

Job Name: 25-4349 Lunsford St. Drainage Repair
 Job Location: Madisonville, KY
 Contractor: Knight Construction & Excavating, Inc.

Plant: Beaver Dam

Tech: J. Coppage

2/9/2026 10:50:51 AM

PC: T. Lewis



Structure ID: BOX CULVERT

P1 BC096048-08WLF-9H

BOX CULVERT (08W/08F/08T)

- P5) 96" x 48" - BOX CULVERT (08W/08F/08T) - 93"
- P4) 96" x 48" - BOX CULVERT (08W/08F/08T) - 69"
- P3) 96" x 48" - BOX CULVERT (08W/08F/08T) - 69"
- P2) 96" x 48" - BOX CULVERT (08W/08F/08T) - 69"
- P1) 96" x 48" - BOX CULVERT (08W/08F/08T) - 58"
- 1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 5) 96" x 48" - Conseal CS-102 1.00"

21242 lb
 15760 lb
 15760 lb
 15760 lb
 13248 lb
 0 lb
 0 lb
 0 lb

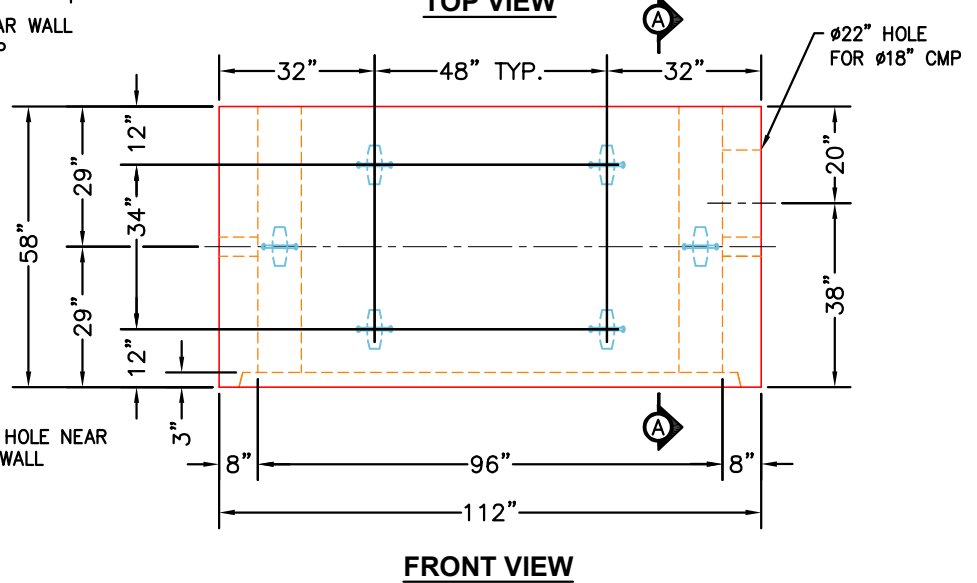
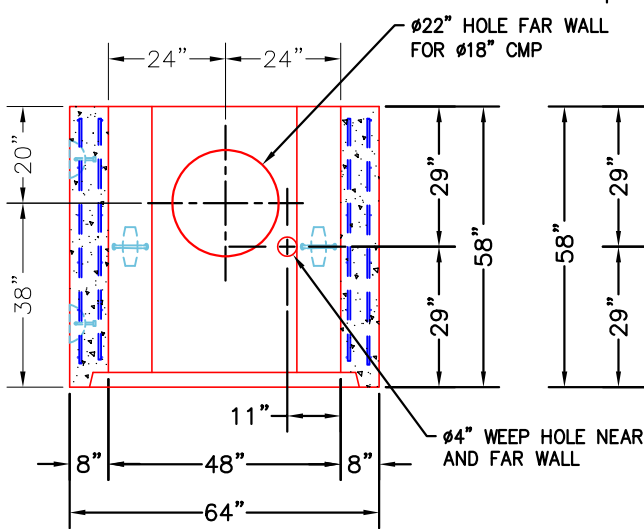
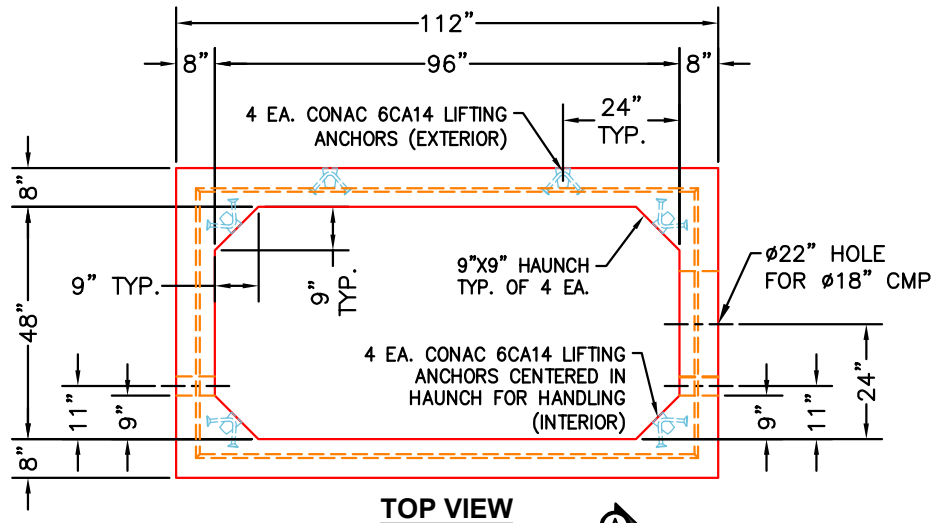
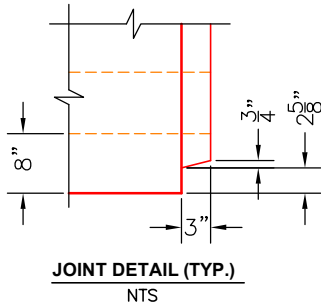
 81770 lb

