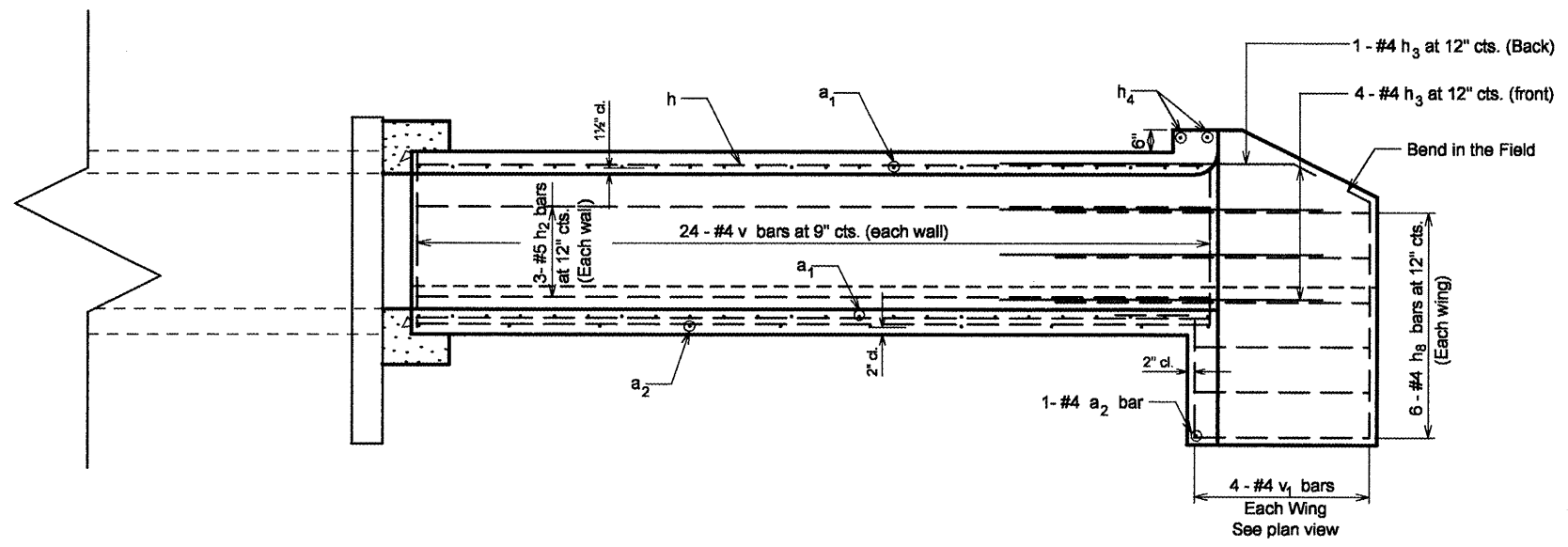


LEFT SIDE REINFORCEMENT PLAN VIEW

NOT TO SCALE



LEFT SIDE REINFORCEMENT ELEVATION VIEW

NOT TO SCALE

NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

BILL OF MATERIAL

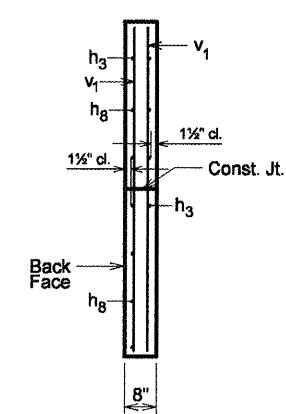
Bar	No.	Size	Length	Shape
a ₁	48	#5	6'-10"	
a ₂	10	#4	5'-3"	
d	6	#4	4'-6"	
h	8	#5	17'-7"	
h ₁	12	#4	17'-7"	
h ₂	6	#5	17'-7"	
h ₃	10	#4	8'-0"	
h ₄	2	#6	5'-3"	
h ₈	12	#4	8'-1"	
v	50	#4	3'-9"	
v ₁	8	#4	6'-9"	
U	6	#4	12'-6"	
* 3/4" Expansion Bolts		Each	10.00	
Concrete Box Culverts		Cu. Yd.	8.50	
Reinforcement Bars		Pound	1,138	
* Concrete Collar		Cu. Yd.	2.25	

* For Information Only

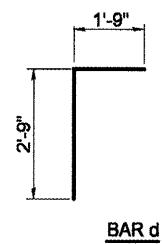
DESIGN STRESSES

f_y = 60,000 psi
f_c = 3,500 psi

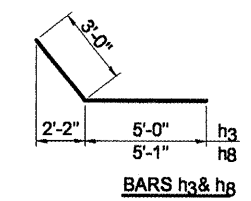
LOADING HS 20-44 & ALT.



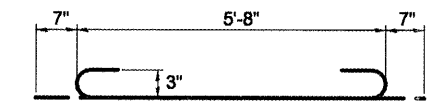
SECTION A-A



BAR d



BARS h₃ & h₈



BAR a₁

FILE NAME = sht-details.dgn	USER NAME = mendezp.j	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BOX CULVERT EXTENSION DETAIL
LT. STA. 534 + 29.26**

F.A.P. RTE. 685	SECTION **	COUNTY *	TOTAL SHEETS 329	SHEET NO. 152
CONTRACT NO. 68599			ILLINOIS FED. AID PROJECT	