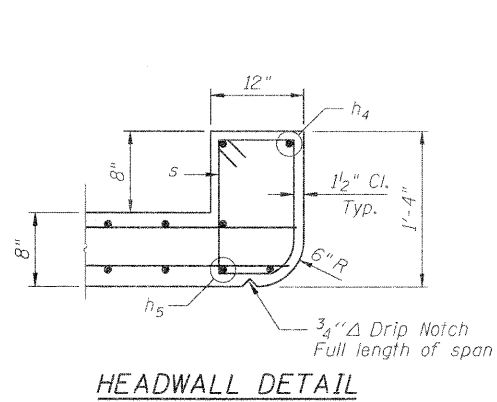
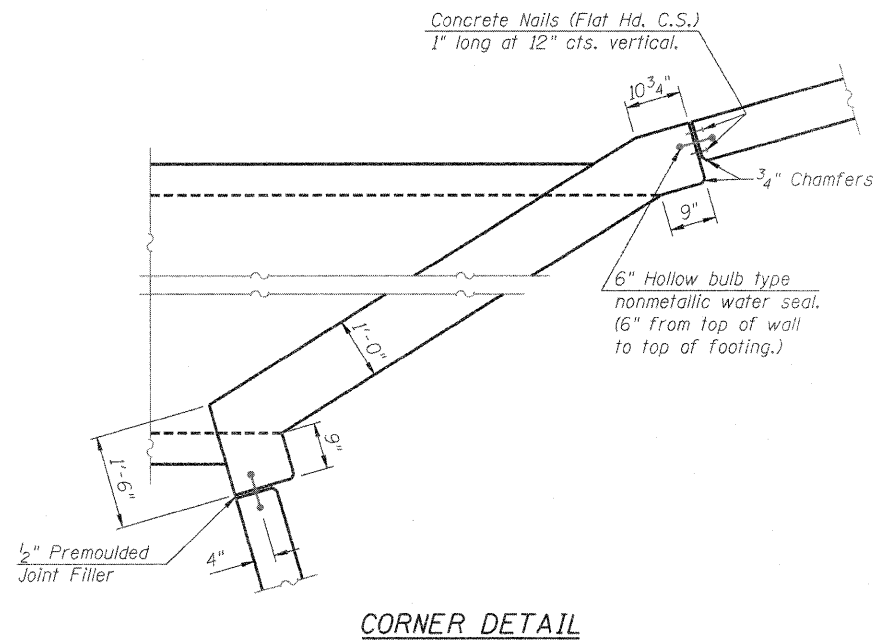


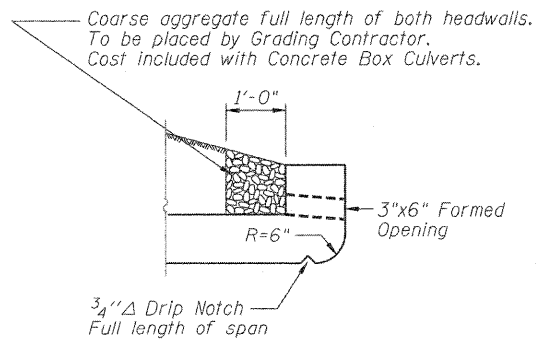
EDGE BEAM DETAILS



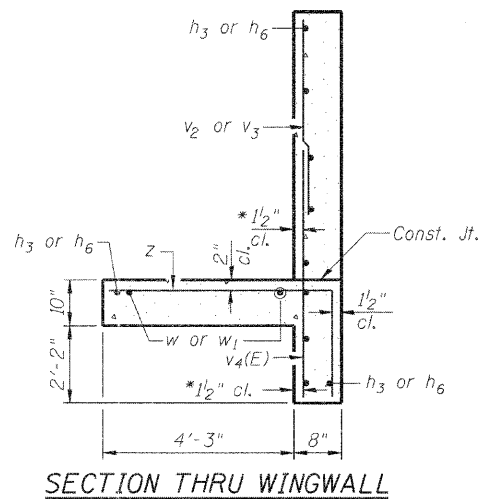
HEADWALL DETAIL



CORNER DETAIL

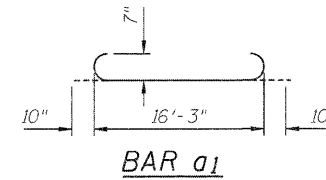


DRAIN DETAIL

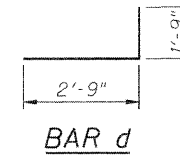


SECTION THRU WINGWALL

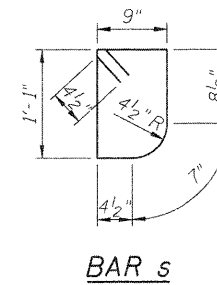
* v bars shall not be placed more than 1/2" cl. from back face of wingwall.
Max. Soil Pressure under footing = 2,479 psf



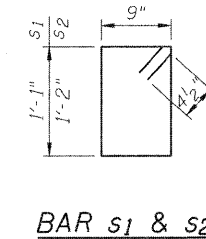
BAR a1



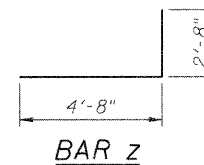
BAR d



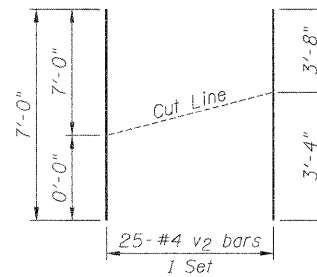
BAR s



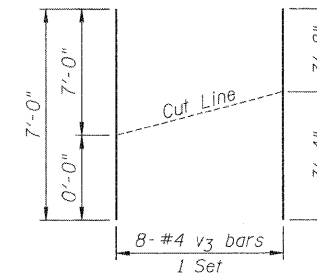
BAR s1 & s2



BAR z



BAR v2 CUT DIAGRAM



BAR v3 CUT DIAGRAM

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a ₁	150	#7	17'-11"	
a ₂	98	#6	16'-3"	
d	26	#4	4'-6"	
h	52	#7	26'-2"	
h ₁	40	#5	26'-2"	
h ₂	24	#5	26'-3"	
h ₃	10	#4	23'-11"	
h ₄	18	#6	25'-7"	
h ₅	16	#8	26'-4"	
h ₆	10	#4	6'-11"	
s	50	#4	4'-3"	
s ₁	50	#4	4'-5"	
s ₂	50	#4	4'-7"	
v	144	#4	7'-1"	
v ₁	4	#4	10'-0"	
v ₂	25	#4	7'-0"	
v ₃	8	#4	7'-0"	
v ₄ (E)	33	#4	4'-8"	
w	6	#5	29'-3"	
w ₁	6	#5	11'-0"	
z	51	#6	7'-4"	
Item		Unit	Quantity	
Concrete Box Culverts		Cu. Yd.	67.0	
Reinforcement Bars		Pound	16,640	
Reinforcement Bars (Epoxy Coated)		Pound	110	
Expansion Bolts, 3/4"		Each	90	