Structure Total: 81770 lb

NOTES:

1. BOX CULVERT IS DESIGNED PER SECTION 605 OF THE KYTC STANDARD SPECIFICATION FOR ROAD & BRIDGE CONSTRUCTION.
2. LOAD REQUIREMENTS PER KY-HL93 (KY TABLE 1)
3. KYTC AND ASTM RATED FOR 0' - 2' COVER.
4. COVER DEPTH = 0' - 2'
5. CONCRETE: 6,500 PSI AT 28 DAYS.
6. REINFORCING: AS SHOWN BY WINFORD PATRONE.
7. BOX CULVERT TO BE SEALED WITH CS-102 ROLL BUTYL MASTIC & CS-212 12" WRAP. (SUPPLIED BY ICAST).
8. WEIGHT: 13,248 LBS.

Rim: 30' Rim to Invert: 0' Slack: 2" Sump: 0" Step Position:

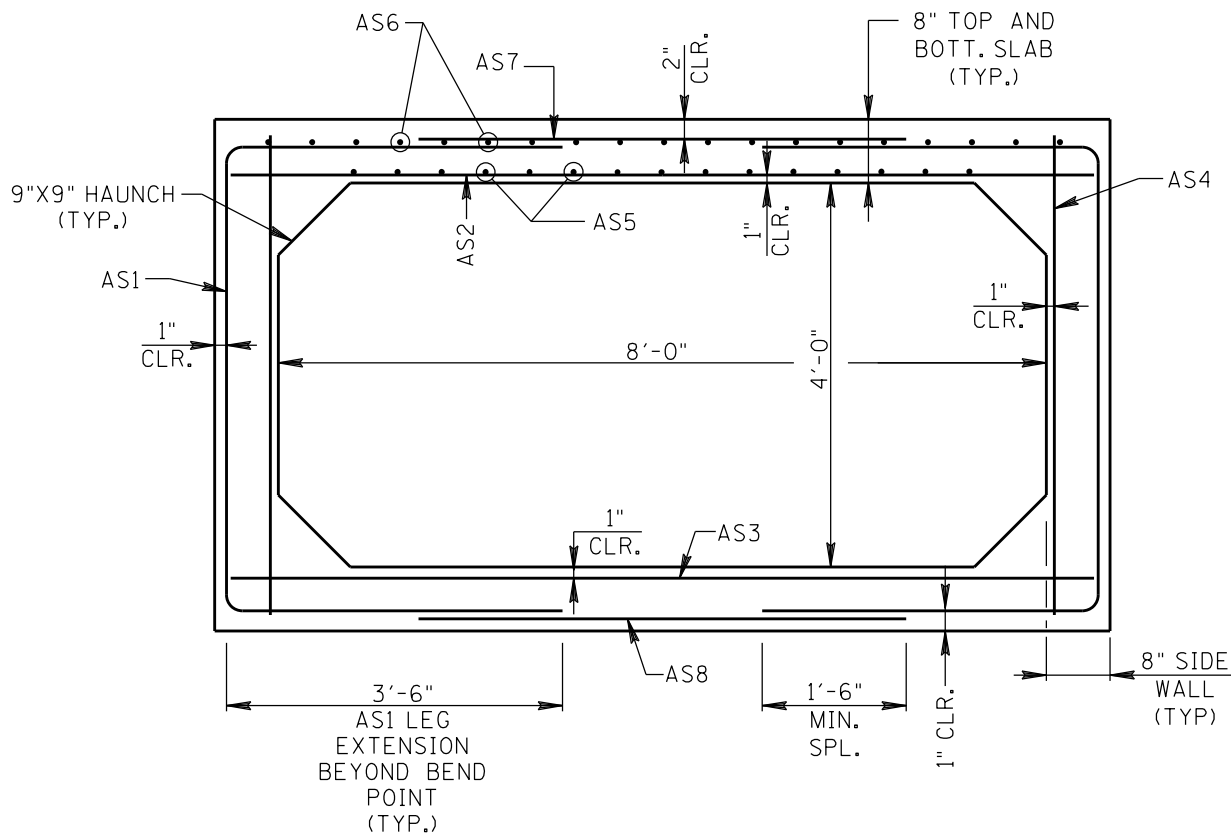


Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 8" Floor Height: 0"	Height (Int): 58" Height (Ext): 58"	Weight (Net): 12459 lb Volume (Net): 3.18cu.yd
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NOTE: SEE "PRECAST CONCRETE JUNCTION BOXES AND PRECAST BOX CULVERTS" SHEET FOR SUMMARY OF BUILDING AND DESIGN CODES, MATERIALS REQUIREMENTS, AND DESIGN LOADS.
