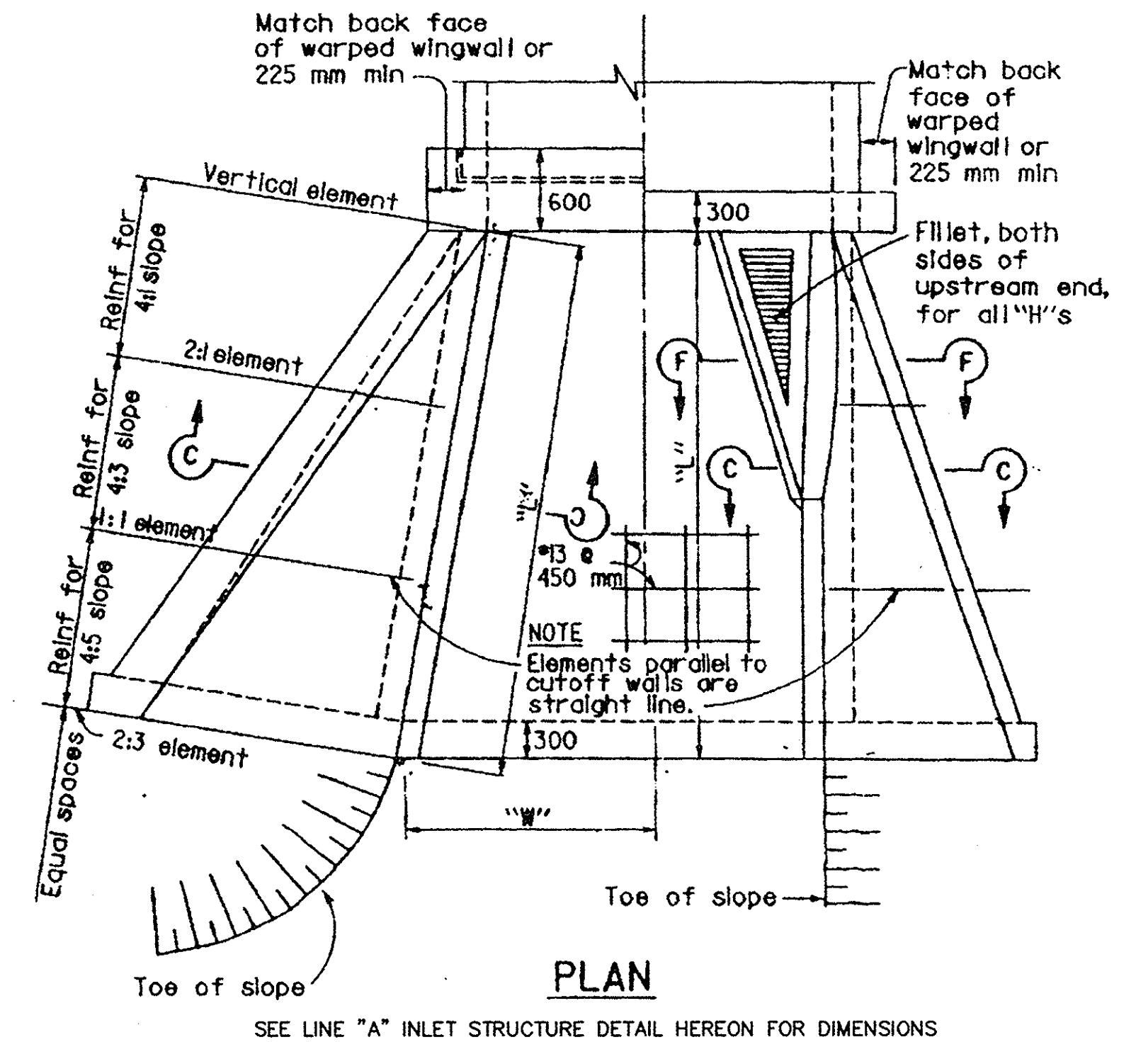
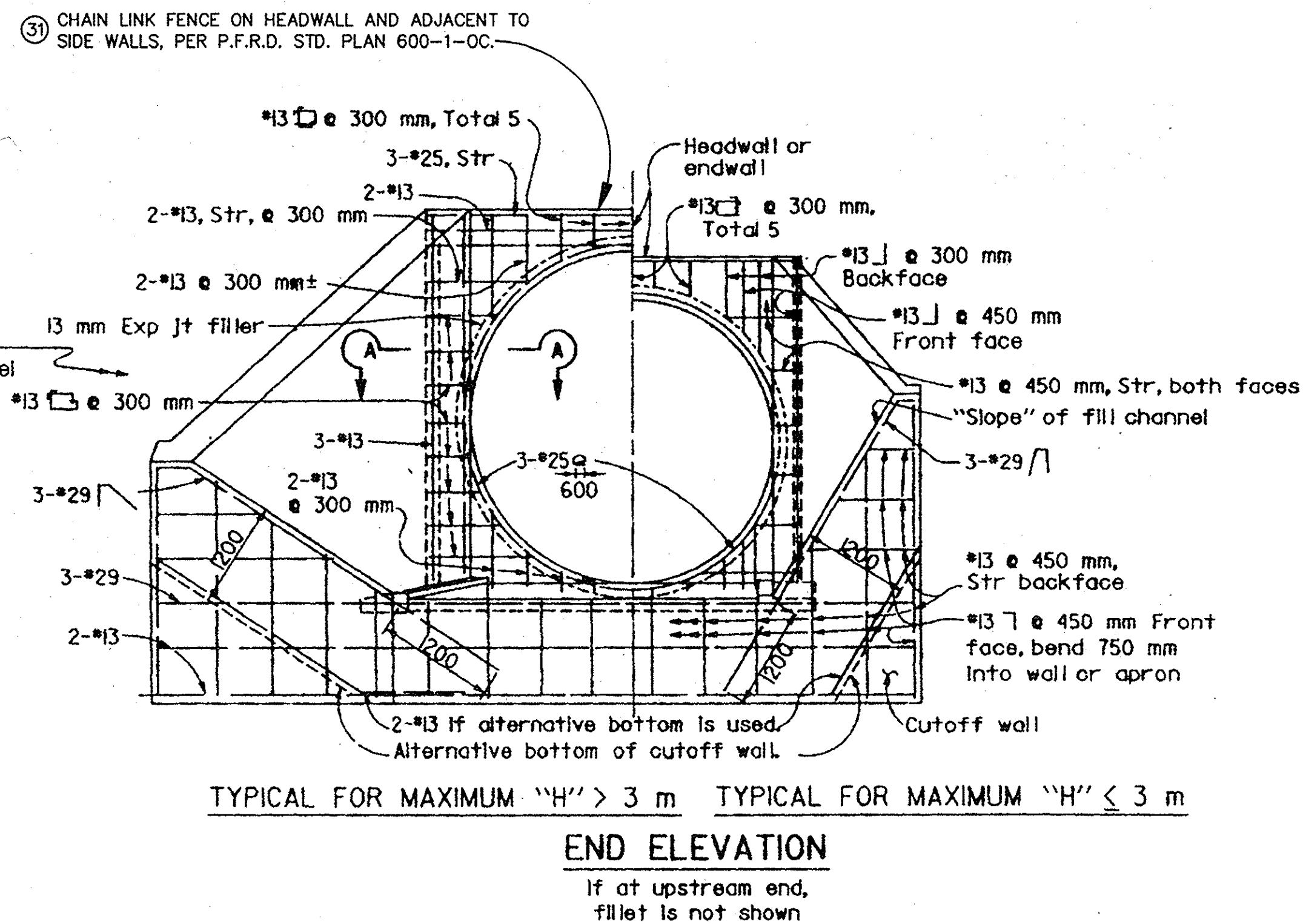
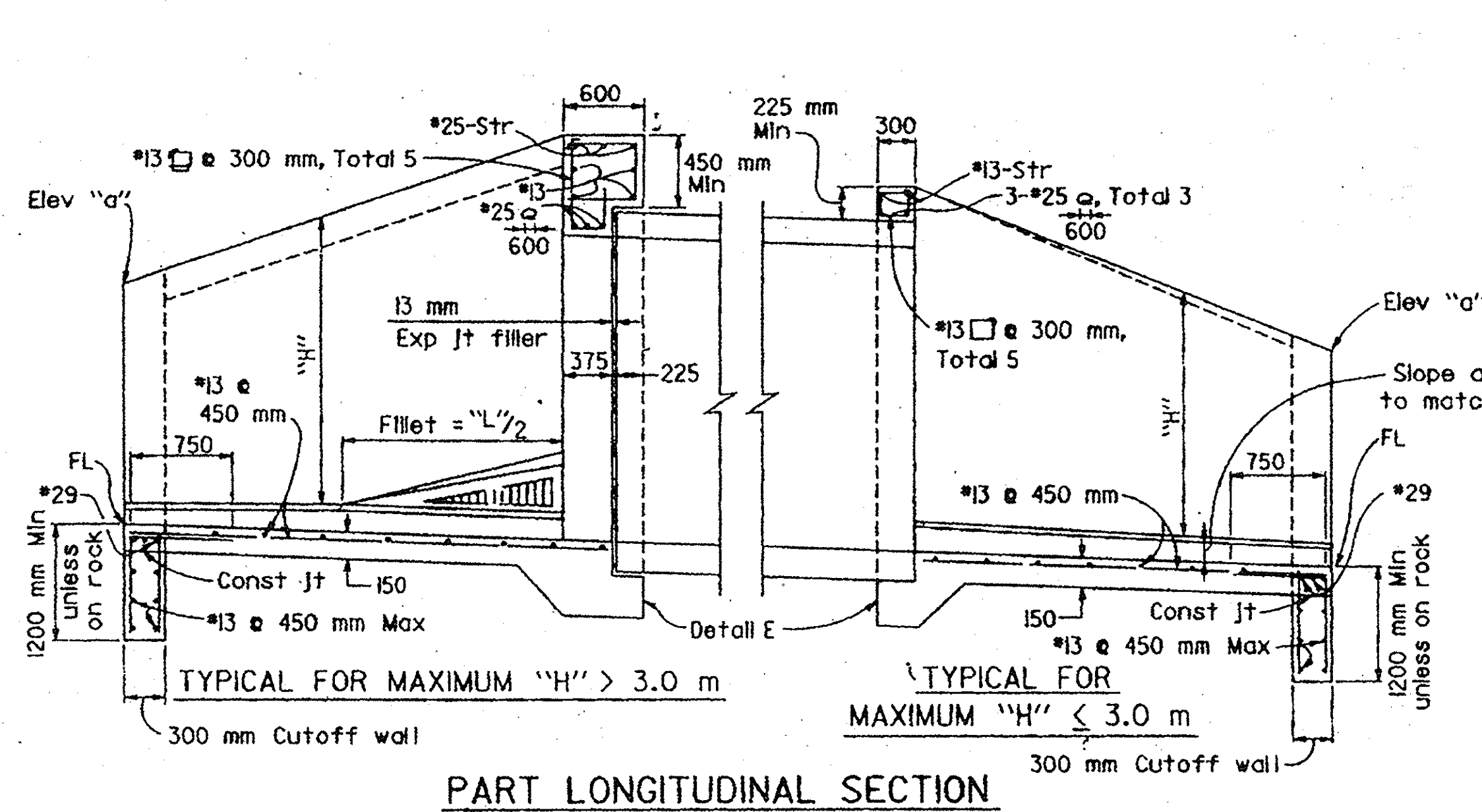
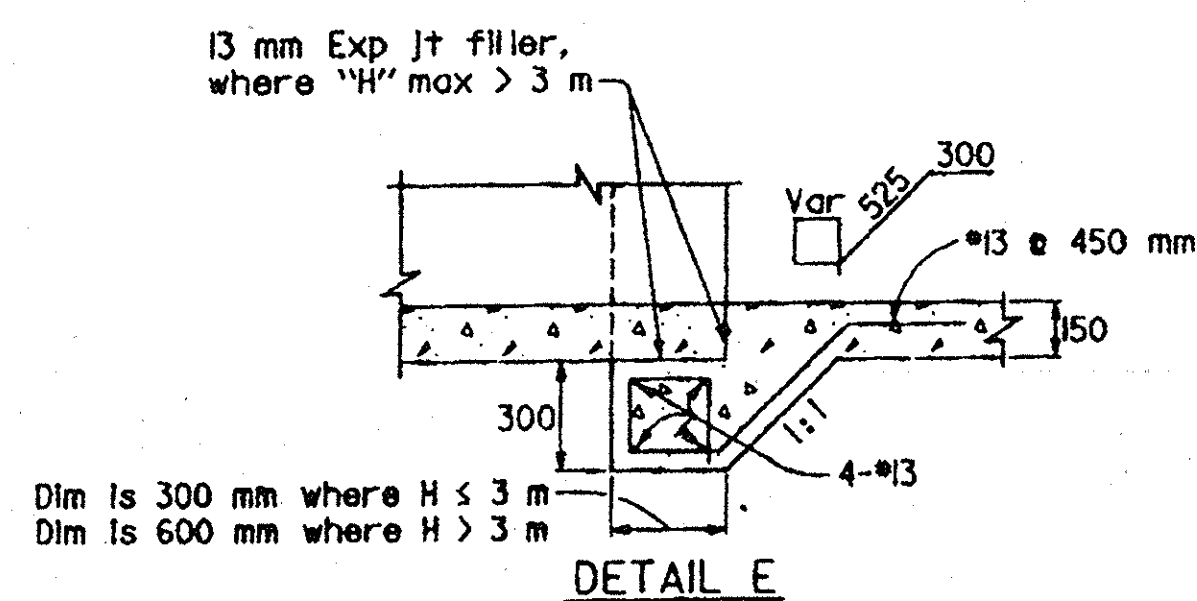
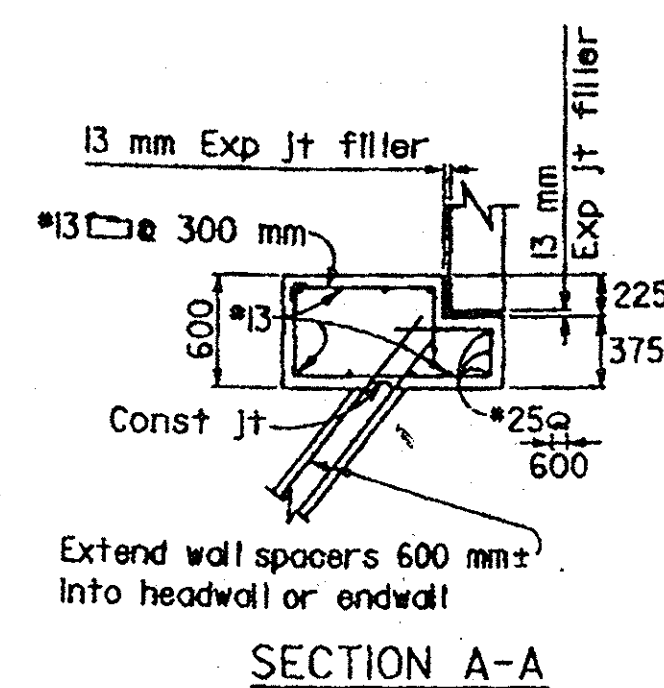
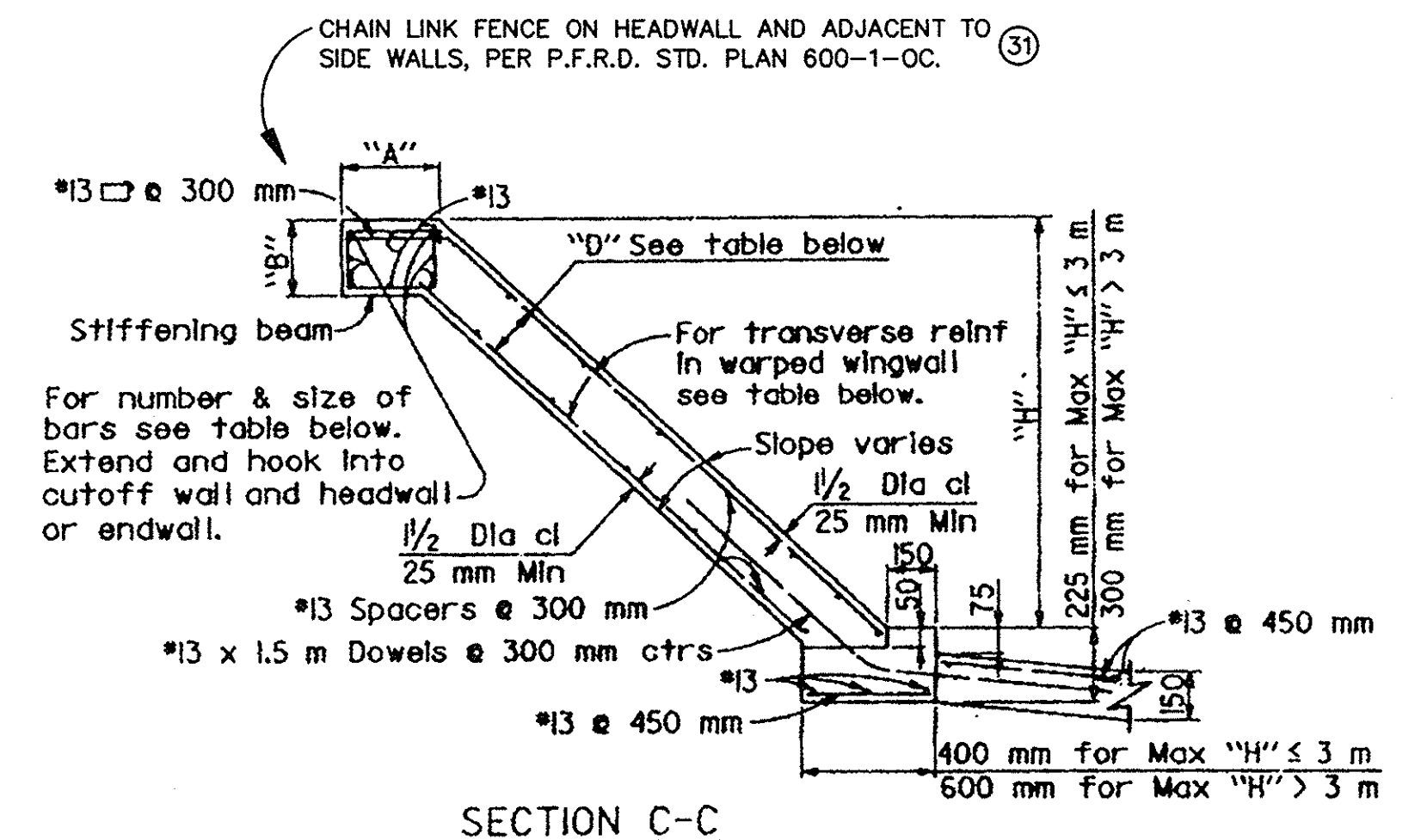
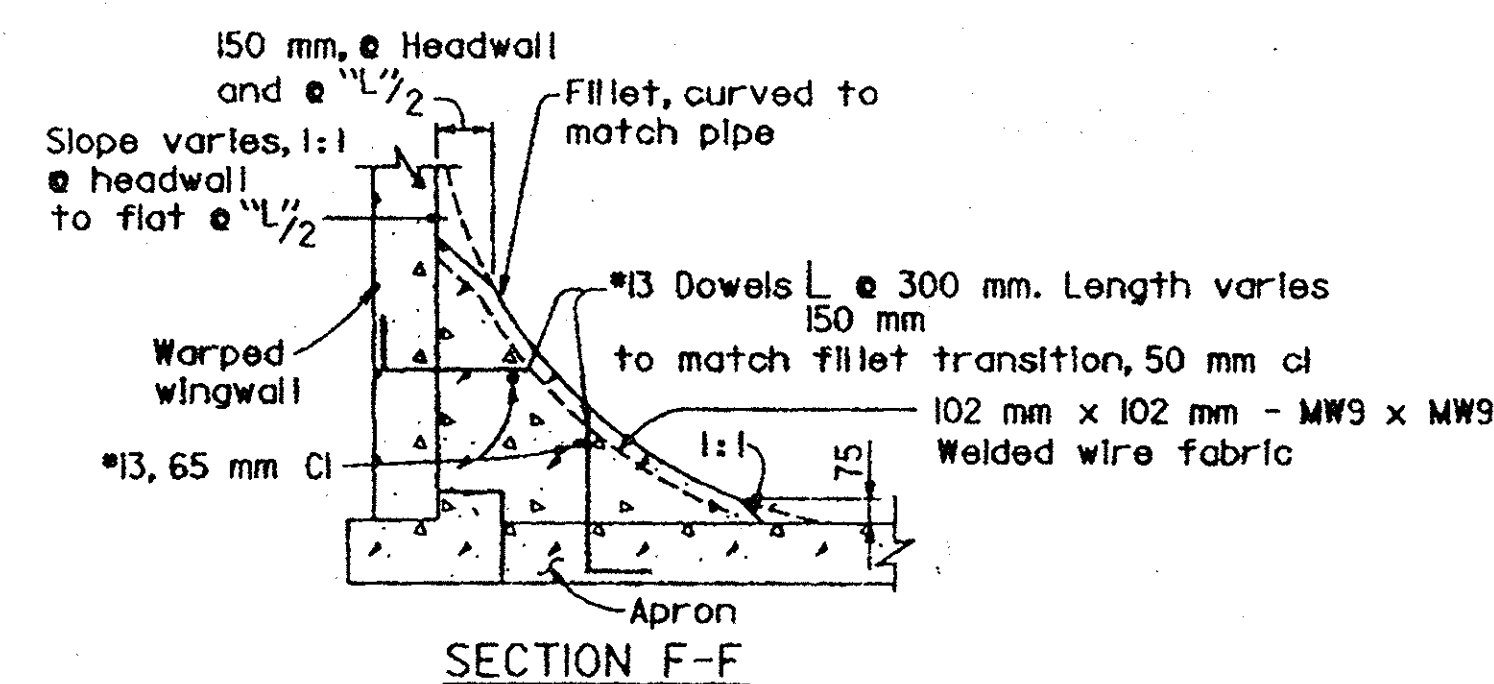




WARPED WINGWALLS																			
WALL DIMENSIONS AND REINFORCING										STIFFENING BEAM DIMENSIONS AND REINFORCING									
