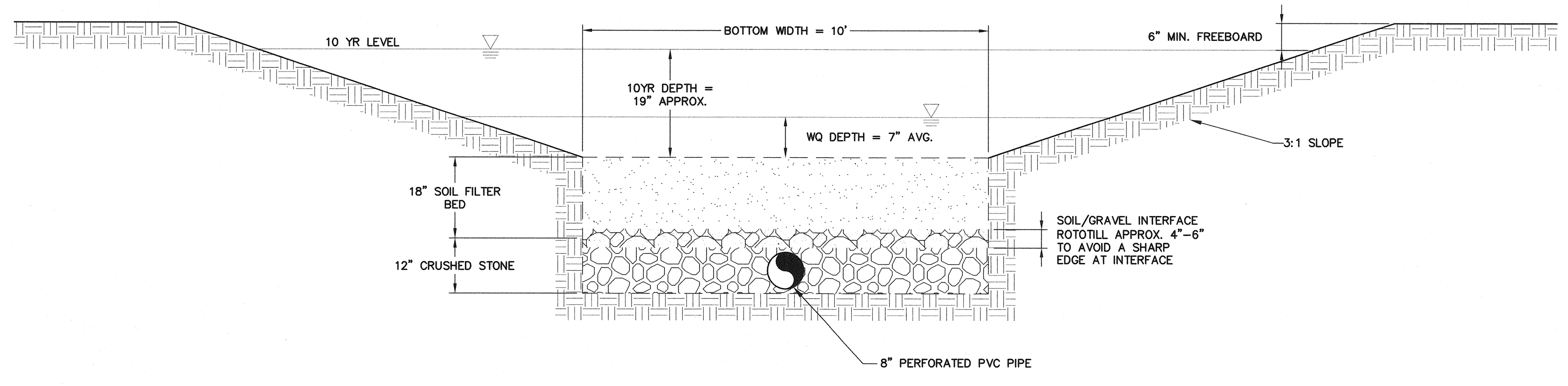


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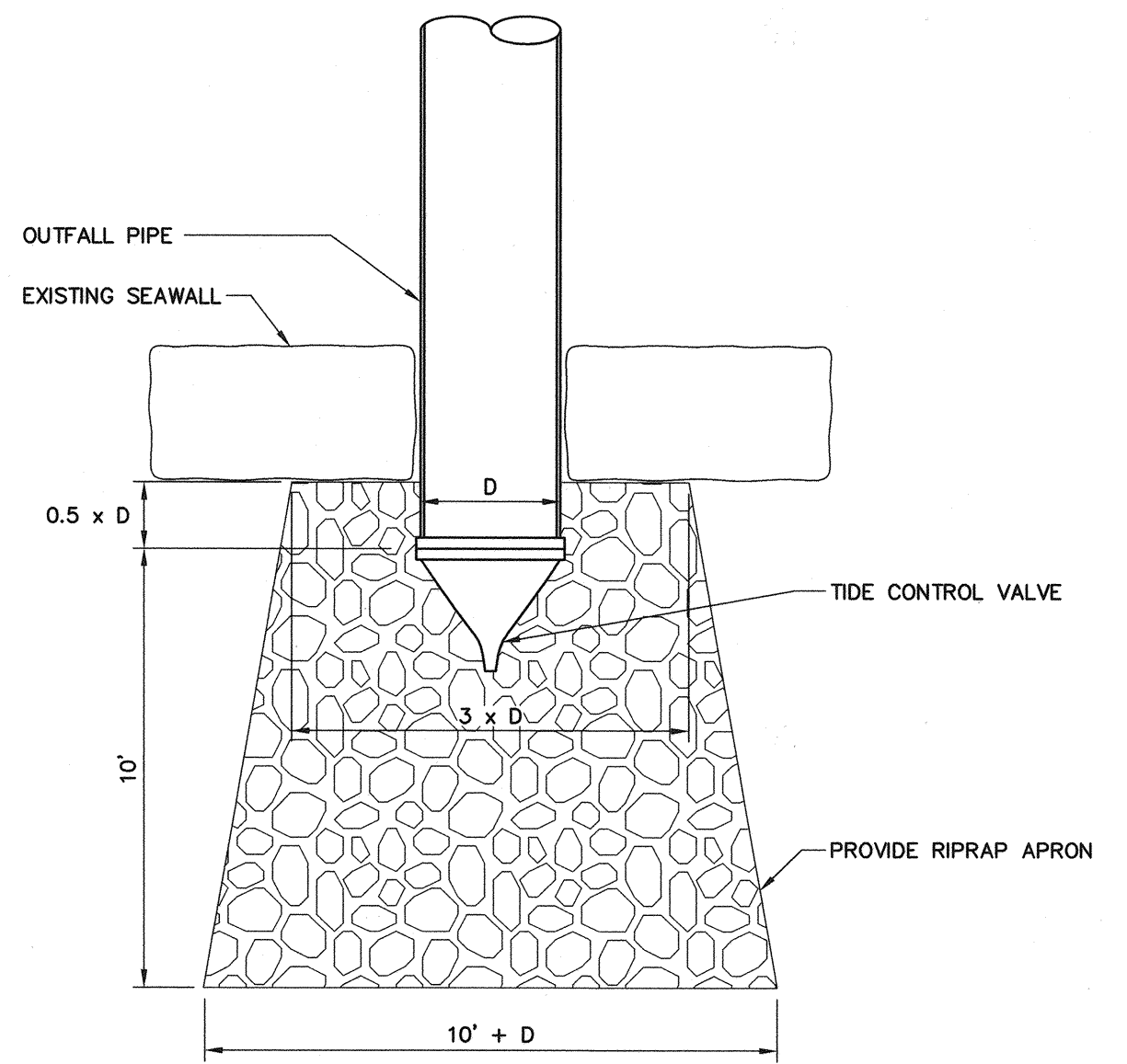
		DATE	10/11/04
		BY	BSS
PROJ. MANAGER	PAUL POTTLE	DESIGN-DETAILED	DAS
CHECKED-REVIEWED	DAS	DESIGN-DETAILED2	DAS
DESIGN-DETAILED3		REVISIONS 1	
REVISIONS 2		REVISIONS 3	
REVISIONS 4		FIELD CHANGES	