 NOTE: ICASST WORKING DRAWINGS FOR ADDITIONAL INFORMATION.



**25-4349 Lunsford St. Drainage Repair
 REINFORCEMENT INFORMATION
 Box Culvert
 SECTIONS P1(A), P2(B), P3(C), AND P4(D)**



8'X4' PRECAST BOX CULVERT SECTION: SECTIONS "A" THRU "D"

NOTE: F'c-min=6,500 P.S.I.

NOT TO SCALE

LOCATION	AREA OF STEEL (IN ²)	
	MAX. REQ'D.	TO BE PROVIDED
AS1	.354	NO. 5'S @ 10", AS=.372
AS2	.518	NO. 5'S @ 5", AS=.744
AS3	.350	NO. 5'S @ 10", AS=.372
AS4	.192	NO. 4'S @ 10", AS=.240
AS5	.192	NO. 4'S @ 10", AS=.240
AS6	.192	NO. 4'S @ 10", AS=.240
AS7	.192	NO. 4'S @ 10", AS=.240
AS8	.192	NO. 4'S @ 10", AS=.240

NOTE: SEE ICASST DRWGS. FOR LOCATIONS OF PRECAST SECTIONS.
 NOTE: A 22"Ø OPENING IN RIGHT SIDE WALL IS TO BE PROVIDED BY THE PRECAST PLANT. SEE DETAIL REGARDING ADDITIONAL REINFORCEMENT FOR PRECAST OPENING.

AREAS REINFORCING STEEL

Fy-min=60 K.S.I.

