

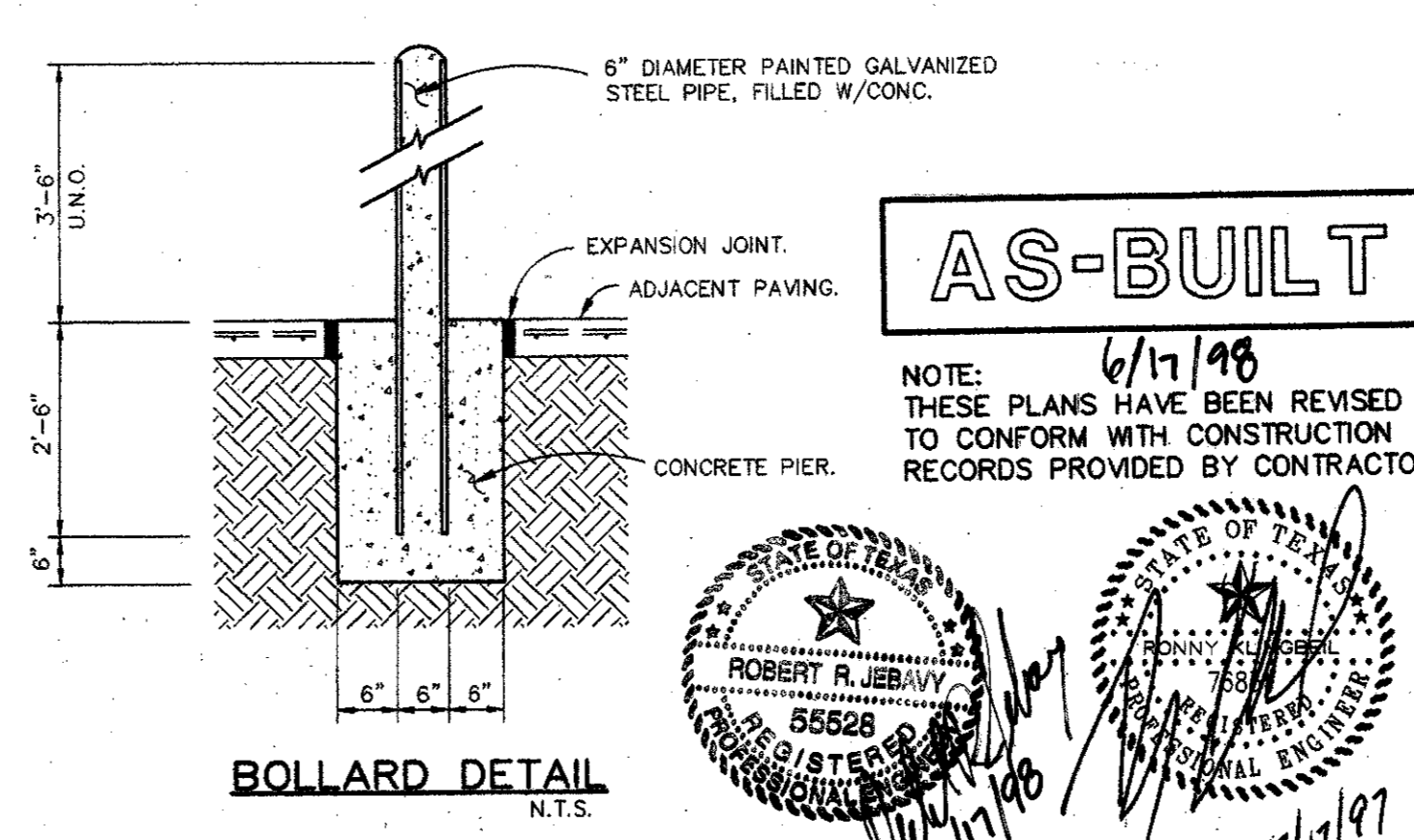