CITY OF PORTLAND
 OCEAN GATEWAY PHASE 1
 CIVIL DETAILS - 7

C406

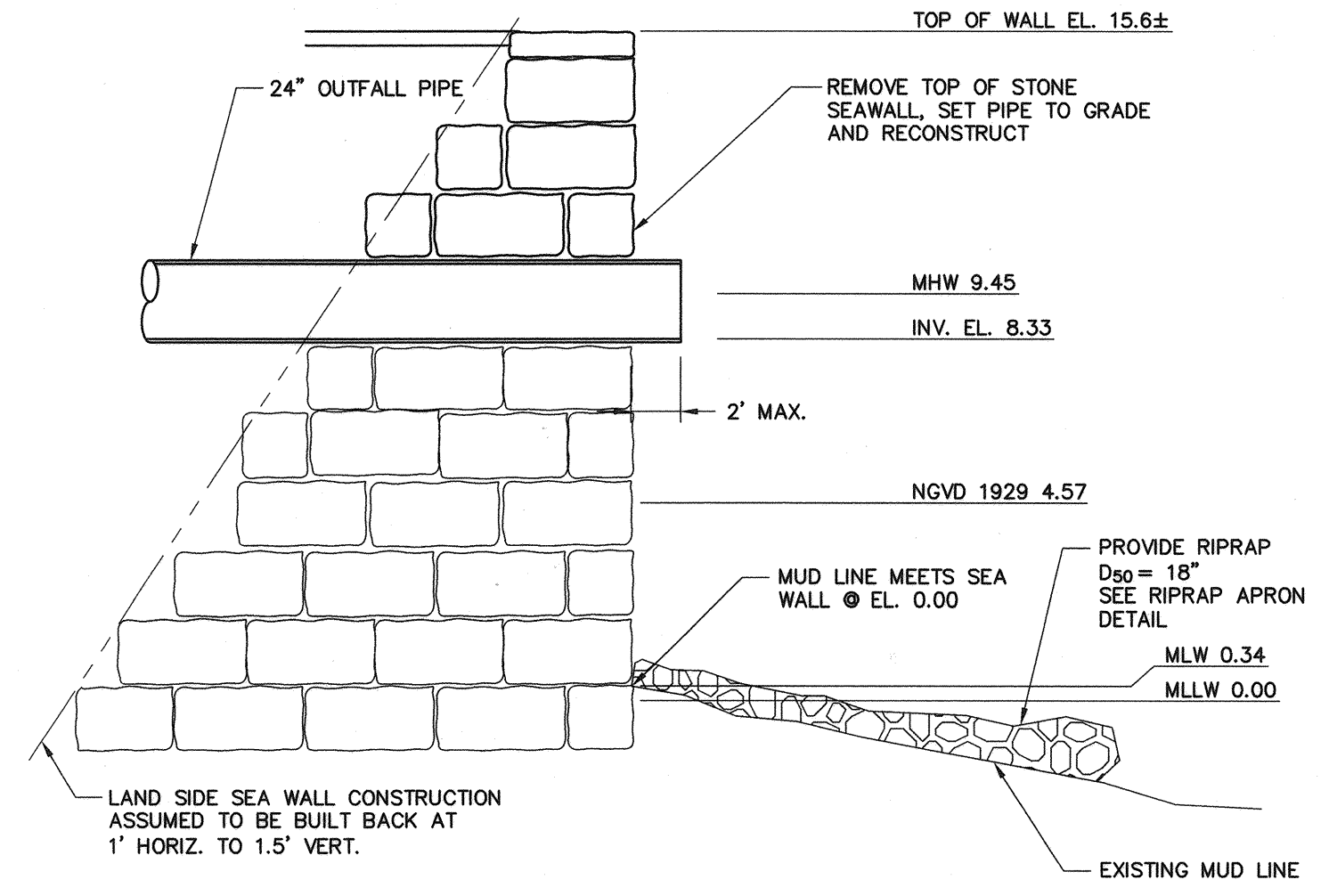


DRY SWALE SECTION
 N.T.S.



