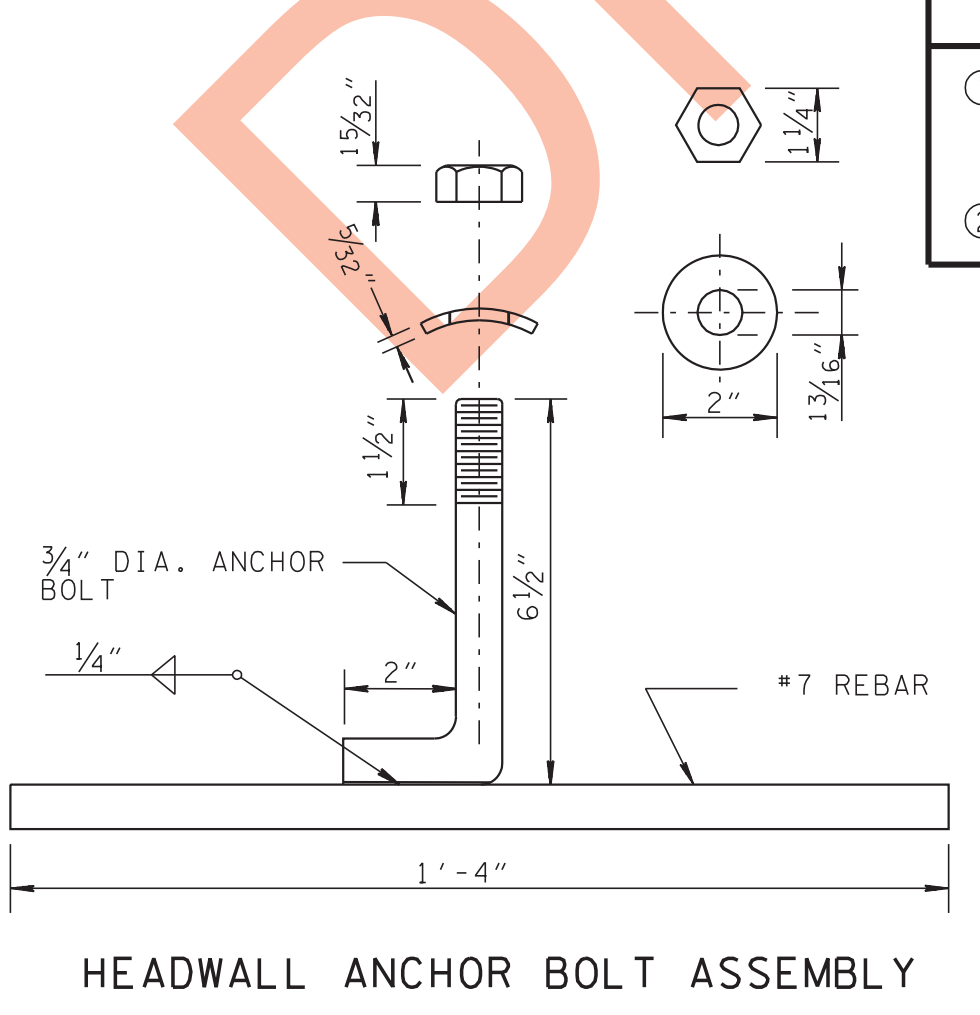
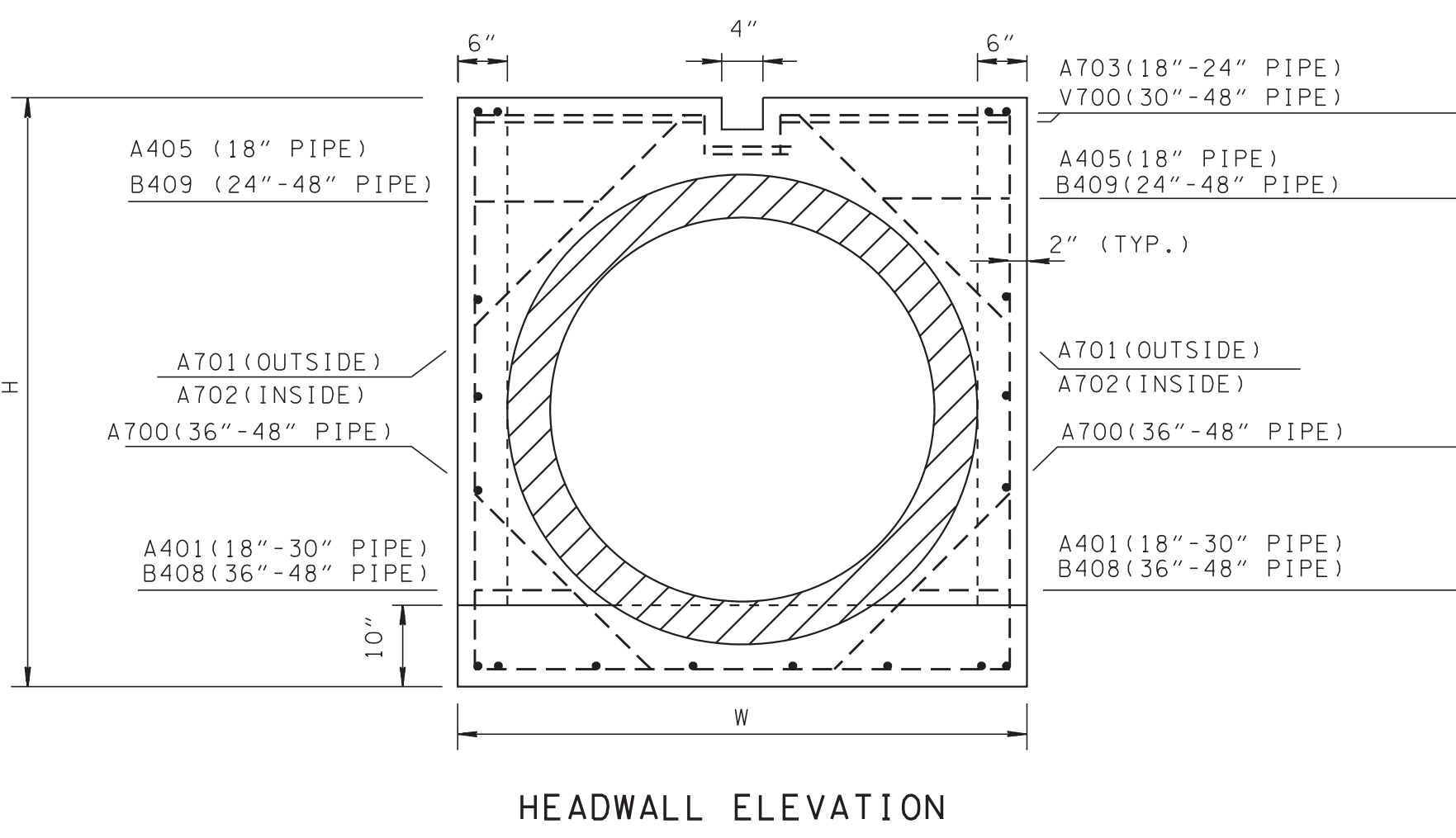
