant: 100
 5/12/2026 11:30:17 AM

Tech: Jared - F
 PC: A. Chambers



Structure ID: 102-12 MHJ

P1 MH060BA66

MH BASE T/n

- P5) 24" - CASTING HEIGHT - 8"
- P4) 48" - MH FLAT LID w/24in ECC Hole F/G - 12"
- P3) 48" - MH RISER T/G - 72"
- P2) 60" - MH Transition Slab 48" Hole T/G - 15"
- P1) 60" - MH BASE T/n - 66"
- 1) HOE R-3472 INDOT Type 2 Frame & Grate
- 1) 60" - Conseal CS-102 1.00"
- 2) 48" - Conseal CS-102 1.00"
- 2) Hole - 44
- 2) Hole - 6
- 11) MH Step ML-10-TDS-NCR - 10"

0 lb
 1561 lb
 5006 lb
 2204 lb
 7940 lb
 250 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb

 Structure Total: 16961 lb

Structure Notes:
 1. INDOT MH TYPE J / ASTM C478 SPEC'S.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE R-3472 INDOT TYPE 2 FRAME & GRATE).

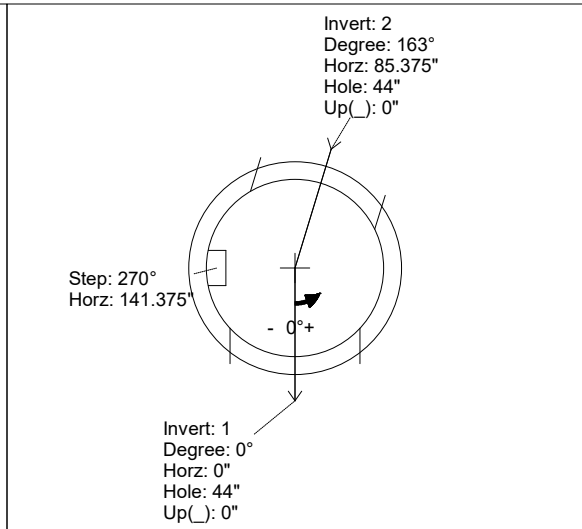
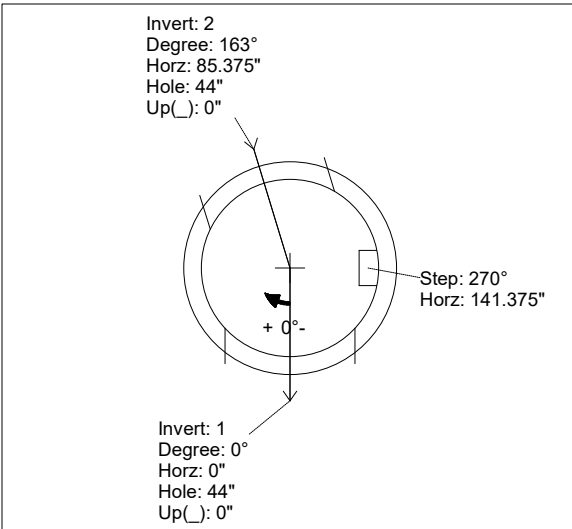
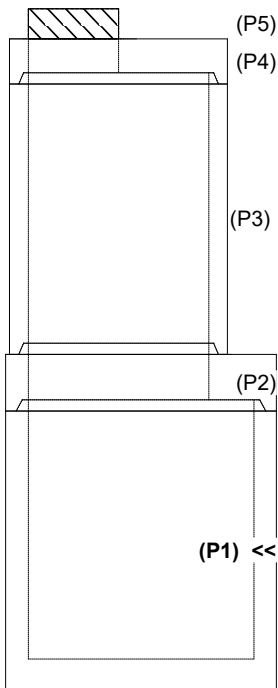
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .12)
 - TRANS. SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .18)
 - FLOOR (As .62) #5 BARS AT 6" C.C.E.W.

Rim: 393.02' Rim to Invert: 14.22' Slack: 0.515" Sump: 2.875" Step Position: 270°

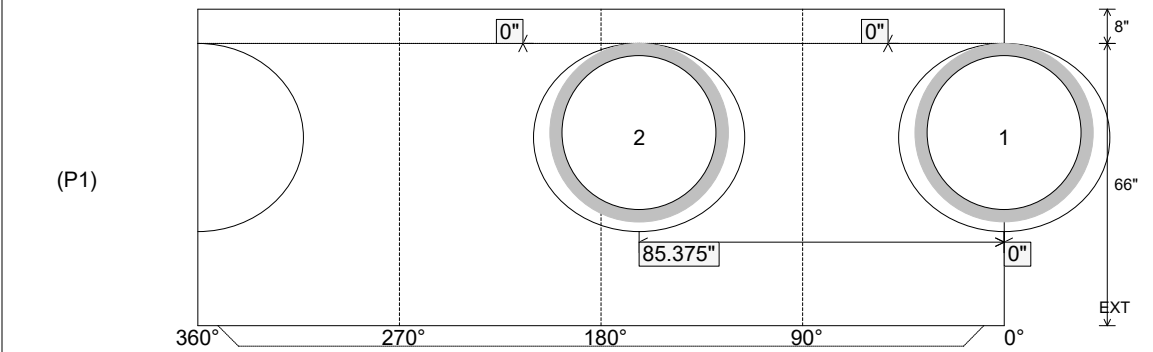
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (↓)	Offset
Invert 1	378.8'	0°	0"	36" HDPE	41.7"	Hole 44	44"	49.393"	0"	0"
Invert 2	378.8'	163°	102.375"	36" HDPE	41.7"	Hole 44	44"	49.393"	0"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
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: 6" Floor Height: 8"	Height (Int): 66" Height (Ext): 74"	Weight (Net): 7940 lb Volume (Net): 2.03cu.yd
----------------------------------	---------------------------------	--	--	--

Job Name: 25-3118 - W6 Ph 2-C Force Main Improvements
 Job Location: Fort Mitchell, KY 41017
 Contractor: Lykins Contracting

Plant: 100

Tech: J. Horsley - A

3/27/2026 11:39:52 AM

PC: Celina Goff



Structure ID: 2301542

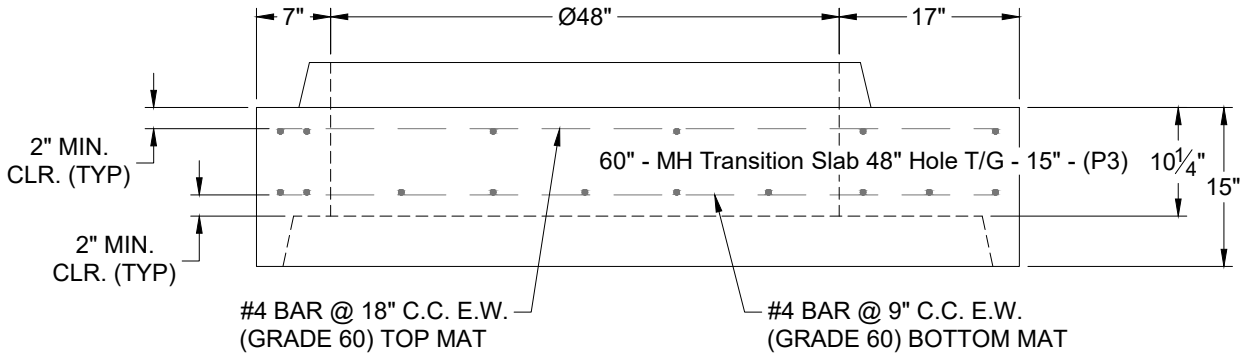
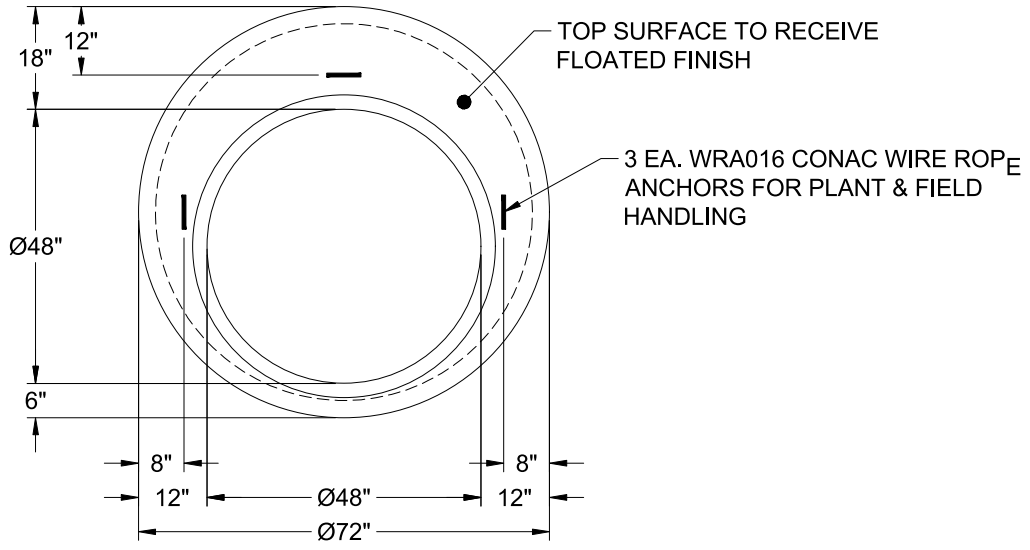
P3 MH060TS15-48ECC

MH Transition Slab 48" Hole T/G

P6) 24" - CASTING HEIGHT - 7"	0 lb
P5) 48" - CON CONE w/24" HOLE F/G - 24"	2252 lb
P4) 48" - MH RISER T/G - 48"	3353 lb
P3) 60" - MH Transition Slab 48" Hole T/G - 15"	2204 lb
P2) 60" - MH RISER w/DROP T/G - 60"	6235 lb
P1) 60" - MH BASE (10"F) w/DROP Custom Ht T/n - 59"	11159 lb
1) 60" - MH INVERT CHANNEL - FULL HEIGHT	2692 lb
1) SECONDARY POUR - Add Exterior Drop to Base (P1)	2967 lb
1) SECONDARY POUR - Add Exterior Drop to Riser (P2)	2580 lb
2) 60" - Conseal CS-102 1.00" (Double)	0 lb
2) 48" - Conseal CS-102 1.00" (Double)	0 lb
2) A-Lok - 1235	2 lb
1) Drop Tee - 8" PVC	0 lb
1) Drop Elbow - 8" PVC	0 lb
16) MH Step ML-10-TDS-NCR - 10"	0 lb

Structure Total:	33444 lb

- Structure Notes:
- PER ASTM C-478 SPECIFICATIONS
 - CONCRETE: 4,000 PSI AT 28 DAYS
 - REINFORCEMENT - 2" MIN. REBAR CLEARANCE (TYP):
 - TOP MAT: #4 BAR @ 18" C.C. E.W. (GRADE 60)
 - BOTTOM MAT: #4 BAR @ 9" C.C. E.W. (GRADE 60)
 - 7" CASTING SUPPLIED BY OTHERS
 - LIFTERS: 3 EA. WRA016 CONAC WIRE ROPE ANCHORS FOR PLANT & FIELD HANDLING
 - TOP SURFACE TO RECEIVE FLOATED FINISH



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: Groove	Wall Thickness: 6"	Height (Ext): 15"	Weight (Net): 2204 lb Volume (Net): 0.56cu.yd
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Job Name: 25-3118 - W6 Ph 2-C Force Main Improvements
 Job Location: Fort Mitchell, KY 41017
 Contractor: Lykins Contracting

Plant: 100

3/27/2026 11:40:56 AM

Tech: J. Horsley - A

PC: Celina Goff



Structure ID: 2301566

P2 MH060TS15-48ECC

MH Transition Slab 48" Hole T/G

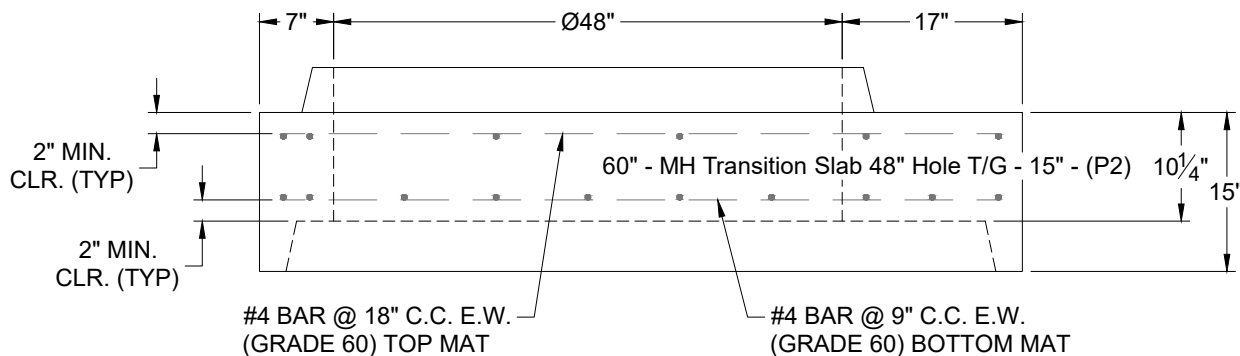
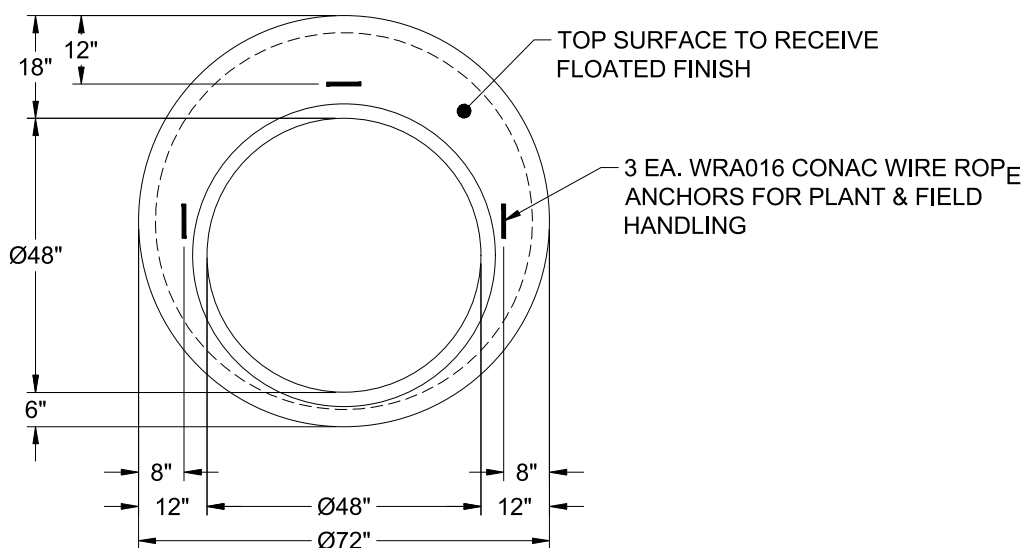
- P7) 24" - CASTING HEIGHT - 7"
- P6) 48" - CON CONE w/24" HOLE F/G - 24"
- P5) 48" - MH RISER T/G - 60"
- P4) 48" - MH RISER T/G - 60"
- P3) 48" - MH RISER T/G - 60"
- P2) 60" - MH Transition Slab 48" Hole T/G - 15"
- P1) 60" - MH BASE (12"F) Custom Ht T/n - 66"
- 1) 60" - MH INVERT CHANNEL - FULL HEIGHT
- 1) 60" - Conseal CS-102 1.00" (Double)
- 4) 48" - Conseal CS-102 1.00" (Double)
- 2) A-Lok - 1235
- 22) MH Step ML-10-TDS-NCR - 10"

- 0 lb
- 2252 lb
- 4192 lb
- 4192 lb
- 4192 lb
- 2204 lb
- 9635 lb
- 2692 lb
- 0 lb
- 0 lb
- 2 lb
- 0 lb

Structure Total: 29360 lb

Structure Notes:

1. PER ASTM C-478 SPECIFICATIONS
2. CONCRETE: 4,000 PSI AT 28 DAYS
3. REINFORCEMENT - 2" MIN. REBAR CLEARANCE (TYP):
 - TOP MAT: #4 BAR @ 18" C.C. E.W. (GRADE 60)
 - BOTTOM MAT: #4 BAR @ 9" C.C. E.W. (GRADE 60)
4. 7" CASTING SUPPLIED BY OTHERS
5. LIFTERS: 3 EA. WRA016 CONAC WIRE ROPE ANCHORS FOR PLANT & FIELD HANDLING
6. TOP SURFACE TO RECEIVE FLOATED FINISH



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: Groove

Wall Thickness: 6"

Height (Ext): 15"

Weight (Net): 2204 lb
Volume (Net): 0.56cu.yd

Job Name: 25-2397B - Sandy Springs Section 2 Sanitary
 Job Location: Elizabethtown, KY 42701
 Contractor: Gary Clifford

Plant: 100

5/27/2026 2:56:17 PM

Tech: J. Horsley

PC: T. Lewis



Structure ID: MH 1

P4 MH072TS15-48ECC

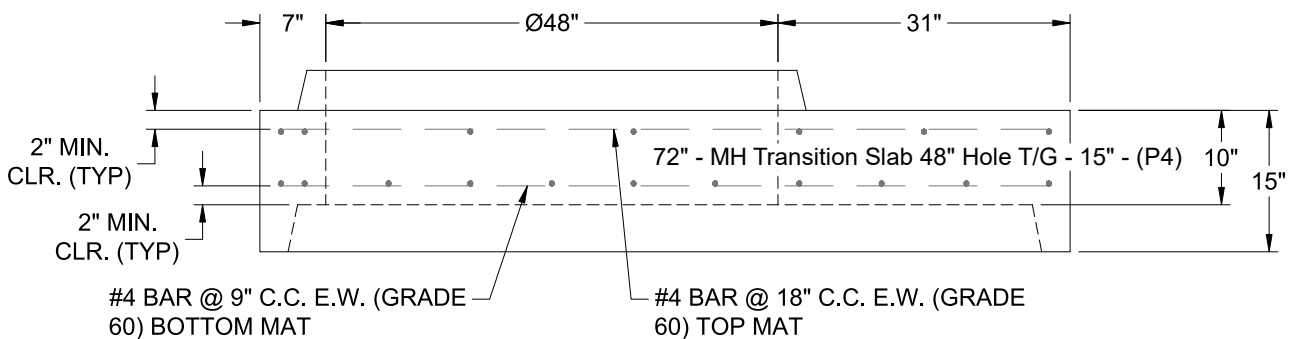
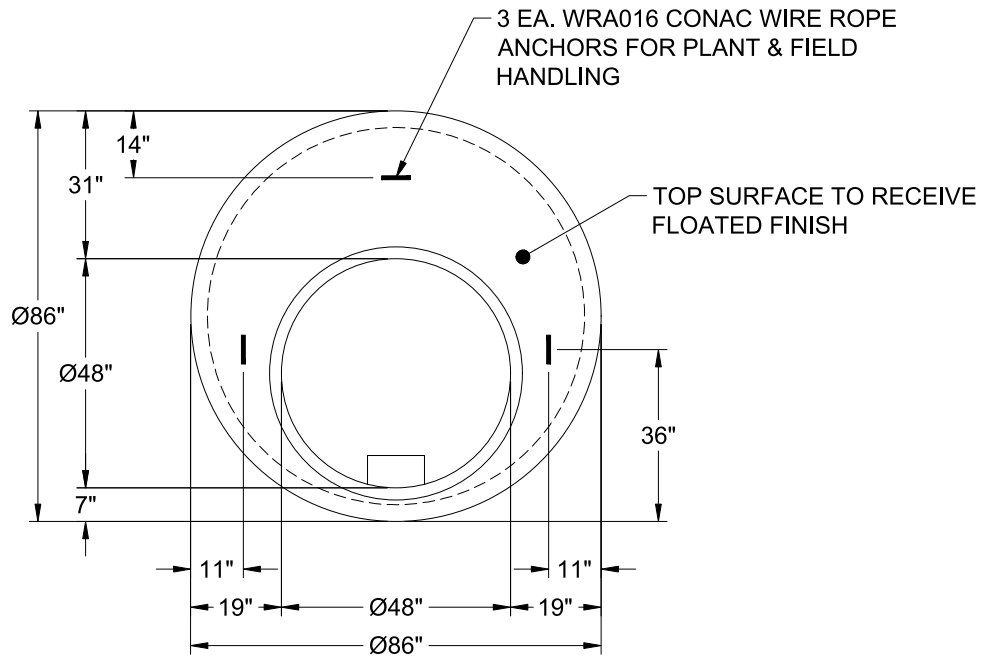
MH Transition Slab 48" Hole T/G

- P6) 24" - CASTING HEIGHT - 7"
- P5) 48" - ECC CONE w/ 24" HOLE F/G - 30"
- P4) 72" - MH Transition Slab 48" Hole T/G - 15"
- P3) 72" - MH RISER Custom Ht T/F - 64"
- P2) 72" - 18" x 12" x 84" Footer Block F/n - 12" (2 Ea.)
- P1) 72" - P.I.P. By Others - Pipe Backfill F/n - 31"
- 1) JOINT WRAP - 0.065"x6"x50" CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) CASTING - HOE MC-315 F/C Sanitary
- 1) 72" - Conseal CS-102 1.00" (Double)
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) 24" - Conseal CS-102 1.00" (Double)
- 2) DOGHOUSE - 62 x 19
- 1) PSX - 12-08 DD (DBL Bands)
- 9) MH Step ML-10-TDS-NCR - 10"

0 lb
2050 lb
3864 lb
8207 lb
3046 lb (1523 lb Ea.)
0 lb
0 lb
0 lb
258 lb
0 lb
0 lb
0 lb
0 lb
0 lb
8 lb
0 lb

Structure Total: 17425 lb

- Structure Notes:
1. PER ASTM C-478 SPECIFICATIONS
 2. CONCRETE: 4,000 PSI AT 28 DAYS
 3. REINFORCEMENT - 2" MIN. REBAR CLEARANCE (TYP):
 - TOP MAT: #4 BAR @ 18" C.C. E.W. (GRADE 60)
 - BOTTOM MAT: #4 BAR @ 9" C.C. E.W. (GRADE 60)
 4. STEPS REQUIRED
 5. HOE MC-315 FRAME & COVER "SANITARY" SUPPLIED BY ICAST
 6. LIFTERS: 3 EA. WRA016 CONAC WIRE ROPE ANCHORS FOR PLANT & FIELD HANDLING
 7. TOP SURFACE TO RECEIVE FLOATED FINISH



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: Groove	Wall Thickness: 7"	Height (Ext): 15"	Weight (Net): 3864 lb Volume (Net): 0.99cu.yd
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Job Name: 23-2404 Hampton Hills (Phase 1)	Plant: 100	Tech: J. Horsley	
Job Location: Richmond, KY	5/19/2026 1:01:03 PM	PC: C. Golf	
Contractor: Seven Earthmovers LLC			

Structure ID: CBI-B2

P2 BX2436-08R60

BOX RISER 8inW T/G

P4) 24" x 120" - CB INLET KY A 10' TOP SAG F/G - 10"	3398 lb
P3) 24" x 120" - CB INLET KY A 10' BOTTOM SAG T/G - 18"	5270 lb
P2) 24" x 36" - BOX RISER 8inW T/G - 60"	5867 lb
P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht T/n - 26"	4049 lb
1) CASTING - HOE KY-206 F/C (KY CBI A)	206 lb
1) SNOUT - BMP SNOUT 18F w/ KIT	25 lb
2) 24" x 36" - Conseal CS-102 1.00"	0 lb
1) Hole - 22	0 lb
Structure Total:	18815 lb

Structure Notes:

- PER KYTC CBI A / ASTM C913 SPEC'S.
- CONCRETE = 4,000 PSI AT 28 DAYS.
- CASTING (HOE KY-206) TO BE CAST INTO TOP PHASE.
- BMP SNOUT 18F w/KIT.

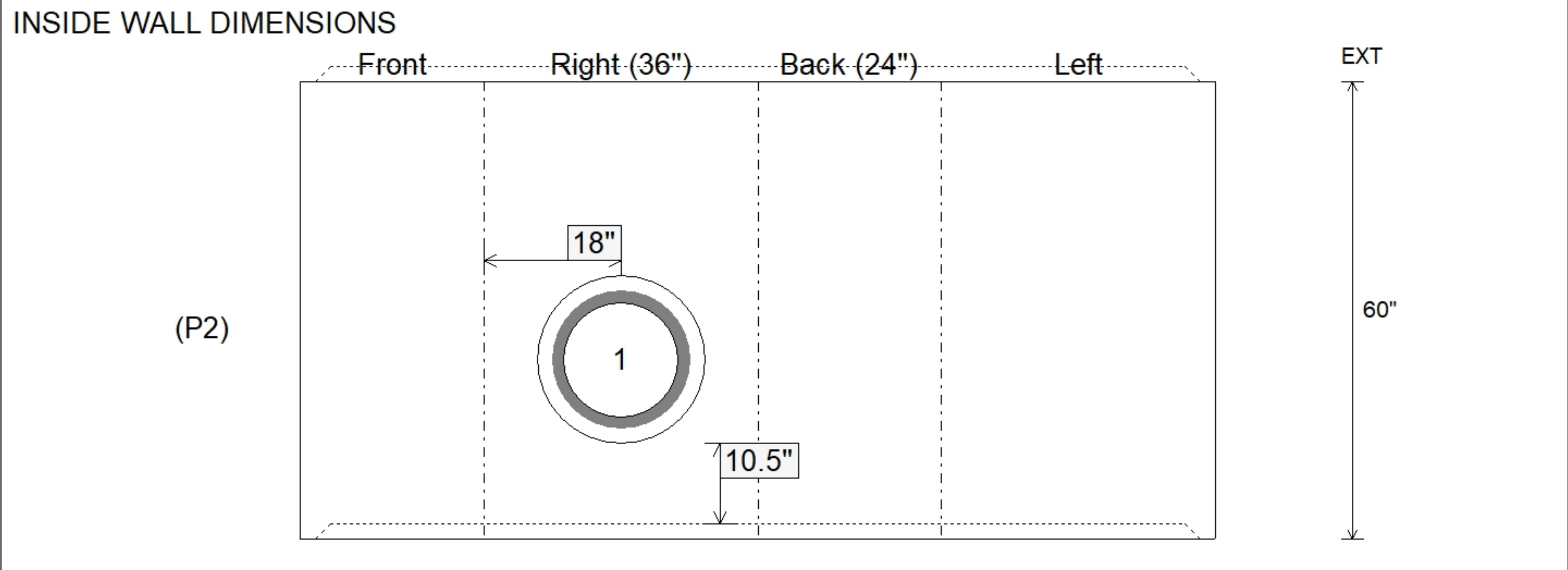
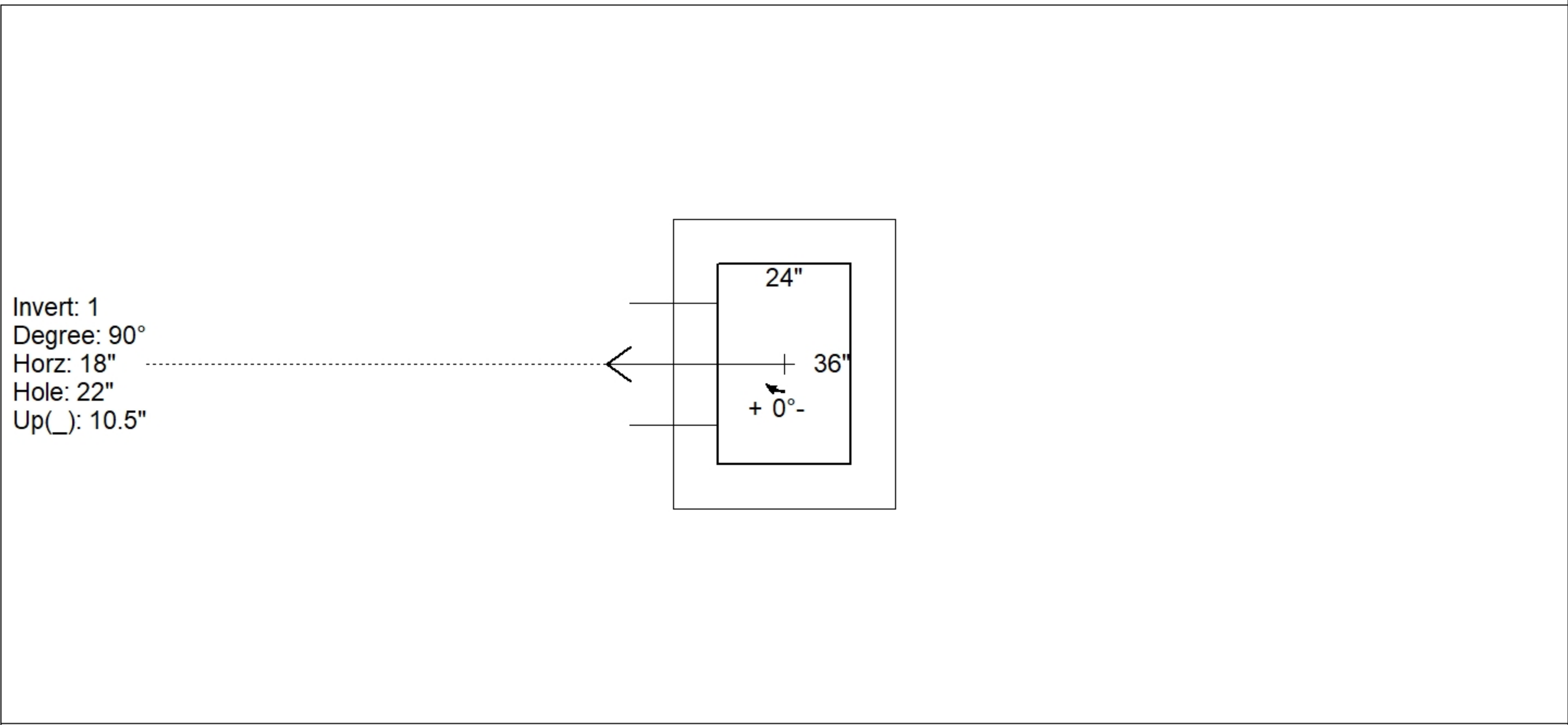
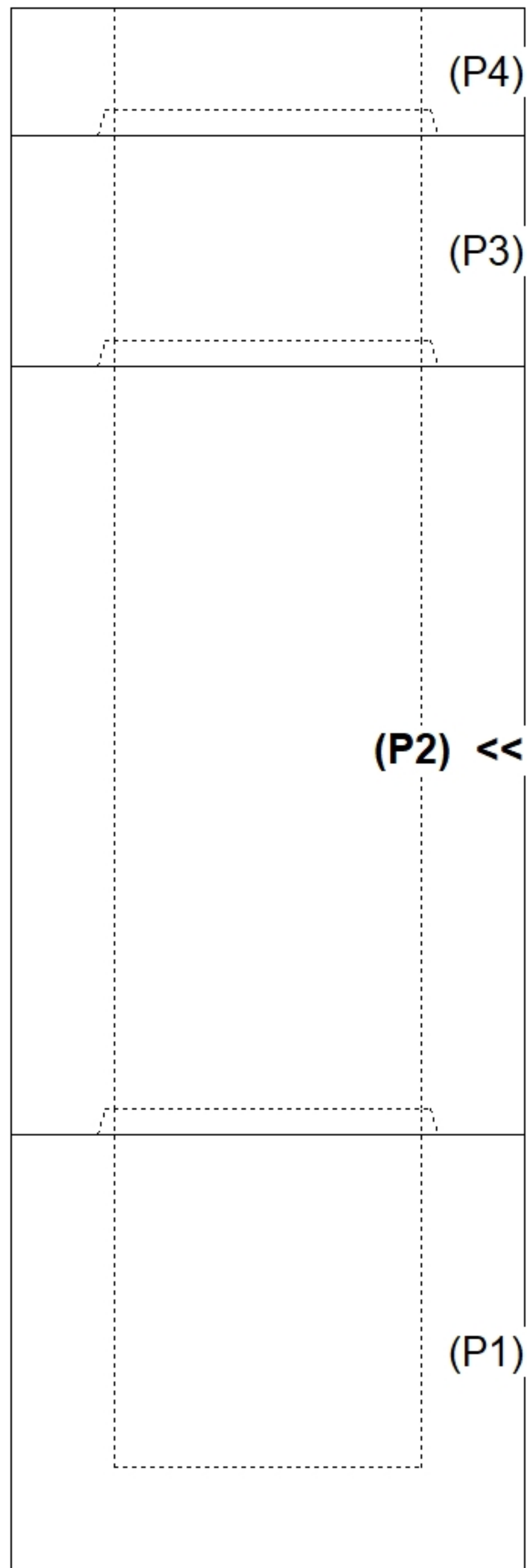
REINFORCING PER ASTM AS615 (GRADE 60).