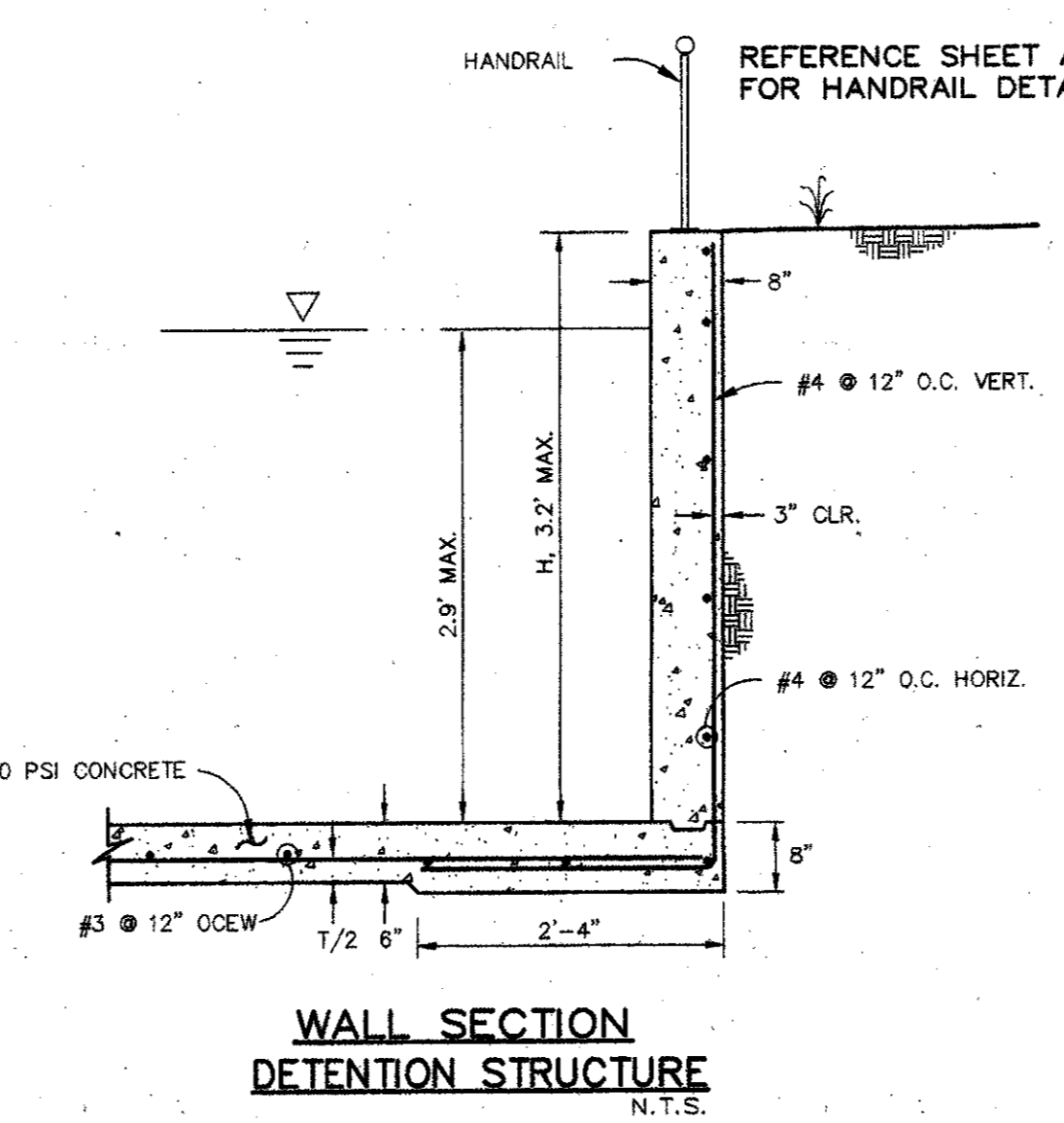