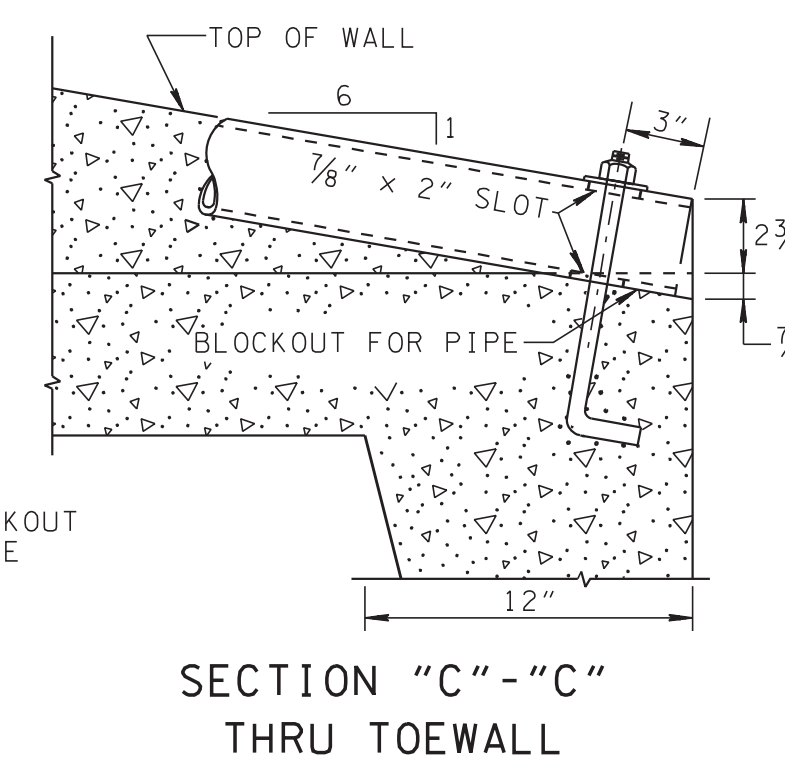
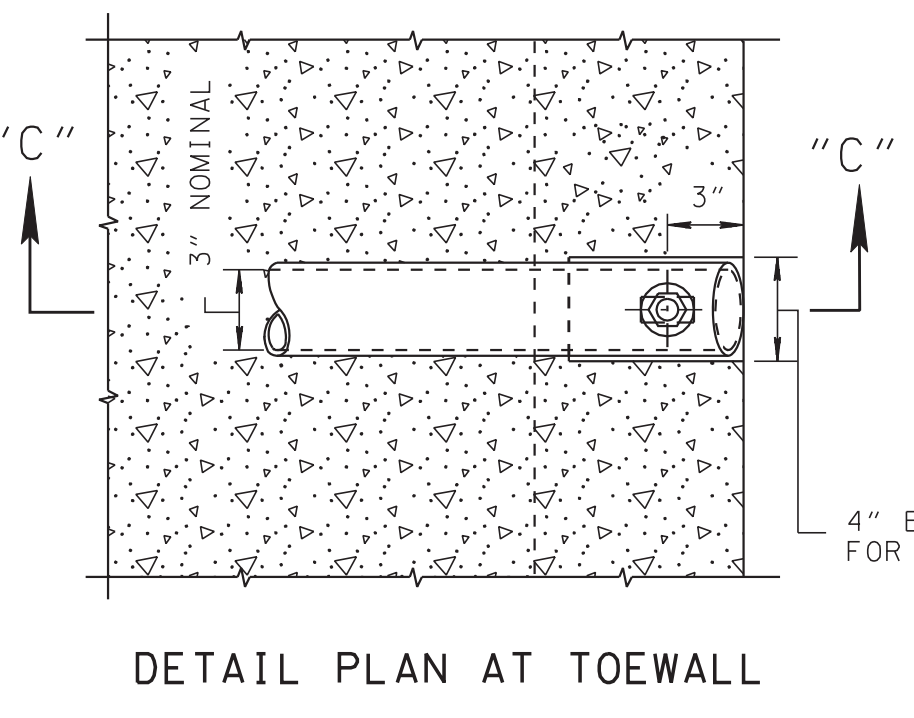
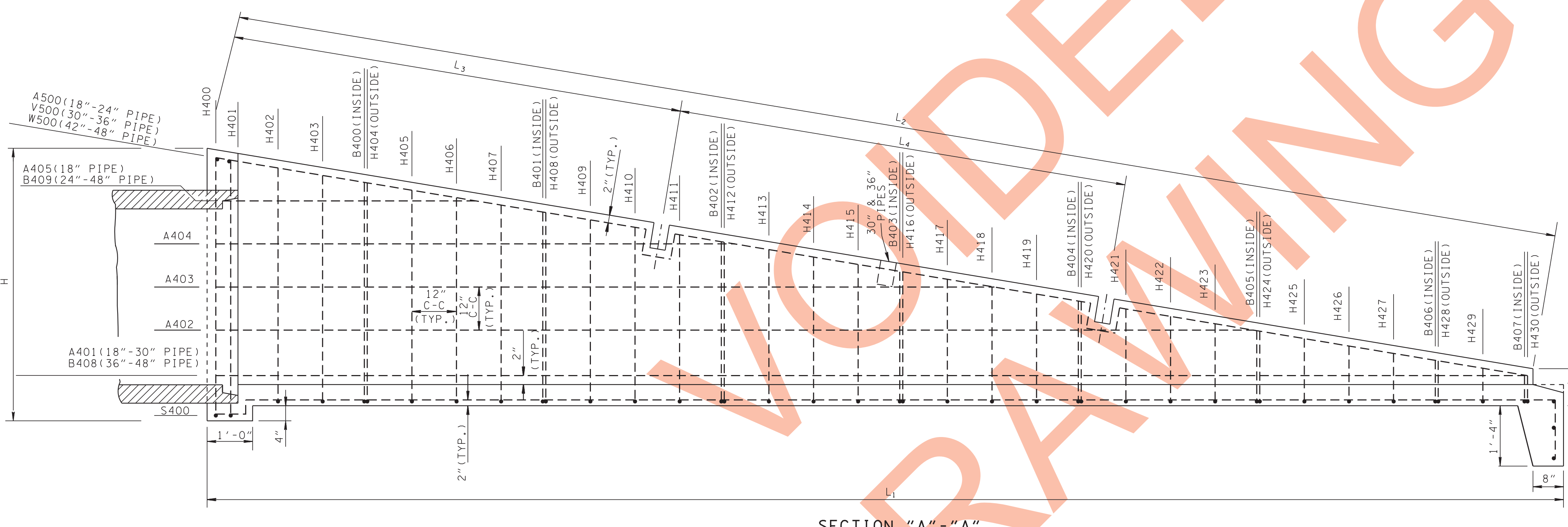
