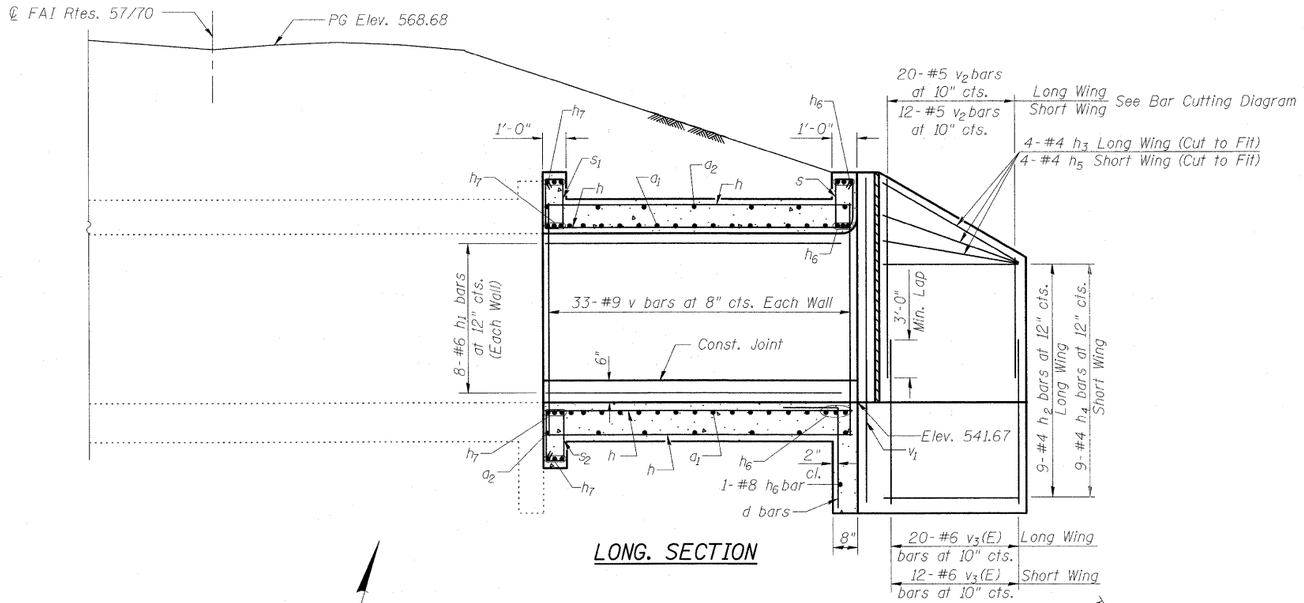
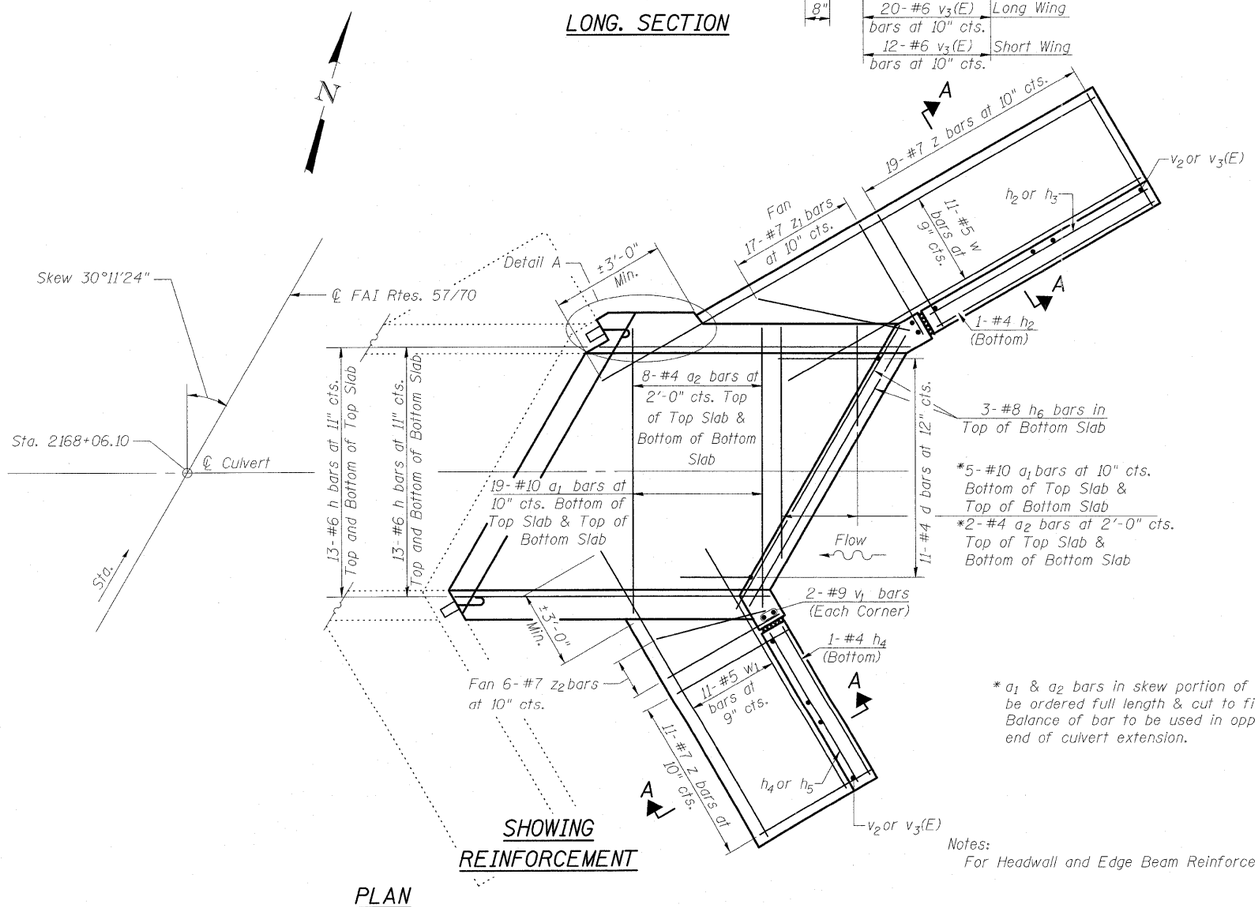


