

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

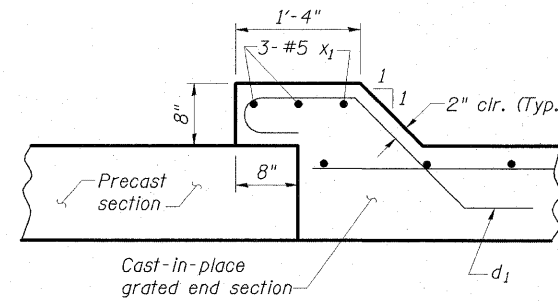
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d	56	#4	4'-6"	
d ₁	104	#4	5'-2"	
h	40	#4	27'-8"	—
h ₁	16	#4	19'-8"	—
h ₂	224	#6	21'-4"	—
h ₃	102	#6	27'-9"	—
h ₄	40	#4	21'-10"	—
u	148	#6	20'-11"	
v	144	#5	12'-2"	—
x	60	#5	1'-0"	—
x ₁	24	#5	22'-5"	
Item	Unit	Quantity		
3 1/2" Galvanized Steel Pipe	Each	20 @ 41'-11" 32 @ 14'-2"		
1/2"x4"x14" Galvanized Anchor Plate	Each	64		
5/8"x9" Galvanized Bolts	Each	160		
1/2" Galvanized Expansion Bolts	Each	128		
9" Square or Round 1/4" Galvanized Plate	Each	64		
Galvanized Steel Pipe Caps	Each	104		
Concrete Structures Reinforcement Bars	Cu. Yd. Pound	170 20600		

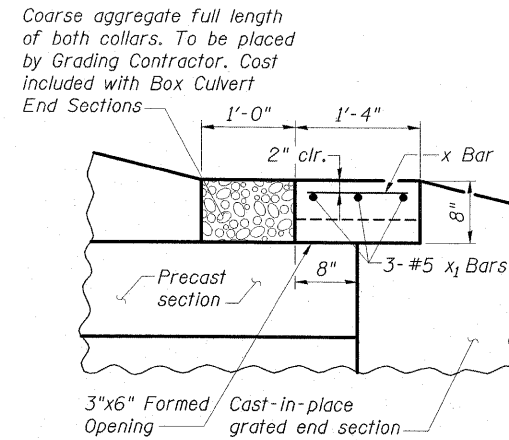
Bill of Material includes totals for both end sections. Cost to be included in Box Culvert End Sections. This bill is provided for information only and may change depending on the final dimensions of the precast box culvert walls and slabs.

MIN. BAR LAP

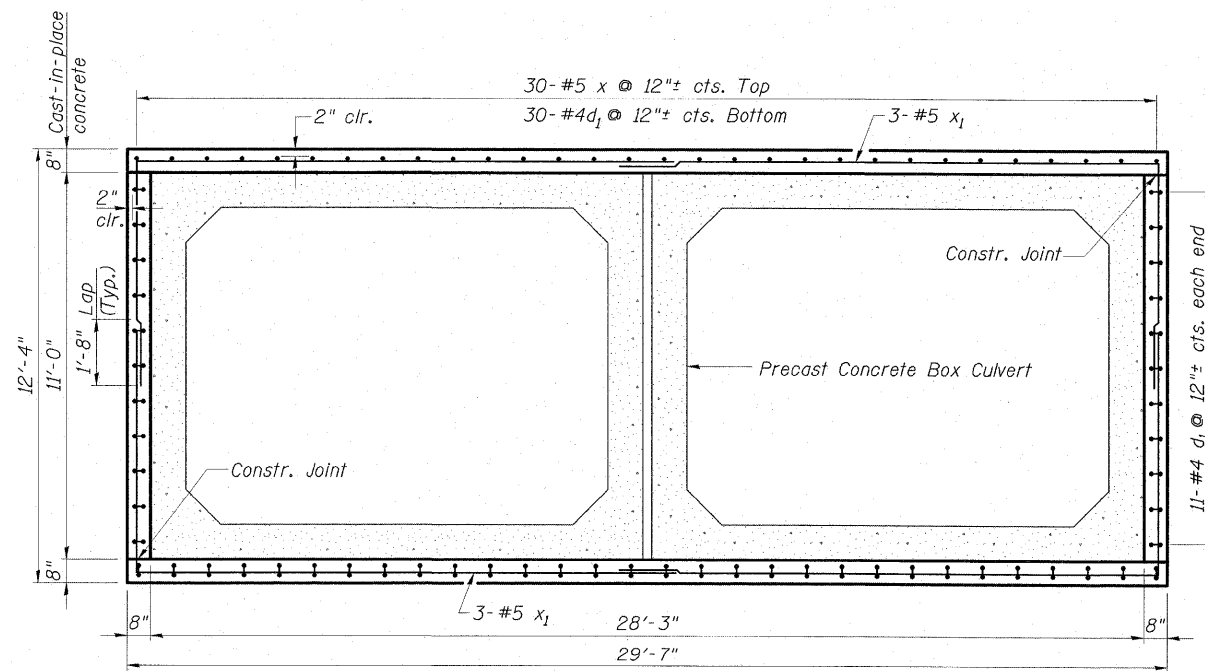
- #4.....1'-4"
- #5.....1'-8"
- #6.....2'-0"



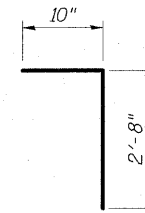
PRECAST BOX CULVERT TO CAST-IN-PLACE END SECTION CONNECTION COLLAR
(Use on bottom and each side)



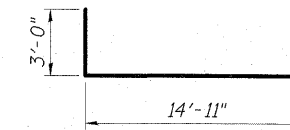
COLLAR & DRAIN DETAIL



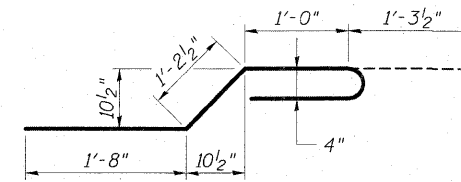
CONCRETE COLLAR SECTION



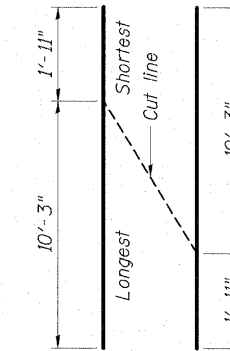
BAR d



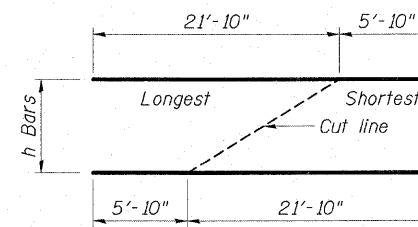
BAR u



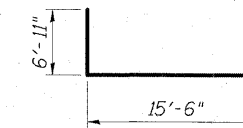
BAR d₁



BAR v CUT DIAGRAM



BAR h CUT DIAGRAM



BAR x₁

ESCA
CONSULTANTS, INC.

DESIGNED BY:	DAJ	11/08
DRAWN BY:	cj	11/08
CHECKED BY:	ELH	11/08
APPROVED BY:	RDP	11/08

**BOX CULVERT DETAILS
STRUCTURE NO. 037-0172**

SHEET NO. 5 7 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	638	136BR-1	HENRY	67	44
CONTRACT NO. 64428					
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		