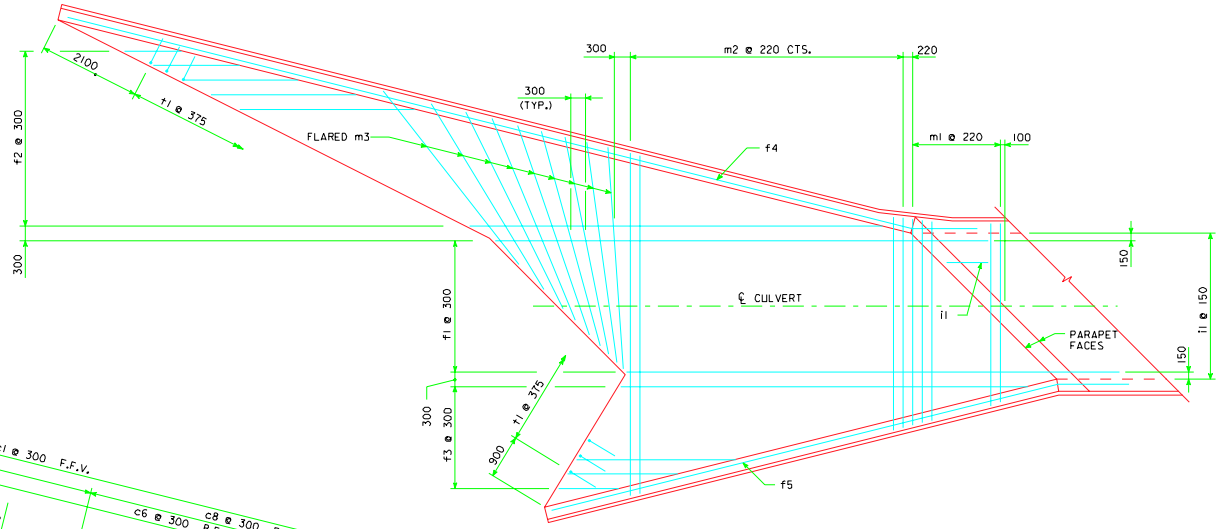
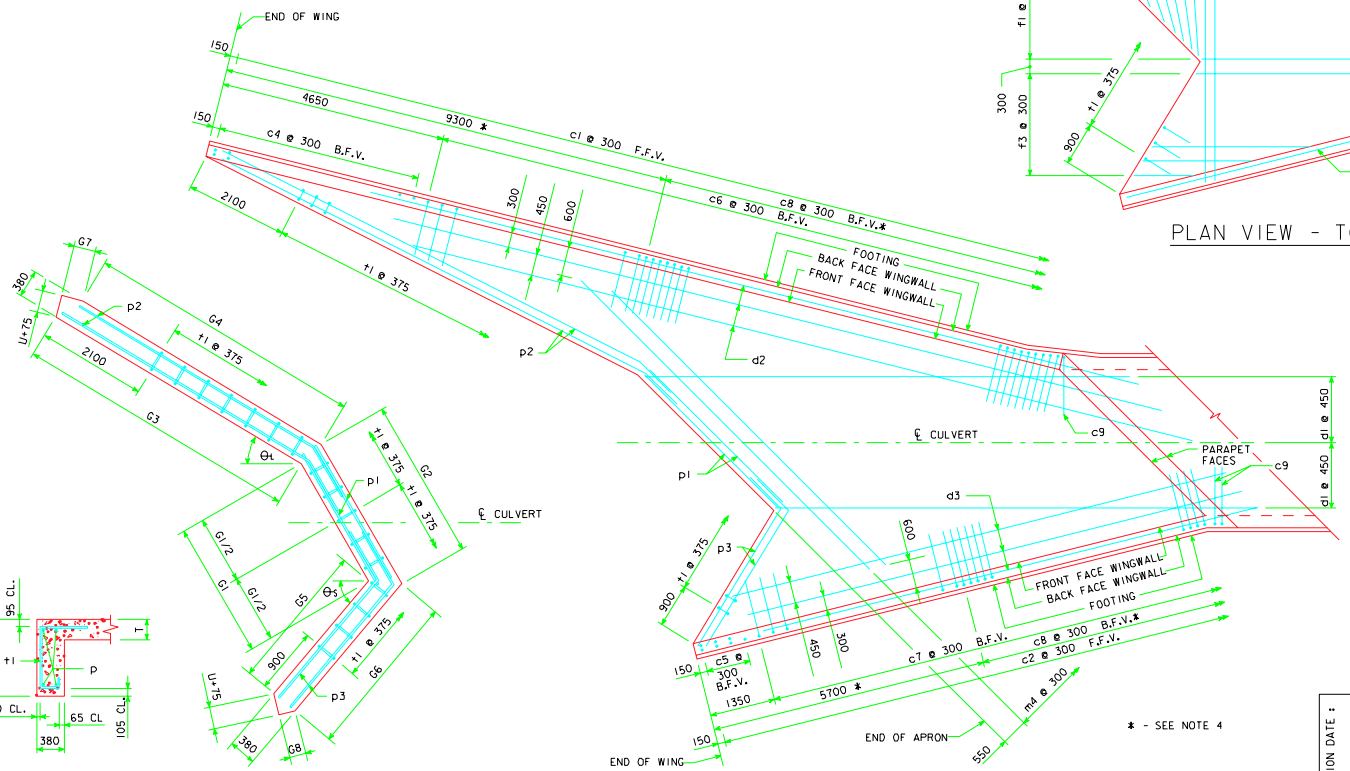
CULVERT HEIGHT (H)	ANGLE	
	θ_L	θ_S
900	27°21'	63°51'
1200	27°10'	62°10'
1500	27°04'	61°05'
1800	26°59'	60°21'
2400	26°53'	59°23'
3000	26°49'	58°48'
3600	26°47'	58°24'



PLAN VIEW - TOP OF APRON REINFORCING BARS



SECTION

PLAN

CURTAIN WALL DETAILS

PLAN VIEW - BOTTOM OF APRON REINFORCING BARS

NOTES:

1. BAR SPACINGS AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES FOR HEADWALLS IN THIS STANDARD.
2. WINGWALL BARS CONSISTENTLY REFERENCED FROM END OF WING FOR ALL HEADWALLS.
3. TOP TRANVERSE FLOOR BARS ARE REFERENCED APPROXIMATELY 100 mm FROM THE BACK OF THE PARAPET FOR ALL HEADWALL.S
4. THERE ARE NO c8 BARS IN THE H=900, H=1200, H=1500 & H=1800 HEIGHT HEADWALLS.
5. FOR DIMENSION TABLE SEE SHEET MFWH 45-6-95.

LATEST REVISION DATE :

APPROVED BY :

STANDARD DESIGN

FLARED WING HEADWALLS

FOR
REINFORCED CONCRETE BOX CULVERTS

PROJECT DEVELOPMENT DIVISION
IOWA DEPARTMENT OF TRANSPORTATION

JULY, 1995

MFWH 45-7-95

FWH457M.S01

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