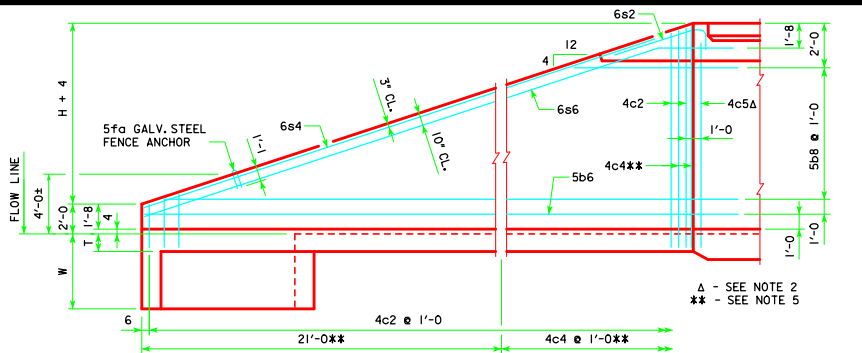
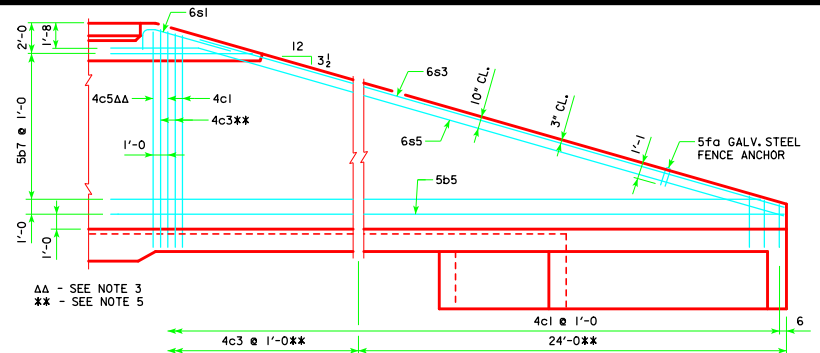


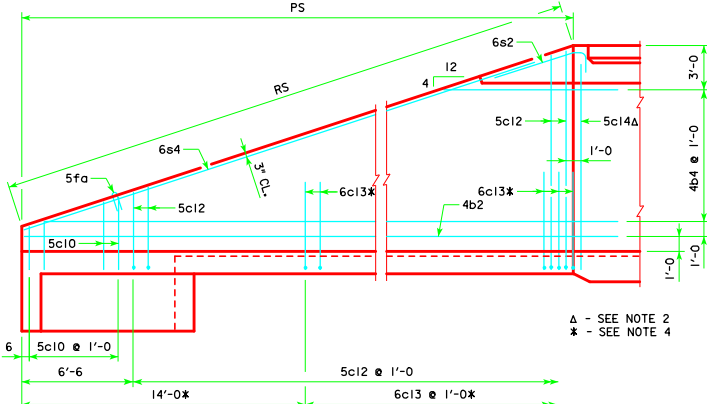
REVISED 06-13 - CHANGED BAR MARK 6c3 TO 6c13 IN TYPICAL VIEW - BACK FACE REINFORCING LONG WINGWALL DETAIL. FROM TWH 15-5-12. THIS SHEET ISSUED 04-12.



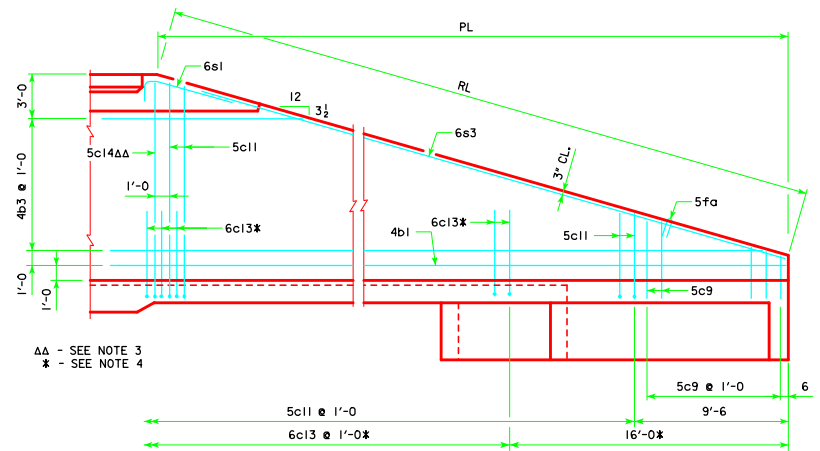
TYPICAL VIEW - FRONT FACE REINFORCING SHORT WINGWALL



TYPICAL VIEW - FRONT FACE REINFORCING LONG WINGWALL

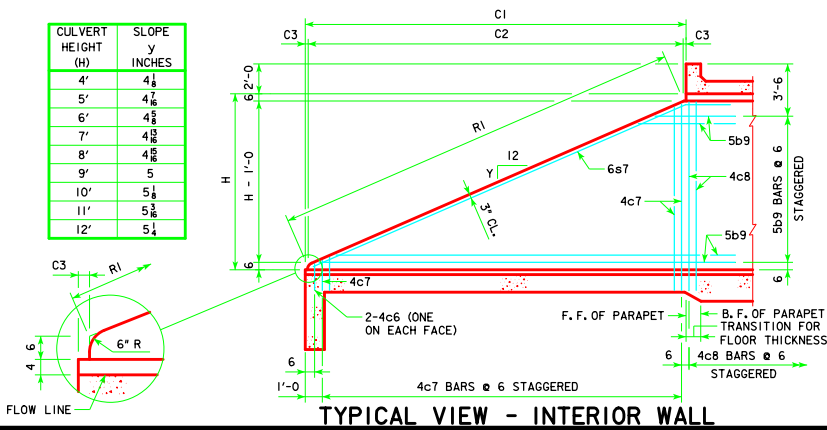


TYPICAL VIEW - BACK FACE REINFORCING SHORT WINGWALL



TYPICAL VIEW - BACK FACE REINFORCING LONG WINGWALL

CULVERT HEIGHT (H)	SLOPE y INCHES
4'	4 ¹ / ₈
5'	4 ¹ / ₄
6'	4 ¹ / ₂
7'	4 ³ / ₈
8'	4 ¹ / ₂
9'	5
10'	5 ¹ / ₈
11'	5 ¹ / ₄
12'	5 ¹ / ₂



TYPICAL VIEW - INTERIOR WALL

NOTES:

1. BAR SPACINGS AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES OF HEADWALLS IN THIS STANDARD.
2. TWO 4c5 & TWO 5c14 BARS FOR ALL HEADWALLS.
3. TWO 4c5 & TWO 5c14 BARS FOR 4', 5', 7', 9', 10' & 12' HEIGHT HEADWALLS. ONE 4c5 & ONE 5c14 BAR FOR 6', 8' & 11' HEIGHT HEADWALLS.
4. NOT APPLICABLE FOR 4' & 5' HEADWALLS.
5. NOT APPLICABLE FOR 4' THRU 8' HEIGHT HEADWALLS.
6. FOR DIMENSION TABLE SEE SHEET TWH 15-2-12.

LATEST REVISION DATE 06-13 APPROVED BY BRIDGE ENGINEER <i>Thomas E. M. Dwyer</i>	
	TWIN REINFORCED CONCRETE BOX CULVERTS STANDARD DESIGN APRIL, 2012
	FLARED WING HEADWALLS 15° SKEW TWH 15-5-12