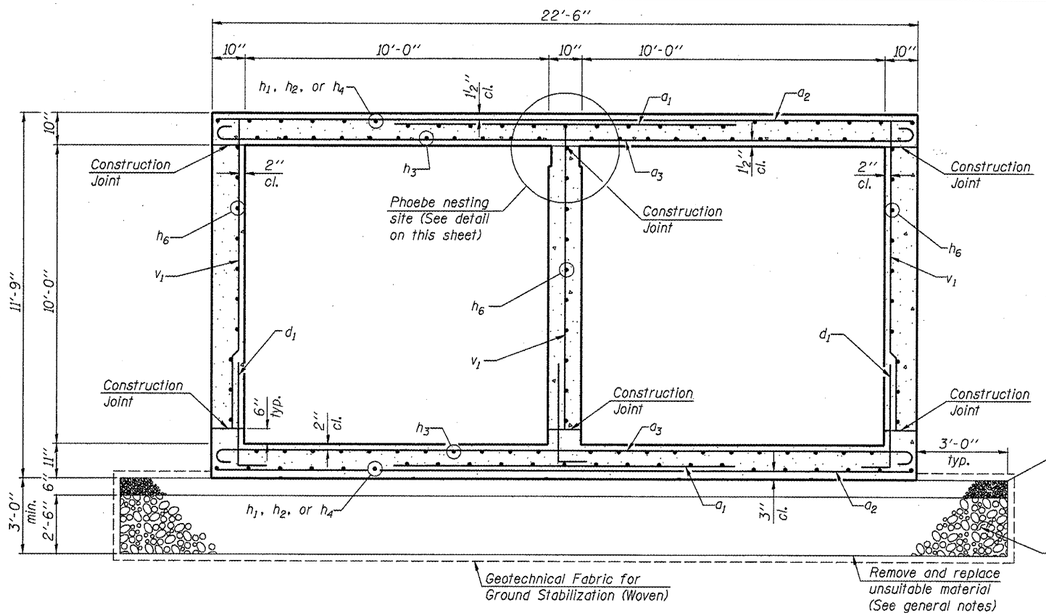
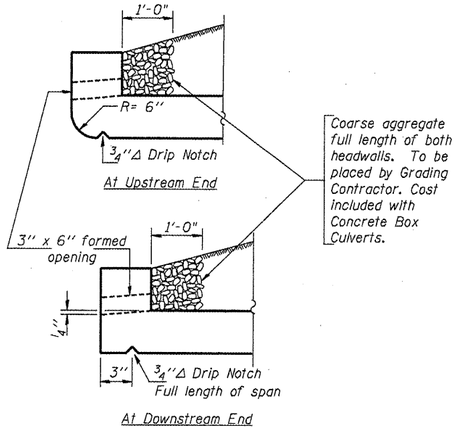


SECTION THRU BARREL



DRAIN DETAIL

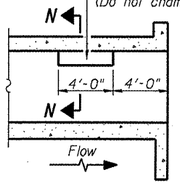
BILL OF MATERIAL

Bar	No. Stage I	No. Stage II	Size	Length	Shape
a_1	88	130	#9	14'-0"	
a_2	86	128	#6	29'-0"	
a_3	110	162	#7	30'-8"	
d_1	324	483	#5	3'-9"	
d_2	28	28	#4	4'-6"	
h_1	46		#6	31'-0"	
h_2	46	46	#6	25'-0"	
h_3	96	140	#6	28'-0"	
h_4		92	#6	30'-0"	
h_5	12	4	#6	28'-6"	
h_6	60	90	#7	28'-6"	
h_7	4	4	#9	15'-8"	
h_8	6	6	#9	16'-0"	
h_9	1	1	#8	14'-9"	
h_{10}	1	1	#8	13'-0"	
h_{11}	1	1	#7	11'-3"	
h_{12}	1	1	#7	8'-9"	
h_{13}	1	1	#6	6'-6"	
h_{14}	1	1	#6	13'-9"	
h_{15}	10	10	#6	8'-11"	
h_{16}	23	23	#4	26'-0"	
$n_1(E)$	35	35	#6	6'-6"	
$n_2(E)$	35	35	#5	3'-8"	
s_1	84		#4	4'-10"	
s_2		28	#4	4'-8"	
t_1	54	54	#6	8'-7"	
v_1	324	483	#5	10'-2"	
v_2	3	3	#5	22'-9"	*
v_3	2	2	#5	11'-6"	
v_4	35	35	#5	6'-9"	
v_5	35	35	#4	8'-5"	
v_6	8	8	#4	13'-10"	
w_1	12	12	#5	26'-0"	

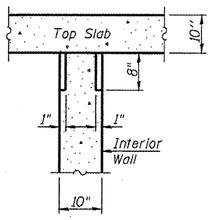
Bar Splicers	Each	120
Concrete Box Culverts	Cu. Yd.	393.2
Reinforcement Bars	Pound	83,790
Reinforcement Bars, Epoxy Coated	Pound	960

*See cutting diagram

Notch formed by rough finished board attached to and removed with form work, each interior wall. (Do not chamfer).



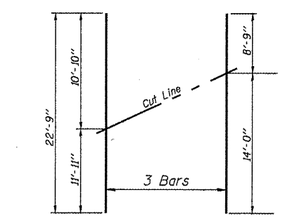
LONGITUDINAL SECTION



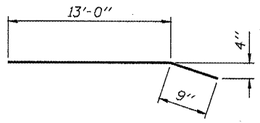
SECTION N-N

PHOEBE NESTING SITE DETAILS

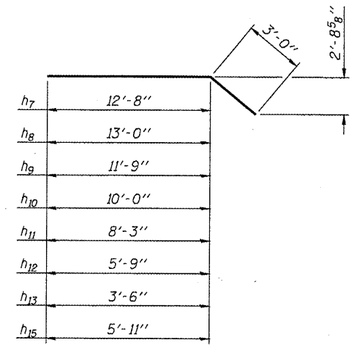
(Downstream End Only)



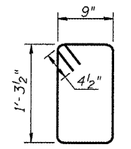
v_2 BAR CUTTING DIAGRAM



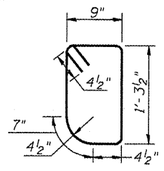
BAR h_{14}



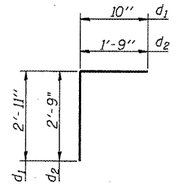
BARS h_7, h_8, h_9, h_{10}, h_{11}, h_{12}, h_{13} & h_{15}



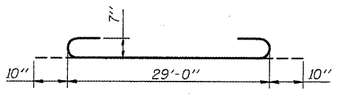
BAR s_1



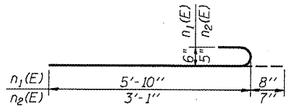
BAR s_2



BARS d_1 & d_2



BAR a_3



BAR $n_1(E)$ & BAR $n_2(E)$

BENDING DIAGRAMS

MIN. BAR LAPS (U.N.)

#4 bar - 1'-4"
#5 bar - 1'-8"
#6 bar - 2'-0"
#7 bar - 2'-9"
#9 bar - 4'-7"

FILE NAME = $FILE$

rjngroup — Excellence through Ownership — 200 West Front Street Wheaton, Il 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -	
	CHECKED - AWW	REVISED -	
PLOT SCALE = 1@0.166667	DRAWN - DJW	REVISED -	
PLOT DATE = 1/25/2011	CHECKED - AWW	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS
STRUCTURE NO. 055-2008
SHEET NO. 9 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	22
		CONTRACT NO. 68662		
	ILLINOIS FED. AID PROJECT			