- TOP PHASE (As .62) #5 BARS AT 6" C.C.E.W.
- BASE WALLS (As .31) #5 BARS AT 12" C.C.E.W.
- BASE FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 874.33' Rim to Invert: 6' Slack: 0" Sump: 42" Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	868.33'	90°	26"	15" ADS N-12	18"	Hole 22	22"	22"	10.5"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)



Coating (Int):	Seam Up: Tongue	Wall Thickness: 8"	Height (Int): 60"	Weight (Net): 5867 lb
Coating (Ext):	Seam Dn: Groove	Floor Height: 0"	Height (Ext): 60"	Volume (Net): 1.5cu.yd

Job Name: 25-4508 - Georgetown Commons Target
 Job Location: Georgetown, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 5/28/2026 11:25:42 AM

Tech: Jared - F
 PC: A. Chambers



Structure ID: 116 (32)

P1 BX2436-08BVF

BOX BASE 8inW, 8inF, Variable Ht F/n

- P2) 24" x 36" - CASTING HEIGHT - 6"
- P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht F/n - 44"
- 1) CASTING - HOE 470 SET LV (F/G/H)
- 1) 24" x 36" - Conseal CS-102 1.00"
- 1) Hole - 20
- 1) Hole - 16

0 lb
 5535 lb
 394 lb
 0 lb
 0 lb
 0 lb

 Structure Total: 5929 lb

- Structure Notes:**
1. PER ASTM C913 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS AND NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE 470 SET LV (F/G/H)).

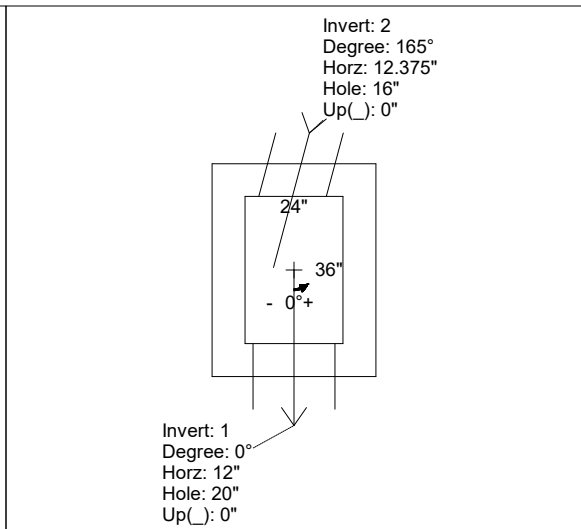
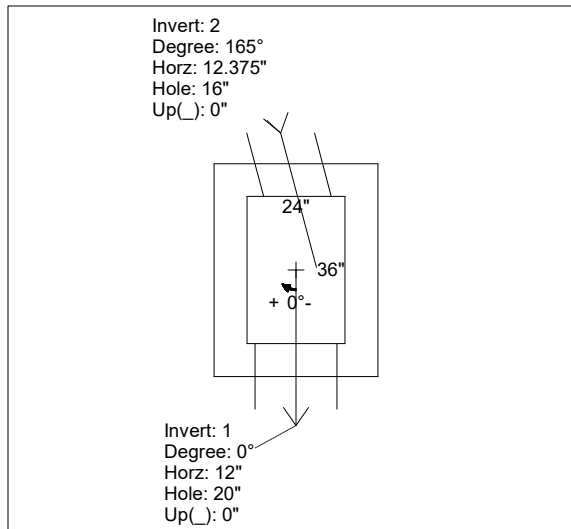
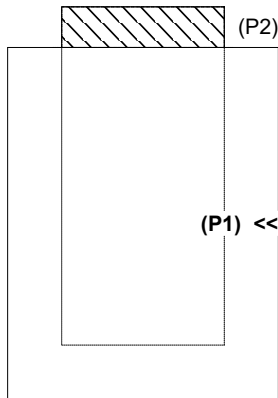
REINFORCING PER ASTM A615 (GRADE 60).
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

Rim: 872.85' Rim to Invert: 4.1' Slack: 0.45" Sump: 1.25" Step Position:

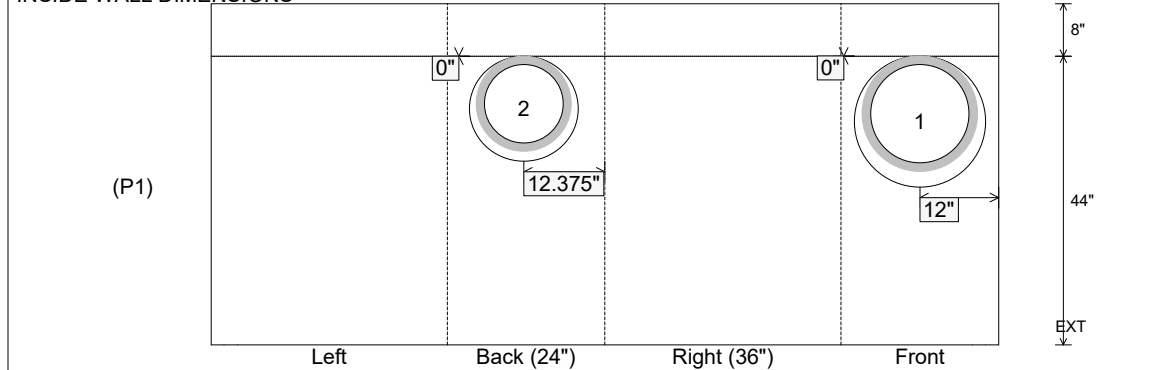
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	868.75'	0°	20"	15" HDPE	17.6"	Hole 20	20"	20"	0"	0"
Invert 2	868.75'	165°	18.25"	12" HDPE	14.5"	Hole 16	16"	16.564"	0"	5"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: n/a	Wall Thickness: 8" Floor Height: 8"	Height (Int): 44" Height (Ext): 52"	Weight (Net): 5535 lb Volume (Net): 1.41cu.yd
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Job Name: 26-1368 Freeman Lake Park Parking Lot Project	Plant: Beaver Dam	Tech: S. Felletter	
Job Location: Elizabethtown, KY Contractor: Kauffeld Brothers Construction	5/29/2026 8:39:15 AM	PC: T. Ryan	

Structure ID: CI #1-2 CBIF

P2 BX2424-08R24

BOX RISER 8inW F/G

P3) 24" x 24" - CASTING HEIGHT - 5"	0 lb
P2) 24" x 24" - BOX RISER 8inW F/G - 24"	2062 lb
P1) 24" x 24" - BOX BASE 8inW, 8inF, Variable Ht T/n - 43"	4281 lb
1) CASTING - HOE KY-465 SET (CBI TY F)	465 lb
2) 24" x 24" - Conseal CS-102 1.00"	0 lb
1) Hole - 20	0 lb
1) Hole - 22	0 lb
Structure Total:	6808 lb

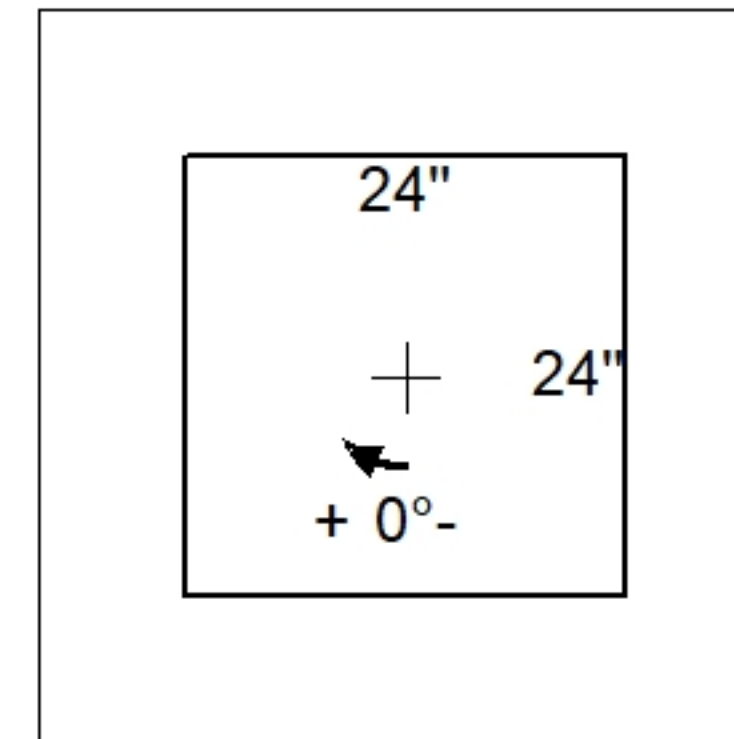
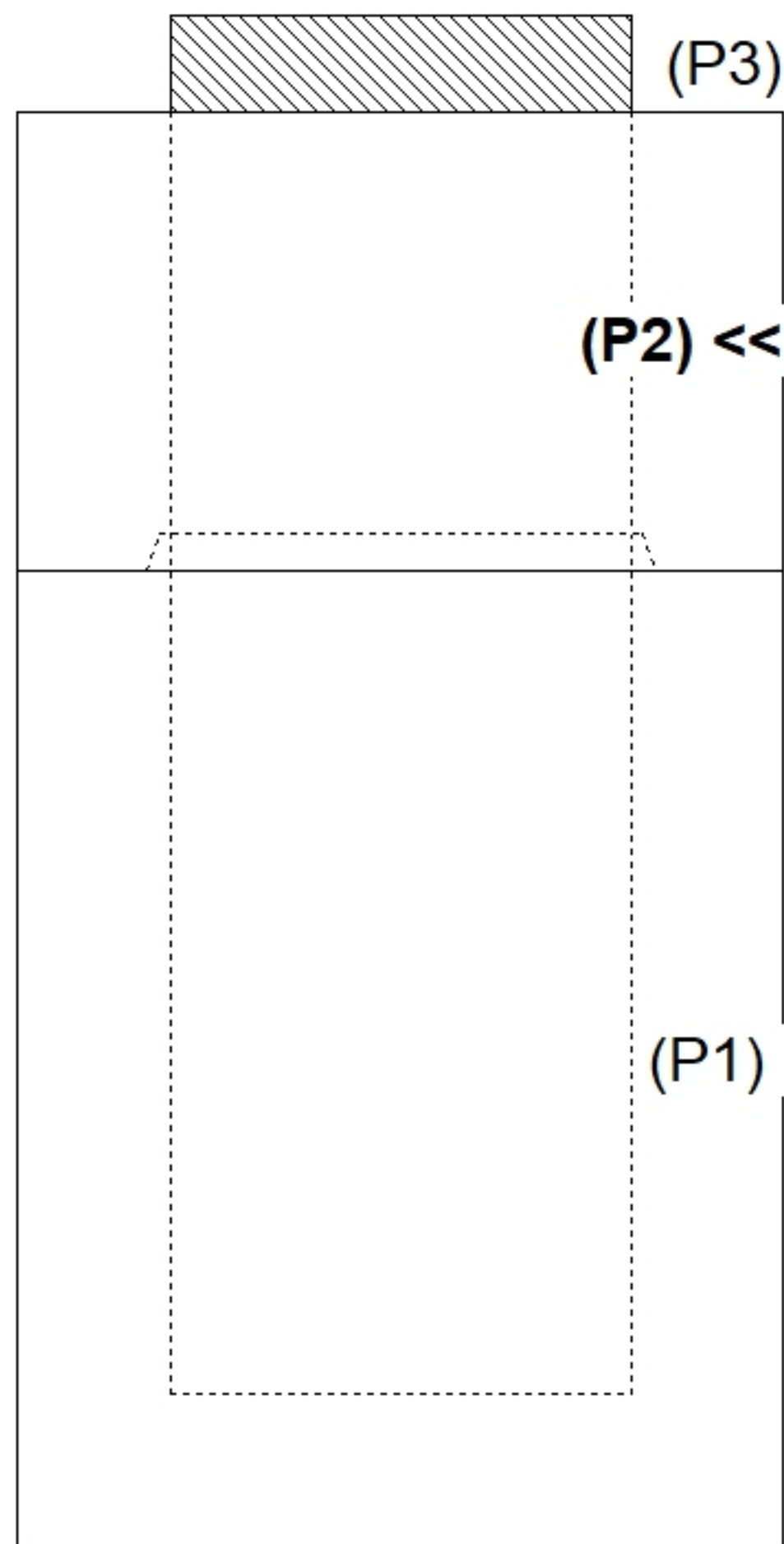
Structure Notes:
 1. KYTC CBI TYPE F / ASTM C913 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. CASTING BY ICAST (HOE KY-465 SET)

REINFORCING PER ASTM A615 (GRADE 60).
 - WALLS (As .31) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

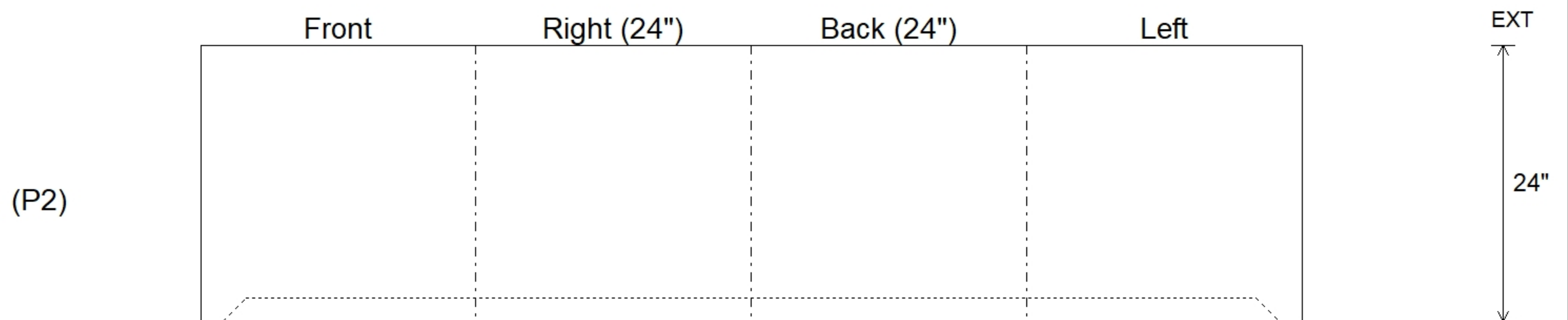
Rim: 761.62' Rim to Invert: 6' Slack: 0" Sump: 0" Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (L)	Offset
Invert 1										
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):	Seam Up: Flat	Wall Thickness: 8"	Height (Int): 24"	Weight (Net): 2062 lb
Coating (Ext):	Seam Dn: Groove	Floor Height: 0"	Height (Ext): 24"	Volume (Net): 0.53cu.yd

Job Name: 26-1368 Freeman Lake Park Parking Lot Project
 Job Location: Elizabethtown, KY
 Contractor: Kauffeld Brothers Construction

Plant: Beaver Dam
 5/28/2026 9:52:12 AM

Tech: S. Felletter
 PC: T. Ryan



Structure ID: YI #3-10 INE7

P2 BX3030-06R36

BOX RISER 6inW F/G

- P3) 30" x 30" - CASTING HEIGHT - 0"
- P2) 30" x 30" - BOX RISER 6inW F/G - 36"
- P1) 30" x 30" - BOX BASE 6inW, 8inF, Variable Ht T/n - 36"
- 1) HOE R-4215-C INDOT Type 7 Convex Grate
- 2) 30" x 30" - Conseal CS-102 1.00"
- 2) Hole - 24

0 lb
 2610 lb
 3339 lb
 250 lb
 0 lb
 0 lb

 Structure Total: 6199 lb

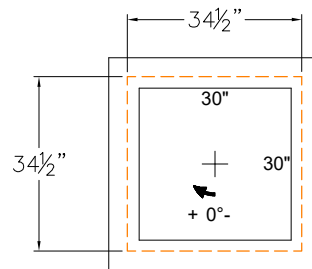
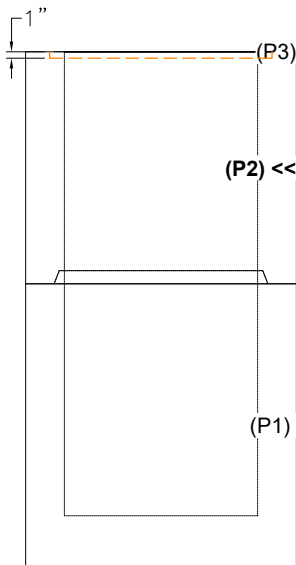
- Structure Notes:
1. INDOT INLET TYPE E / ASTM C913 SPEC'S.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO INVERT CHANNEL.
 4. CASTING BY ICAST (INDOT TYPE 7 R-4215-C).
 5. 34 1/2" X 34 1/2" X 1" DEEP RECESS IN THE TOP OF THE WALLS

REINFORCING PER ASTM A615 (GRADE 60).
 - WALLS (As .31) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

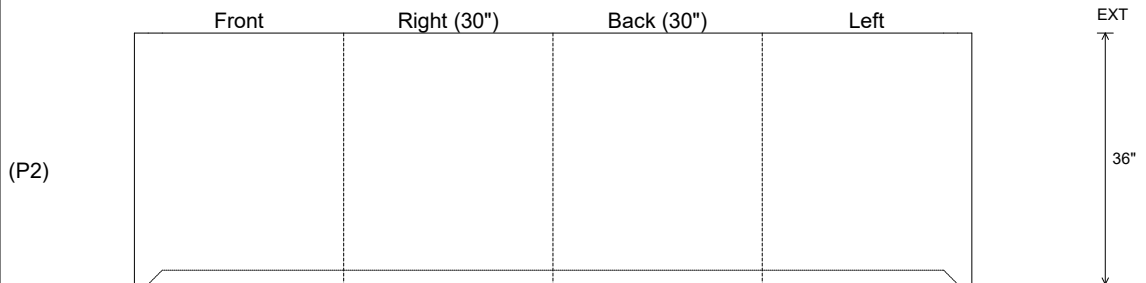
Rim: 772.25' Rim to Invert: 6' Slack: 0" Sump: 0" Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (L)	Offset
Invert 1										
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: Groove

Wall Thickness: 6"
 Floor Height: 0"

Height (Int): 36"
 Height (Ext): 36"

Weight (Net): 2610 lb
 Volume (Net): 0.67cu.yd

Job Name: 26-1368 Freeman Lake Park Parking Lot Project
 Job Location: Elizabethtown, KY
 Contractor: Kauffeld Brothers Construction

Plant: Beaver Dam
 5/29/2026 8:38:06 AM

Tech: S. Felletter
 PC: T. Ryan



Structure ID: JB #2-7 JBB

P1 BX24300808VF

BOX BASE 8inW, 8inF, Variable Ht T/n

- P4) CASTING (cast in) - 0
- P3) 24" x 30" - BX FLAT LID 8inW SPEC. (KY JB-B1) F/F - 8"
- P2) 24" x 30" - BOX RISER 8inW F/G - 42"
- P1) 24" x 30" - BOX BASE 8inW, 8inF, Variable Ht T/n - 28"
- 1) CASTING - HOE KY-206 F/C (KY TY1)
- 1) This Structure Includes a Cast-in Item
- 2) 24" x 30" - Conseal CS-102 1.00"
- 1) 24" - Conseal CS-102 1.00"
- 1) Hole - 26
- 1) DOGHOUSE INVRTD - 24"x24"

0 lb
 931 lb
 3676 lb
 3510 lb
 206 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb

 Structure Total: 8324 lb

Structure Notes:
 1. KYTC JUNCTION BOX B1 / PER ASTM C913 SPEC'S.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. TOP SLAB w KYTC TYPE 1 F/C CAST FLUSH.
 4. CASTING BY ICAST (HOE KY-206 F/C). CAST-IN.

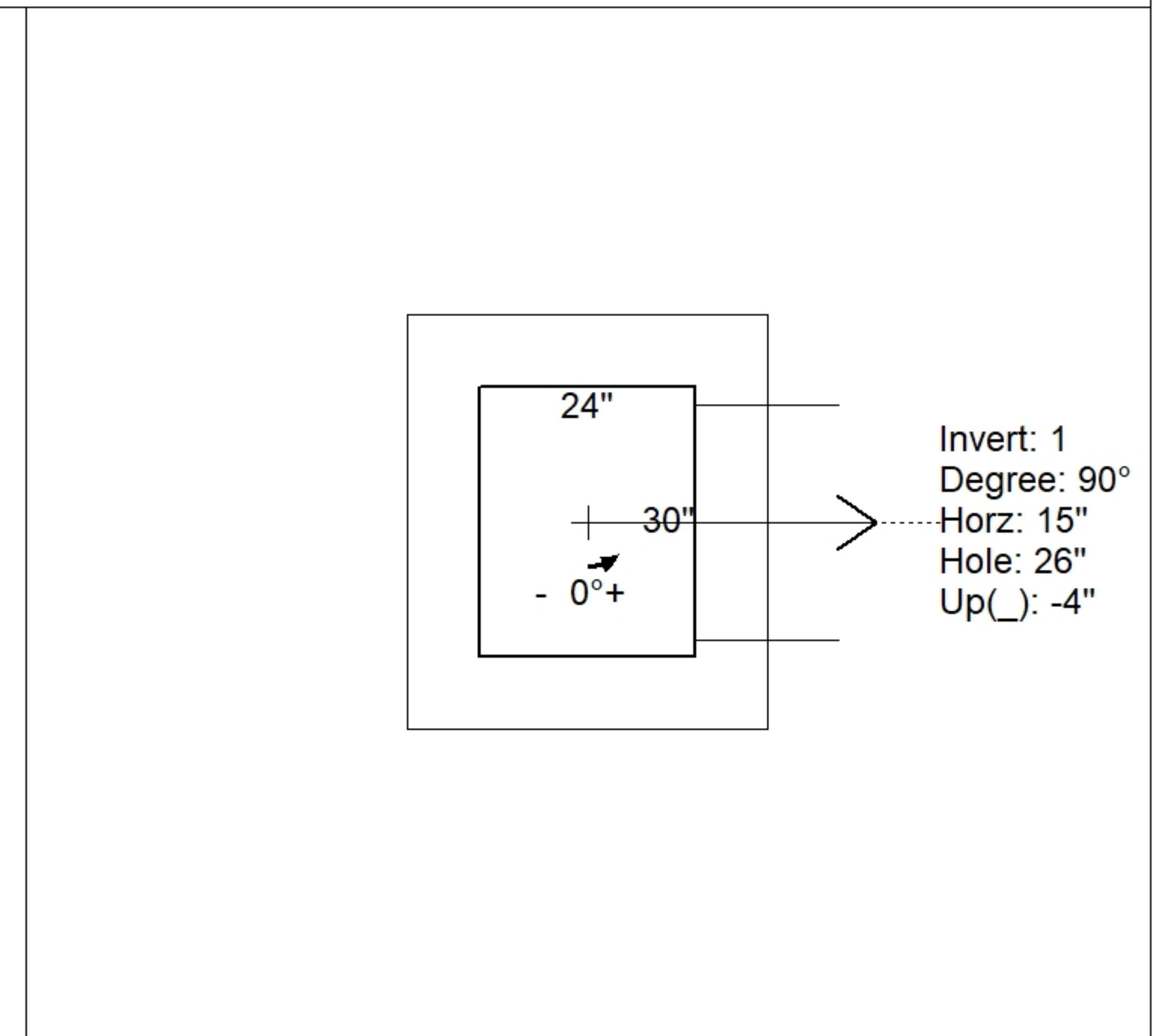
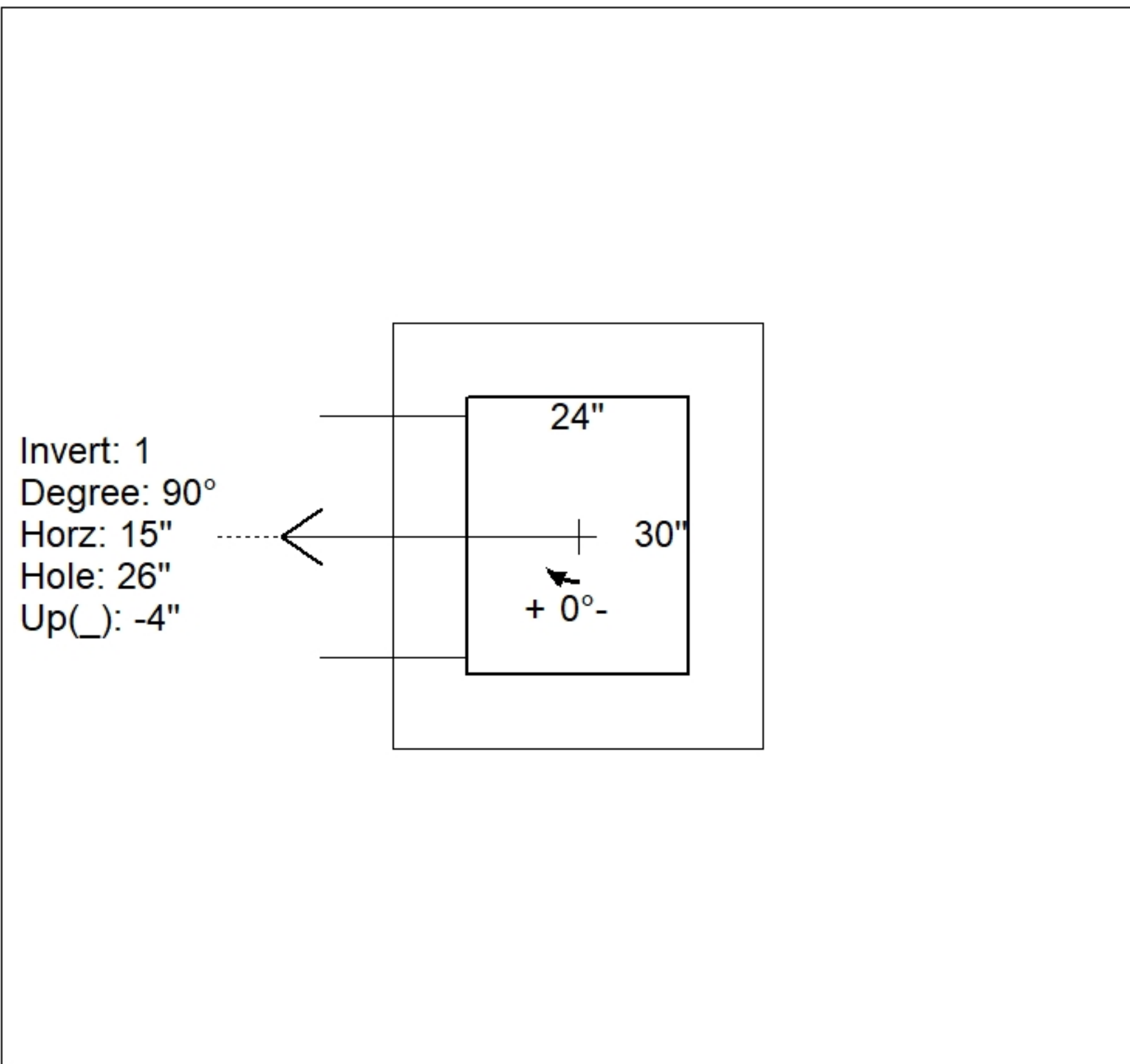
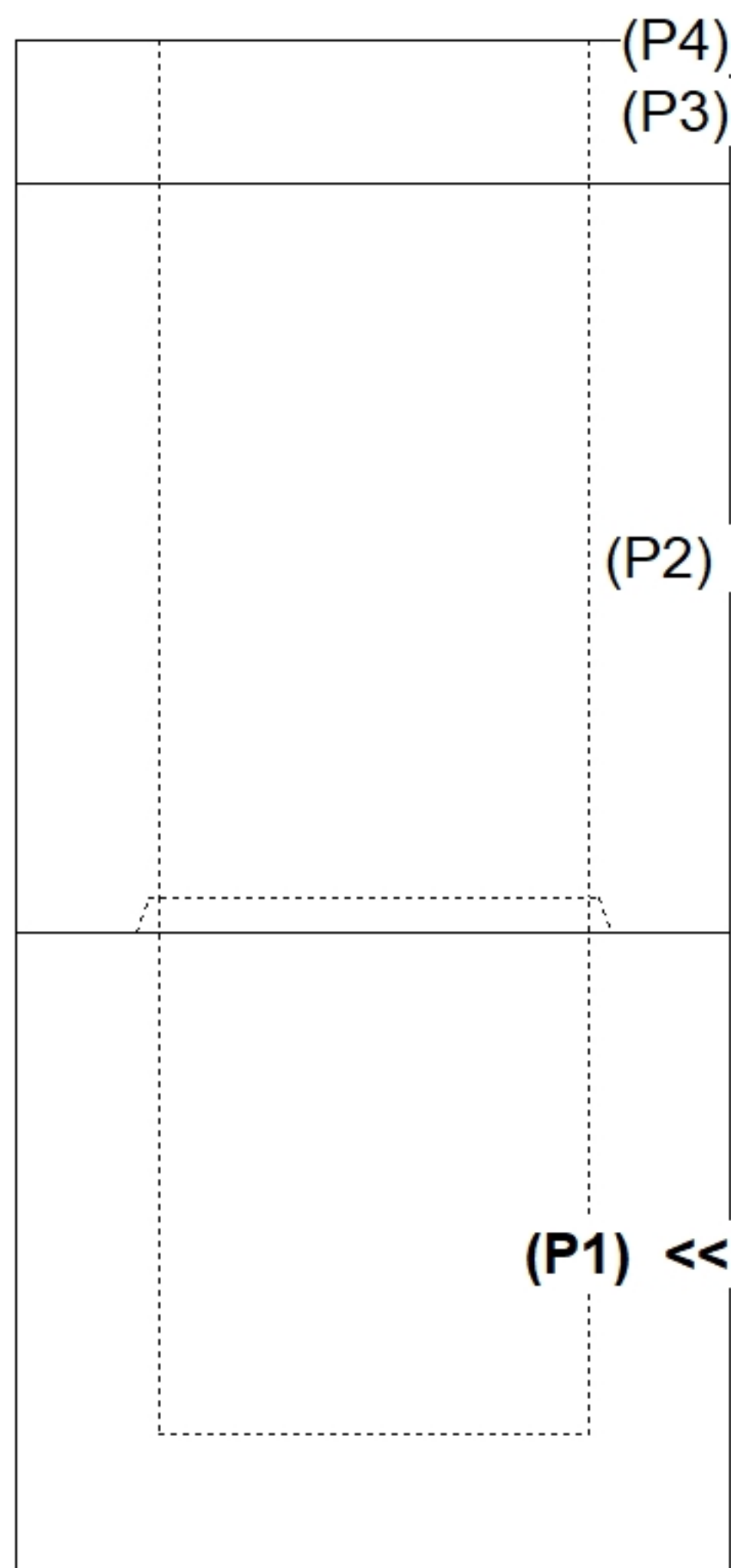
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
 - WALLS (As .31) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 773.5' Rim to Invert: 6.5' Slack: 0" Sump: 0" Step Position:

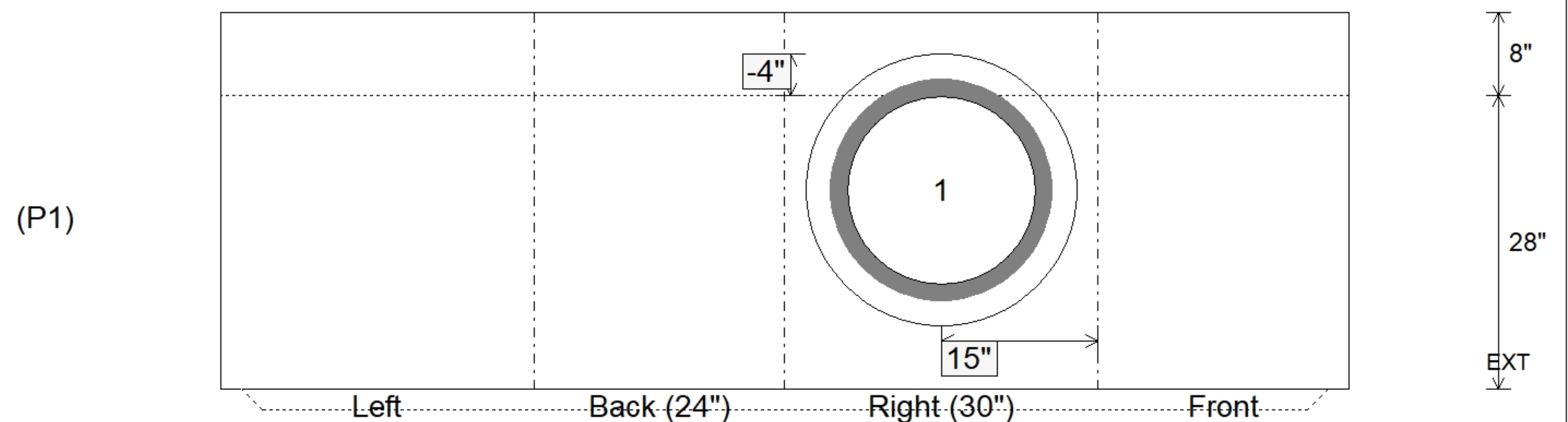
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	767'	90°	23"	18" HDPE	21.2"	Hole 26	26"	26"	-4"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

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: 8"
 Floor Height: 8"

Height (Int): 28"
 Height (Ext): 36"

Weight (Net): 3510 lb
 Volume (Net): 0.9cu.yd

Job Name: 26-1368 Freeman Lake Park Parking Lot Project	Plant: Beaver Dam	Tech: S. Felletter	
Job Location: Elizabethtown, KY Contractor: Kauffeld Brothers Construction	5/29/2026 8:38:04 AM	PC: T. Ryan	

Structure ID: CI #2-3 CBIF

P1 BX2424-08BAVF

BOX BASE 8inW, 8inF, Variable Ht T/n

P3) 24" x 24" - CASTING HEIGHT - 5"	0 lb
P2) 24" x 24" - BOX RISER 8inW F/G - 30"	2578 lb
P1) 24" x 24" - BOX BASE 8inW, 8inF, Variable Ht T/n - 37"	4029 lb
1) CASTING - HOE KY-465 SET (CBI TY F)	465 lb
2) 24" x 24" - Conseal CS-102 1.00"	0 lb
1) Hole - 20	0 lb
Structure Total:	7072 lb