Element	Slope	"H"	2.1 m or less	2.6 m	3.1 m	3.5 m	3.9 m	5.5 m	6.1 m	"L"	3.7 m	4.3 m	4.9 m	5.5 m	6J m	7.6 m	9J m	10.7 m	12.2 m or more
4:1	Front face reinf		#13@300	#13@175	#16@175	#16@125	#19@150	#22@175	#22@150	1.8 m	No beam. Place 2-#19 in each face along top of wall.								
	Rear face reinf		#13@300	#13@300	#13@300	#13@300	#13@300	#13@300	#13@300	2.4 m									
4:3	Front face reinf		#13@300	#13@300	#13@300	#13@300	#13@250	#13@200	#13@150	3.0 m	"A"=450								
	Rear face reinf		#13@300	#13@300	#13@300	#13@250	#13@175	#13@150	#13@100	3.7 m	"B"=300								
4:5	Front face reinf		#13@300	#13@300	#13@300	#13@300	#13@300	#13@300	#13@300	4.3 m	Total 6-#22								
	Rear face reinf		#13@300	#13@300	#13@300	#13@300	#13@300	#13@300	#13@300	4.9 m	"B"=300								
"D" at Cutoff Wall (mm)			150	150	150	190	200	240	280	5.5 m	Total 6-#22								
"D" at Culvert (mm)			150	150	150	200	240	280	330	6.1 m	Total 6-#25								
											"B"=300								
											"A"=600								
											Total 6-#29								

NOTES Wall design modified from standard (earth density = 1900kg/m³, equivalent fluid pressure = 7.86 kpa/m). Vary "D" of warped wall uniformly from that at cutoff wall to that at headwall or endwall, for maximum "H" > 3.7m. Dimensions "L", "W", "H", "M", "N", Elevation "a", "Angle of flare", and end "Slope" (as apply) are shown on the plans.

SEE LINE "A" INLET STRUCTURE DETAIL ON SHEET 5 FOR DIMENSIONS



27 REINF. CONCRETE INLET STRUCTURE
CALTRANS STANDARD PLAN D86B, MODIFIED.
NO SCALE
SEE SHEET 5 FOR ADDITIONAL DETAILS

NO.	DATE	REVISIONS	APPROVED

HUITT-ZOLIARS
Huitt-Zoliars, Inc.
15101 Red Hill Avenue, Tustin, CA 92780 (714) 259-7900
PREPARED UNDER PROFESSIONAL ENGINEERING CONTRACT NO. 30924
DATE 9/19/99

DESIGNED BY RJV	STORM DRAIN PLANS FOR CROWN VALLEY PARKWAY BRIDGE EMBANKMENTS	SHEET 6 OF 13 SHEETS
DRAWN BY RJV		
CHECKED BY CFT		
FIELD BOOK		
JARDINES TO LADERA PC		JOB NO. 10-0367-03



PL 18 (16395)