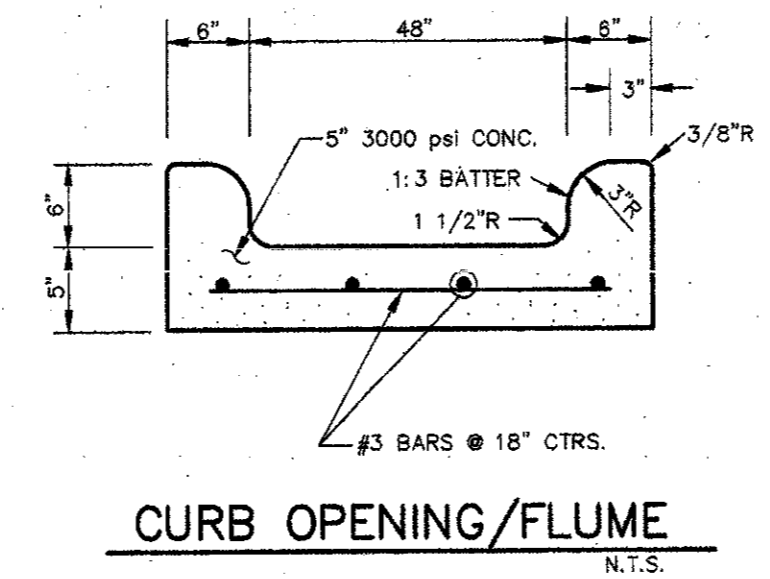
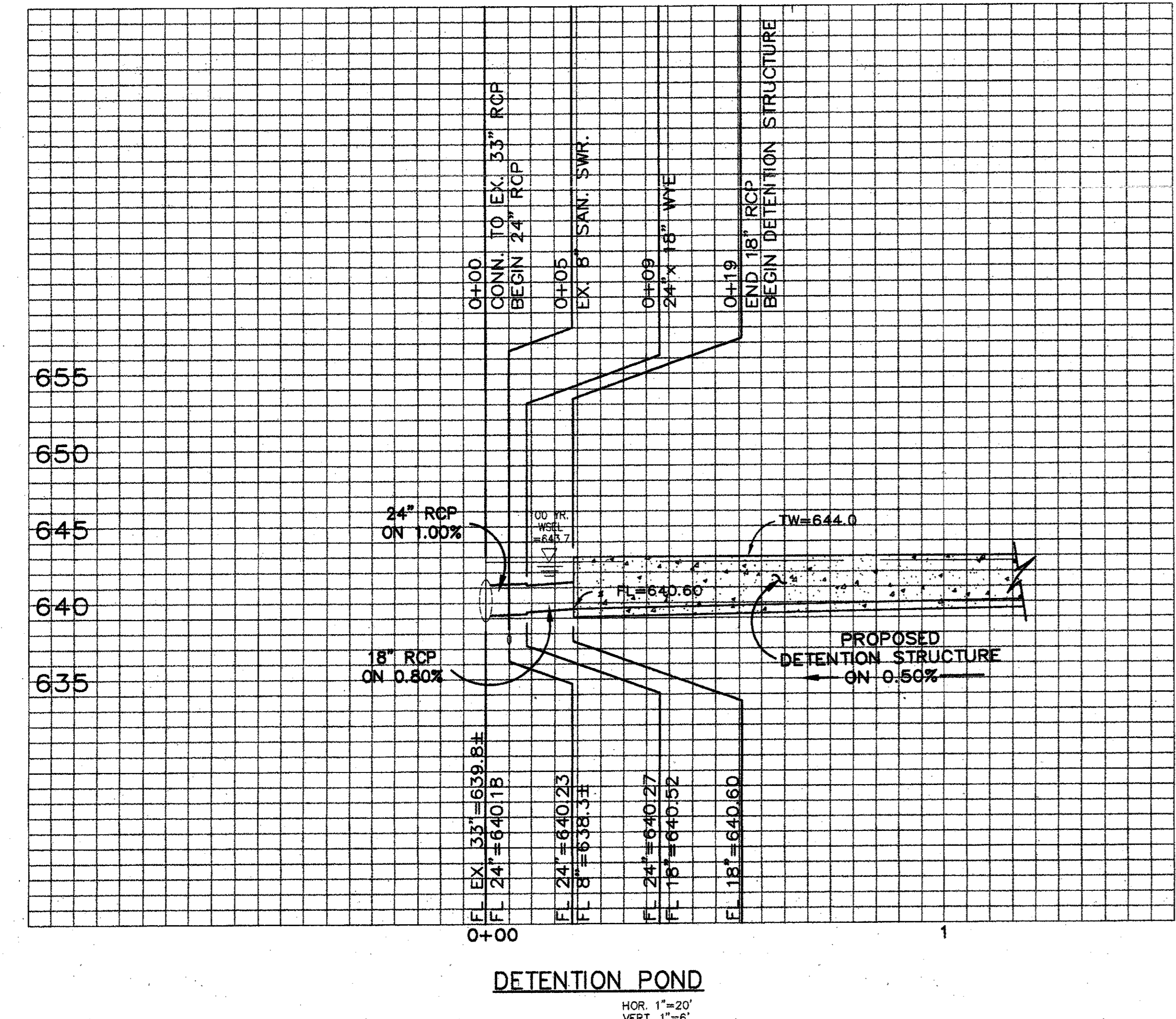