Structure Notes:
 1. KYTC CBI TYPE F / ASTM C913 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. CASTING BY ICAST (HOE KY-465 SET)

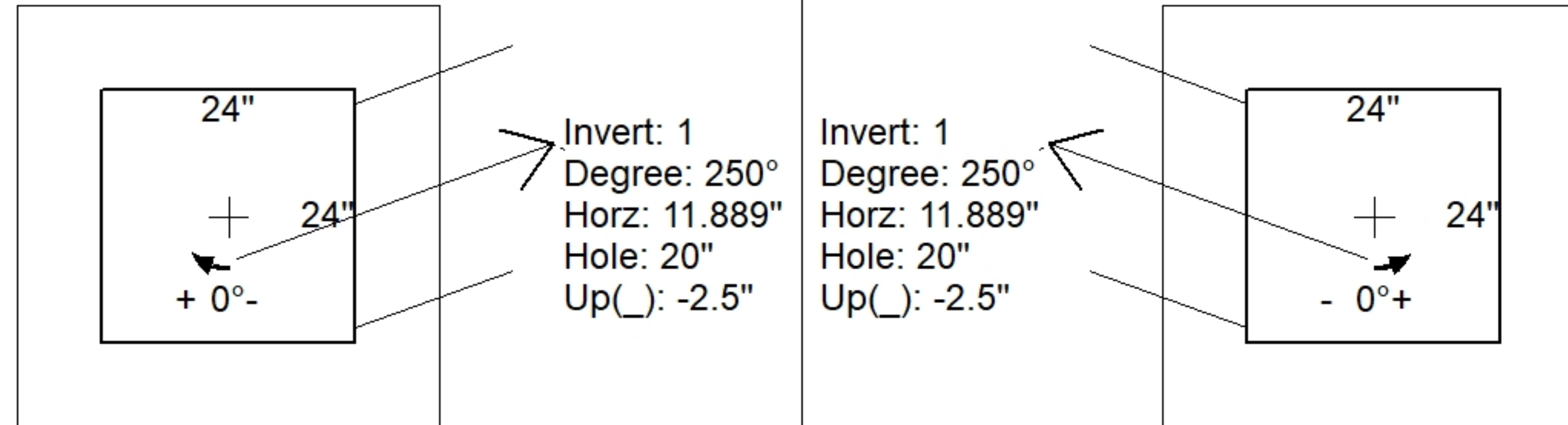
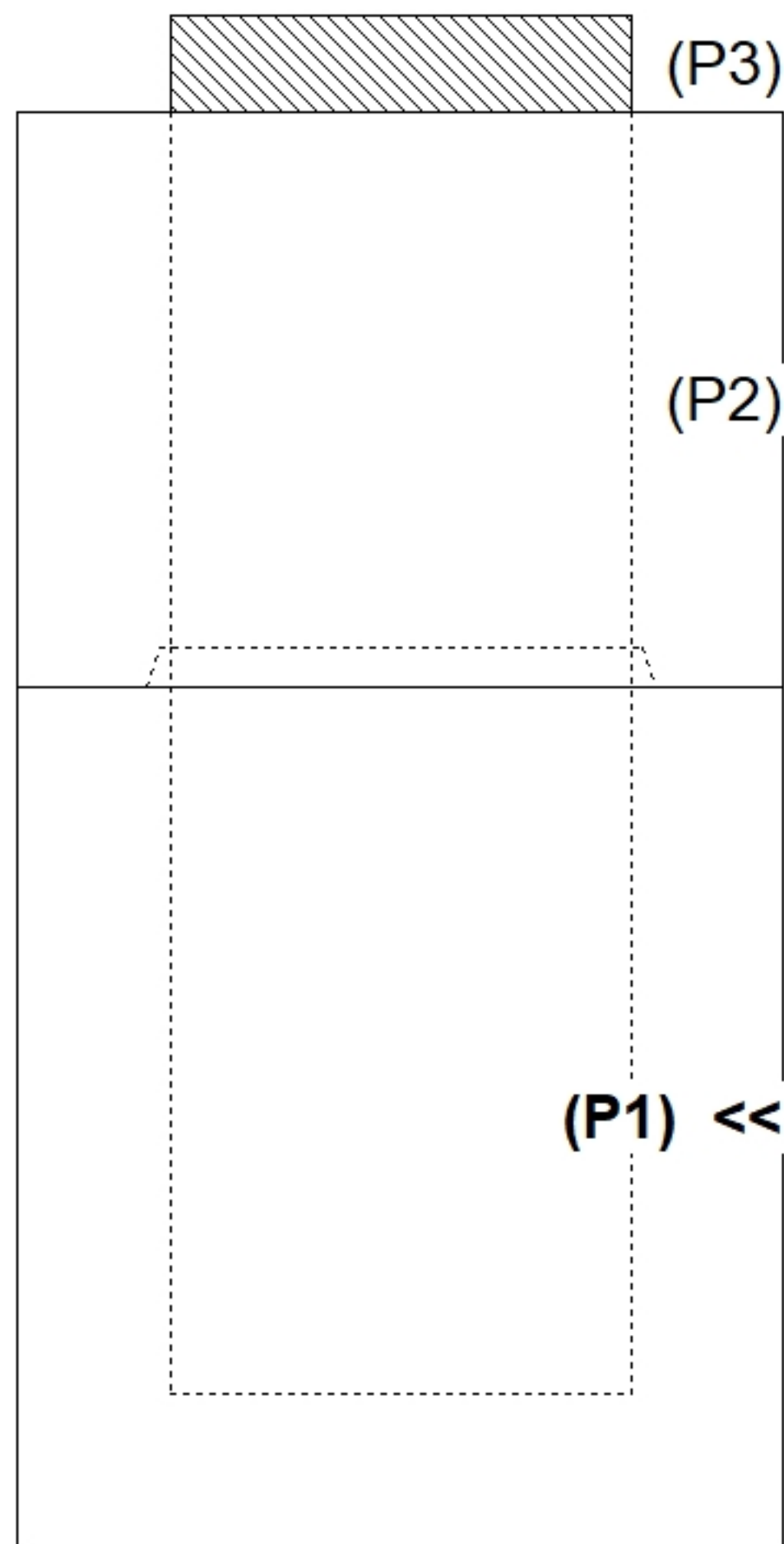
REINFORCING PER ASTM A615 (GRADE 60).
 - WALLS (As .31) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 766.6' Rim to Invert: 6' Slack: 0" Sump: 0" Step Position:

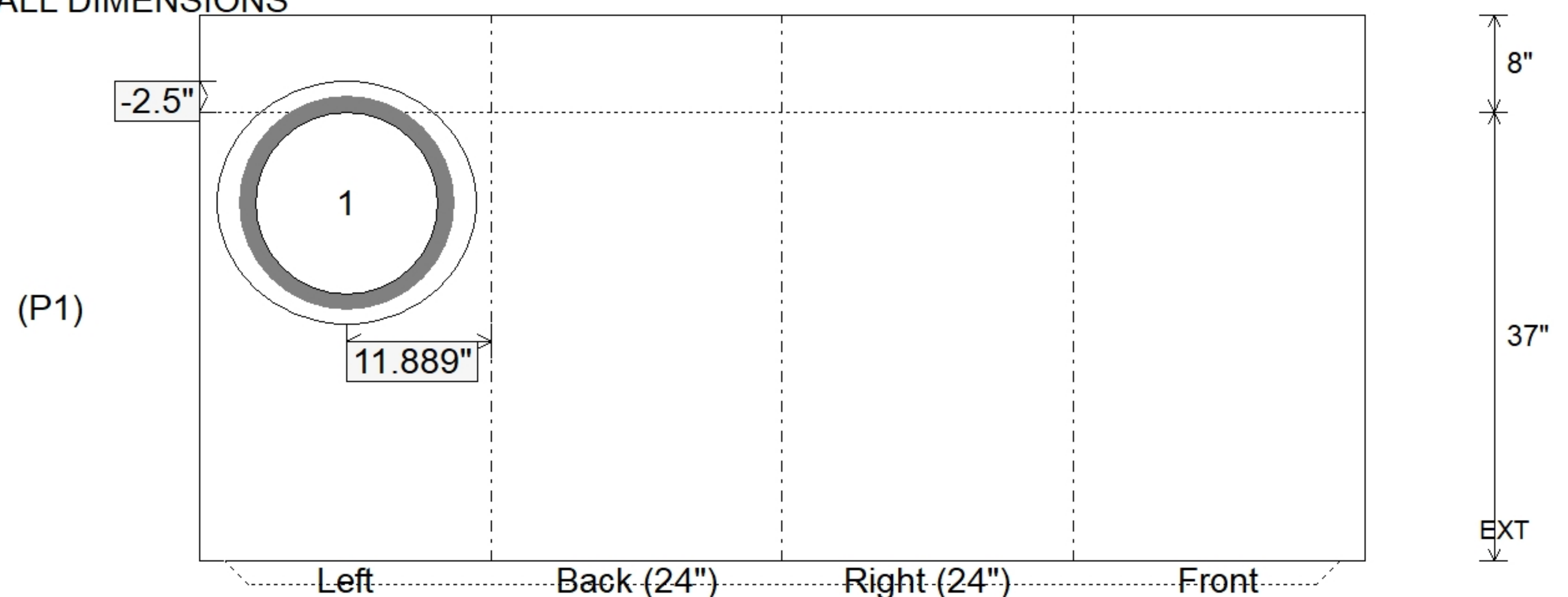
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	760.6'	250°	16.977"	15" HDPE	17.6"	Hole 20	20"	21.284"	-2.5"	4"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):	Seam Up: Tongue	Wall Thickness: 8"	Height (Int): 37"	Weight (Net): 4029 lb
Coating (Ext):	Seam Dn: n/a	Floor Height: 8"	Height (Ext): 45"	Volume (Net): 1.03cu.yd

Structure ID: BASIN D - OCS

P1 BX4848-08BAVF

BOX BASE 8inW, 8inF, Variable Ht F/n

P2) 48" x 48" - CASTING HEIGHT - 1" P1) 48" x 48" - BOX BASE 8inW, 8inF, Variable Ht F/n - 35" 1) 48" x 48" - Conseal CS-102 1.00" 1) Hole - 30 1) Hole - 6	0 lb 7519 lb 0 lb 0 lb 0 lb ----- Structure Total: 7519 lb
---	--

Structure Notes:
 1. PER ASTM C913 SPECIFICATIONS.
 2. CONCRETE = 4,500 PSI AT 28 DAYS.
 3. CASTING/BAR GRATE SUPPLIED BY OTHERS.

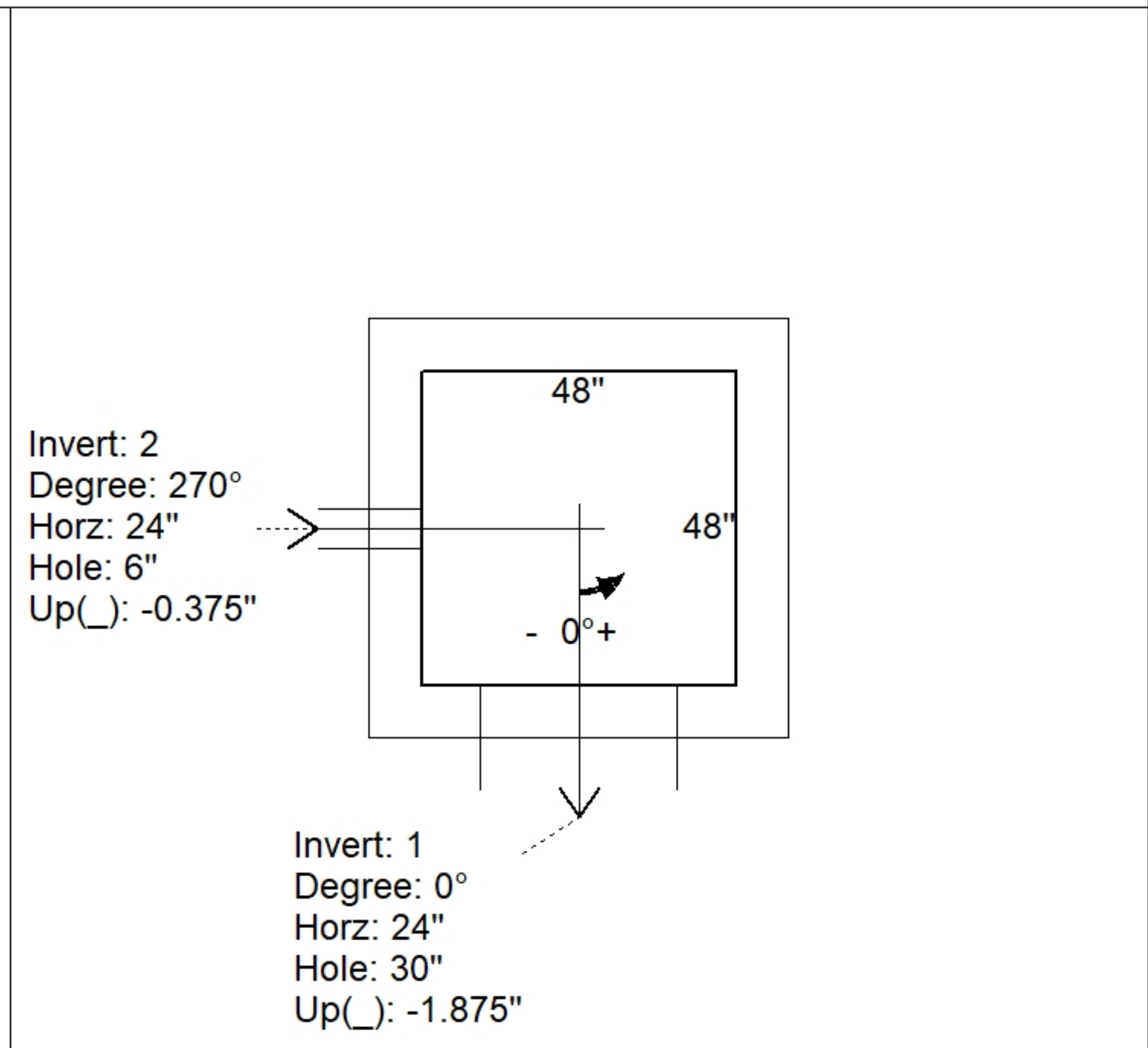
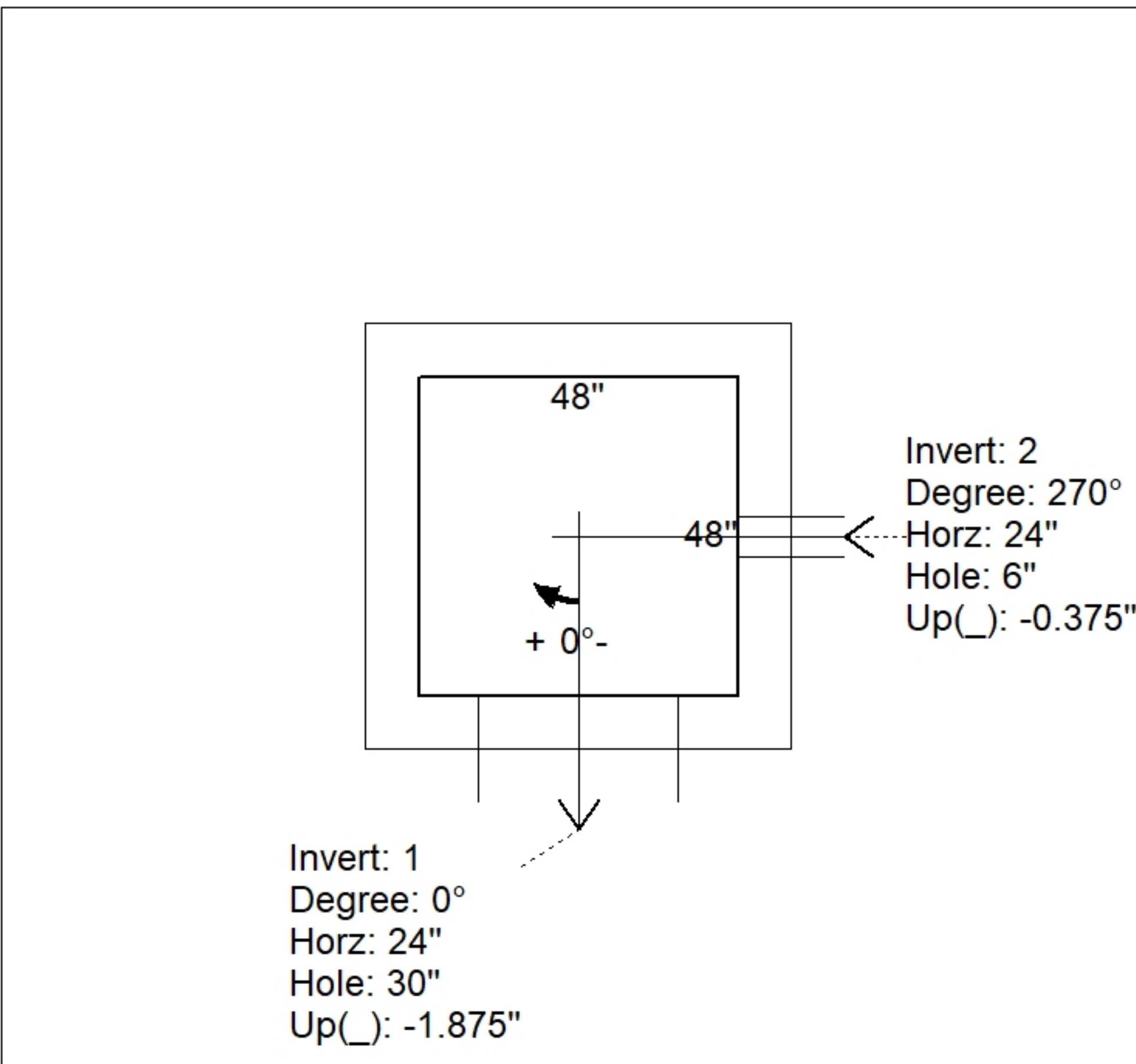
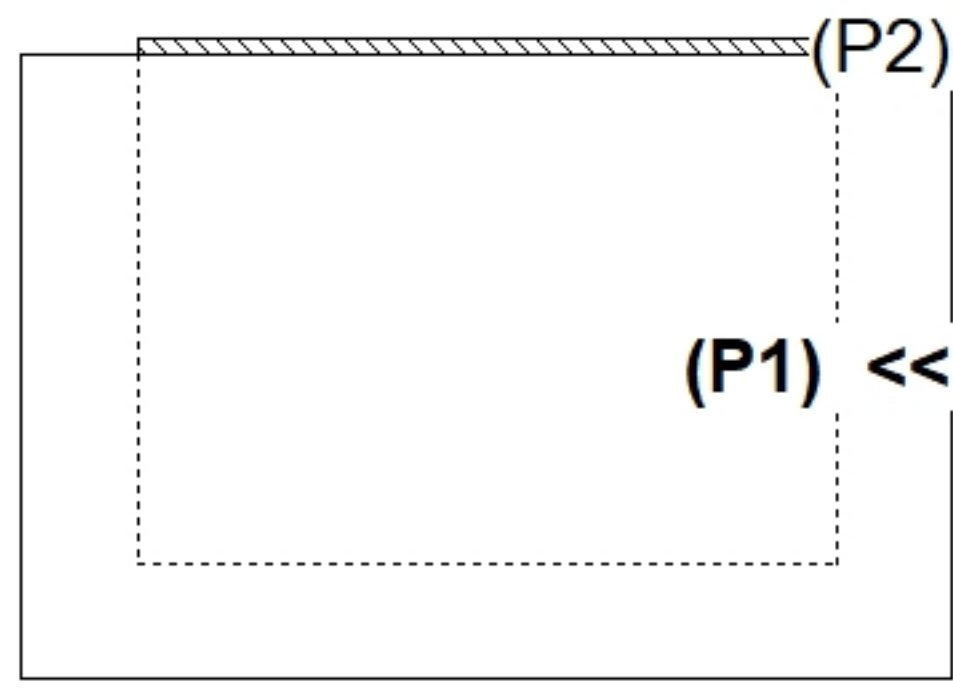
REINFORCING PER ASTM A615 (GRADE 60).
 - BASE WALLS (As .31) #5 BARS AT 12" C.C.E.W.
 - BASE FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 887' Rim to Invert: 3' Slack: 0" Sump: 0" Step Position:

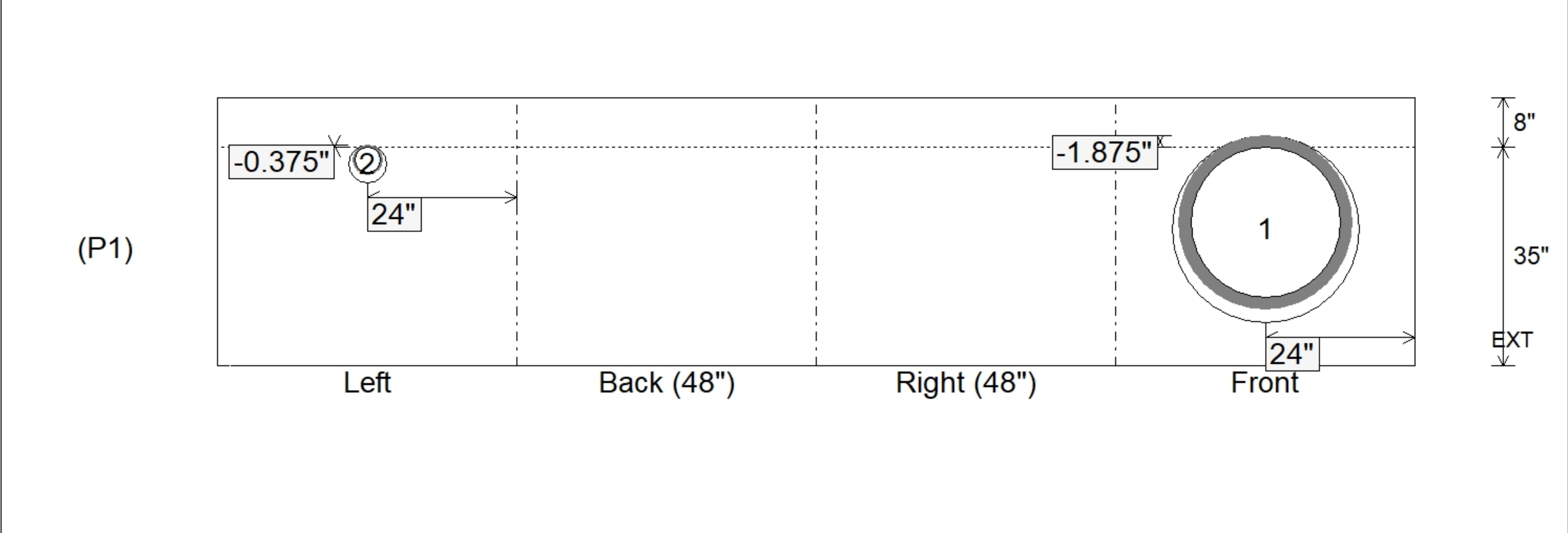
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	884'	0°	32"	24" HDPE	27.8"	Hole 30	30"	30"	-1.875"	0"
Invert 2	884'	270°	32"	4" HDPE (perf pipe)	4.8"	Hole 6	6"	6"	-0.375"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: n/a	Wall Thickness: 8" Floor Height: 8"	Height (Int): 35" Height (Ext): 43"	Weight (Net): 7519 lb Volume (Net): 1.92cu.yd
----------------------------------	-------------------------------	--	--	--

Job Name: 23-2792 - Teal Dr. Development
 Job Location: Gallatin, TN
 Contractor: Stewart Richey

Plant: 100
 3/25/2026 1:41:43 PM

Tech: J. Horsley - F
 PC: C. Goff



Structure ID: STM-E6

P1 BX28280606VH

BOX BASE 6inW, 6inF, Variable Ht F/n

- P2) 28" x 28" - CASTING HEIGHT - 6"
- P1) 28" x 28" - BOX BASE 6inW, 6inF, Variable Ht F/n - 44"
- 1) CASTING - JBS 3101 Single Set (F/G/H)
- 1) 28" x 28" - Conseal CS-102 1.00"
- 1) Hole - 22

0 lb
 3627 lb
 619 lb
 0 lb
 0 lb

 0 lb
 Structure Total: 4246 lb

Structure Notes:
 1. PER ASTM C913 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS AND NO INVERT CHANNEL.
 4. CASTING BY ICAST (JBS 3101 SINGLE SET (F/G/H)).

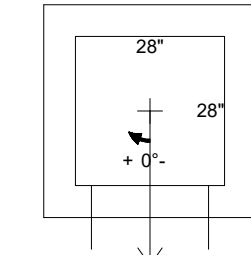
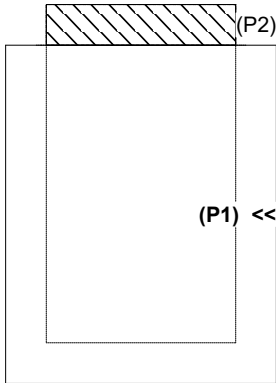
REINFORCING PER ASTM A615 (GRADE 60).
 - WALLS (As .31) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 473.52' Rim to Invert: 4.18' Slack: 0.16" Sump: 0" Step Position:

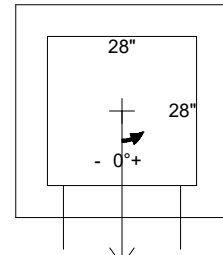
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	469.34'	0°	20"	15" RCP B WALL	19.5"	Hole 22	22"	22"	-2.25"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

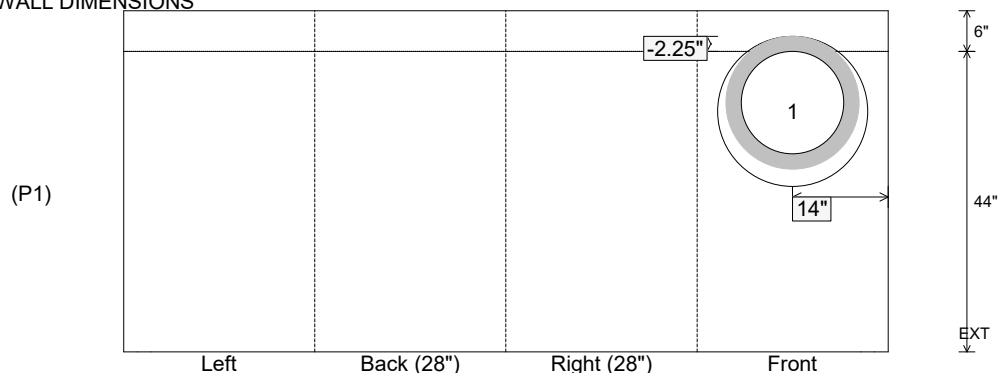


Invert: 1
 Degree: 0°
 Horz: 14"
 Hole: 22"
 Up(): -2.25"



Invert: 1
 Degree: 0°
 Horz: 14"
 Hole: 22"
 Up(): -2.25"

INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: n/a

Wall Thickness: 6"
 Floor Height: 6"

Height (Int): 44"
 Height (Ext): 50"

Weight (Net): 3627 lb
 Volume (Net): 0.93cu.yd

Job Name: 23-2792 - Teal Dr. Development
 Job Location: Gallatin, TN
 Contractor: Stewart Richey

Plant: 100
 3/25/2026 1:41:33 PM

Tech: J. Horsley - F
 PC: C. Goff



Structure ID: STM-B2

P1 BX3030-06VH

BOX BASE 6inW, 6inF, Variable Ht F/n

- P2) 30" x 30" - CASTING HEIGHT - 4"
- P1) 30" x 30" - BOX BASE 6inW, 6inF, Variable Ht F/n - 20"
- 1) CASTING - JBS 4315 F/G
- 1) 30" x 30" - Conseal CS-102 1.00"
- 1) DOGHOUSE INVRTD - 26"x22"

0 lb
 2058 lb
 500 lb
 0 lb
 0 lb

 0 lb
 Structure Total: 2558 lb

Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO STEPS AND NO INVERT CHANNEL.
4. CASTING BY ICAST (JBS 4315 F/G).

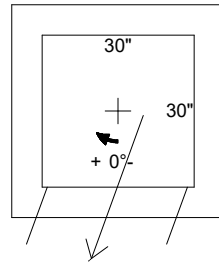
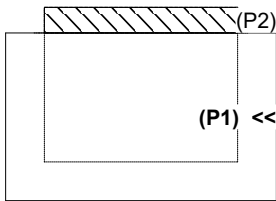
REINFORCING PER ASTM A615 (GRADE 60).
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

Rim: 467.89' Rim to Invert: 2.07' Slack: 0.84" Sump: 0" Step Position:

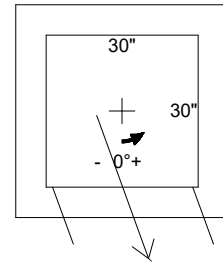
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	465.82'	20°	23.375"	18" RCP B WALL	23"	DOGHOUSE INVRTD 26"x22"	26" x 22"	27.669"	-2.5"	-5"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

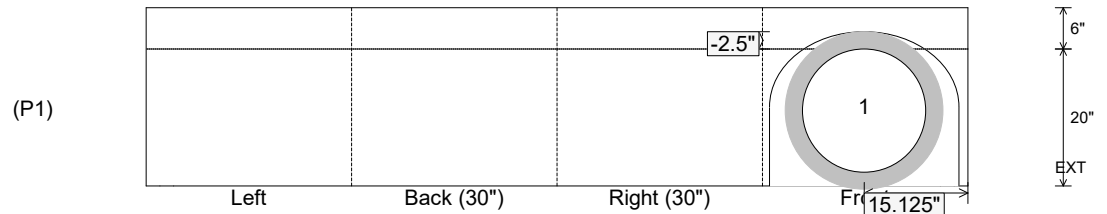


Invert: 1
 Degree: 20°
 Horz: 15.125"
 Hole: 26" x 22"
 Up(): -2.5"



Invert: 1
 Degree: 20°
 Horz: 15.125"
 Hole: 26" x 22"
 Up(): -2.5"

INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: n/a

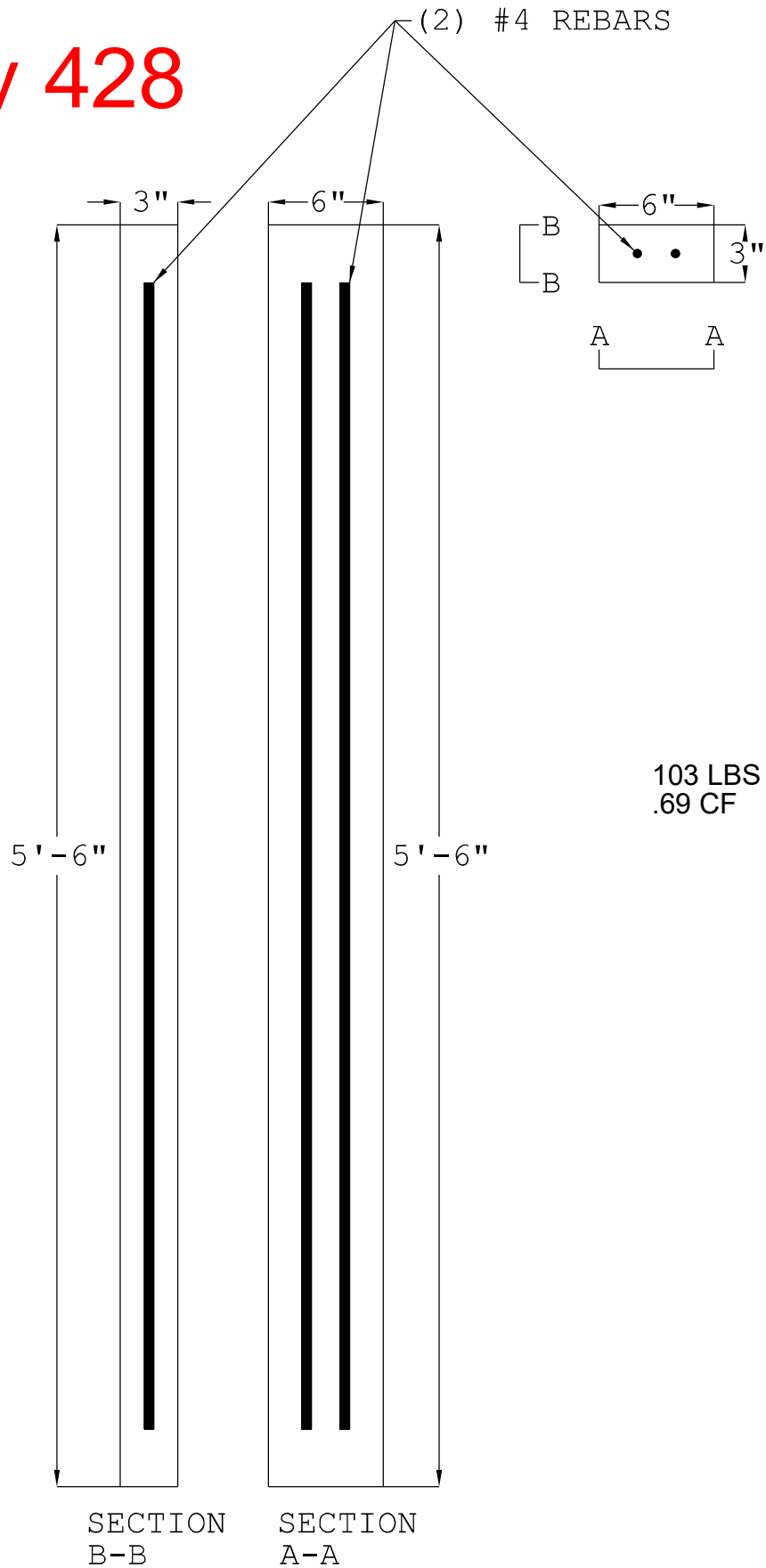
Wall Thickness: 6"
 Floor Height: 6"

Height (Int): 20"
 Height (Ext): 26"

Weight (Net): 2058 lb
 Volume (Net): 0.53cu.yd

ALCOA CONCRETE LOGS

Quantity 428





Structure ID: STM-H2

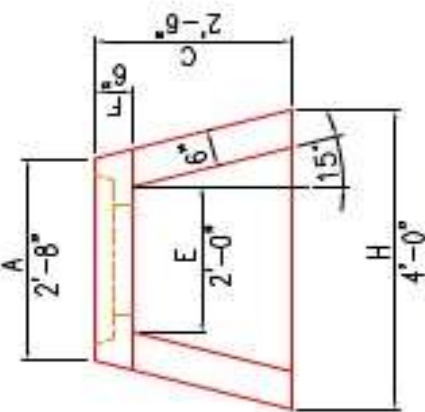
P1 HAW18F

18" - HW AW w/FLAT BOTTOM

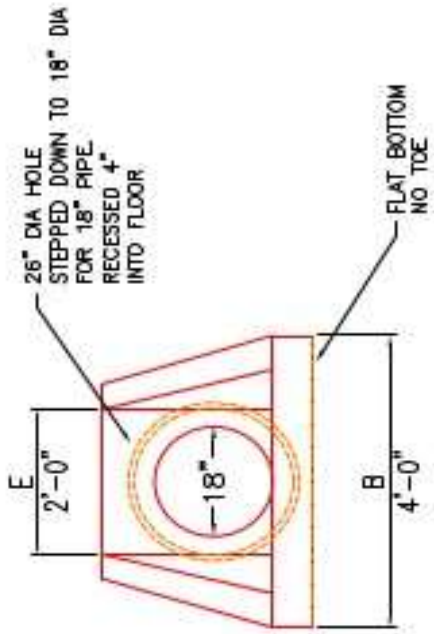
DIMENSIONS & QUANTITIES										
TYPE	PIPE Ø	A	B	C	D	E	F	C	H	WEIGHT
AW	18"	2'-8"	2'-8"	2'-6"	2'-2"	2'-0"	6"	0"	4'-0"	1,380 LBS.
										1,380 LBS.