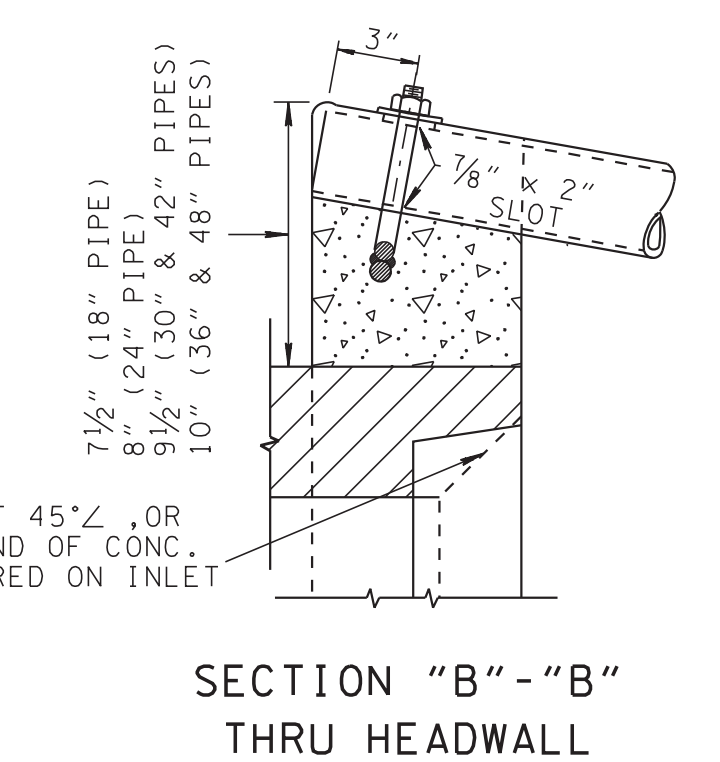
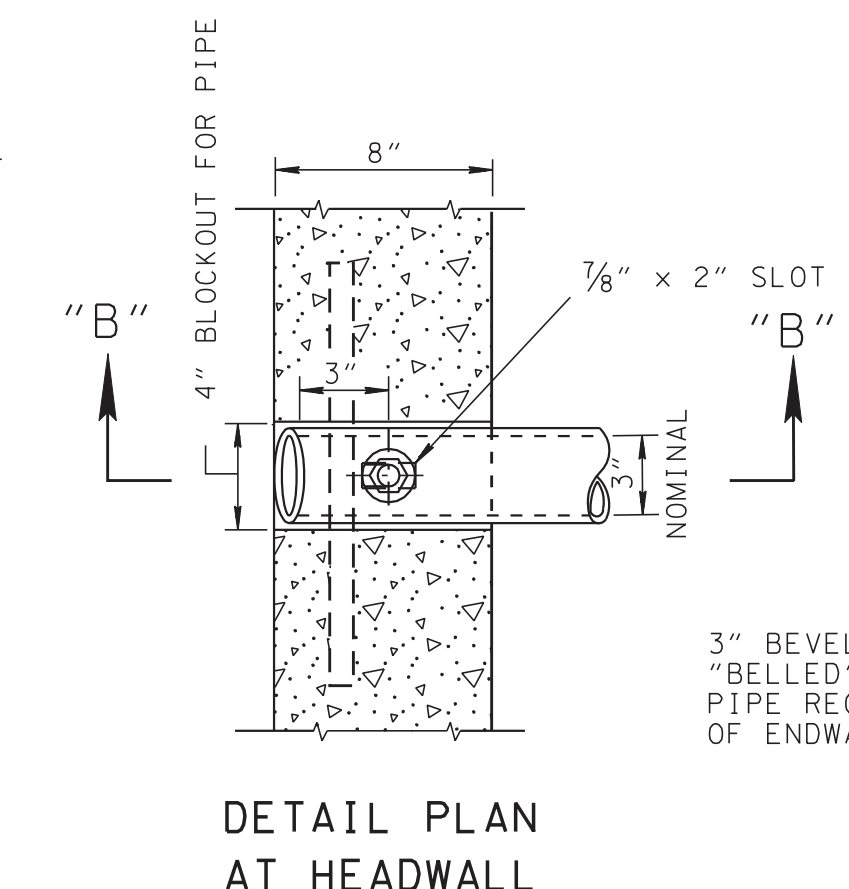