SK-1/4

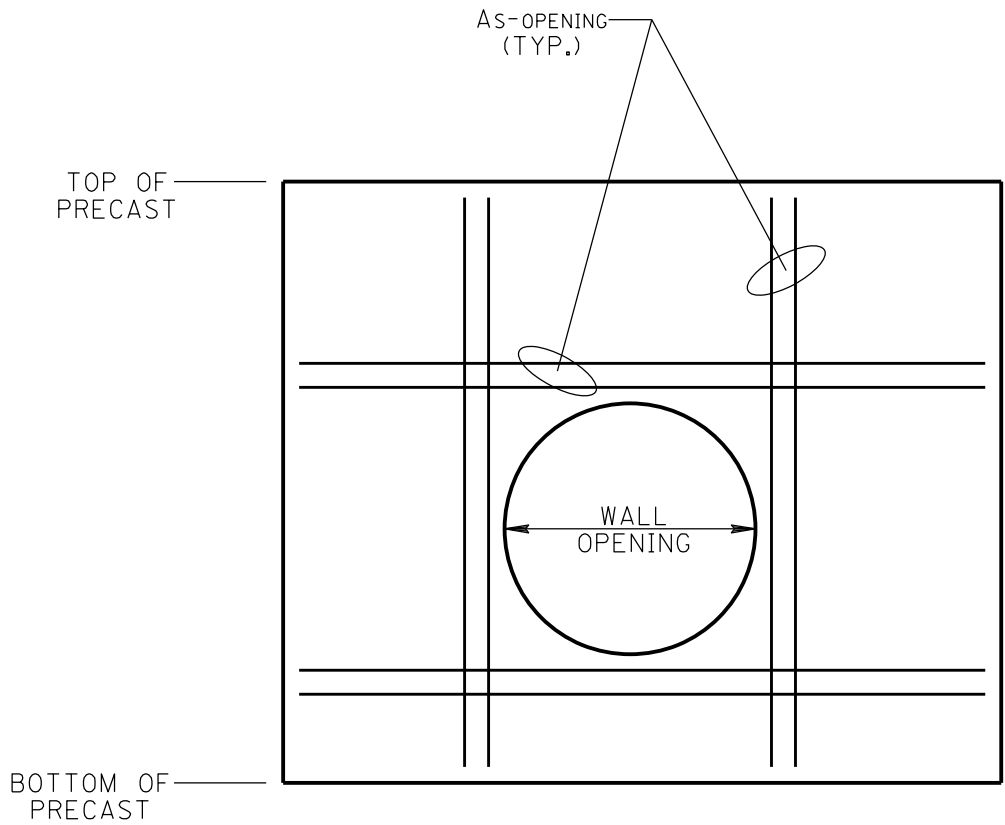
8'X4' PRECAST CONCRETE BOX CULVERT: SECTIONS "A" THRU "D"

LUNSFORD DRAINAGE REPAIRS PROJECT: MADISONVILLE, KENTUCKY

ADDITIONAL REINFORCEMENT REQUIRED ON EACH FACE
 ALONG EACH SIDE OF OPENING:
 2- #5'S HORIZONTAL TOP AND BOTTOM
 AND 2-#5'S VERTICAL EACH SIDE



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 REINFORCEMENT INFORMATION
 Box Culvert



ADDITIONAL REINFORCMENT
@ WALL OPENINGS

NOTE: ADDITIONAL OPENING BARS ARE SUPPLEMENTAL TO SCHEDULED WALL REINFORCEMENT FOR EACH WALL OPENING. ADDITIONAL BARS MAY BE TERMINATED AT A DISTANCE OF 1'-6" BEYOND THE LIMITS OF OPENING OR AT 2" FROM THE INTERSECTING EDGE OF CONCRETE WHEN THE 1'-6" DIMENSION INTERSECTS A WALL. BAR SIZES MAY BE UPSIZED TO PROVIDE THE SAME AREA OF STEEL WHEN THE NUMBER OF BARS CANNOT BE ACCOMMODATED.

ADDITIONAL REINFORCEMENT AT PRECAST WALL OPENING
 FOR 22"Ø PRECAST OPENING IN SECTION "A"

SK-3/4

8'X4' PRECAST CONCRETE BOX CULVERT: PRECAST OPENING RE-BAR
 LUNSFORD DRAINAGE REPAIRS PROJECT: MADISONVILLE, KENTUCKY