NOTES:

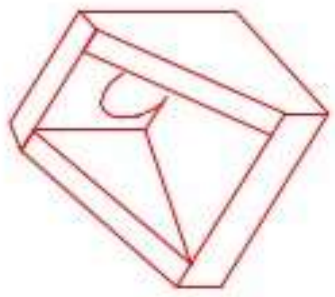
1. CONCRETE: 4500 PSI AT 28 DAYS MINIMUM COMPRESSIVE STRENGTH.
2. REINFORCING: #4 BAR @ 12" C/C E.W. -GRADE 60, (WITH 2" CONCRETE COVER MINIMUM)
3. REINFORCING BARS TO BE TACK WELDED OR TIED.
4. PIPE AND LIFTING ANCHOR POCKETS TO BE GROUTED WITH NON-SHRINK GROUT AFTER SETTING.
5. PREFORMED STEPPED HOLE SIZED AS PER O.D. OF PIPE + 3" -4".
6. OPTIONAL FOOTING (TOE) AVAILABLE FOR ALL SIZES.



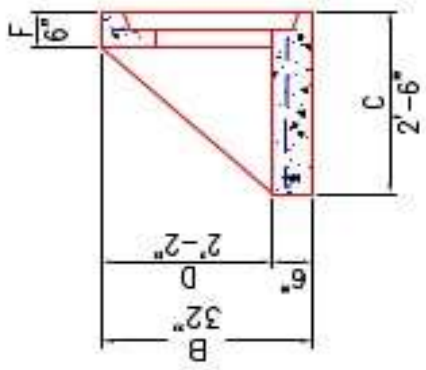
PLAN VIEW



FRONT ELEVATION



ISOMETRIC VIEW



SECTION A-A

PRODUCTION WORK ORDER		PRODUCT I.D.: HAW18F	
QUALITY CONTROL CHECKLIST <input type="checkbox"/> ALL DIMENSIONS CORRECT. <input type="checkbox"/> LIFTERS INSTALLED. <input type="checkbox"/> STEPPED HF CORRECT SIZE. <input type="checkbox"/> REINFORCING CORRECT. <input type="checkbox"/> CLEARANCE ON REINFORCING CORRECT. <input type="checkbox"/> EDGES CHAMFERED. <input type="checkbox"/> ALL PATCHWORK ACCEPTABLE.		PRODUCT VIEW: RIGHT SIDE UP PLANT: BEAVER DAM, KY. WEIGHT: 1,380 LBS. TOP SECTION JOINT: N/A BASE SECTION JOINT: N/A QC CHECK INITIALS:	DESCRIPTION: 18in AW WINGED HEADWALL, FLAT CUSTOMER: STOCK PROJECT: STOCK STRUCTURE ID.: T.B.D. SALES ORDER NO: T.B.D. PC: B. KELLY DRAWING: J. HORSLEY DATE: 10/30/23 SCALE: NTS PG. 1 of 1



Arcadia™ Hydrodynamic Separator Installation Guide

Concrete Manhole Installation

This installation guide is a reference for installing the Arcadia Water Quality unit into a precast concrete structure. These directions assume the manhole base and riser have been assembled, and that the top slab has not been set.

Note: Do not insert the inlet or outlet pipes until after the Arcadia internals have been installed. All pipes should sit flush inside the manhole. If pipes must be inserted in advance, the pipes should not protrude into the structure as they can interfere with installation of the Arcadia Internals.

Content

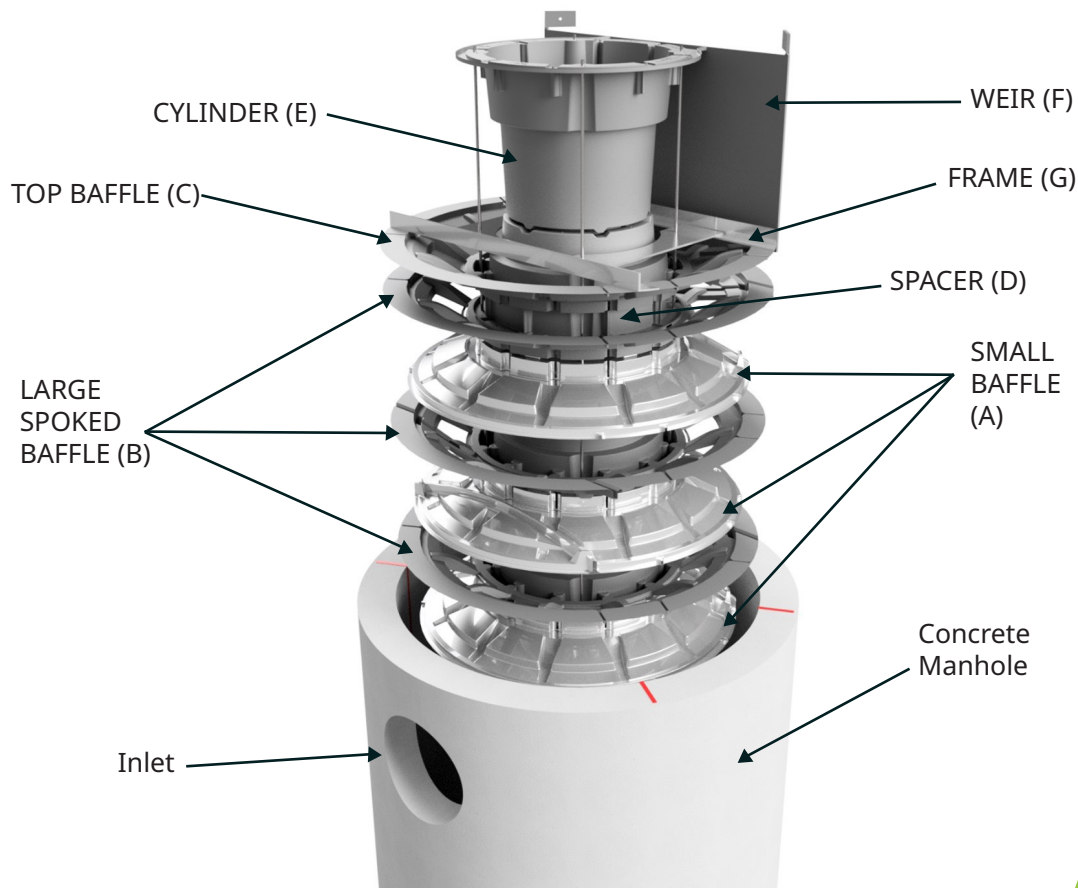
Section 1: Internal Components, Hardware & Tools

Section 2: Assembling Internal Components

Section 3: Mounting Brackets within Concrete Manhole Riser

Section 4: Transporting Assembled Arcadia Internals

Section 5: Installing Arcadia Internals into the Manhole – For Contactor/Jobsite



Section 1: Internal Components, Hardware and Tools



SMALL BAFFLE (A) Qty: 3



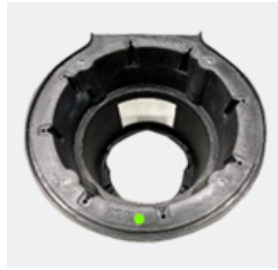
LARGE SPOKED BAFFLE (B)
Qty: 3



TOP BAFFLE (C) Qty: 1



SPACER (D) Qty: 1



CYLINDER (E) Qty: 1



WEIR (F) Qty: 1



FRAME (G) Qty: 1

Note: To separate baffles in shipping stack, pull from center of each baffle.

Hardware Provided by ADS



Threaded Rod
(4 long and 4
short) Qty: 8



Washers
Qty: 12



Nuts
Qty: 12



Threaded
Coupling
Qty: 4



Screws



Bolts for frame
Assembly



Rod Caps
Qty: 4



Threadlocker
Capsules
Qty: 2

Please set aside the following items that will later be delivered to the jobsite along with the assembled Arcadia Unit.

- Small Hardware package marked "Arcadia Installation, For Jobsite Contractor (Not for Precaster)".
- Conseal Roll(s).
- Copy of the Installation Guide

Other Tools Needed

- $\frac{9}{16}$ " (14.28 mm) or $\frac{3}{4}$ " (19.05 mm) Hand Wrench, depending on model size
- Phillips screwdriver or screw gun with Phillips bit
- 4 small hand clamps
- Pair of sawhorses

Section 2: Assembling Internal Components

1. Suggested procedure to facilitate assembly:
 - Utilize a set of sawhorses to support the initial assembly.
 - Set the spacing between the sawhorses (outside distance, see **figure 1**) according to the table below.

Arcadia Model	Spacing in (mm)
AR3	10 (250)
AR4	15 (375)
AR5	17 (425)
AR6	19 (475)
AR8	25 (625)

2. Place one SMALL BAFFLE (A) on the saw horses with the molded word "UP" readable and facing upward."

*Note: Throughout this procedure, as you stack up the baffles, make sure to align the molded word UP for each layer. For each baffle, UP should be readable and aligned with previous layers shown in **figure 2**.*

3. Rotate the baffle as needed to ensure the word UP is aligned with that of the previous baffle, then slide one LARGE SPOKED BAFFLE (B) down the threaded rods until it rests on the previous part, as shown in **figure 3**. Each part mates with the previous part in only one orientation.
4. Place another SMALL BAFFLE (A) on top of the previous part, as shown in **figure 4**. There should now be a total of three (3) baffles in place (two SMALL BAFFLES (A) and one LARGE SPOKED BAFFLE (B)).

Note: The long threaded rods will not reach up to the third baffle yet.

5. One at a time, grasp each of the long threaded rods and feed / pull up through the three baffles until the washer end is tight against the underside of the bottom baffle. Place a hand clamp on each long threaded rod against the top-most baffle to hold it in position, as shown in **figures 5 and 6**.
6. Carefully lower the entire assembly to floor level. If picking up by hand, this is most easily done by grasping two of the long threaded rods in between baffles.
7. Once on the floor, remove all 4 clamps and allow long threaded rods to rest on the floor.

Scan the QR Code to watch the Arcadia installation video



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5

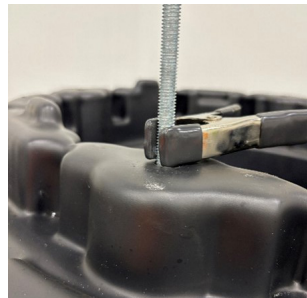


Figure 6



8. Repeat steps 2 & 3 once, then step 2 once more, such that two more LARGE SPOKED BAFFLE (B) and one more SMALL BAFFLE (A) have been added, for a total of six baffles, as shown in **figure 7**.
9. If SPACER (D) is supplied, slide it down the long threaded rods until it rests on the previous part. The SPACER (D) flange should be oriented down, as shown in **figure 8**.

Note: there is no SPACER (D) provided for the 3' (0.9 m) diameter unit (AR3) and the 6' (1.8 m) diameter unit (AR6). For these two sizes, skip this step.

10. Slide TOP BAFFLE (C) down the long threaded rods until it rests on the previous part, as shown in **figure 9**. Each part mates with the previous part in only one orientation. Check that the molded word UP, on the outer edge is readable, facing upward, and aligned with the word UP on the previous part before sliding down the rods into position.
11. Grasping each long threaded rod between baffles, push each rod up until the washer is once again snug at the bottom of the stack, as shown in **figure 10**. Hand snug a washer and nut to each long threaded rod with a wrench.

Note: Recommended to hold the nut with the wrench and turn the threaded rod to snug.

12. **Two people are needed for this step.** Assemble FRAME (G) by bolting the 4 metal pieces with provided short bolts, nuts & washers. As shown in **figure 11 and 12**.
13. Slide FRAME (G) onto the threaded rods until it rests flat on TOP BAFFLE (C). Orient FRAME (G) so that it aligns parallel to the flat portion of TOP BAFFLE (C), as shown in **figure 13**.

*Note: Make sure the frame is installed upright, with the angled bends pointing upward, as shown in **figure 13**.*

14. Add another washer and nut to each of the long threaded rods above FRAME (G). Do not screw the nut all the way down. Then, attach a threaded coupling at the top end of each long threaded rod. Screw it down until the top of the coupling is flush with the top of the threaded rod. Leave the nut just below the coupling, as shown in **figure 14**. (This is to facilitate step 17.)

Figure 7



Figure 8

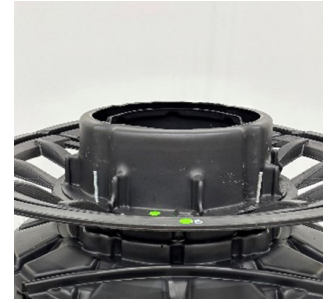


Figure 9



Figure 10



Figure 11



Figure 12

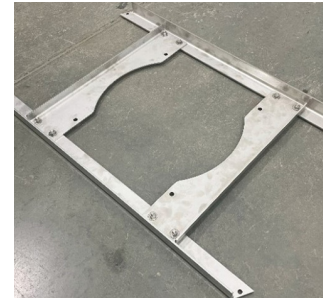


Figure 13

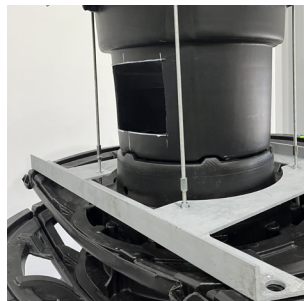


Figure 14



15. Place a washer and nut onto the end of the four short threaded rods, screwing about 3" (75 mm) down. Orient CYLINDER (E) with the flange facing up, feed the rods from the top through the holes in the CYLINDER (E) until the nuts rest on top of the CYLINDER, as shown in **figure 15**.
16. Place CYLINDER (E) assembly on top of TOP BAFFLE (C). Each part mates with the previous part in only one orientation. Check that flat side of the flange of CYLINDER (E) is aligned with the flat side of the TOP BAFFLE (C) as shown in **figure 16**. Attach the bottom end of the 4 short threaded rods to each threaded coupling at the top of the 4 long threaded rods. Hand tighten snug by twisting the long and short threaded rods in opposite directions.
17. Secure CYLINDER (E) onto each of the 4 short threaded rods with a washer and nut at the top. Hand snug with wrench.
18. Slide WEIR (F) into top slot with the curved edge down. Ensure WEIR (F) is centered in the slot. To easily insert WEIR (F), push one end home and secure lower corner of WEIR (F) to TOP BAFFLE (C) with a screw, as shown in **figures 17 and 18**; then push the other end home and secure with screw. For the 8' (2.4 m) diameter unit (AR8), add additional screws into the slot and through the bottom of the weir at approximately the middle, 1/4, and 3/4 positions.
19. Screw down and hand snug the nuts to the steel FRAME (G) with a wrench. Also hand snug the nuts to the top of the CYLINDER (E), and to the top of the TOP BAFFLE (C) if they have loosened. Add a drop of Threadlocker to the rod threads near each nut before final tightening.
20. Secure the top of WEIR (F) with three screws into CYLINDER (E), as shown in **figure 19**.
21. Attach Rod Caps to the top of each threaded rod, on top of the unit.
22. The finished assembly should appear as shown in **figure 20**.

Figure 15



Figure 16



Figure 17



Figure 18



Figure 19



Figure 20



Section 3: Mounting Brackets within Concrete Manhole Riser

Materials provided by ADS

- Mounting Template (Qty: 1)
- Brackets (Qty: 4)
- ¼" (6.35 mm) Diameter 20 thread size, 3 ¼" (82.55 mm) wedge anchors (Qty: 4)

Other Tools Needed

- Drill
 - ¼" (6.35mm) Masonry drill bit
 - Hammer
 - 7/16" (11.11 mm) socket or wrench
 - Masking Tape
 - Rigging
1. Use one of the 3 methods below to locate and mark the elevation and center line for each of the 4 brackets.
 - a. Mounting Template Method:
 1. Position top of template to match the outlet pipe invert elevation.
 2. Align centerline of template with the center of the outlet pipe hole.
 3. Spread template along inner circumference of the manhole wall, maintaining level. Affix with tape as you proceed. Check level as you proceed.
 4. Mark bracket elevations and centerlines at bottom of template.
 5. Remove template.
 - b. Angular Dimensions Method:
 1. From the outlet invert, measure depth A (Table 1) and around B° and C° in each direction to locate the top of each bracket. Mark top of bracket.
 - c. Linear Dimensions Method:
 1. From the outlet invert, measure depth A (Table 2) and around the inside arc B" and C" in each direction to locate the top of each bracket. Mark top of bracket. Crosscheck outlet invert elevations from approved job specific drawings.

Figure 22

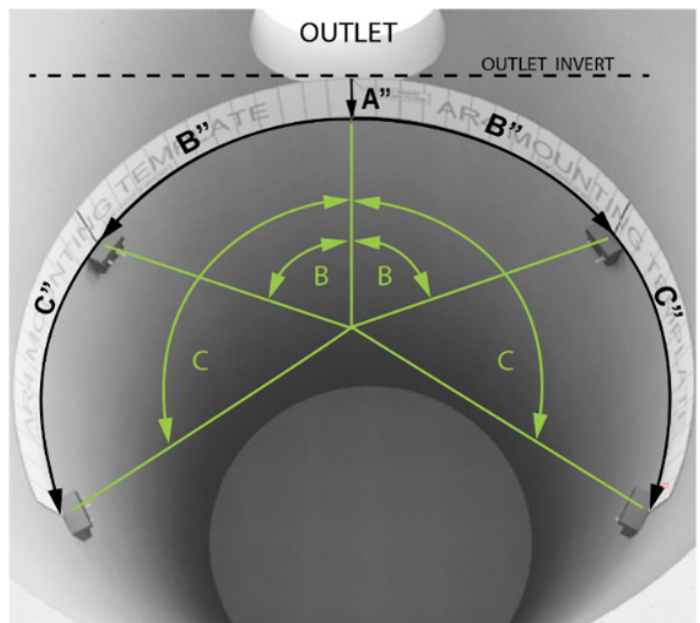


Table 1: Angular Measurements

Arcadia Model	A. Depth from Outlet Invert in (mm)	B. Angle from Outlet Center	C. Angle from Outlet Center
AR3	4 1/2 (114.3)	65°	115°
AR4	5 1/2 (139.7)	60°	120°
AR5	6 (150)	65°	115°
AR6	6 1/2 (165.1)	60°	120°
AR8	8 (200)	60°	120°

Table 2: Linear Measurements

Arcadia Model	A. Depth from Outlet Invert in (mm)	B. Measurement from Outlet Center in (mm)	C. Measurement from Outlet Center in (mm)
AR3	4 1/2 (114.3)	20 3/8 (517.5)	36 1/8 (917.6)
AR4	5 1/2 (139.7)	25 1/8 (638.1)	50 1/4 (1276.3)
AR5	6 (150)	34 (850)	60 1/8 (1527.2)
AR6	6 1/2 (165.1)	37 3/4 (958.8)	75 1/2 (1917.7)
AR8	8 (200)	50 1/4 (1276.3)	100 1/2 (2552.7)

- Hold bracket in position in manhole at locations indicated. Mark anchor holes for each bracket as shown in **figure 23**.
- Drill two 1/4" (6.35 mm) holes per bracket, 2 1/2" (63.5 mm) deep. Diagonal holes are recommended. Extra holes provided if needed as shown in **figure 24**.
- Attach 4 brackets to manhole at positions marked, aligned with top of bracket. Lightly hammer the anchors in place. Tighten the locking nuts to firmly secure brackets to the concrete. Trim any excess anchor that extends beyond the bracket edge as shown in **figure 25**.
- Extend center lines up the manhole wall to the top. Also extend lines across top edge. These center lines will be used by installers at the jobsite to align the unit during installation as shown in **figure 26**.

Note: These center lines are part of the bracket installation and should be made with a suitable marking device that can be easily seen, such as a level and marker, or chalk line.

Figure 23



Figure 24



Figure 25

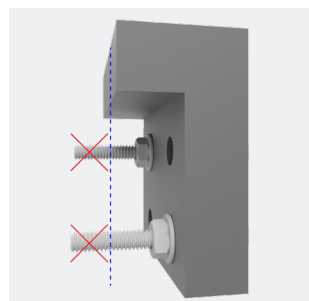
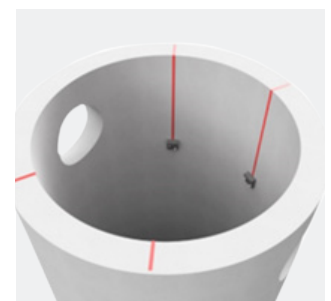


Figure 26



Section 4: Transporting Assembled Arcadia Internals

Placing assembled Arcadia inside concrete manhole riser section; Most common.

1. Choosing a segment of precast concrete manhole riser or base.
 - For transport, choose a riser section that does not contain the mounting brackets, with the following minimum riser depths. This riser section will serve as shipping containment for the internals.
 - The Arcadia internals will be permanently installed onto the mounting brackets at the jobsite. See Section 5.
2. Rigging Arcadia Internals for lifting.
 - Use the stainless-steel frame arms as pick points for straps, chains or other qualified rigging. It is recommended to attach at diagonally opposite arms.
 - Appropriate rigging examples shown in **figures 27 and 28**.
3. Place Arcadia Internals within the riser segment using hoisting equipment.
4. Secure with strapping.
5. Along with the internals, be sure to also deliver the 3 additional items listed in the note below and seen in **figures 29 and 30**.

Minimum Depth Transport Riser Section ft (m)	Arcadia Model
3 (0.9)	AR3
4 (1.2)	AR4, AR5, AR6
5 (1.5)	AR8
6 (1.8)	AR10

Figure 27



Figure 28



Figure 29



Figure 30



Note: Please deliver the following additional items to the jobsite along with the assembled Arcadia unit.

- Small hardware package marked "Arcadia Installation, For Jobsite Contractor (NOT FOR PRECASTER)"
- Conseal roll(s)
- Copy of the Installation Guide

Transporting without a concrete riser?
Contact ADS for guidance.

Table 4: Arcadia Separator Internals Weight Once Assembled

Arcadia Model	AR3	AR4	AR5	AR6	AR8	AR10
lbs (kg)	82 (37.1)	165 (74.8)	252 (411.3)	356 (161.4)	882 (400)	1306 (592.3)

Section 5: Installing Arcadia Internals into the Manhole

These directions assume the manhole base and riser have not been assembled, and that the top slab has not been set.

Note: Do not insert the inlet or outlet pipes until after the Arcadia internals have been installed. If pipes must be inserted in advance, the pipes should not protrude into the structure as they can interfere with installation of the Arcadia Internals.

Materials provided by ADS

- Arcadia Internals (Qty: 1)
- ¼" (6.35 mm) Diameter 20 thread count, 3 ¼" (82.55 mm) wedge anchors (Qty: 2)
- 5/16" (7.93 mm) Diameter 1 ½" (38.1 mm) hex head lag screws and washers (Qty: 4)
- ¼" (6.35 mm) high speed drill bit for drilling into steel brackets (only for AR8 model)
- Conseal Roll(s)

Other Tools Needed

- Drill
 - ¼" (6.35 mm) Masonry Drill Bit
 - 3/16" (4.76 mm) Multi-Purpose Drill Bit
 - Hammer
 - 7/16" (11.11 mm) socket or wrench
 - Rigging
1. Before assembling the manhole base and riser(s), remove the assembled Arcadia unit from the precast segment that was used for protection during transport, if applicable. Rig the Arcadia internals for overhead lifting. Use the stainless-steel frame arms as pick points for straps, chains or other qualified rigging. It is recommended to attach diagonally to opposite arms. See **figures 31 and 32**. Set the Arcadia unit on level ground.
 2. Locate the concrete riser section with Arcadia Mounting Brackets installed.
 3. Check for bracket centerline markings inside and on top edge of the manhole. If no markings are present, find and extend the centerlines of each bracket along the inside of the riser all the way to the riser top edge as shown. These centerlines will be used to align the unit during installation. See **figure 33**.
 4. Rig Arcadia internals for overhead lifting. Use the stainless-steel frame arms as pick points for straps, chains or other qualified rigging. It is recommended to attach diagonally to opposite arms. See **figures 31 and 32**.

Figure 31



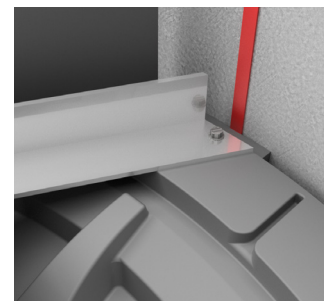
Figure 32



Figure 33



Figure 34



- a. Keep the WEIR (F) centered above the outlet pipe opening. See **figure 35**.
- b. Keep frame arms aligned with bracket centerlines during the entire lowering process. Failure to maintain alignment could result in damage to the unit. See **figure 36**.

5. Lift Arcadia internals at slow speed. Before lowering the unit into the manhole, check for proper alignment with the mounting brackets inside the manhole. Orientation is important throughout the entire installation process.
6. Once aligned, slowly lower Arcadia internals into manhole. Utilize a spotter to guide the alignment of the unit with tagline. Proceed until the stainless-steel frame arms are resting on the pre-installed mounting brackets within the manhole.
7. Affix Arcadia internals with provided lag screws and washers through the holes in the ends of the stainless-steel frame arms, through the top plastic of the unit and into the plastic brackets beneath. First pre-drill each with a 3/16" (4.76 mm) drill bit, or for AR8 use the provided 1/4" (6.35 mm) drill bit into steel brackets below. Use 7/16" (11.11 mm) socket to drive in lag screws until snug.
8. Affix WEIR (F) edges to manhole walls using concrete anchors. See **figures 37 and 38**.

- a. Bend WEIR (F) installation tabs to the manhole wall as shown in **figure 37**.
- b. Mark holes for anchors, one hole per tab.
- c. Drill a 1/4" (6.35 mm) hole 2 1/2" (63.5 mm) deep at each marked hole.
- d. Bend WEIR (F) installation tabs to manhole wall.
- e. Insert anchors and lightly hammer in place to secure WEIR (F) to manhole wall.
- f. Tighten the locking nuts to firmly secure brackets to the manhole wall as shown in **figure 38**.

