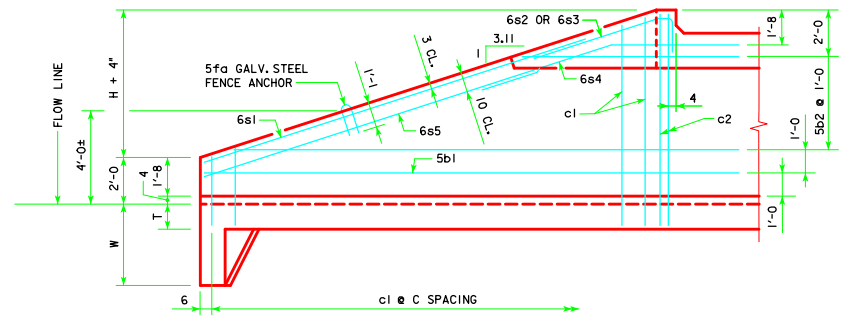
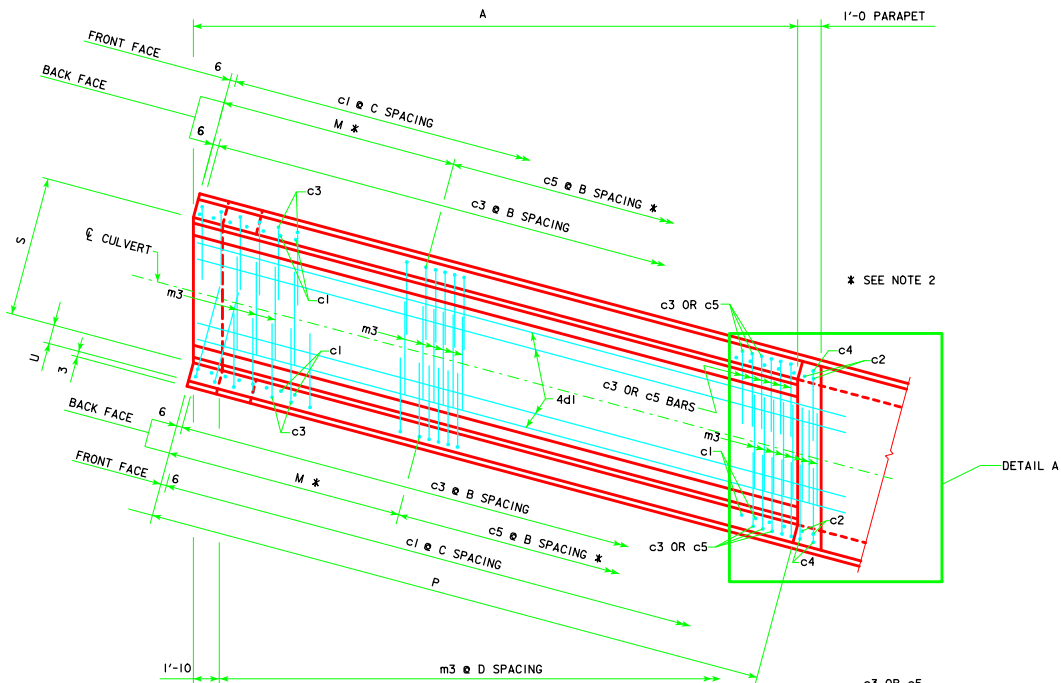
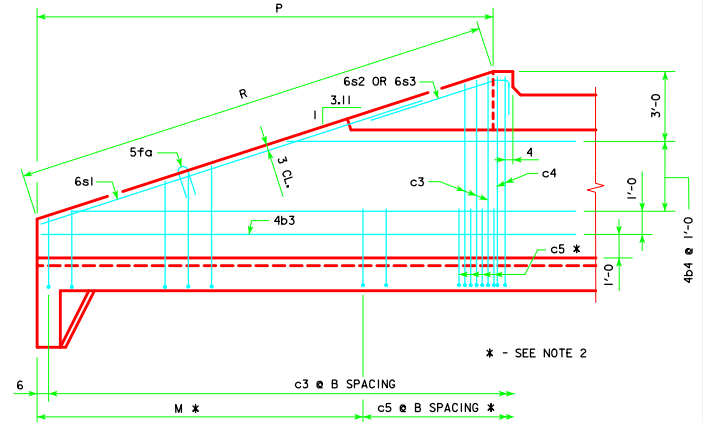


ENGLISH:RFDSD\IGNEDS\ING\ECULVERTS.DGN - PWH 15-3-12 - THIS SHEET ISSUED 04-12.



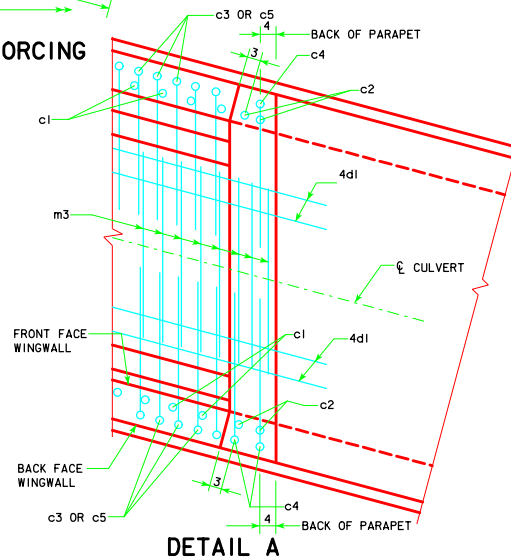
TYPICAL VIEW - FRONT FACE WINGWALL REINFORCING



TYPICAL VIEW - BACK FACE WINGWALL REINFORCING

NOTES :

1. BAR SPACINGS AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES OF HEADWALLS IN THIS STANDARD.
2. NOT APPLICABLE FOR THE FOLLOWING HEADWALL SIZES: 12x4, 10x6, 10x5, 10x4, 8x6, 8x5, 8x4, 6x6, 6x5, 6x4, 6x3, 5x6, 5x5, 5x4, AND 5x3.
3. FOR HEADWALL DIMENSIONS AND BAR SPACING SEE DRAWING PWH 15-1-12.
4. WINGWALL BARS CONSISTENTLY REFERENCED FROM END OF WING FOR ALL WINGWALLS.
5. APRON m3 BARS ARE TO BE CENTERED ON \bar{C} CULVERT.
6. B.F.V. (c4) AND F.F.V. (c2) BARS ARE APPROXIMATELY 4" FROM THE BACK OF PARAPET FOR ALL HEADWALLS.



LATEST REVISION DATE <i>Thomas E. M. Donnell</i> APPROVED BY BRIDGE ENGINEER		
	STANDARD DESIGN - SINGLE REINFORCED CONCRETE BOX CULVERTS PARALLEL WING HEADWALLS APRIL, 2012	
	WINGWALL ELEVATIONS & BOTTOM APRON REINFORCING 15° SKEW	PWH 15-3-12