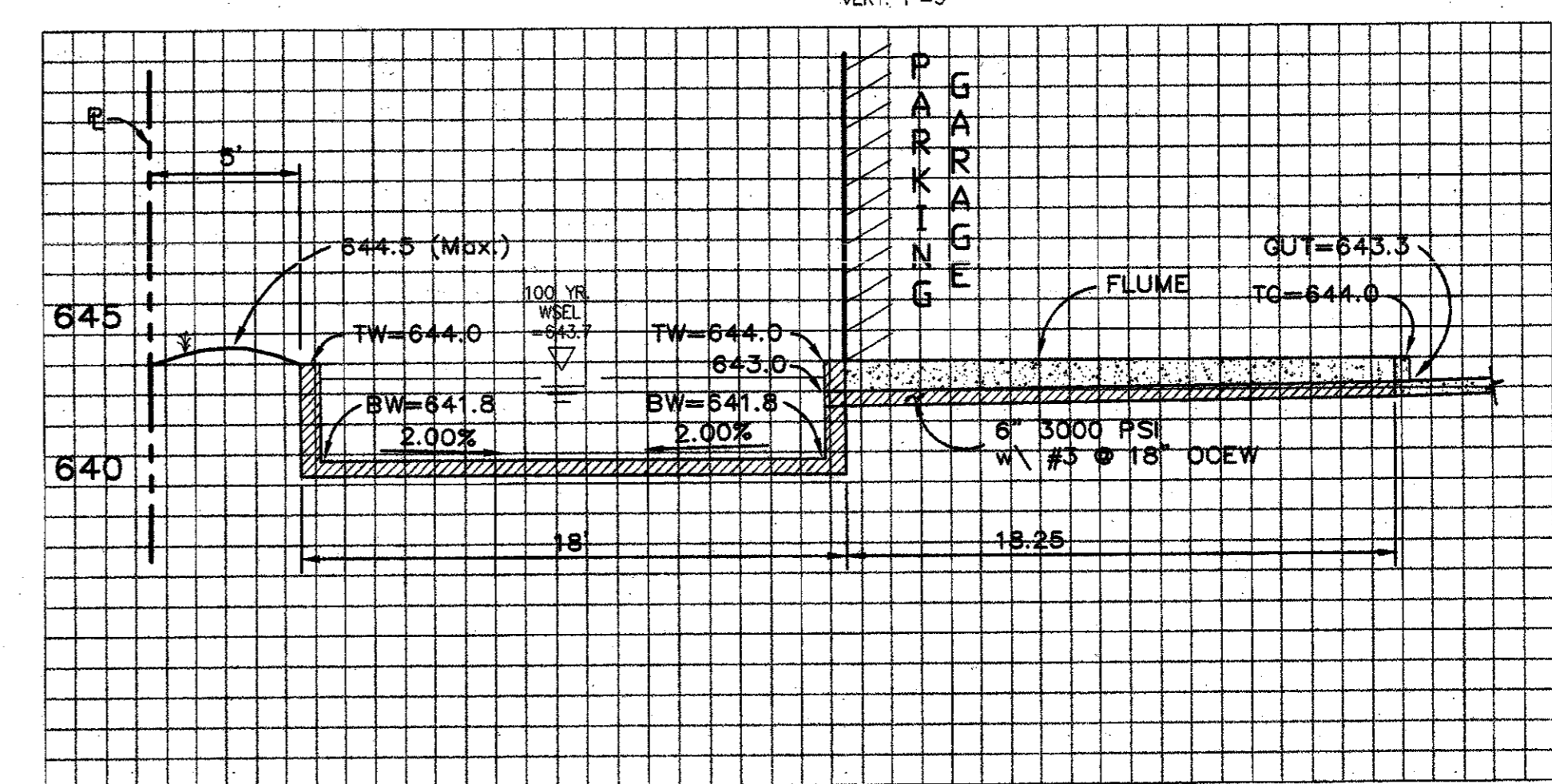