9. Finally, seal WEIR (F) & TOP BAFFLE (C) edges to manhole wall using conseal to fill any gaps. See **figure 35**.

Figure 35

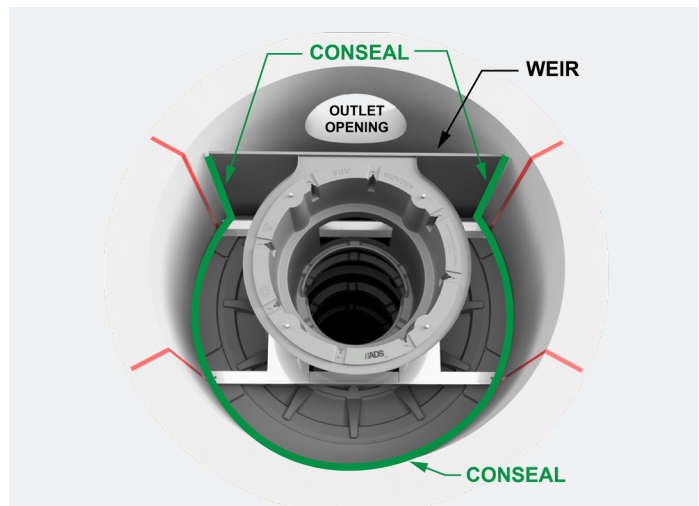


Figure 36

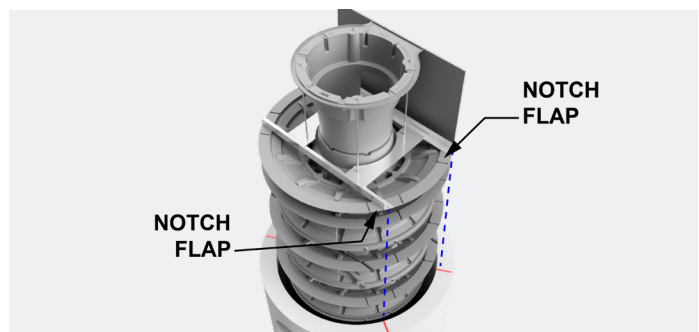


Figure 37

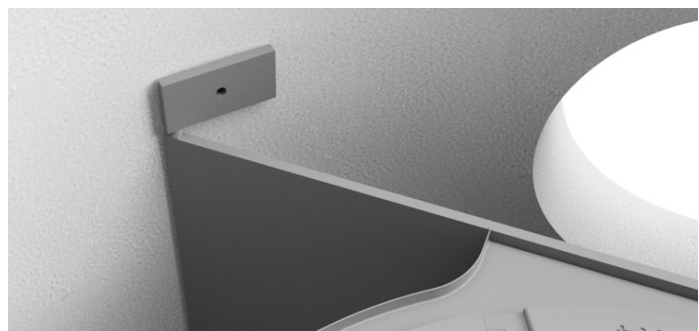
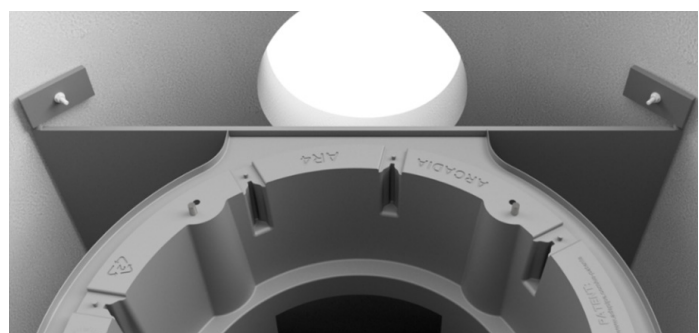


Figure 38

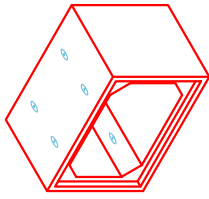




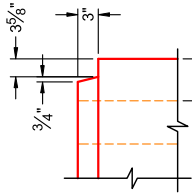
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P1 BC048072-08WLF-9H

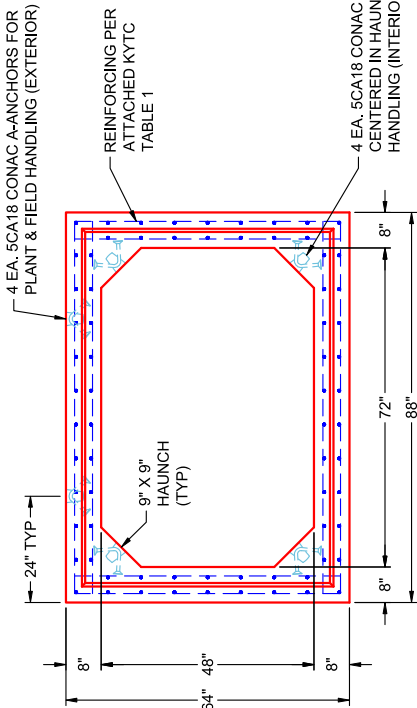
BOX CULVERT (08W/08F/08T) No Tongue G/F



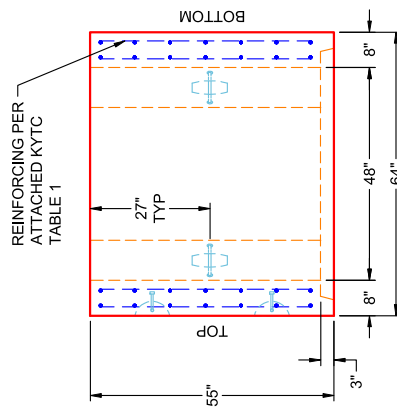
COMPONENT ISOMETRIC VIEW



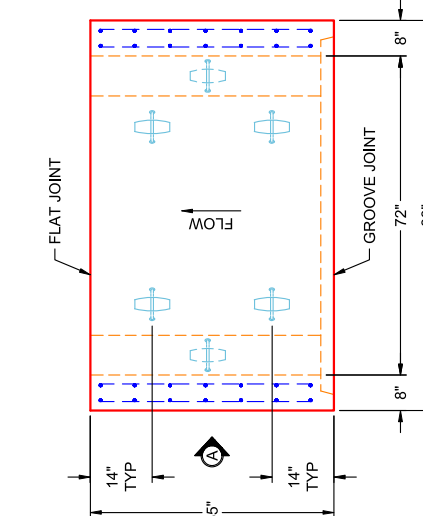
JOINT DETAIL (TYP) NTS



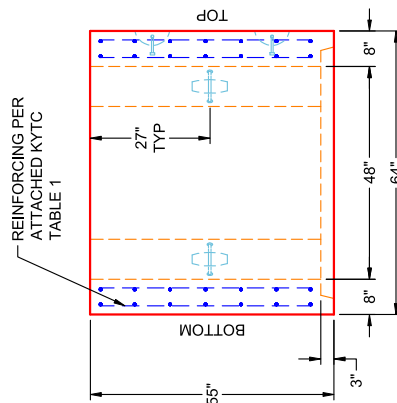
END VIEW TYPICAL



VIEW B SEC A (UPRIGHT IN MOLD)



PLAN VIEW SEC A (UPRIGHT IN MOLD)



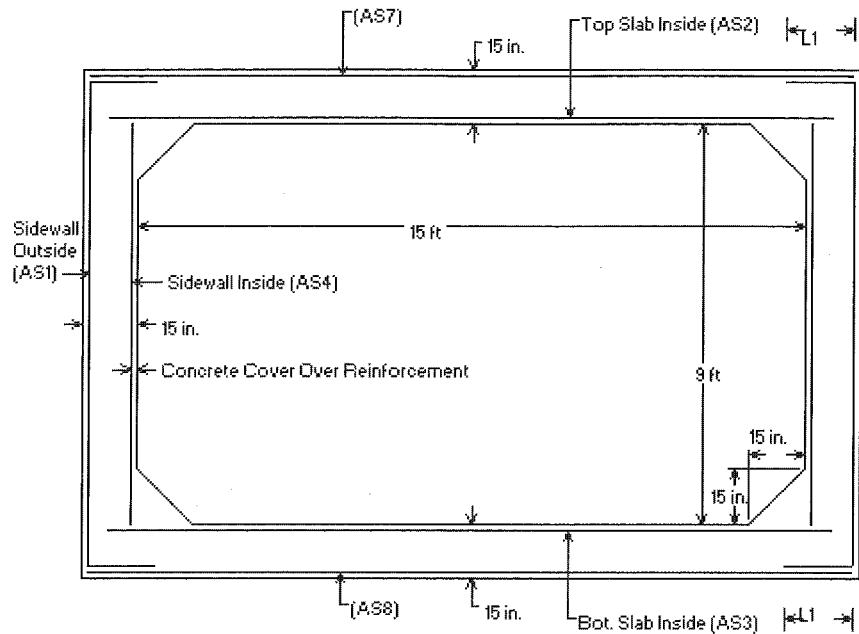
VIEW A SEC A (UPRIGHT IN MOLD)

- GENERAL NOTES:**
- PER SECTION 605 OF KYTC STANDARD SPECS FOR ROAD & BRIDGE CONSTRUCTION
 - LOAD REQUIREMENTS: KY-HL93 (KY TABLE 1)
 - REINFORCEMENT PER ATTACHED KYTC TABLE 1
 - COVER DEPTH: 0' - 4"
 - CONCRETE: 5,000 PSI AT 28 DAYS
 - JOINT SEALANT: 1" BUTYL MASTIC (CS-102) EXTERIOR JOINT WRAP: 12" WIDE (CS-212)
 - WEIGHT: 6' X 4' RCBC = 2,354 LBS / LF (4'-7" LONG SECTION = 10,790 LBS)

<p>PRODUCTION WORK ORDER</p> <p>QUALITY CONTROL CHECKLIST</p> <ul style="list-style-type: none"> <input type="checkbox"/> ALL DIMENSIONS CORRECT. <input type="checkbox"/> LIFTERS INSTALLED INSIDE. <input type="checkbox"/> RECESS WITH HAUNCHES CORRECT. <input type="checkbox"/> REINFORCING CORRECT. <input type="checkbox"/> SURFACE QUALITY ACCEPTABLE. <input type="checkbox"/> LIFTERS INSTALLED OUTSIDE. <input type="checkbox"/> PRODUCT SQUARE. 	PRODUCT I.D.: BC048072-08WLF-9H	DESCRIPTION: 72" X 48" X 55" BOX CULVERT (8" WALLS & 9" HAUNCH)
	PRODUCT VIEW: RIGHT SIDE UP	CUSTOMER: ERNIE DAVIS & SONS MECHANICAL, INC.
	PLANT: BEAVER DAM, KY	PROJECT: HUNTER'S RIDGE PH 1
	WEIGHT: 10,790 LBS	STRUCTURE: BC 6 X 4 (SEC A)
	TOP SECTION JOINT: FLAT	ORDER NO: 25-2898
	BASE SECTION JOINT: GROOVE	PE: J.H. ROSS
	QC CHECK INITIALS:	DRAWING: K. CARDWELL
	DATE: 05/29/26	SCALE: NTS
		PG. 1 OF 1



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- * <L1> is Splice Length
- * (AS7) is Top Slab Outside
- * (AS8) is Bottom Slab Outside
- * See Box Culvert Design Summary Sheet for transverse and distribution reinforcement, as required.
- * For sidewall thicknesses of 6 in. and above, extend AS2 and AS3 a min. of 4 in. beyond the inside face of the sidewall. For thicknesses less than 6 in., extend AS2 and AS3 at least to within 1-1/2 in. of the outside face of the sidewall.

Notes:

- 1) Other reinforcement schemes that provide the required reinforcement areas at all locations identified in the program output are acceptable.
- 2) Longitudinal reinforcement is not shown for clarity, see AASHTO M259 for longitudinal reinforcement and for additional requirements.

KY Table 1

Precast Culvert KYHL-93 Design Table

Design Earth Cover, ft		As1	As2	As3	As4	As7	As8	As5	As6
6x4x7	0<2*	0.202	0.421	0.266	0.168	0.192	0.168	0.192	0.192
	2<3	0.251	0.368	0.288	0.168	0.168	0.168		
	3-5	0.19	0.271	0.24	0.168	0.168	0.168		
	10	0.168	0.228	0.234	0.168	0.168	0.168		
	15	0.216	0.306	0.313	0.168	0.168	0.168		
	20	0.275	0.391	0.398	0.168	0.168	0.168		
	25	0.338	0.479	0.487	0.168	0.168	0.168		
	30	0.404	0.571	0.579	0.168	0.168	0.168		
	35	0.473	0.667	0.675	0.168	0.168	0.168		

*top slab 8"

Design Earth Cover, ft		As1	As2	As3	As4	As7	As8	As5	As6
6x5x7	0<2*	0.192	0.449	0.291	0.168	0.192	0.168	0.192	0.192
	2<3	0.22	0.398	0.316	0.168	0.168	0.168		
	3-5	0.168	0.294	0.262	0.168	0.168	0.168		
	10	0.168	0.243	0.252	0.168	0.168	0.168		
	15	0.188	0.326	0.336	0.168	0.168	0.168		
	20	0.238	0.417	0.427	0.168	0.168	0.168		
	25	0.291	0.512	0.522	0.168	0.168	0.168		
	30	0.347	0.611	0.622	0.168	0.168	0.168		
	35	0.406	0.714	0.725	0.168	0.168	0.168		

*top slab 8"

Design Earth Cover, ft		As1	As2	As3	As4	As7	As8	As5	As6
6x6x7	0<2*	0.192	0.47	0.311	0.168	0.192	0.168	0.192	0.192
	2<3	0.195	0.421	0.337	0.168	0.168	0.168		
	3-5	0.168	0.311	0.277	0.168	0.168	0.168		
	10	0.168	0.252	0.263	0.168	0.168	0.168		
	15	0.168	0.338	0.349	0.168	0.168	0.168		
	20	0.212	0.432	0.444	0.168	0.168	0.168		
	25	0.259	0.531	0.543	0.168	0.168	0.168		
	30	0.308	0.634	0.647	0.168	0.168	0.168		
	35	0.359	0.741	0.755	0.168	0.168	0.168		

*top slab 8"

Default Configuration Image

Strength Reduction Factors

Design Code: [ASPHD-LLFD]

Flexure: [1] Shear: [0.9]

Crack Width (CHBDC Only): [0.25] in

Reinforcement Diameter: [User Specified]

Reinforcement Diameter	AS11	AS21	AS31	AS41	AS51	AS81
* Sidewall Thickness	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.
* Top Slab Thickness	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.
* Bottom Slab Thickness	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.
* Sidewall Thickness	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.
* Top Slab Thickness	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.
* Bottom Slab Thickness	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.	[0] in.

Soil Load Data

Soil Unit Weight: [120] pcf

Minimum Lateral Pressure Coefficient: [0.25]

Maximum Lateral Pressure Coefficient: [0.5]

Vertical Arching Factor: [Embankment/Compacted]

Return to Main Menu

Data Directory: [Jeremiah Littleton Documents] [30>EARS]

SI Unit File [Customary US Unit File]

Section Length: [] ft

Box Geometry

SPAN < / ft	SPAN > / ft
[Span]/12	[0]
[Span]/12	[0]
[Span]/12	[0]
[Span]/12	[0]
[Span]/12	[0]

MINIMUM DEPTH OF FILL < 2 ft

MINIMUM DEPTH OF FILL >= 2 ft

Reinforcement Type: [Welded Wire]

Material Properties

Main Reinforcement Yield Strength: [65000] psi

Design Concrete Strength: [5000] psi

Concrete Unit Weight: [150] pcf

Stirrup Reinforcement Developable Yield Stress: [60000] psi

Total Service Stress Limit: [100] %

Restore Default Settings

Next Page >> Return to Main Menu

Live Load Data

Live Load Type (Max Z): [HS-Series] Magnitude (k): [25]

Interstate/Tandem: [] Magnitude (k): [80]

CHBDC Truck: [] Magnitude (k): [140]

Tandem/Tandem: [] Magnitude (k): [140]

Other: [] Magnitude (k): [10]

None: []

Direction of Traffic: [Parallel] To Span

Impact Factor Options: [Design Code] Design Code: [1]

Impact Factor (User Def): []

Lane Load: [0] lb/ft

Live Load Distribution Factor (LLDF): [Design Code] Design Code: [1.15]

Fluid Levels

Depth of Fluid: [1] * Hise

Fluid Unit Weight: [62.5] pcf

Surcharge Loads

Uniform Vertical Lateral - Top of Culvert (LLTC): [0] lb/ft

Lateral - Bottom of Culvert (LLBC): [90] lb/ft

Interstate/Tandem Truck Wheel Layout

Users Specified (Not by Code)

Footprint	Length	Width
<input checked="" type="checkbox"/> By Code	[10] in.	[20] in.
<input checked="" type="checkbox"/> By Code	[10] in.	[20] in.
<input checked="" type="checkbox"/> By Code	[0] in.	[0] in.
<input checked="" type="checkbox"/> By Code	[10] in.	[24] in.
<input checked="" type="checkbox"/> By Code	[10] in.	[20] in.
<input checked="" type="checkbox"/> By Code	[10] in.	[20] in.

Return to Main Menu

Live Load Data

Live Load Type (Max Z): [HS-Series] Magnitude (k): [25]

Interstate/Tandem: [] Magnitude (k): [80]

CHBDC Truck: [] Magnitude (k): [140]

Tandem/Tandem: [] Magnitude (k): [140]

Other: [] Magnitude (k): [10]

None: []

Direction of Traffic: [Parallel] To Span

Impact Factor Options: [Design Code] Design Code: [1]

Impact Factor (User Def): []

Lane Load: [0] lb/ft

Live Load Distribution Factor (LLDF): [Design Code] Design Code: [1.15]

Fluid Levels

Depth of Fluid: [1] * Hise

Fluid Unit Weight: [62.5] pcf

Surcharge Loads

Uniform Vertical Lateral - Top of Culvert (LLTC): [0] lb/ft

Lateral - Bottom of Culvert (LLBC): [90] lb/ft

Interstate/Tandem Truck Wheel Layout

Users Specified (Not by Code)

Footprint	Length	Width
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<input checked="" type="checkbox"/> By Code	[10] in.	[20] in.
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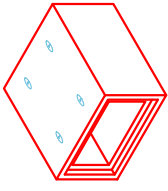
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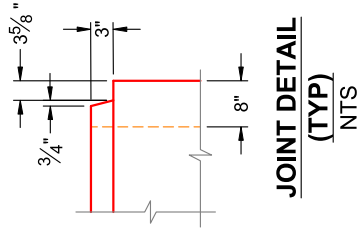
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P1 BC048024-08WLF

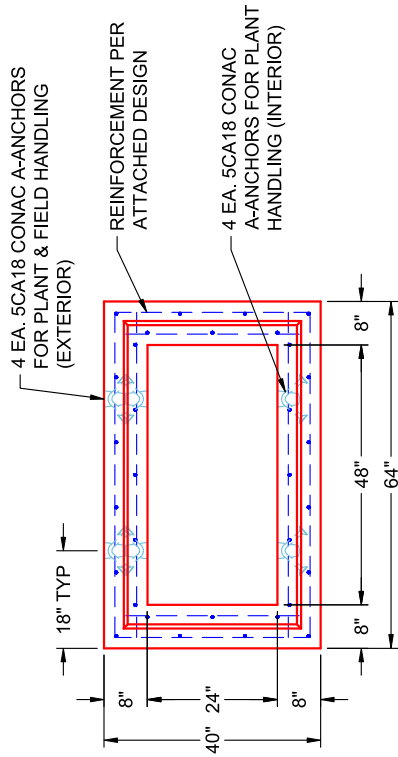
BOX CULVERT (08W/08F/08T) No Haunch G/T



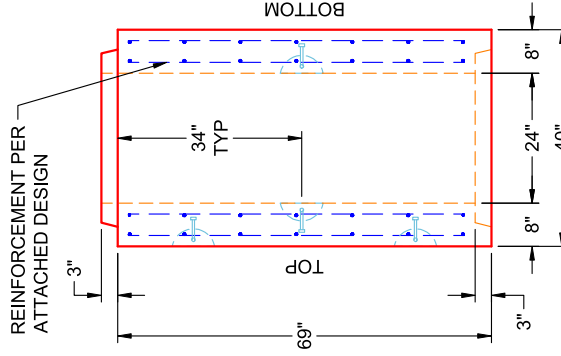
COMPONENT ISOMETRIC VIEW



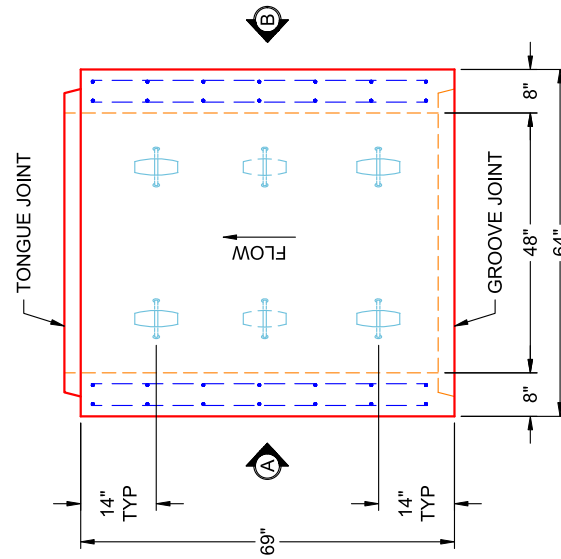
JOINT DETAIL (TYP) NTS



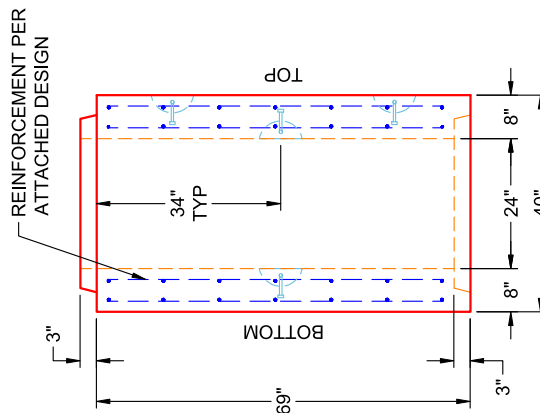
END VIEW TYPICAL



VIEW B PC 22 (UPRIGHT IN MOLD)



PLAN VIEW PC 22 (UPRIGHT IN MOLD)



VIEW A PC 22 (UPRIGHT IN MOLD)

GENERAL NOTES:

1. MANUFACTURED TO ASTM C-1577 & SECTION 714 OF INDOT STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE BOX STRUCTURES
2. LOAD REQUIREMENTS: HL93
3. REINFORCEMENT PER ATTACHED DESIGN
4. COVER DEPTH: 4'-8"
5. CONCRETE: 5,000 PSI AT 28 DAYS
6. JOINT SEALANT: 1" BUTYL MASTIC (CS-102) EXTERIOR JOINT WRAP: 12" WIDE (CS-212)
7. WEIGHT: 4' X 2' (48" X 24") RCBC = 1,418 LBS / LF (69" LONG SECTION = 8,152 LBS)

INFRASTRUCTURE PRECAST (ICAST)

Sht _____ of _____
 By: J. Horsley
 Ck: _____
 5/11/2026 4:10:17 PM
 p. 1 of 3

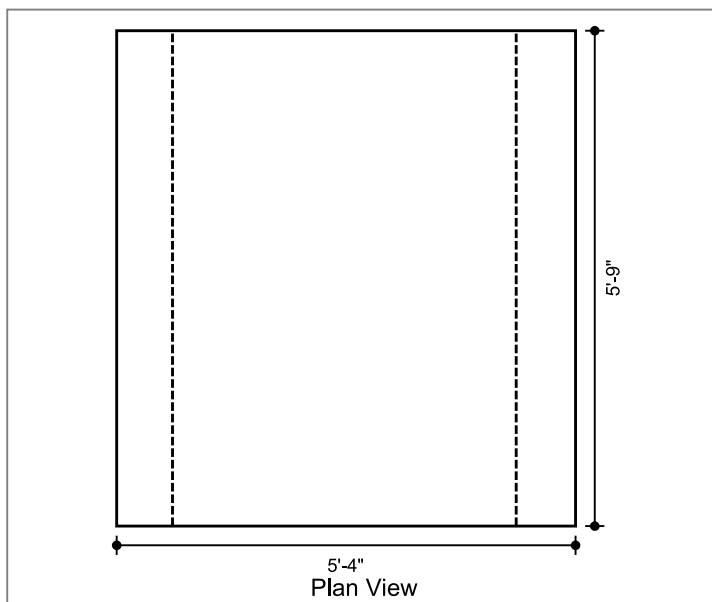
Project : Alcoa Outfall
 Task :
 Job No. : 25-2073

Client: Bowen Engineering Co
 File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

Spec.: LRFD 9th ed.
 Type of Culvert: Precast

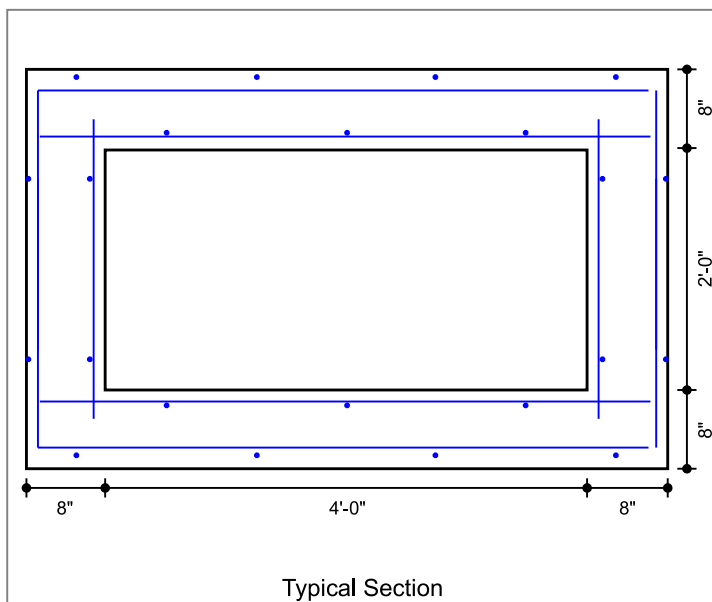
Physical Dimensions

Clear Span: 4'-0"
 Clear Height: 2'-0"
 Top Slab: 8"
 Bottom Slab: 8"
 Ext. Wall: 8"
 Fill Depth Range
 Maximum: 7.99 ft
 Minimum: 4.00 ft
 Increment: 0.50 ft
 Length: 5'-9"
 Skew Angle: 0.00 deg
 Bottom Slab Support: Full Slab
 Top Haunch, Width: 0"
 Top Haunch, Height: 0"
 Bottom Haunch, Width: 0"
 Bottom Haunch, Height: 0"



Material Properties

Concrete
 Strength, f_c: 5.000 ksi
 Density: 0.150 kcf
 Elasticity, E_c: 3834 ksi
 Type: Normal wt
 Steel
 Yield, f_y: 60 ksi
 Allow Stress: 36 ksi
 Elasticity, E_s: 29000 ksi
 Soil
 Density: 0.120 kcf
 Exposure Factor
 Class 2 Exposure
 Reinforcement Covers
 Ext. Cover Top Slab: 2"
 Ext. Cover Bottom Slab: 1"
 Ext. Cover Walls: 1"
 Int. Cover Walls: 1"
 Int. Cover Top Slab: 1"
 Int. Cover Bottom Slab: 1"



Controlling Ratings

Inventory Rating: NaN
 Operating Rating: NaN

Loads

Live Load
 Vehicle Names: HL-93
 Traffic Direction: Parallel
 Eq. Height of Soil: Calculated
 Dead Load
 Future Wearing Surface: 0.000 klf
 Additional Dead Load: 0.000 klf
 Concentrated Loads: none

Lateral Soil Loads
 Eq. Fluid Press. Max: 60.00 pcf
 Eq. Fluid Press. Min: 30.00 pcf

Interior Water Pressure: yes, head pressure = 0 ft
 Exterior Water Pressure: no

INFRASTRUCTURE PRECAST (ICAST)

Sht _____ of _____

By: J. Horsley

Ck: _____

5/11/2026 4:10:17 PM

Project : Alcoa Outfall

Task :

Client: Bowen Engineering Co

Job No. : 25-2073

File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

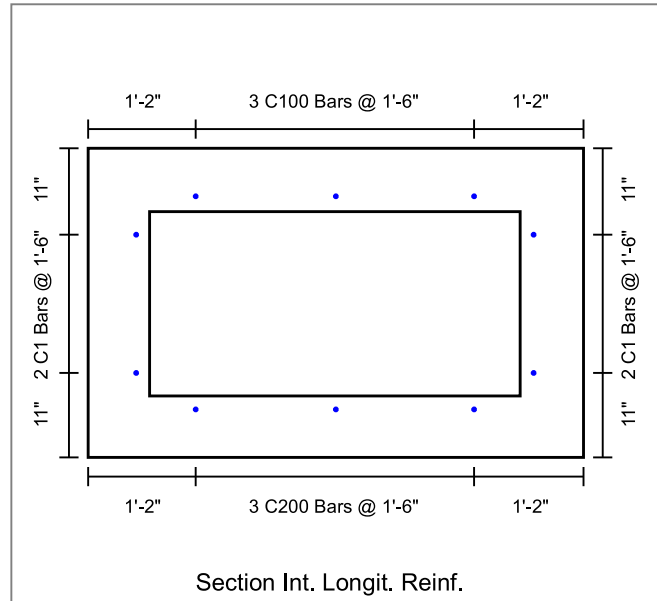
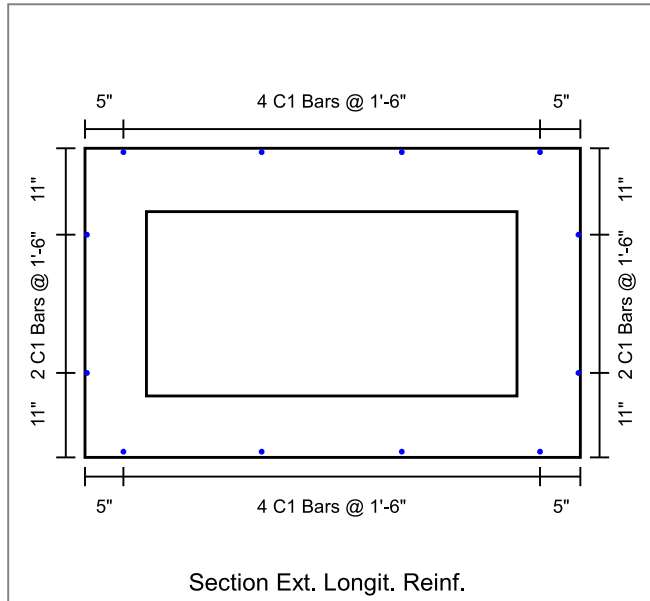
etc of 3

Concrete Summary

Volume of Concrete: 0.362 cy/ft Total Volume of Concrete: 2.082 cy

Reinforcing Steel Bar Schedule (lb)

Location	Mark	Qty	Size	Spacing	Type	Length	Center	Ver.Leg	Tot.Weight
Top Slab(Int)	A100 (AS2)	6	4	1'-0"	S	5'-1"	--	--	20.0
Bot Slab(Int)	A200 (AS3)	6	4	1'-0"	S	5'-1"	--	--	20.0
Corner(Top)	A1 (AS1)	6	4	1'-0"	U	9'-5"	5'-1"	2'-2"	38.0
Corner(Bot)	A2 (AS1)	6	4	1'-0"	U	9'-7"	5'-1"	2'-3"	38.0
Wall(Int)	B1 (AS4)	12	4	1'-0"	S	2'-6"	--	--	20.0
Longit. Top (Int)	C100 (AS5)	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Bot (Int)	C200	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Top (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Bot (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Int)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
									182



INFRASTRUCTURE PRECAST (ICAST)

Sht _____ of _____

By: J. Horsley

Ck: _____

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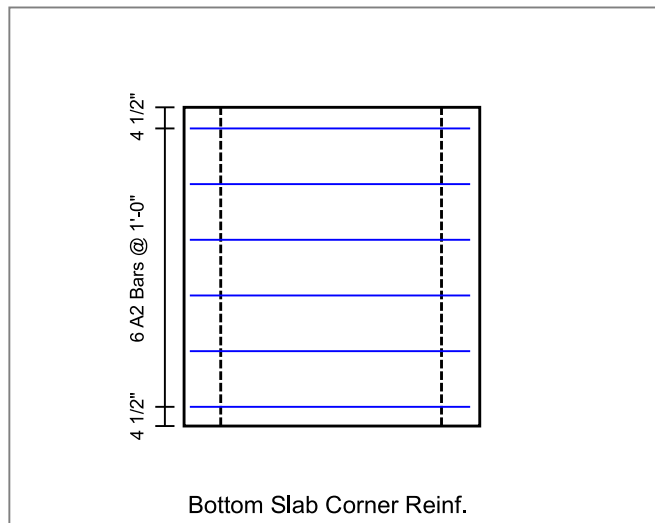
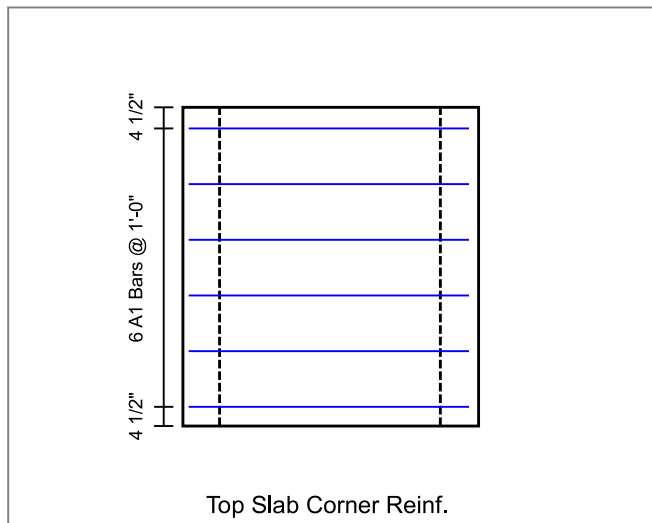
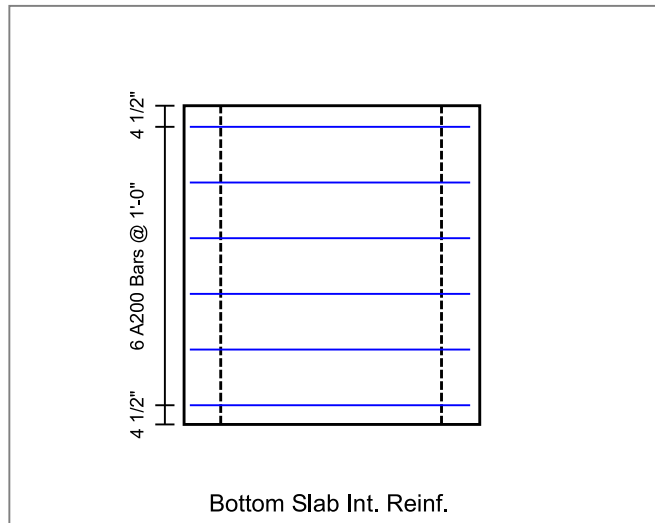
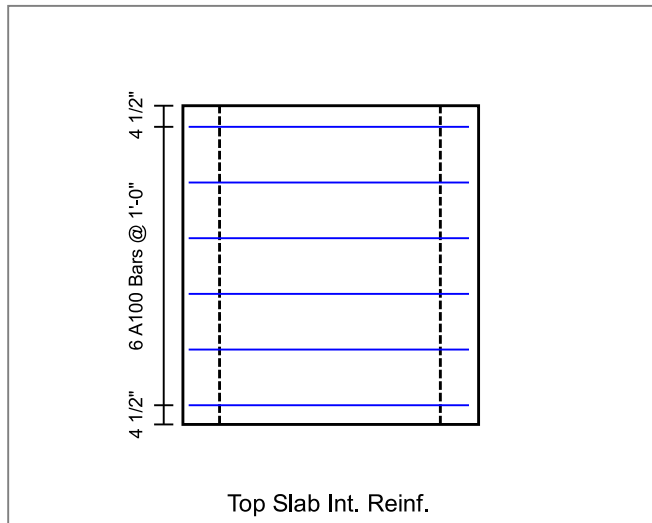
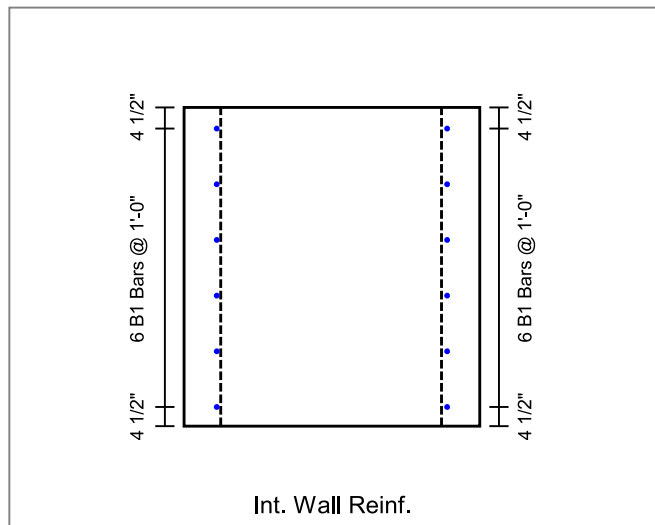
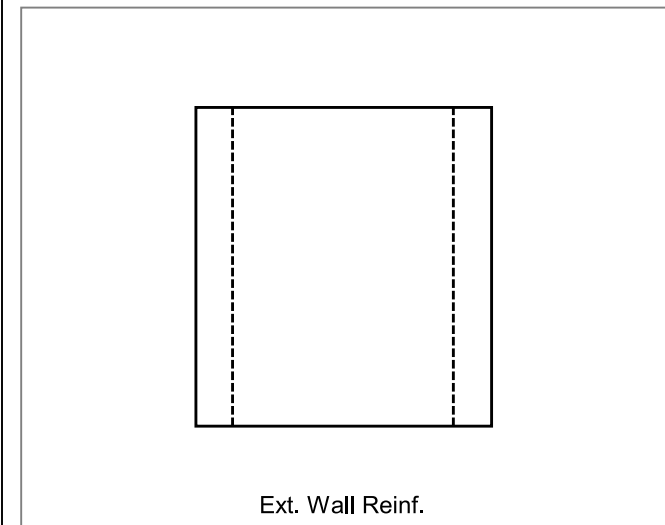
Project : Alcoa Outfall