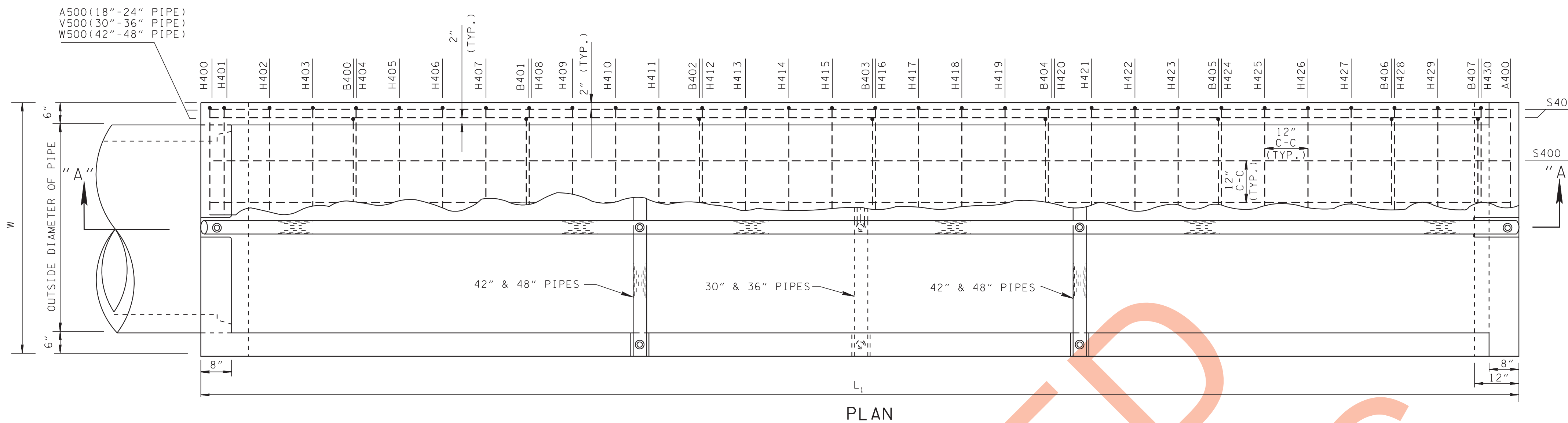


REV. 11-6-89: ADDED FOOTNOTE. NO. ② UNDER DIMENSION AND QUANTITIES FOR ONE ENDWALL TABULATED BLOCK.

□ REV. 3-30-00: MODIFIED TOE WALL AND CLASS "A" CONCRETE QUANTITIES.