LONG. SECTION

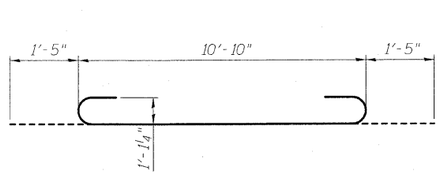


SHOWING REINFORCEMENT

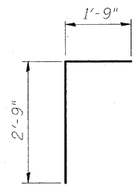
PLAN

* a_1 & a_2 bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert extension.

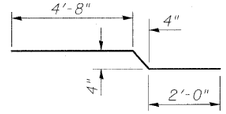
Notes:
For Headwall and Edge Beam Reinforcement, see Sheet 1 of 3.



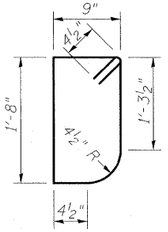
BAR a_1



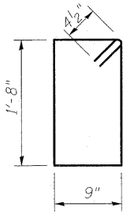
BAR d



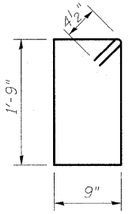
BAR h_8



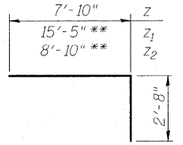
BAR s



BAR s_1

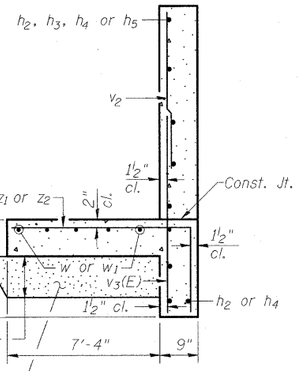


BAR s_2



BAR z, z_1 & z_2

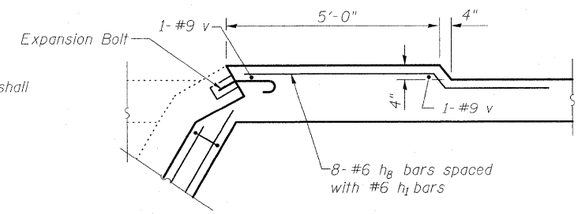
** Field cut z_1 and z_2 bars to fit.



Removal & Disposal of Unsuitable Material and Rockfill-Replacement

SECTION A-A

Calculated Max. Soil Pressure Under Footing = 2480 psf



DETAIL A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_1	48	#10	13'-8"	
a_2	20	#4	10'-10"	
d	11	#4	4'-6"	
h	52	#6	20'-11"	
h_1	16	#6	20'-9"	
h_2	10	#4	15'-2"	
h_3	4	#4	15'-9"	
h_4	10	#4	8'-8"	
h_5	4	#4	9'-7"	
h_6	10	#8	12'-0"	
h_7	12	#8	12'-10"	
h_8	8	#6	7'-2"	
s	12	#4	5'-5"	
s_1	12	#4	5'-7"	
s_2	12	#4	5'-9"	
v	68	#9	9'-1"	
v_1	4	#9	11'-7"	
v_2	16	#5	12'-7"	
$v_3(E)$	32	#6	6'-4"	
w	11	#5	32'-6"	
w_1	11	#5	16'-7"	
z	30	#7	10'-6"	
z_1	17	#7	18'-1"	
z_2	6	#7	11'-6"	
Concrete Box Culverts		Cu. Yd.	47.8	
Reinforcement Bars, Epoxy Coated		Pound	310	
Reinforcement Bars		Pound	10760	
¾" Expansion Bolts		Each	20	
Concrete Removal		Cu. Yd.	7.3	
Removal & Disposal of Unsuitable Material		Cu. Yd.	41	
Rockfill-Replacement		Ton	86	

BERNARDIN • LOCHMUELLER & ASSOCIATES, INC.
3 OAK DRIVE
MARYVILLE, ILLINOIS 62062
PHONE (618) 288-4545
FAX (618) 288-4688

FILE NAME = _RT 2168+06.10.dgn	USER NAME =	DESIGNED - A.C.S.	REVISED -
Illinois Design Firm Number 184.001670		CHECKED - B.B.	REVISED -
	PLOT SCALE =	DRAWN - A.C.S.	REVISED -
	PLOT DATE = 1:44:20 PM 3/15/2011	CHECKED - C.J.F.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT DETAILS, RT STA 2168+06.10
FAI ROUTES 57/70
SHEET NO. 5 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3,4)R	EFFINGHAM	1098	363
		CONTRACT NO. 74299		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		