Client: Bowen Engineering Co

Task :

File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

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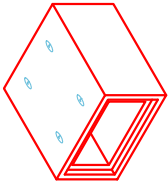




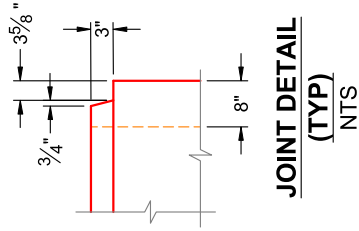
Structure ID: BC 4 x 2 (PC 21)

P1 BC048024-08WLF

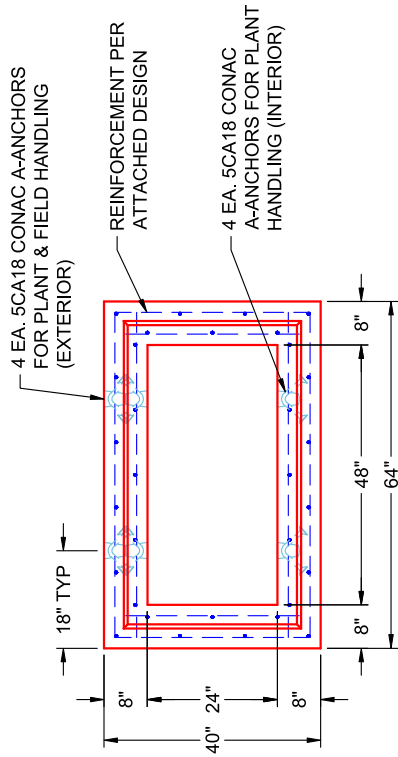
BOX CULVERT (08W/08F/08T) No Haunch G/T



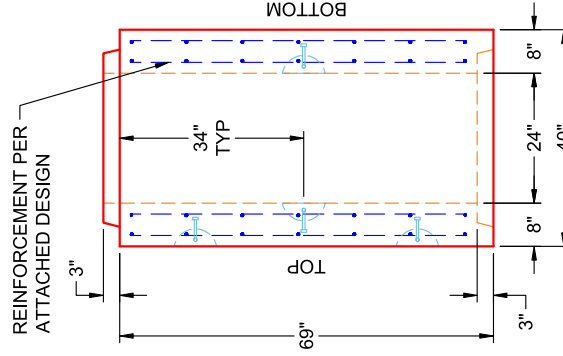
**COMPONENT
ISOMETRIC VIEW**



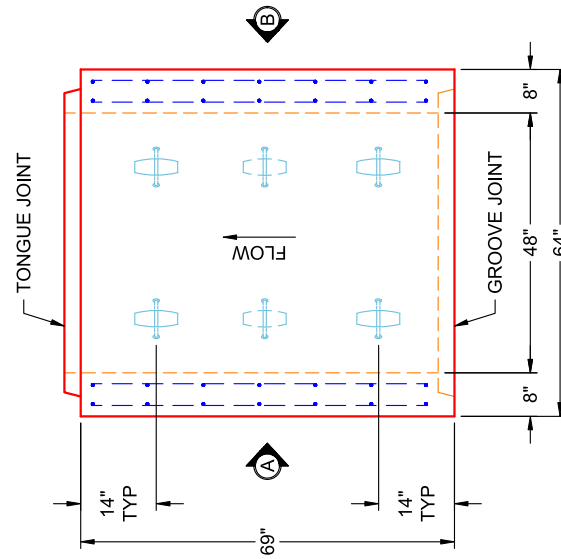
**JOINT DETAIL
(TYP)
NTS**



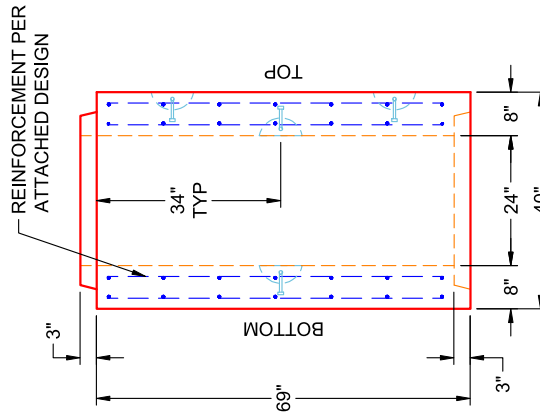
**END VIEW
TYPICAL**



**VIEW B
PC 21
(UPRIGHT IN MOLD)**



**PLAN VIEW
PC 21
(UPRIGHT IN MOLD)**



**VIEW A
PC 21
(UPRIGHT IN MOLD)**

GENERAL NOTES:

1. MANUFACTURED TO ASTM C-1577 & SECTION 714 OF INDOT STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE BOX STRUCTURES
2. LOAD REQUIREMENTS: HL93
3. REINFORCEMENT PER ATTACHED DESIGN
4. COVER DEPTH: 4'-8"
5. CONCRETE: 5,000 PSI AT 28 DAYS
6. JOINT SEALANT: 1" BUTYL MASTIC (CS-102) EXTERIOR JOINT WRAP: 12" WIDE (CS-212)
7. WEIGHT: 4' X 2' (48" X 24") RCBC = 1,418 LBS / LF (69" LONG SECTION = 8,152 LBS)

INFRASTRUCTURE PRECAST (ICAST)

Sht _____ of _____
 By: J. Horsley
 Ck: _____
 5/11/2026 4:10:17 PM
 p. 1 of 3

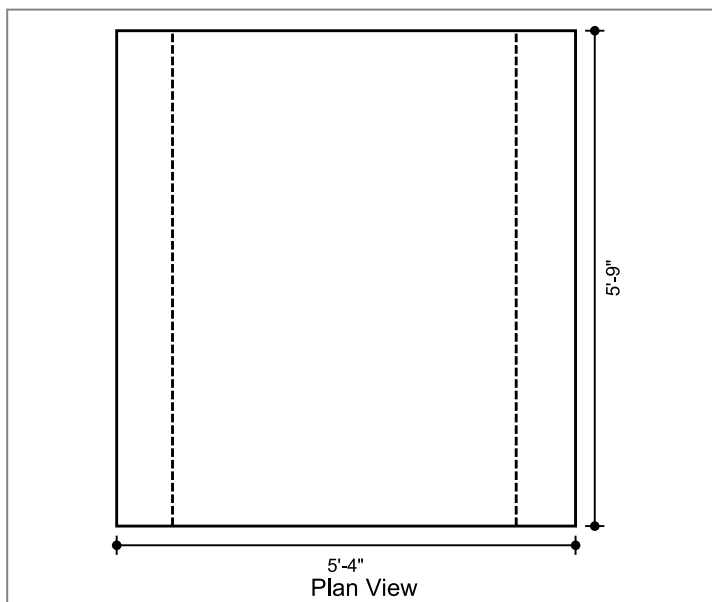
Project : Alcoa Outfall
 Task :
 Job No. : 25-2073

Client: Bowen Engineering Co
 File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

Spec.: LRFD 9th ed.
 Type of Culvert: Precast

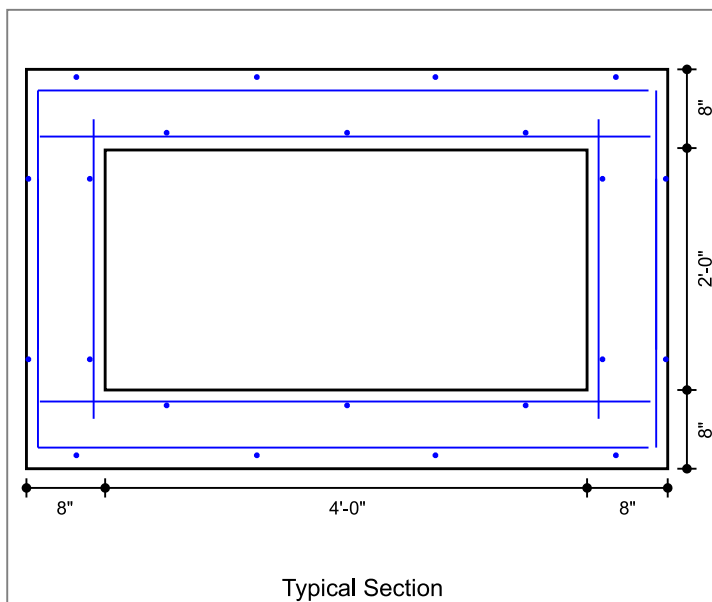
Physical Dimensions

Clear Span: 4'-0"
 Clear Height: 2'-0"
 Top Slab: 8"
 Bottom Slab: 8"
 Ext. Wall: 8"
 Fill Depth Range
 Maximum: 7.99 ft
 Minimum: 4.00 ft
 Increment: 0.50 ft
 Length: 5'-9"
 Skew Angle: 0.00 deg
 Bottom Slab Support: Full Slab
 Top Haunch, Width: 0"
 Top Haunch, Height: 0"
 Bottom Haunch, Width: 0"
 Bottom Haunch, Height: 0"



Material Properties

Concrete
 Strength, f_c: 5.000 ksi
 Density: 0.150 kcf
 Elasticity, E_c: 3834 ksi
 Type: Normal wt
 Steel
 Yield, f_y: 60 ksi
 Allow Stress: 36 ksi
 Elasticity, E_s: 29000 ksi
 Soil
 Density: 0.120 kcf
 Exposure Factor
 Class 2 Exposure
 Reinforcement Covers
 Ext. Cover Top Slab: 2"
 Ext. Cover Bottom Slab: 1"
 Ext. Cover Walls: 1"
 Int. Cover Walls: 1"
 Int. Cover Top Slab: 1"
 Int. Cover Bottom Slab: 1"



Controlling Ratings

Inventory Rating: NaN
 Operating Rating: NaN

Loads

Live Load
 Vehicle Names: HL-93
 Traffic Direction: Parallel
 Eq. Height of Soil: Calculated
 Dead Load
 Future Wearing Surface: 0.000 klf
 Additional Dead Load: 0.000 klf
 Concentrated Loads: none

Lateral Soil Loads
 Eq. Fluid Press. Max: 60.00 pcf
 Eq. Fluid Press. Min: 30.00 pcf

Interior Water Pressure: yes, head pressure = 0 ft
 Exterior Water Pressure: no

INFRASTRUCTURE PRECAST (ICAST)

Sht _____ of _____

By: J. Horsley

Ck: _____

5/11/2026 4:10:17 PM

etc of 3

Project : Alcoa Outfall

Task :

Client: Bowen Engineering Co

Job No. : 25-2073

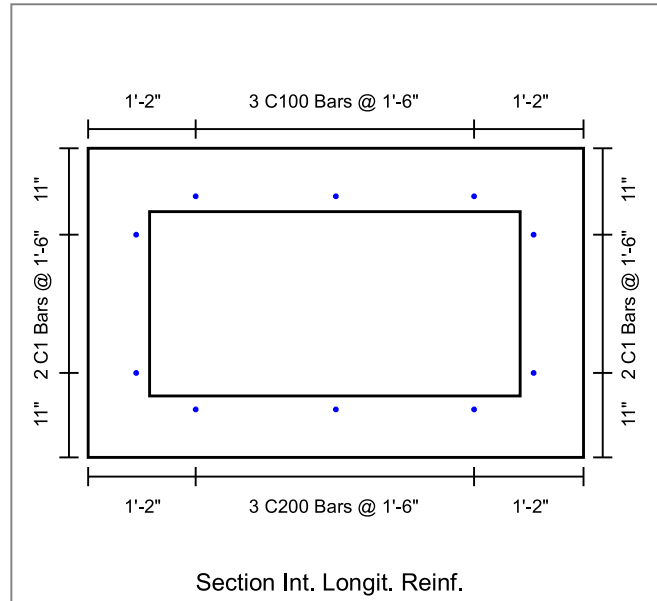
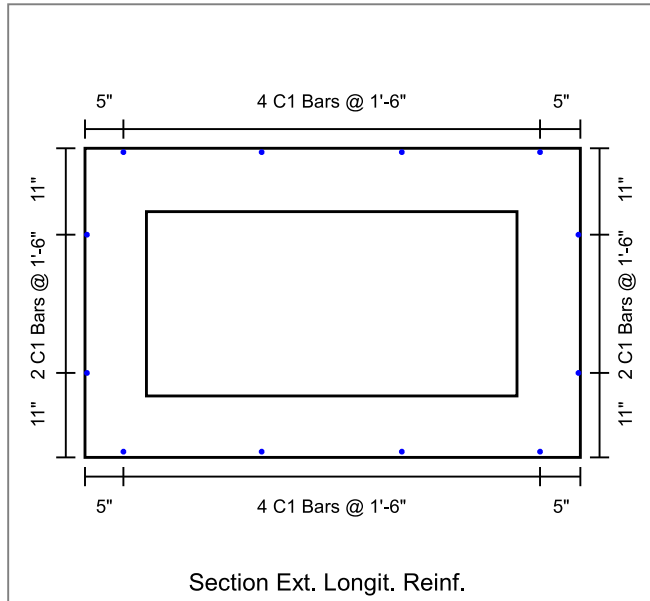
File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

Concrete Summary

Volume of Concrete: 0.362 cy/ft Total Volume of Concrete: 2.082 cy

Reinforcing Steel Bar Schedule (lb)

Location	Mark	Qty	Size	Spacing	Type	Length	Center	Ver.Leg	Tot.Weight
Top Slab(Int)	A100 (AS2)	6	4	1'-0"	S	5'-1"	--	--	20.0
Bot Slab(Int)	A200 (AS3)	6	4	1'-0"	S	5'-1"	--	--	20.0
Corner(Top)	A1 (AS1)	6	4	1'-0"	U	9'-5"	5'-1"	2'-2"	38.0
Corner(Bot)	A2 (AS1)	6	4	1'-0"	U	9'-7"	5'-1"	2'-3"	38.0
Wall(Int)	B1 (AS4)	12	4	1'-0"	S	2'-6"	--	--	20.0
Longit. Top (Int)	C100 (AS5)	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Bot (Int)	C200	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Top (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Bot (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Int)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
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INFRASTRUCTURE PRECAST (ICAST)

Sht _____ of _____

By: J. Horsley

Ck: _____

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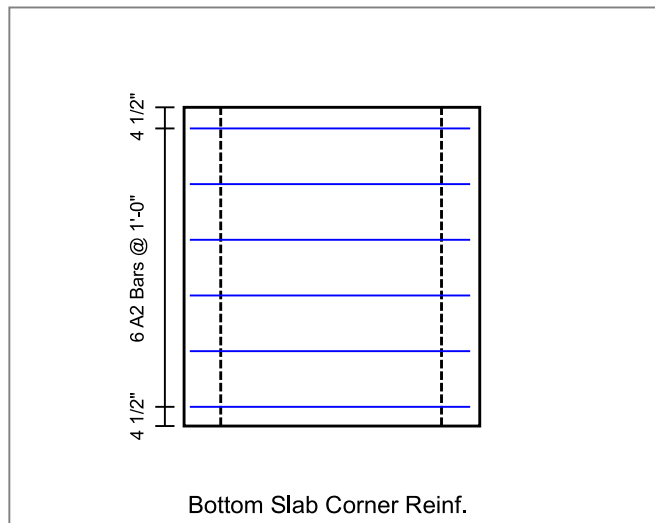
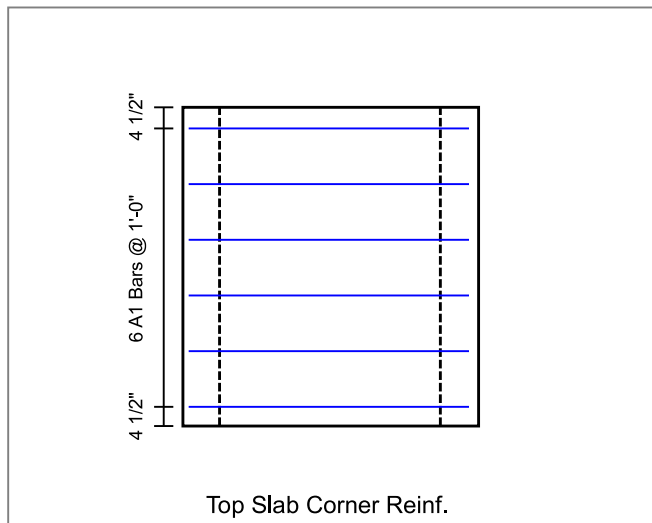
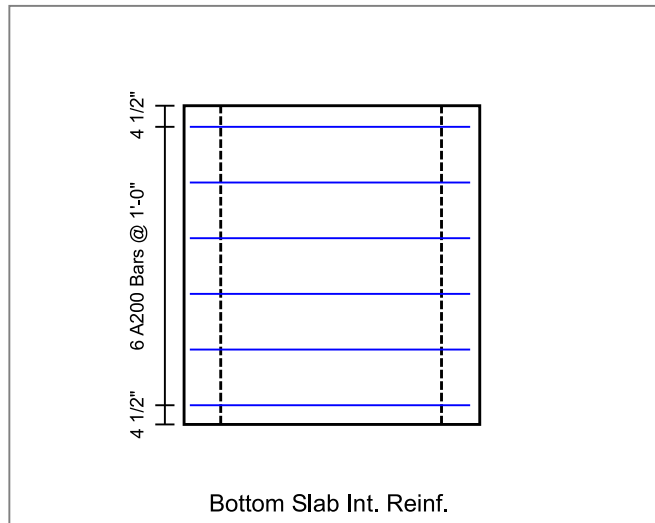
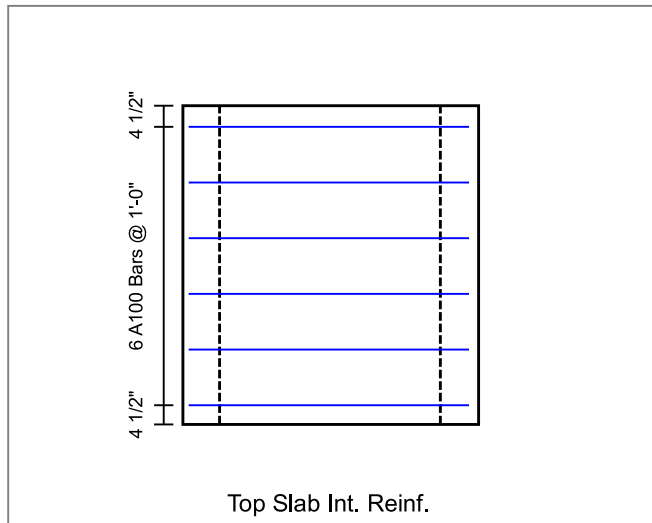
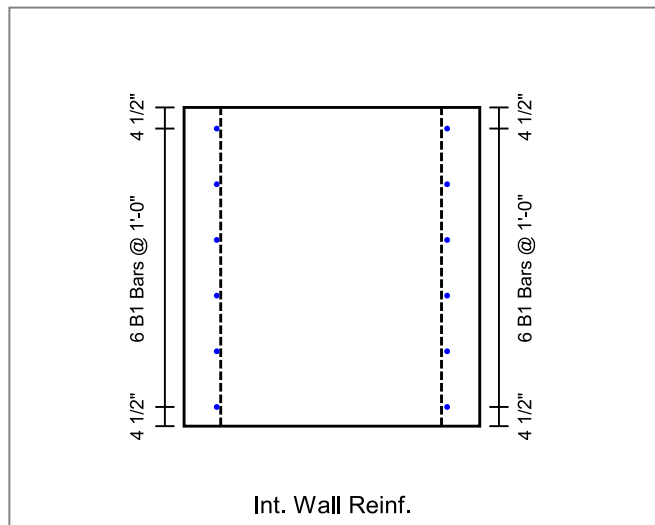
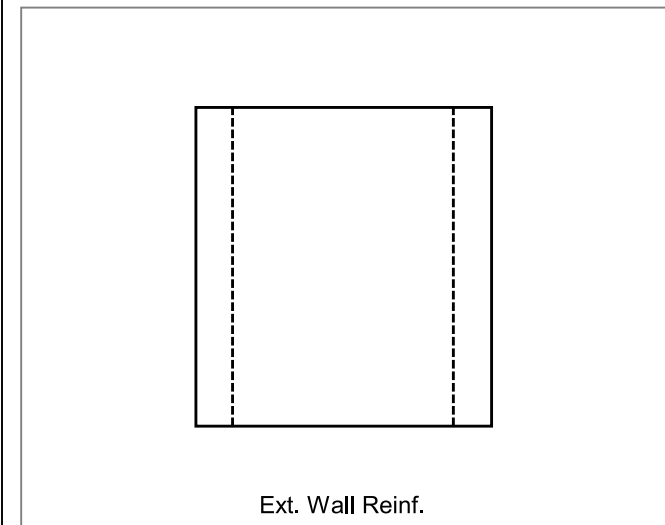
Project : Alcoa Outfall

Client: Bowen Engineering Co

Task :

File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

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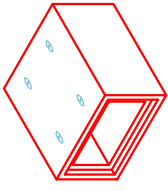




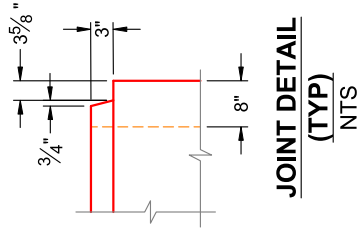
Structure ID: BC 4 x 2 (PC 19)

P1 BC048024-08WLF

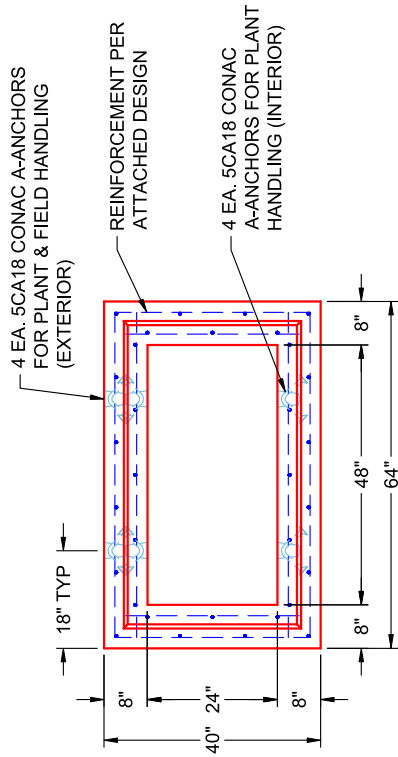
BOX CULVERT (08W/08F/08T) No Haunch G/T



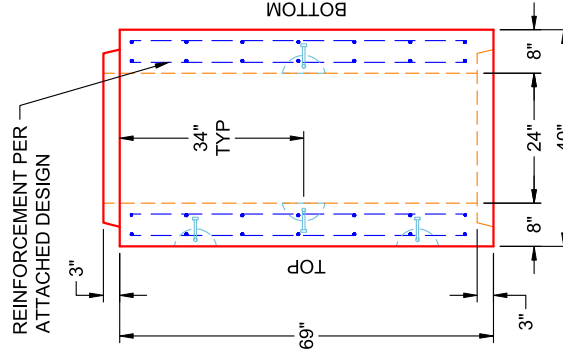
COMPONENT ISOMETRIC VIEW



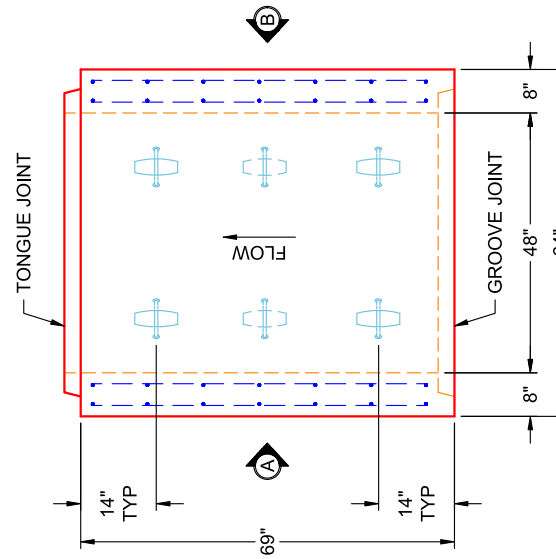
JOINT DETAIL (TYP) NTS



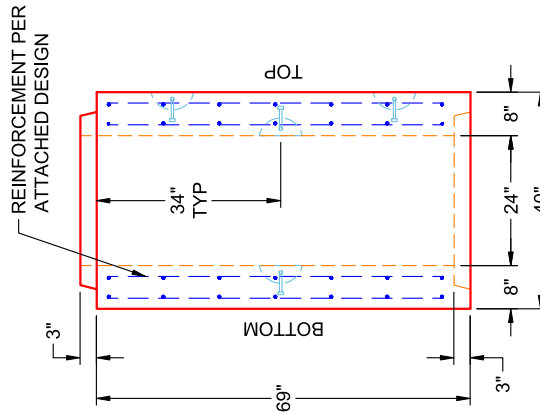
END VIEW TYPICAL



VIEW B PC 19 (UPRIGHT IN MOLD)



PLAN VIEW PC 19 (UPRIGHT IN MOLD)



VIEW A PC 19 (UPRIGHT IN MOLD)

GENERAL NOTES:

1. MANUFACTURED TO ASTM C-1577 & SECTION 714 OF INDOT STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE BOX STRUCTURES
2. LOAD REQUIREMENTS: HL93
3. REINFORCEMENT PER ATTACHED DESIGN
4. COVER DEPTH: 4'-8"
5. CONCRETE: 5,000 PSI AT 28 DAYS
6. JOINT SEALANT: 1" BUTYL MASTIC (CS-102) EXTERIOR JOINT WRAP: 12" WIDE (CS-212)
7. WEIGHT: 4' X 2' (48" X 24") RCBC = 1,418 LBS / LF (69" LONG SECTION = 8,152 LBS)

INFRASTRUCTURE PRECAST (ICAST)

Sht _____ of _____
 By: J. Horsley
 Ck: _____
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 p. 1 of 3

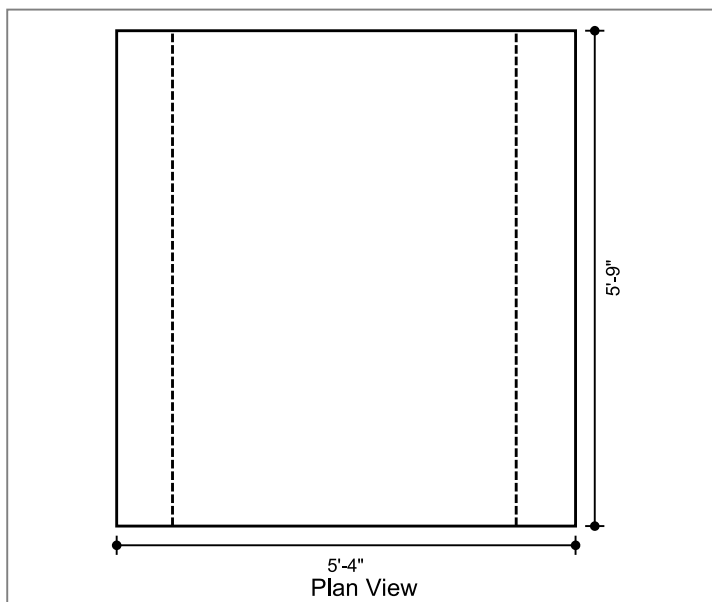
Project : Alcoa Outfall
 Task :
 Job No. : 25-2073

Client: Bowen Engineering Co
 File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

Spec.: LRFD 9th ed.
 Type of Culvert: Precast

Physical Dimensions

Clear Span: 4'-0"
 Clear Height: 2'-0"
 Top Slab: 8"
 Bottom Slab: 8"
 Ext. Wall: 8"
 Fill Depth Range
 Maximum: 7.99 ft
 Minimum: 4.00 ft
 Increment: 0.50 ft
 Length: 5'-9"
 Skew Angle: 0.00 deg
 Bottom Slab Support: Full Slab
 Top Haunch, Width: 0"
 Top Haunch, Height: 0"
 Bottom Haunch, Width: 0"
 Bottom Haunch, Height: 0"



Material Properties

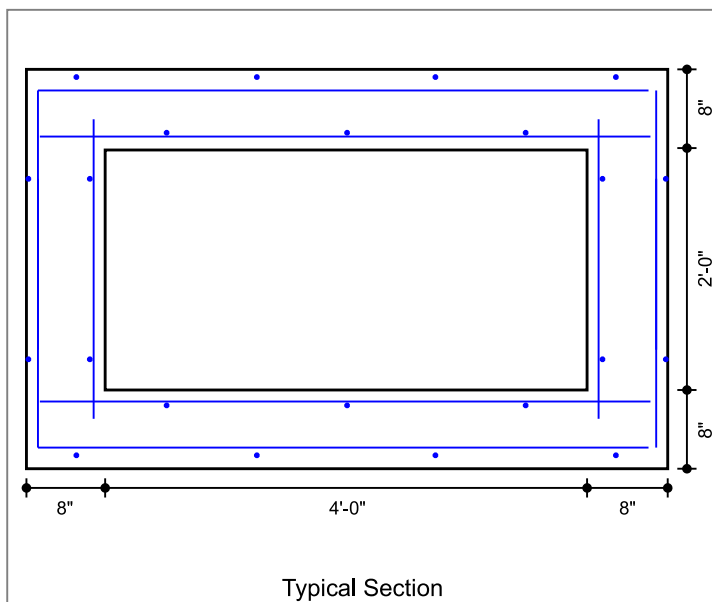
Concrete
 Strength, f_c: 5.000 ksi
 Density: 0.150 kcf
 Elasticity, E_c: 3834 ksi
 Type: Normal wt

Steel
 Yield, f_y: 60 ksi
 Allow Stress: 36 ksi
 Elasticity, E_s: 29000 ksi

Soil
 Density: 0.120 kcf

Exposure Factor
 Class 2 Exposure

Reinforcement Covers
 Ext. Cover Top Slab: 2"
 Ext. Cover Bottom Slab: 1"
 Ext. Cover Walls: 1"
 Int. Cover Walls: 1"
 Int. Cover Top Slab: 1"
 Int. Cover Bottom Slab: 1"



Controlling Ratings

Inventory Rating: NaN
 Operating Rating: NaN

Loads

Live Load
 Vehicle Names: HL-93
 Traffic Direction: Parallel
 Eq. Height of Soil: Calculated

Dead Load
 Future Wearing Surface: 0.000 klf
 Additional Dead Load: 0.000 klf
 Concentrated Loads: none

Lateral Soil Loads
 Eq. Fluid Press. Max: 60.00 pcf
 Eq. Fluid Press. Min: 30.00 pcf

Interior Water Pressure: yes, head pressure = 0 ft
 Exterior Water Pressure: no

INFRASTRUCTURE PRECAST (ICAST)

Sht _____ of _____

By: J. Horsley

Ck: _____

5/11/2026 4:10:17 PM

etc of 3

Project : Alcoa Outfall

Task :

Client: Bowen Engineering Co

Job No. : 25-2073

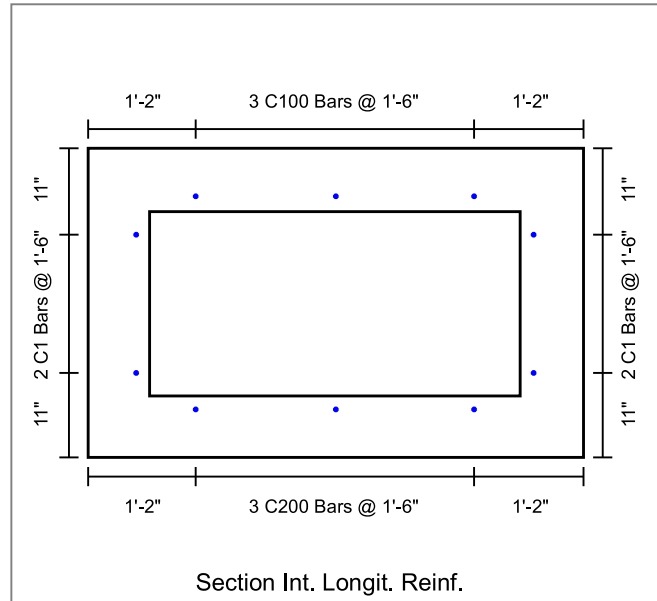
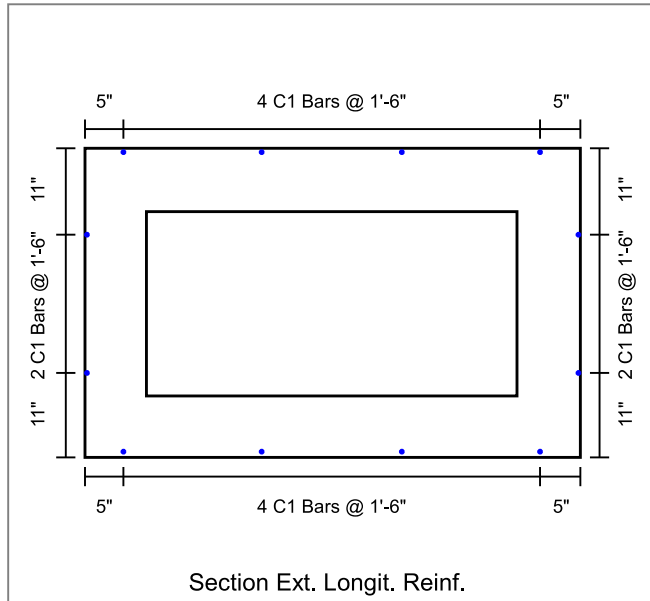
File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