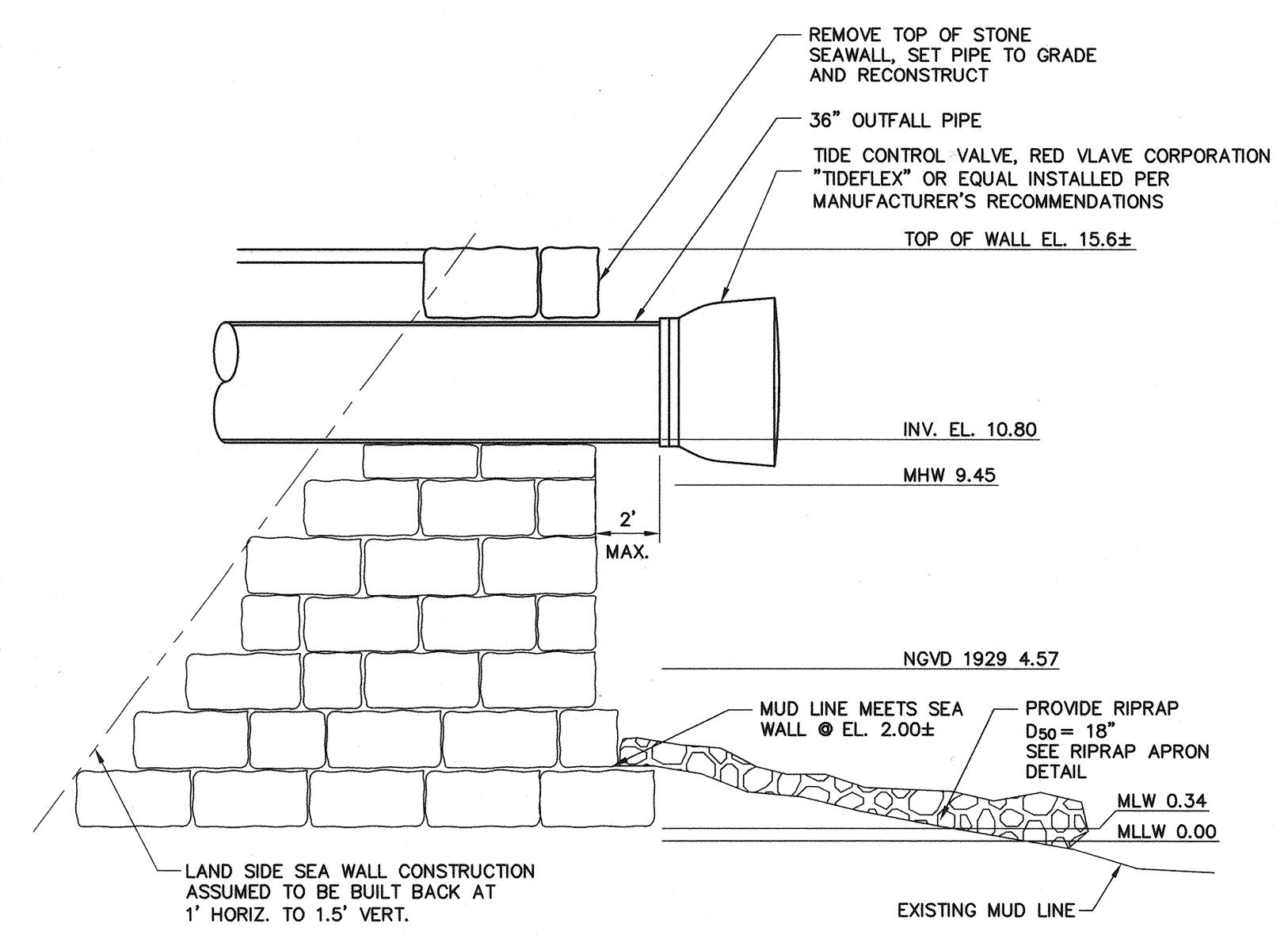
D = OUTFALL PIPE DIAMETER
 RIPRAP D₅₀ = 18"
 DEPTH OF APRON = 1.5 x MAX. STONE SIZE

OUTFALL RIPRAP APRON
 N.T.S.



OUTFALL WEST DETAIL
 N.T.S.

NOTE: DIMENSIONS OF WALL, PLACEMENT OF BLOCKS AND LEVEL OF MUDLINE ARE APPROXIMATE.



OUTFALL EAST DETAIL
 N.T.S.

NOTE: DIMENSIONS OF WALL, PLACEMENT OF BLOCKS AND LEVEL OF MUDLINE ARE APPROXIMATE.