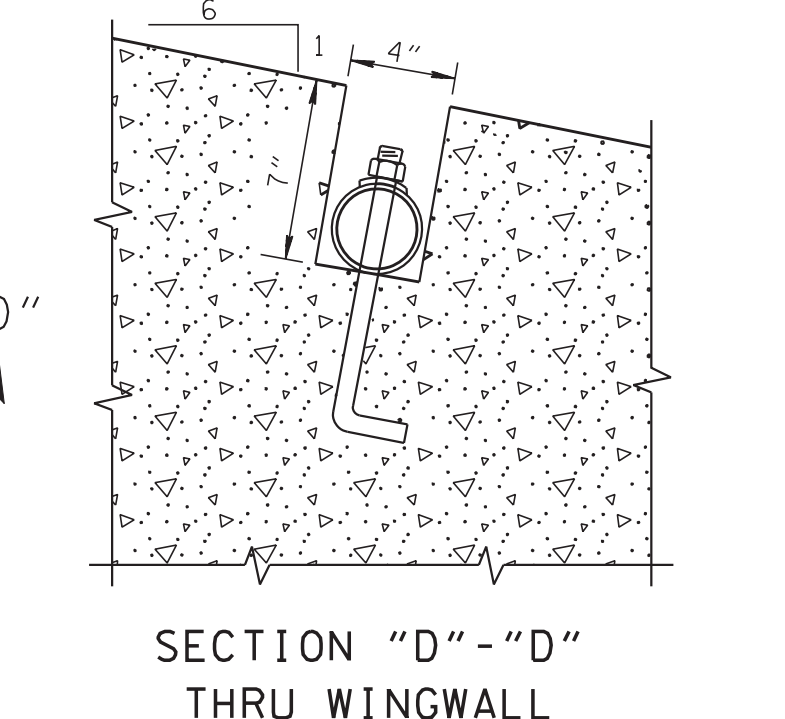
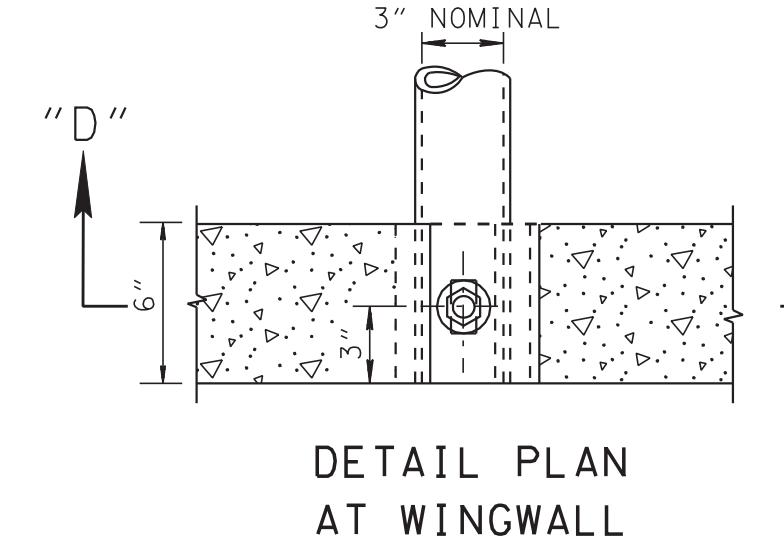


GENERAL NOTES

- ANCHOR BOLT ASSEMBLY FOR TOEWALL AND WINGWALLS SHALL BE AS SHOWN, EXCEPT WITHOUT REBAR AND LONG SHANK OF BOLT TO BE 11" INSTEAD OF 6 1/2".
- BOLTS SHALL NOT EXTEND MORE THAN 1/2" ABOVE TOP OF NUTS.

PIPE CULV. DIA.	CONCRETE ENDWALL DIMENSIONS						STRUCTURAL STEEL PIPE DIMENSIONS		ESTIMATED QUANTITIES		
	H	L ₁	L ₂	L ₃	L ₄	W	LG	WG	CLASS "A" CONCRETE CU. YD.	STEEL BAR REINF. ② LB.	STRUCT. STEEL LB.
	18"	3'-2"	12'-8"	12'-2"	—	—	2'-11"	—	—	1.47	193
24"	3'-9"	16'-2"	15'-8 5/8"	—	—	3'-6"	—	—	2.22	275	① —
30"	4'-5"	20'-2"	19'-9 1/4"	10'-3"	—	4'-1"	20'-4 3/4"	1 @ 4'-1"	3.23	410	186
36"	5'-0"	23'-8"	23'-3 3/4"	12'-0 1/4"	—	4'-8"	23'-11 3/8"	1 @ 4'-8"	4.38	524	217
42"	5'-6"	26'-8"	26'-4 1/4"	8'-10 1/2"	8'-10"	5'-3"	26'-11 1/8"	2 @ 5'-3"	5.47	629	284
48"	6'-1"	30'-2"	29'-10 7/8"	10'-0 3/4"	10'-0 3/8"	5'-10"	30'-6 3/8"	2 @ 5'-10"	6.86	779	320

① PIPE GRATE IS NOT REQUIRED FOR 18" OR 24" PIPE CULVERTS.
② SEE D-PE-6B(2) FOR BILL OF STEEL.



□ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CONCRETE ENDWALL
TYPE "U" WITH
STEEL PIPE GRATE
FOR 18" THRU 48" PIPES
6:1 SLOPE

D-PE-6B(1)