Concrete Summary

Volume of Concrete: 0.362 cy/ft Total Volume of Concrete: 2.082 cy

Reinforcing Steel Bar Schedule (lb)

Location	Mark	Qty	Size	Spacing	Type	Length	Center	Ver.Leg	Tot.Weight
Top Slab(Int)	A100 (AS2)	6	4	1'-0"	S	5'-1"	--	--	20.0
Bot Slab(Int)	A200 (AS3)	6	4	1'-0"	S	5'-1"	--	--	20.0
Corner(Top)	A1 (AS1)	6	4	1'-0"	U	9'-5"	5'-1"	2'-2"	38.0
Corner(Bot)	A2 (AS1)	6	4	1'-0"	U	9'-7"	5'-1"	2'-3"	38.0
Wall(Int)	B1 (AS4)	12	4	1'-0"	S	2'-6"	--	--	20.0
Longit. Top (Int)	C100 (AS5)	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Bot (Int)	C200	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Top (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Bot (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Int)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
									182



INFRASTRUCTURE PRECAST (ICAST)

Sht _____ of _____

By: J. Horsley

Ck: _____

5/11/2026 4:10:17 PM

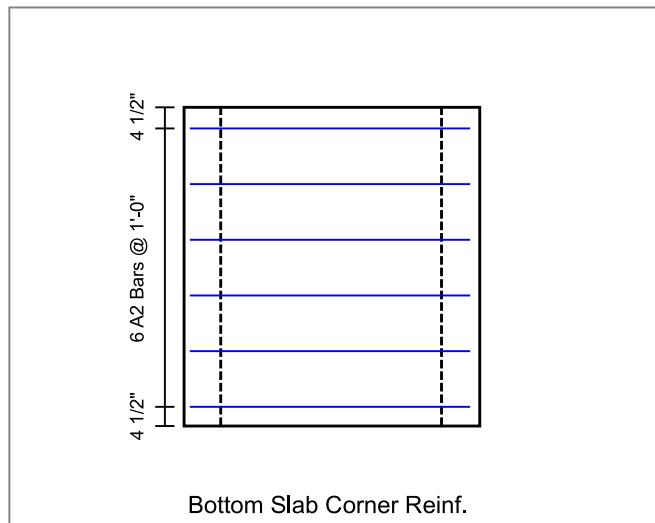
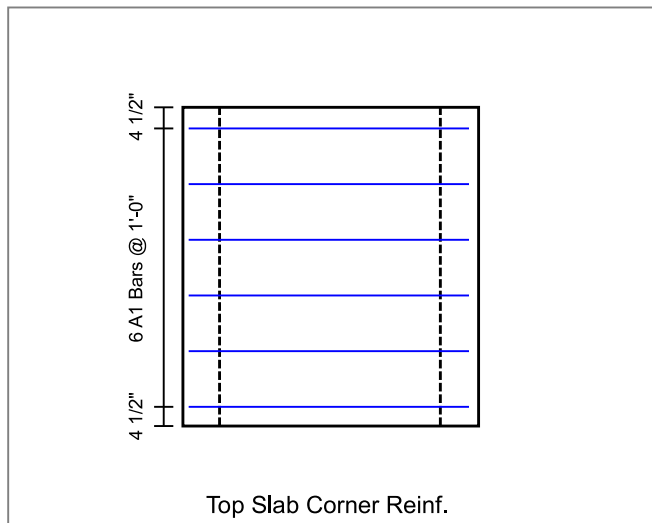
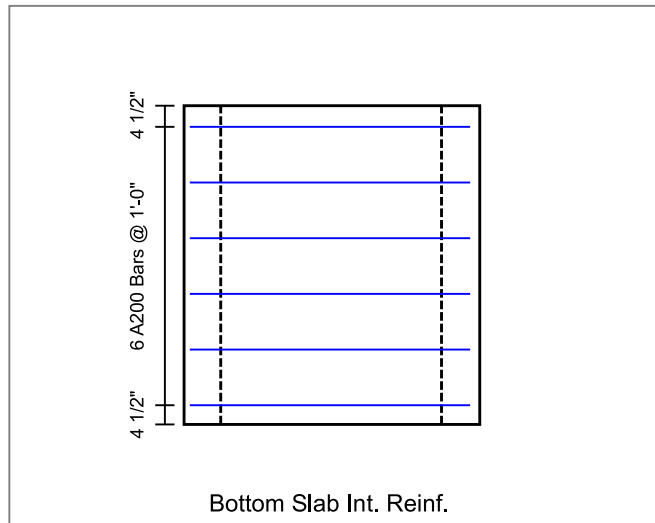
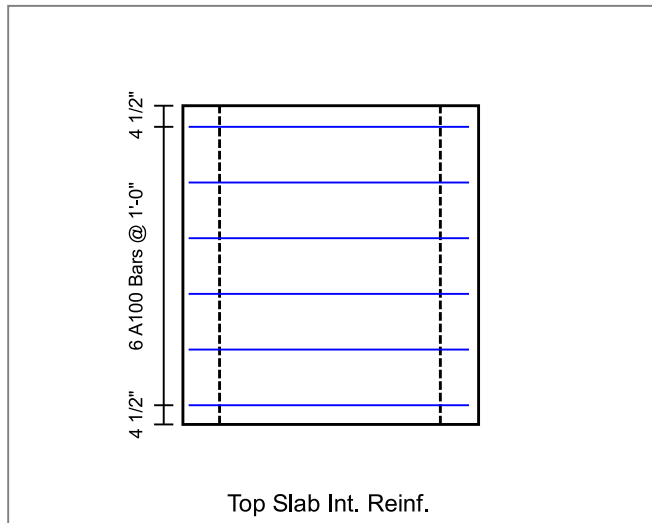
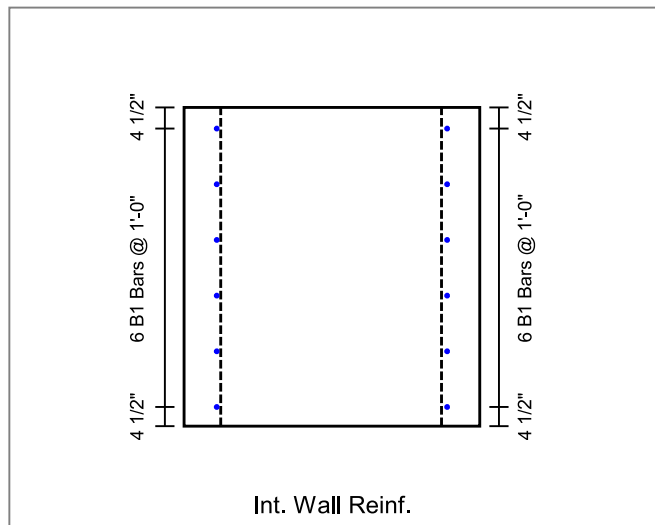
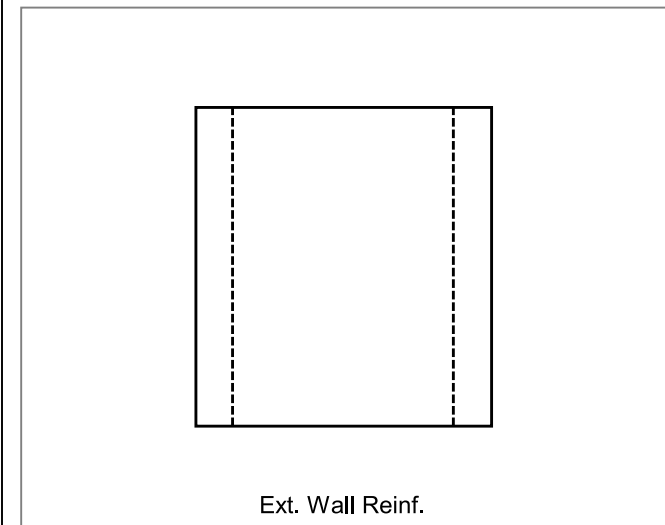
Project : Alcoa Outfall

Client: Bowen Engineering Co

Task :

File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

Page 3 of 3



Job Name: 26-1368 Freeman Lake Park Parking Lot Project
 Job Location: Elizabethtown, KY
 Contractor: Kauffeld Brothers Construction

Plant: Beaver Dam
 5/28/2026 9:51:48 AM

Tech: S. Felletter
 PC: T. Ryan



Structure ID: JB #2-7 JBB

P3 BX024030-08LD08S

BX FLAT LID 8inW SPEC. (KY JB-B1) F/F

- P4) CASTING (cast in) - 0
- P3) 24" x 30" - BX FLAT LID 8inW SPEC. (KY JB-B1) F/F - 8"
- P2) 24" x 30" - BOX RISER 8inW F/G - 42"
- P1) 24" x 30" - BOX BASE 8inW, 8inF, Variable Ht T/n - 28"
- 1) CASTING - HOE KY-206 F/C (KY TY1)
- 1) This Structure Includes a Cast-in Item
- 2) 24" x 30" - Conseal CS-102 1.00"
- 1) 24" - Conseal CS-102 1.00"
- 1) Hole - 26
- 1) DOGHOUSE INVRTD - 24"x24"

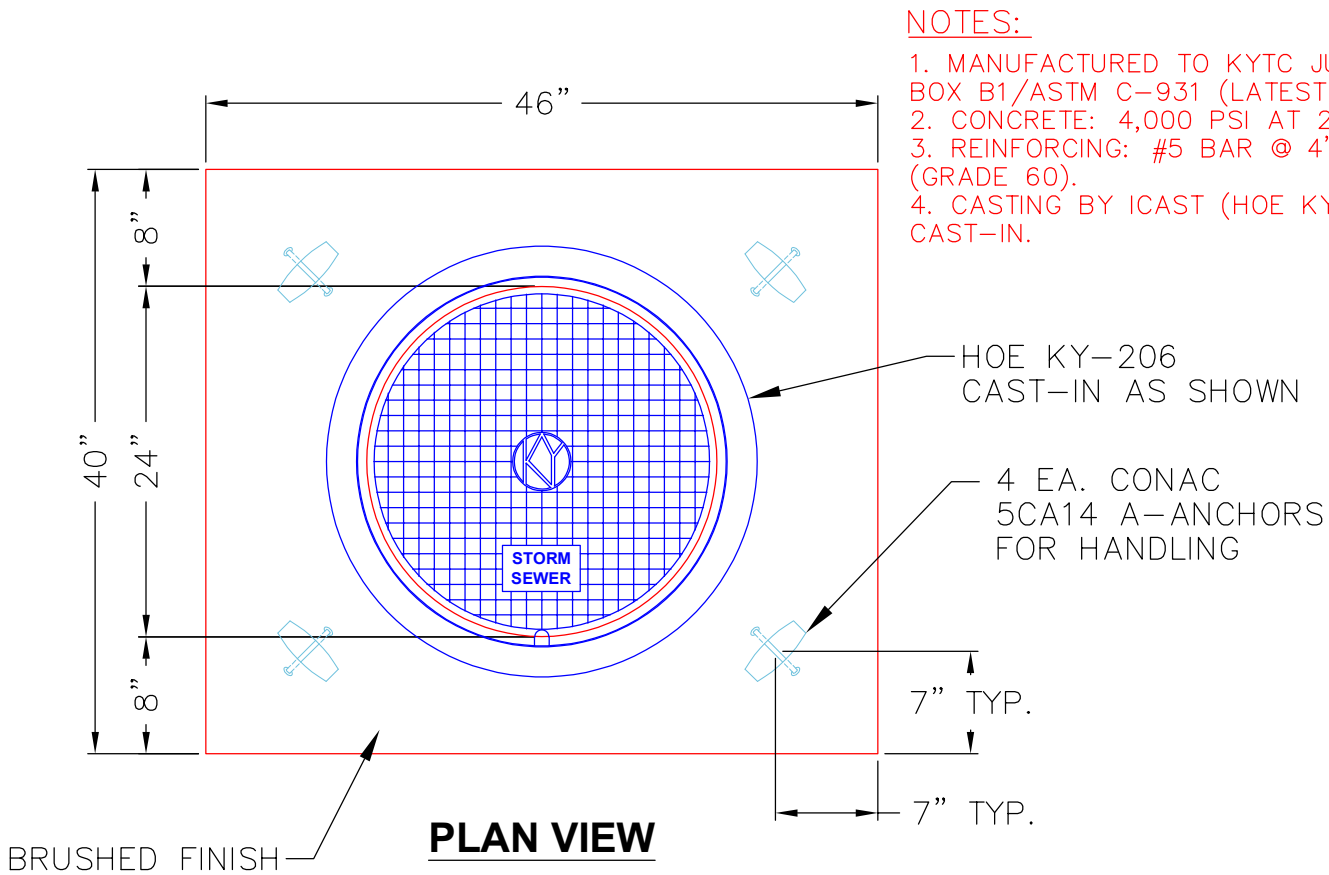
	0 lb
	931 lb
	3676 lb
	3510 lb
	206 lb
	0 lb
	0 lb
	0 lb
	0 lb
	0 lb
	0 lb
	0 lb
Structure Total:	8324 lb

Structure Notes:

1. KYTC JUNCTION BOX B1 / PER ASTM C913 SPEC'S.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. TOP SLAB w KYTC TYPE 1 F/C CAST FLUSH.
4. CASTING BY ICAST (HOE KY-206 F/C). CAST-IN.

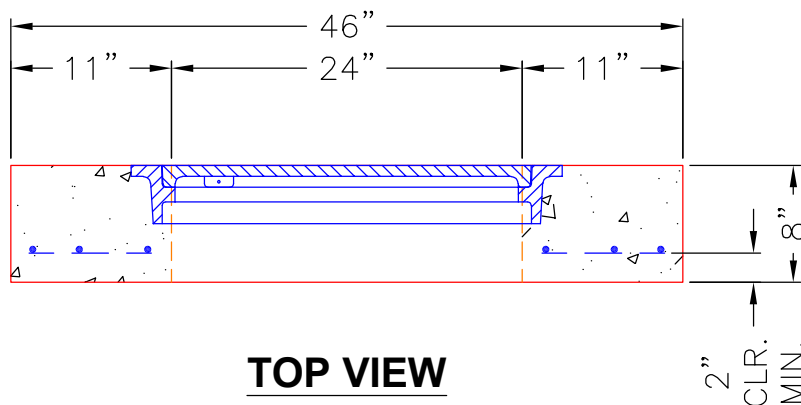
REINFORCING PER ASTM A615 (GRADE 60).

- TOP SLAB (As. 62) #5 BARS AT 4" C.C.E.W.
- WALLS (As .31) #5 BARS AT 12" C.C.E.W.
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.



NOTES:

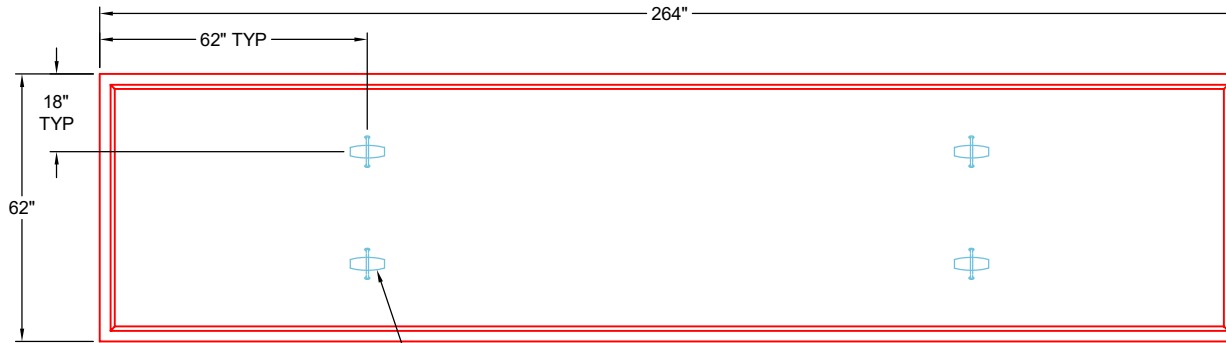
1. MANUFACTURED TO KYTC JUNCTION BOX B1/ASTM C-931 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 4" C.C. E.W. (GRADE 60).
4. CASTING BY ICAST (HOE KY-206 F/C). CAST-IN.



Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Flat	Wall Thickness: 8"	Height (Ext): 8"	Weight (Net): 931 lb Volume (Net): 0.24cu.yd
----------------------------------	--------------------------------	--------------------	------------------	---

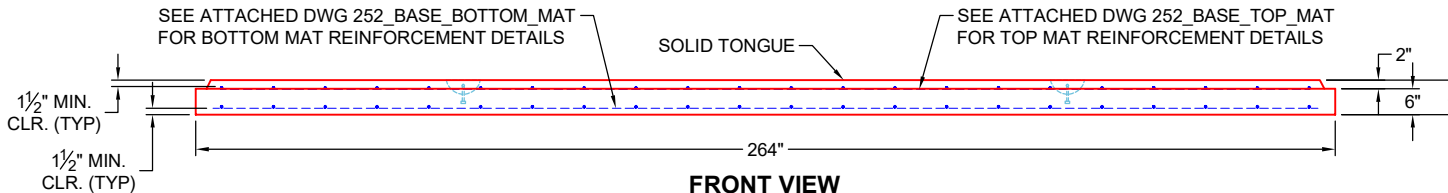
GENERAL NOTES:

1. MANUFACTURED TO ASTM C-913 (LATEST REVISION)
2. CONCRETE: 5,000 PSI AT 28 DAYS
3. REINFORCEMENT - MIN. 1½" REBAR CLEARANCE:
 - TOP MAT: PER ATTACHED DWG 252_BASE_TOP_MAT
 - BOTTOM MAT: PER ATTACHED DWG 252_BASE_BOTTOM_MAT
4. WEIGHTS: 11,502 LBS

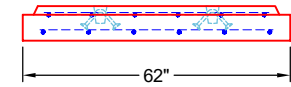


4 EA. 6CA18 CONAC A-ANCHORS FOR PLANT & FIELD HANDLING


**PLAN VIEW
(RIGHT SIDE UP)**



**FRONT VIEW
(RIGHT SIDE UP)**



**SIDE VIEW
(RIGHT SIDE UP)**

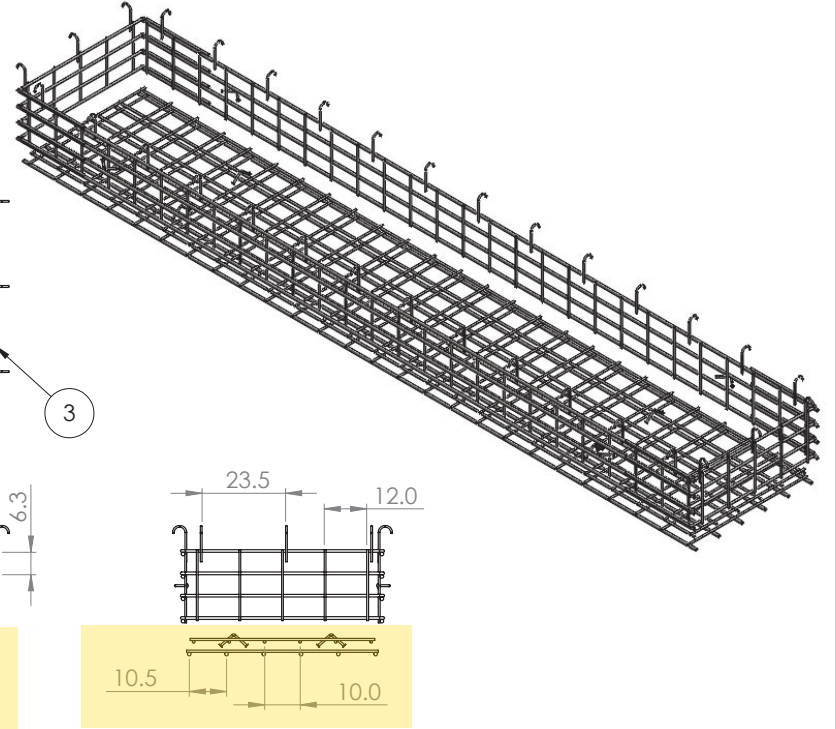
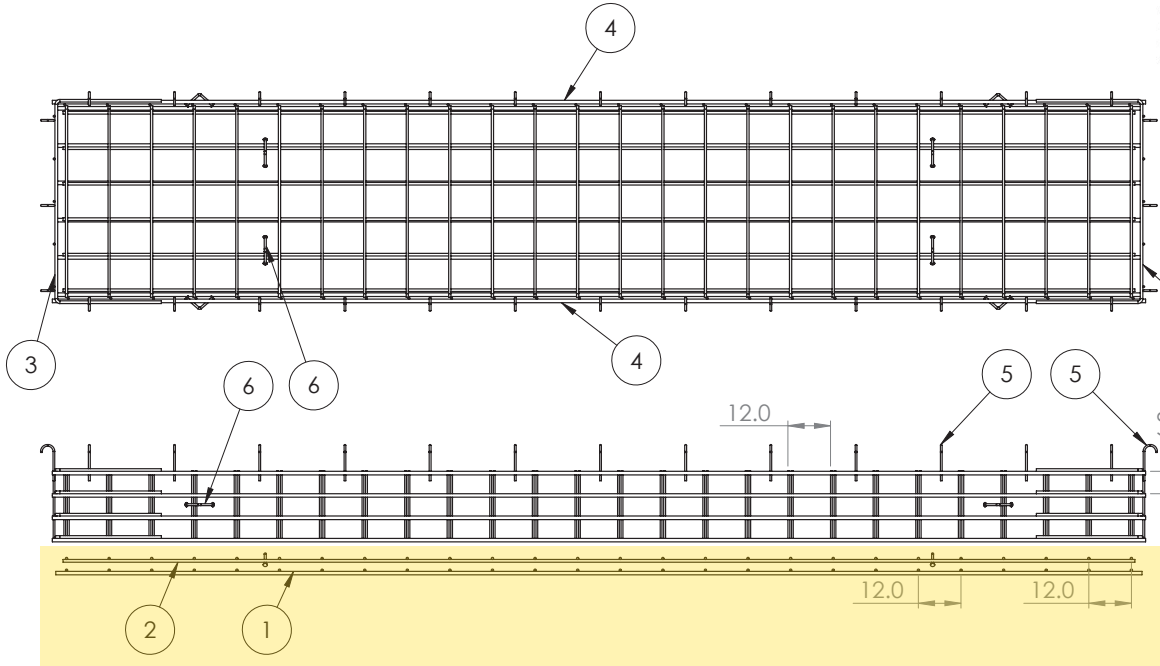
PRODUCTION WORK ORDER		PRODUCT I.D.: CVBS	DESCRIPTION: 62" X 264" X 8" SEPARATE BASE SLAB	
	QUALITY CONTROL CHECKLIST <input type="checkbox"/> ALL DIMENSIONS CORRECT. <input type="checkbox"/> LIFTERS INSTALLED. <input type="checkbox"/> CORRECT THICKNESS. <input type="checkbox"/> REINFORCING CORRECT. <input type="checkbox"/> FINISH ON SLAB SURFACE UNIFORM. <input type="checkbox"/> OUTSIDE TOP EDGE TROWELLED. <input type="checkbox"/> SOLID TONGUE JOINT INSTALLED.	PRODUCT VIEW: RIGHT SIDE UP	CUSTOMER: ENDESOL, INC.	
		PLANT: BEAVER DAM, KY	PROJECT: 1-26 691249488	
		WEIGHT: 11,502 LBS	STRUCTURE: 2-61615 1 (EFX-60 21 PN VAULT)	
		TOP SECTION JOINT: N / A	ORDER NO: 26-1615	
		BASE SECTION JOINT: SOLID TONGUE	PE: J.H. ROSS	DRAWING: J. HORSLEY
QC CHECK INITIALS:	DATE: 04/24/26	SCALE: NTS	PG. 1 OF 1	

4

3

2

1



ITEM NO.	PART NUMBER	Qty.
1	252_Base_Bottom Mat	1
2	252_Base_Top Mat	1
3	Short Wall	2
4	252_ADJ_Long Wall	2
5	#4 0904J	32
6	6CA18	8

NOTES:

1. Rebar: #5, #6, #8 A614 Grade 60
2. All Rebar to have 1.5" Cover Minimum

PROPRIETARY AND CONFIDENTIAL
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ENDESOL INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ENDESOL INC. IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES		DRAWN	CMJ 3-25-16
		TOLERANCES:		CHECKED	JHR 3-25-16
		FRACTIONAL 1/8"		ENG APPR.	XXXX XXXX
		TWO PLACE DECIMAL .13		MFG APPR.	XXXX XXXX
		THREE PLACE DECIMAL .125		Q.A.	XXXX XXXX
		INTERPRET GEOMETRIC TOLERANCING PER:		COMMENTS:	
		MATERIAL		REBAR A614 G60	
NEXT ASSY		USED ON		FINISH	
				MILL	
APPLICATION		DO NOT SCALE DRAWING			
				ENDESOL TITLE: EFX-60 Adjustable Section Rebar Layout SIZE B DWG. NO. EFX-60 ADJ Rebar REV X1	
				SCALE: 1:50 WEIGHT: SHEET 1 OF 1	

4

3

2

1

B

B

A

A

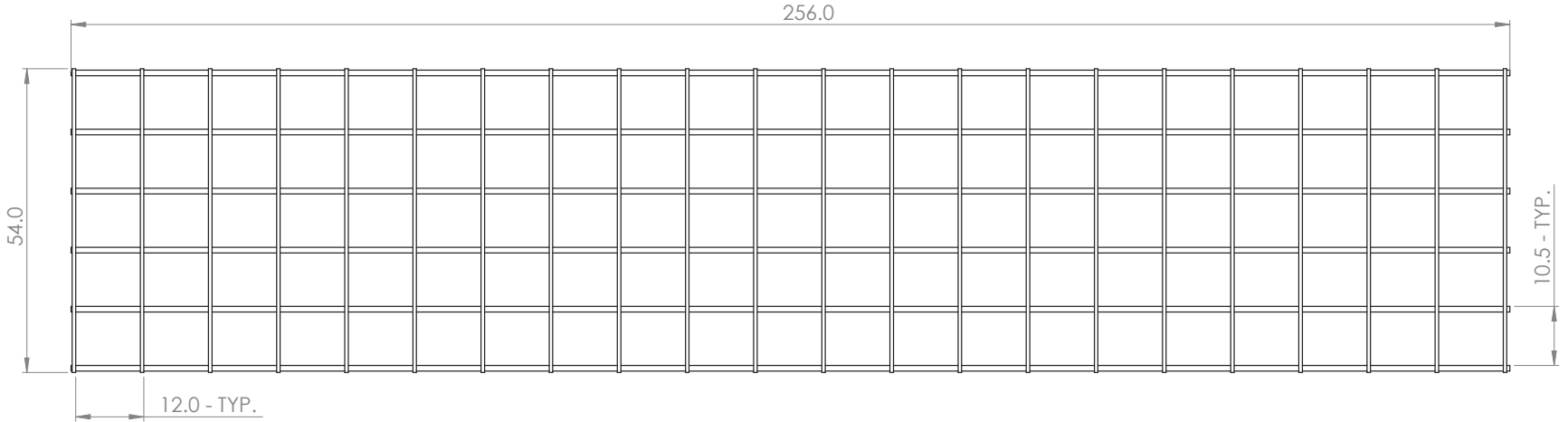
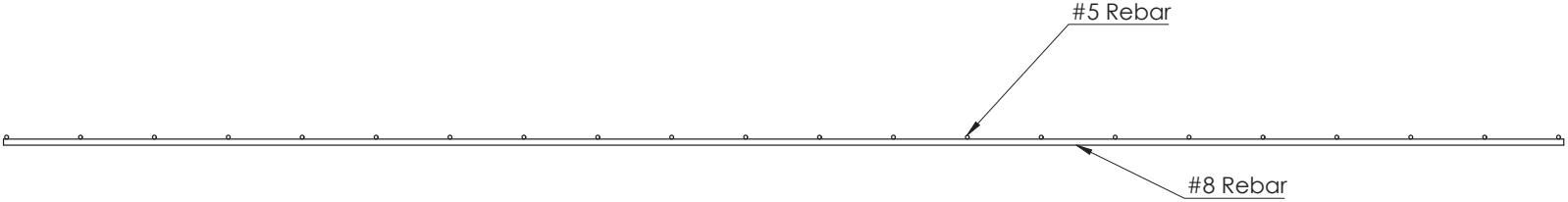
4

3

2

1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	#8_256.0	#8 Rebar	6
2	#5_54.0	#5 Rebar	22



981 W. 7th Street
 Beaver Dam, KY
 42320
 P 270-363-2238
 F 270-363-2234
 iCastinc.com

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONAL ±
 ANGULAR: MACH ± BEND ±
 DECIMAL ± 0.5"

MATERIAL

FINISH
 DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	CMJ	8/3/20
CHECKED	JHR	8/3/20
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

PROPRIETARY AND CONFIDENTIAL
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
 INFRASTRUCTURE PRECAST INC. (iCast). ANY REPRODUCTION IN PART OR
 AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF iCast IS PROHIBITED.

SIZE DWG. NO. REV.
B 252_Base_Bottom Mat
 SCALE: 1:50 WEIGHT: SHEET 1 OF 1

4

3

2

1

B

B

A

A

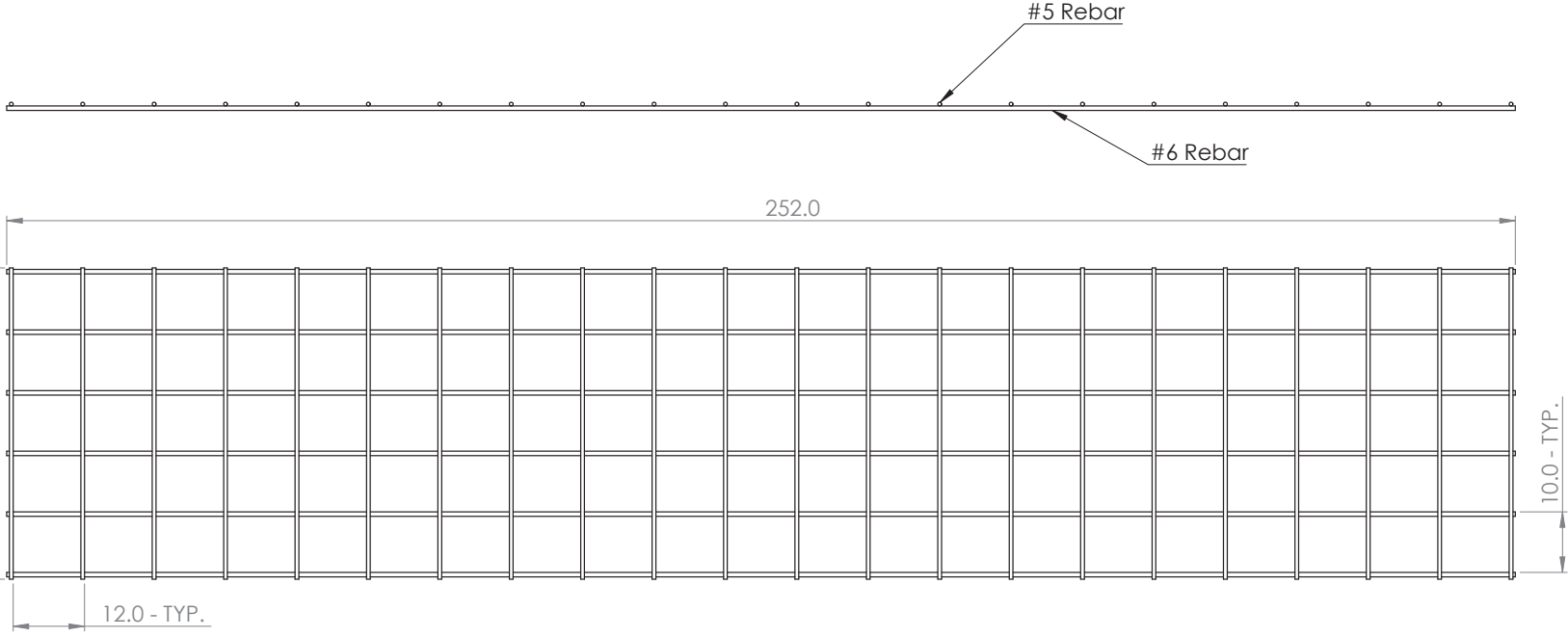
4

3

2

1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	#6_252.0	#6 Rebar	6
2	#5_52.0	#5 Rebar	22



981 W. 7th Street
 Beaver Dam, KY
 42320
 P 270-363-2238
 F 270-363-2234
 iCastinc.com

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONAL ±
 ANGULAR: MACH ± BEND ±
 DECIMAL ± 0.5"

MATERIAL
 FINISH
 DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	CMJ	8/3/20
CHECKED	JHR	8/3/20
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

PROPRIETARY AND CONFIDENTIAL
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
 INFRASTRUCTURE PRECAST INC. (iCast). ANY REPRODUCTION IN PART OR
 AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF iCast IS PROHIBITED.

SIZE DWG. NO. REV.
B 252_Base_Top Mat
 SCALE: 1:50 WEIGHT: SHEET 1 OF 1

4

3

2

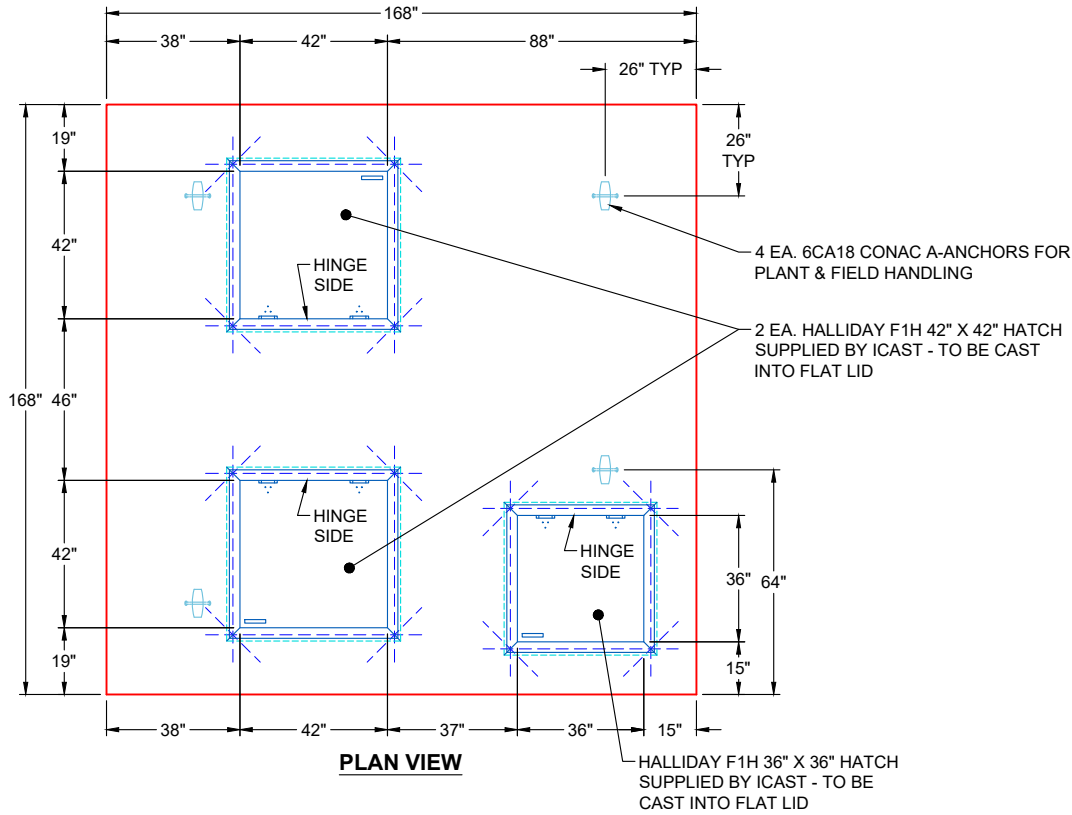
1

B

B

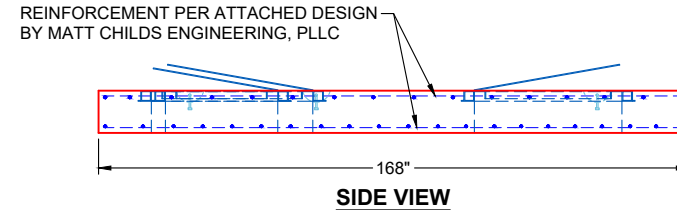
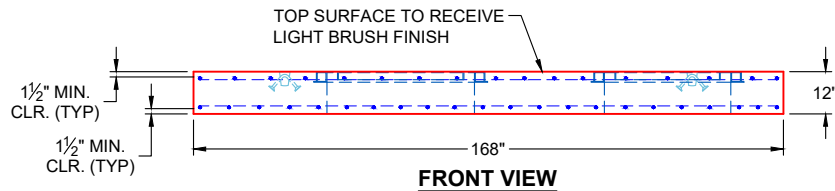
A

A



GENERAL NOTES:

1. MANUFACTURED TO ASTM C-913 (LATEST REVISION)
2. CONCRETE: 5,000 PSI AT 28 DAYS
3. REINFORCEMENT PER ATTACHED DESIGN BY MATT CHILDS ENGINEERING, PLLC
4. WEIGHT: 23,563 LBS
5. 2 EA. HALLIDAY F1H 42" X 42" HATCHES SUPPLIED BY ICAST - TO BE CAST INTO FLAT LID
6. 1 EA. HALLIDAY F1H 36" X 36" HATCH SUPPLIED BY ICAST - TO BE CAST INTO FLAT LID
7. ALL HATCHES TO HAVE FALL PROTECTION
8. LIFTERS: 4 EA. 6CA18 CONAC A-ANCHORS FOR PLANT & FIELD HANDLING
9. TOP SURFACE TO RECEIVE LIGHT BRUSH FINISH
10. XYPEX ADMIXTURE REQUIRED



PRODUCTION WORK ORDER		PRODUCT I.D.: CTSX	DESCRIPTION: 168" X 168" X 12" FLAT LID SPECIAL W/ XYPEX		
	QUALITY CONTROL CHECKLIST <input type="checkbox"/> ALL DIMENSIONS CORRECT. <input type="checkbox"/> LIFTERS INSTALLED. <input type="checkbox"/> HOLE LOCATION(S) CORRECT. <input type="checkbox"/> REINFORCING CORRECT. <input type="checkbox"/> HATCH LOCATION(S) & ORIENTATION(S). <input type="checkbox"/> EDGES CHAMFERED. <input type="checkbox"/> SHIPLAP JOINT INSTALLED.	PRODUCT VIEW: RIGHT SIDE UP	CUSTOMER: GARNEY COMPANIES, INC.		
		PLANT: BEAVER DAM, KY	PROJECT: EAST REGIONAL BANK PUMP STATION		
		WEIGHT: 23,563 LBS	STRUCTURE: GRINDER VAULT (PIECE 5)		
		TOP SECTION JOINT: FLAT	ORDER NO: 25-1137B		
		BASE SECTION JOINT: N / A	PE: J.H. ROSS	DRAWING: K. CARDWELL	
		QC CHECK INITIALS:	DATE: 11/25/25	SCALE: NTS	PG. 1 OF 1

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2
 Job Location: Stanford, KY
 Contractor: Frederick and May Construction

Plant: 100

5/5/2026 8:17:54 PM

Tech: Jared - F

PC: E. Bradley



Structure ID: METER VAULT - 6

P2 BX4884-06LD08-SP

CB FLAT TOP 6"W w/36"x60" HATCH F/F

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

100 lb
 2417 lb
 10702 lb
 116 lb
 0 lb
 0 lb
 0 lb

Structure Total: 13334 lb

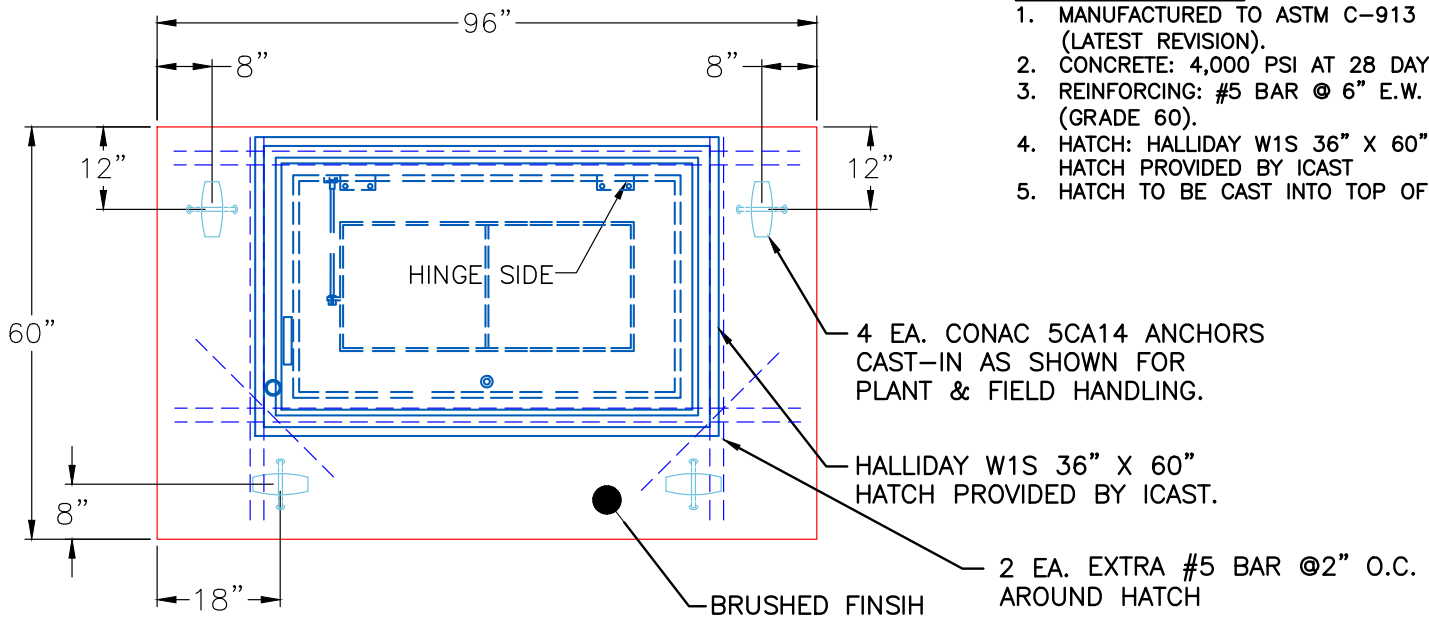
Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO STEPS AND NO INVERT CHANNEL.
4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

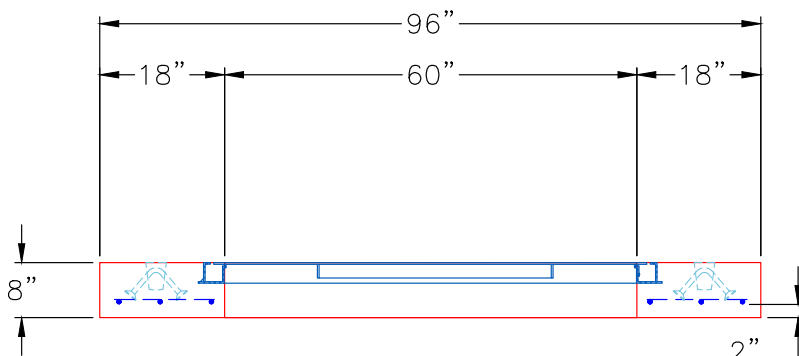
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

GENERAL NOTES:

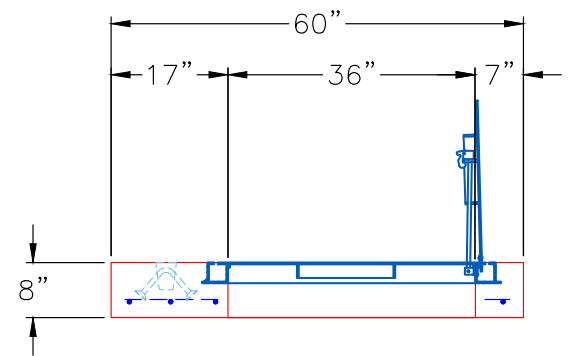
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



PLAN VIEW



FRONT VIEW



RIGHT VIEW

Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb
 Volume (Net): 0.62cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2
 Job Location: Stanford, KY
 Contractor: Frederick and May Construction

Plant: 100

5/5/2026 8:17:54 PM

Tech: Jared - F

PC: E. Bradley



Structure ID: METER VAULT - 7

P2 BX4884-06LD08-SP

CB FLAT TOP 6"W w/36"x60" HATCH F/F

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

100 lb
 2417 lb
 10702 lb
 116 lb
 0 lb
 0 lb
 0 lb

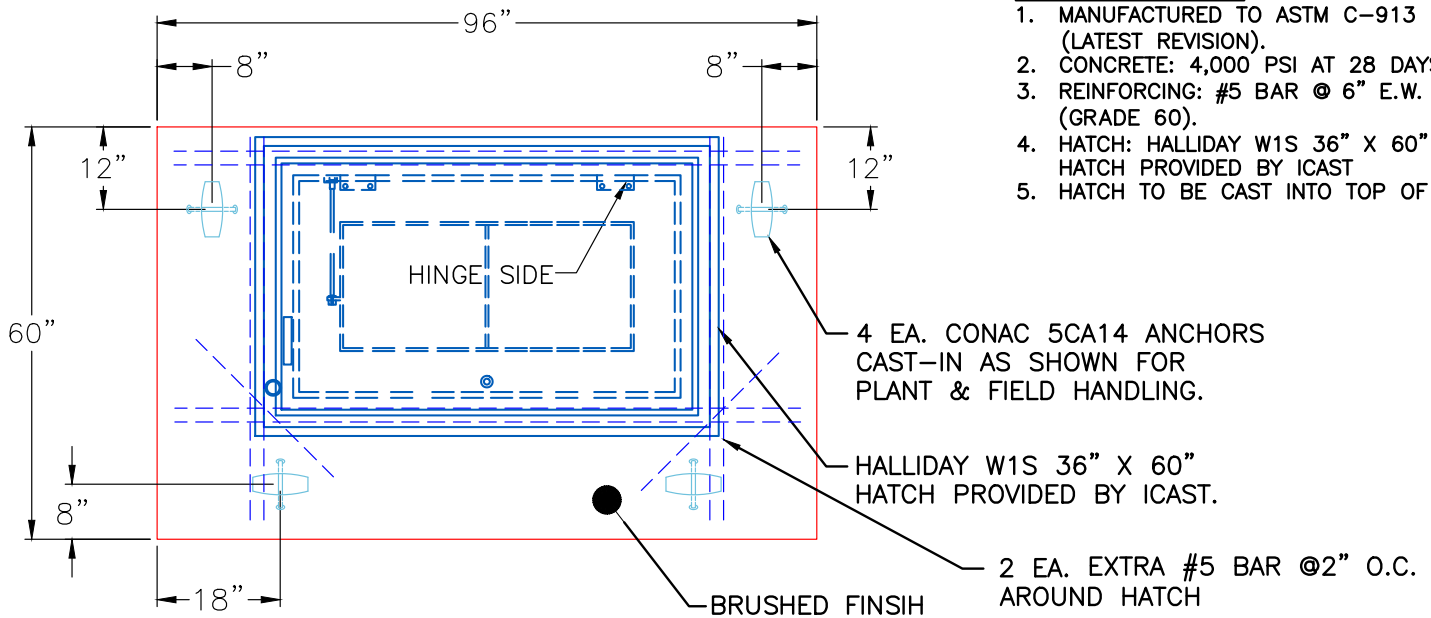
 Structure Total: 13334 lb

Structure Notes:
 1. PER ASTM C913 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS AND NO INVERT CHANNEL.
 4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

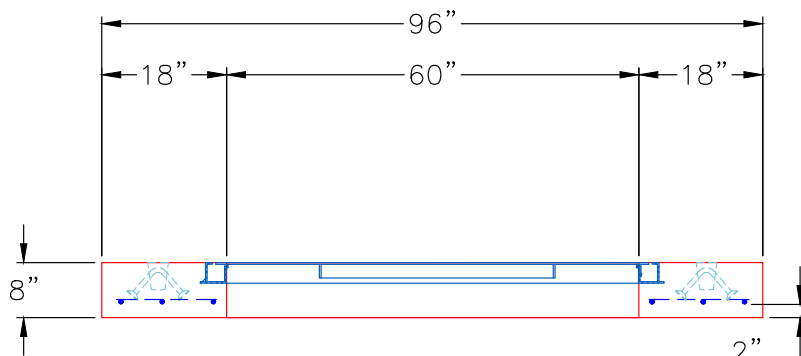
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

GENERAL NOTES:

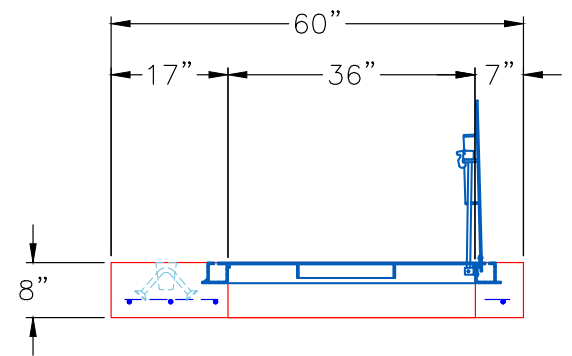
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



PLAN VIEW



FRONT VIEW



RIGHT VIEW

Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb
 Volume (Net): 0.62cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2
 Job Location: Stanford, KY
 Contractor: Frederick and May Construction

Plant: 100

5/5/2026 8:17:54 PM

Tech: Jared - F

PC: E. Bradley



Structure ID: METER VAULT - 10

P2 BX4884-06LD08-SP

CB FLAT TOP 6"W w/36"x60" HATCH F/F

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

100 lb
 2417 lb
 10702 lb
 116 lb
 0 lb
 0 lb
 0 lb

Structure Total: 13334 lb

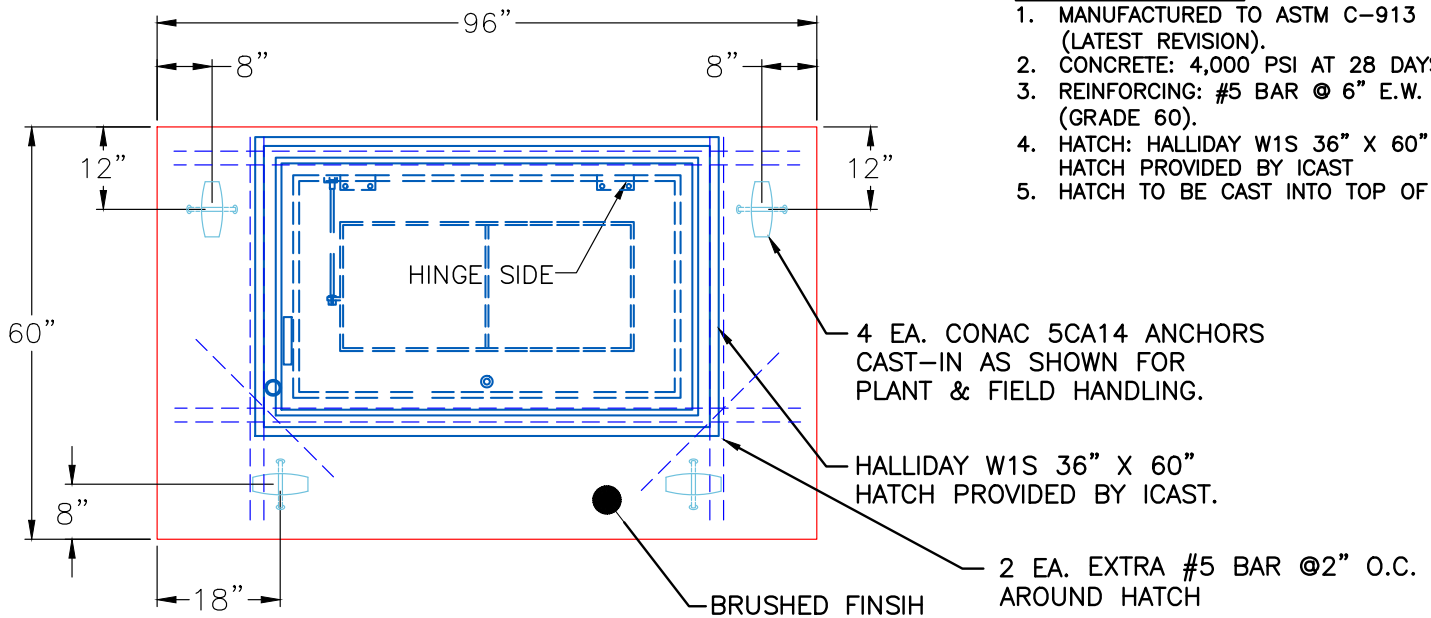
Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO STEPS AND NO INVERT CHANNEL.
4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

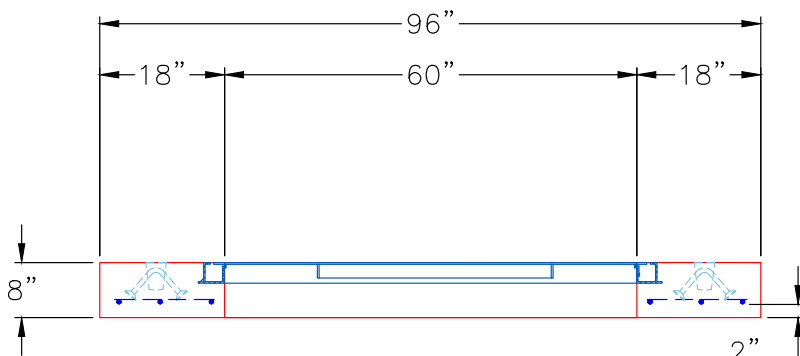
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

GENERAL NOTES:

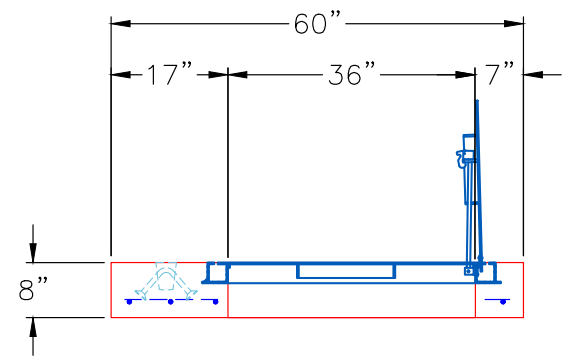
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



PLAN VIEW



FRONT VIEW



RIGHT VIEW

Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb
 Volume (Net): 0.62cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2
 Job Location: Stanford, KY
 Contractor: Frederick and May Construction

Plant: 100

5/5/2026 8:17:54 PM

Tech: Jared - F

PC: E. Bradley



Structure ID: METER VAULT - 9

P2 BX4884-06LD08-SP

CB FLAT TOP 6"W w/36"x60" HATCH F/F

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

100 lb
 2417 lb
 10702 lb
 116 lb
 0 lb
 0 lb
 0 lb

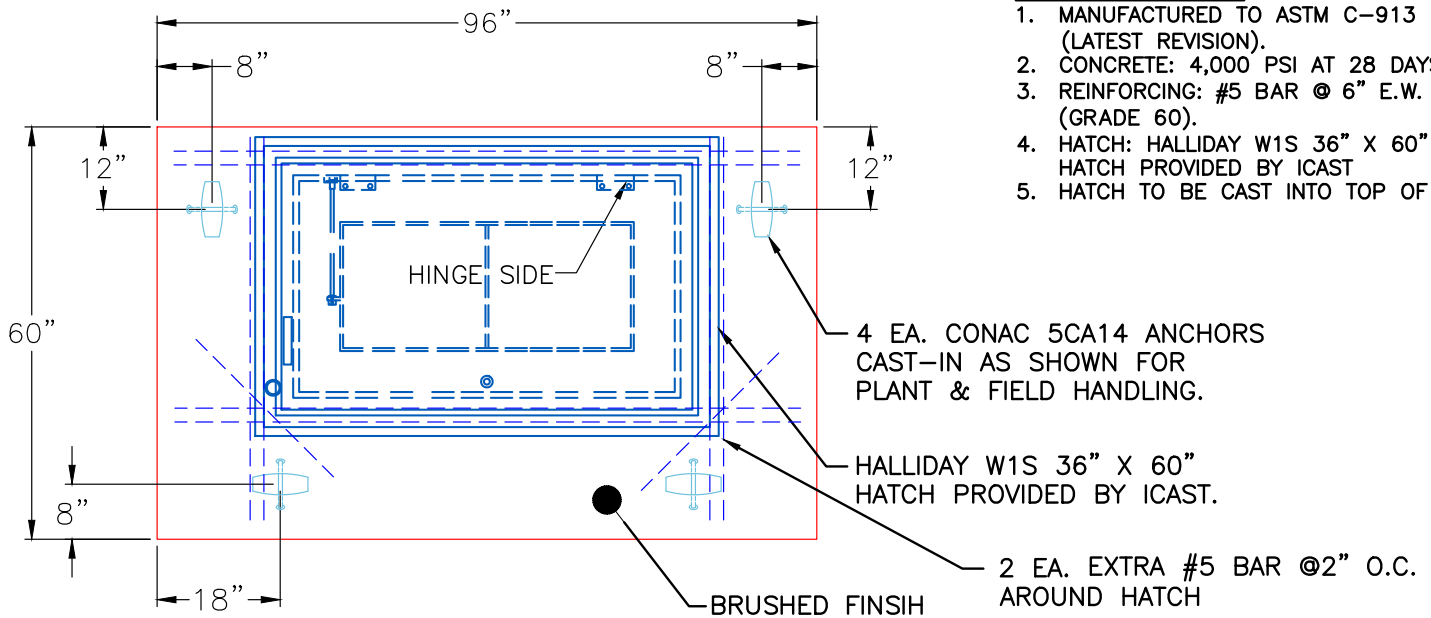
 Structure Total: 13334 lb

Structure Notes:
 1. PER ASTM C913 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS AND NO INVERT CHANNEL.
 4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

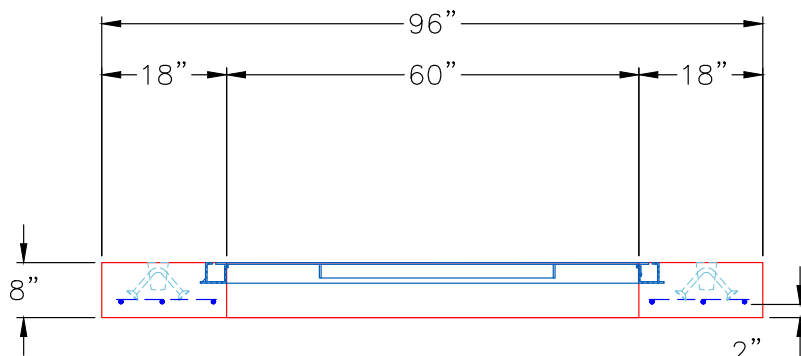
REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

GENERAL NOTES:

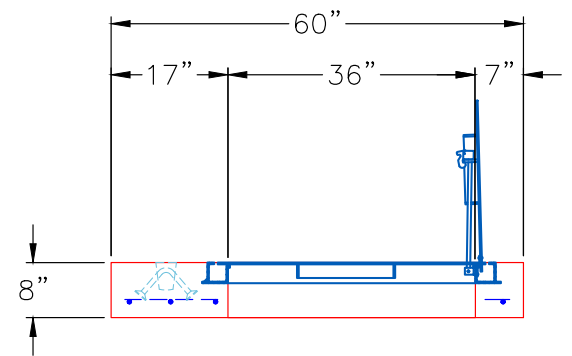
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



PLAN VIEW



FRONT VIEW



RIGHT VIEW

Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb
 Volume (Net): 0.62cu.yd

Job Name: 26-1098 LUC Sinking Creek Lift Station
 Job Location: London, KY
 Contractor: Endesol, Inc.

Plant: Beaver Dam
 1/16/2026 1:22:44 PM

Tech: J. Coppage
 PC: E. Bradley



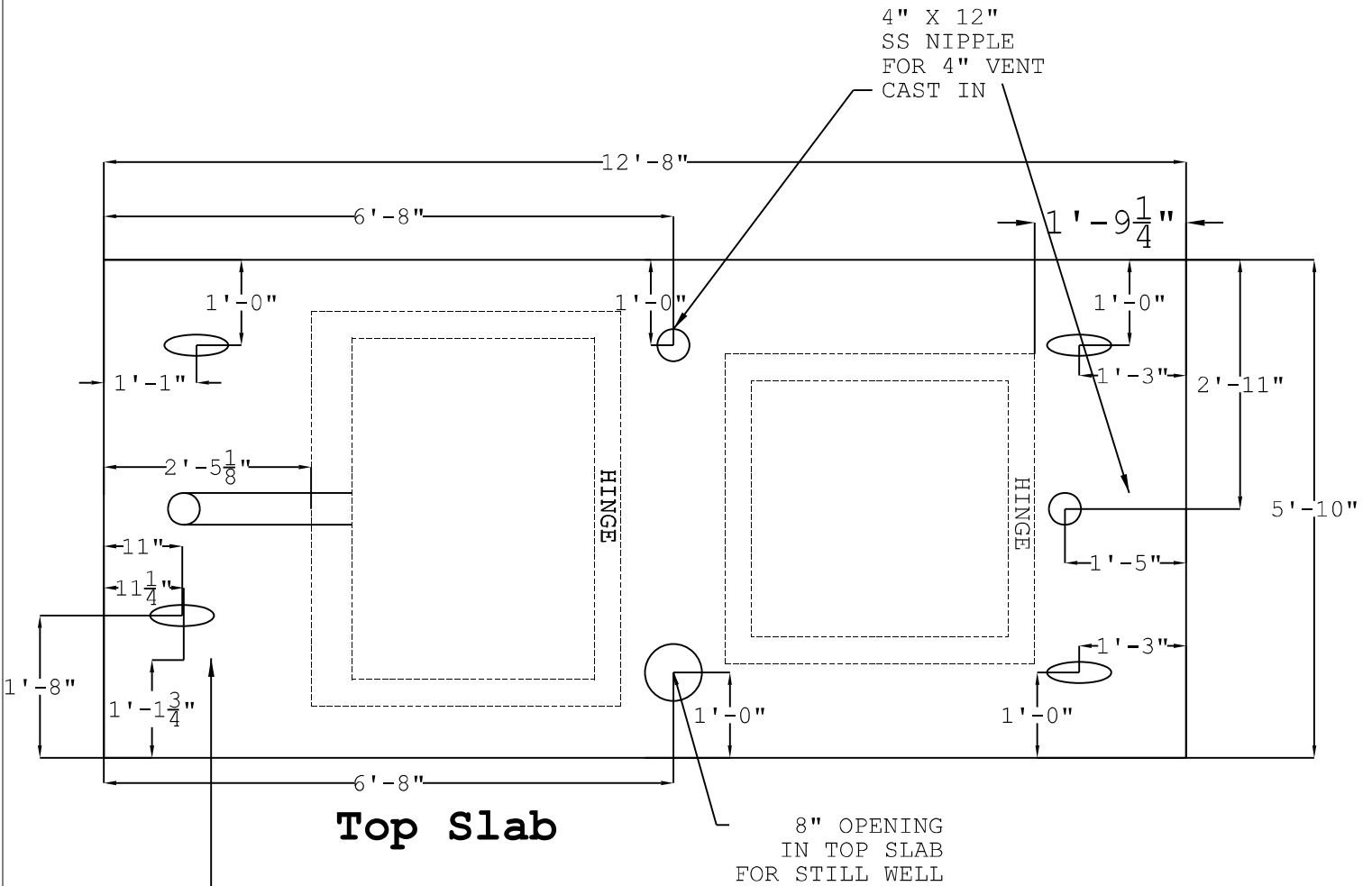
Structure ID: Lift Station

P4 CTS-X

Combined Lift Station Top Slab Custom w/Xypex

P5) 36" x 36" - CASTING HEIGHT - 0"	0 lb
P4) 72" - Combined Lift Station Top Slab Custom w/Xypex - 12"	8108 lb
P3) 72" - Combined Lift Station Walls/Floor w/XYPEX - 71"	29429 lb
P2) 72" - MH RISER Custom Ht, w/XYPEX - 36.5"	5188 lb
P1) 72" - MH BASE SQ EF Cust. Ht. 12"F (EF =102"SQ) w/ XYPEX - 72"	20973 lb
1) This Structure Includes a Cast-in Item	0 lb
1) HATCH (Alum.) - HALLIDAY W1R 34"x52"	46 lb
1) HATCH (Alum.) - HALLIDAY W1R 36"x36"	46 lb
1) SECONDARY POUR - EXTENDED BASE SLAB	0 lb
1) SECONDARY POUR - WALLS FOR VAULT SECTION	0 lb
1) SECONDARY POUR - VAULT SECTION EXTENSION	0 lb
1) ASSEMBLY REQUIRED	0 lb
2) 72" - DBL 1"x14.5' Butyl (2x)	0 lb
2) PSX - 12-08 NYLO	16 lb
Structure Total:	63806 lb

Structure Notes:
 1. PER ASTM C478 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .31) #5 BARS AT 8" C.C.E.W.
 - RISER/WALLS (As .18)
 - FLOOR (As .37) #5 BARS AT 10" C.C.E.W.



Top Slab

CONCRETE MIX DESIGN:
 5,000 PSI @ 28 DAYS
 XYPEX RED ADMIXTURE

CARBOLINE 300M COATING, TWO COATS:
 ALL INTERIOR WALLS
 BOTTOM OF TOP SLAB IN WET WELL AREA
 BOTTOM OF COMBO SECTION IN WET WELL AREA

Lid:
 #5@8" OC EW T&B

Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Flat	Wall Thickness: 7"	Height (Ext): 12"	Weight (Net): 8108 lb Volume (Net): 2.07cu.yd
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