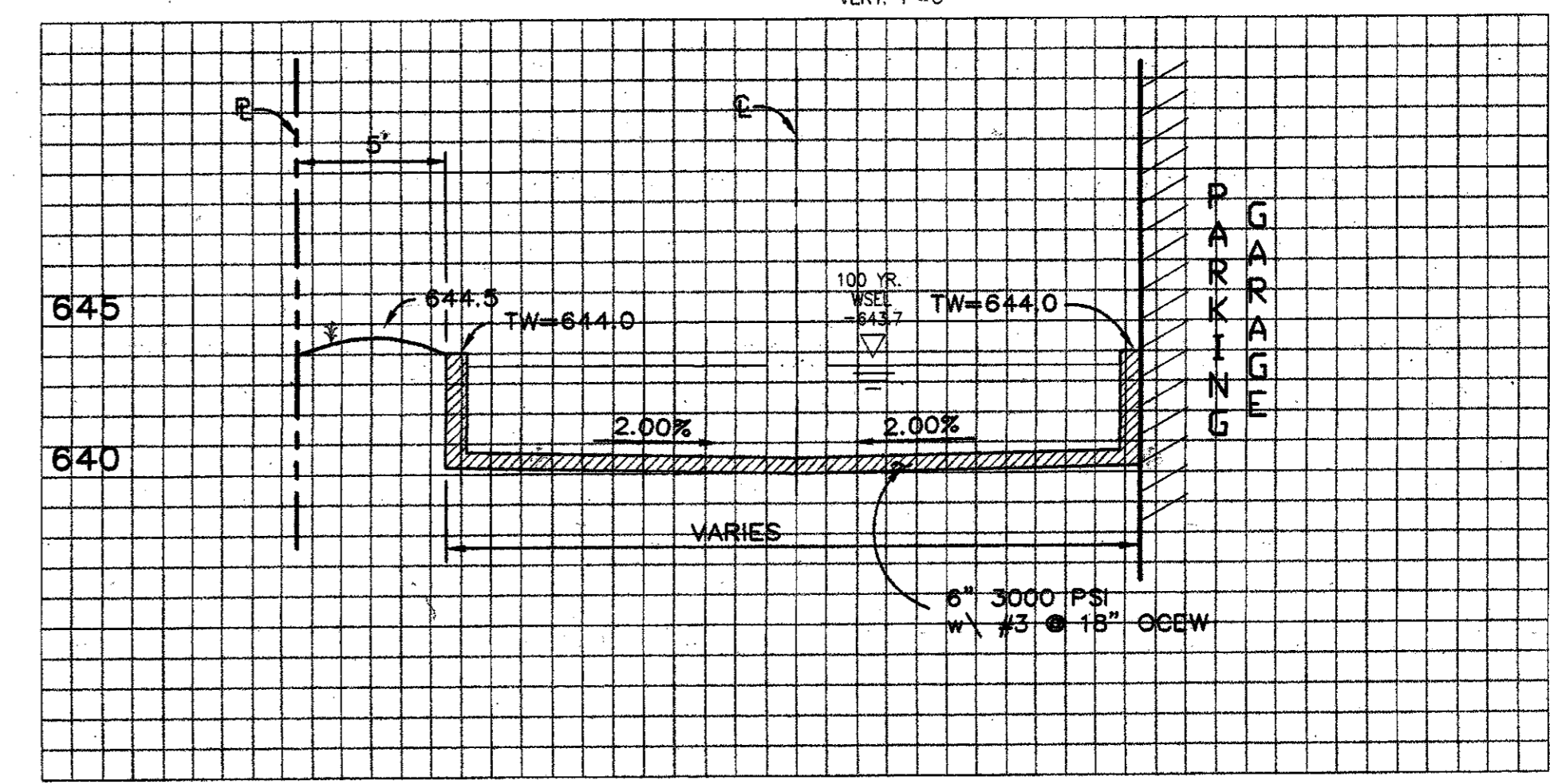
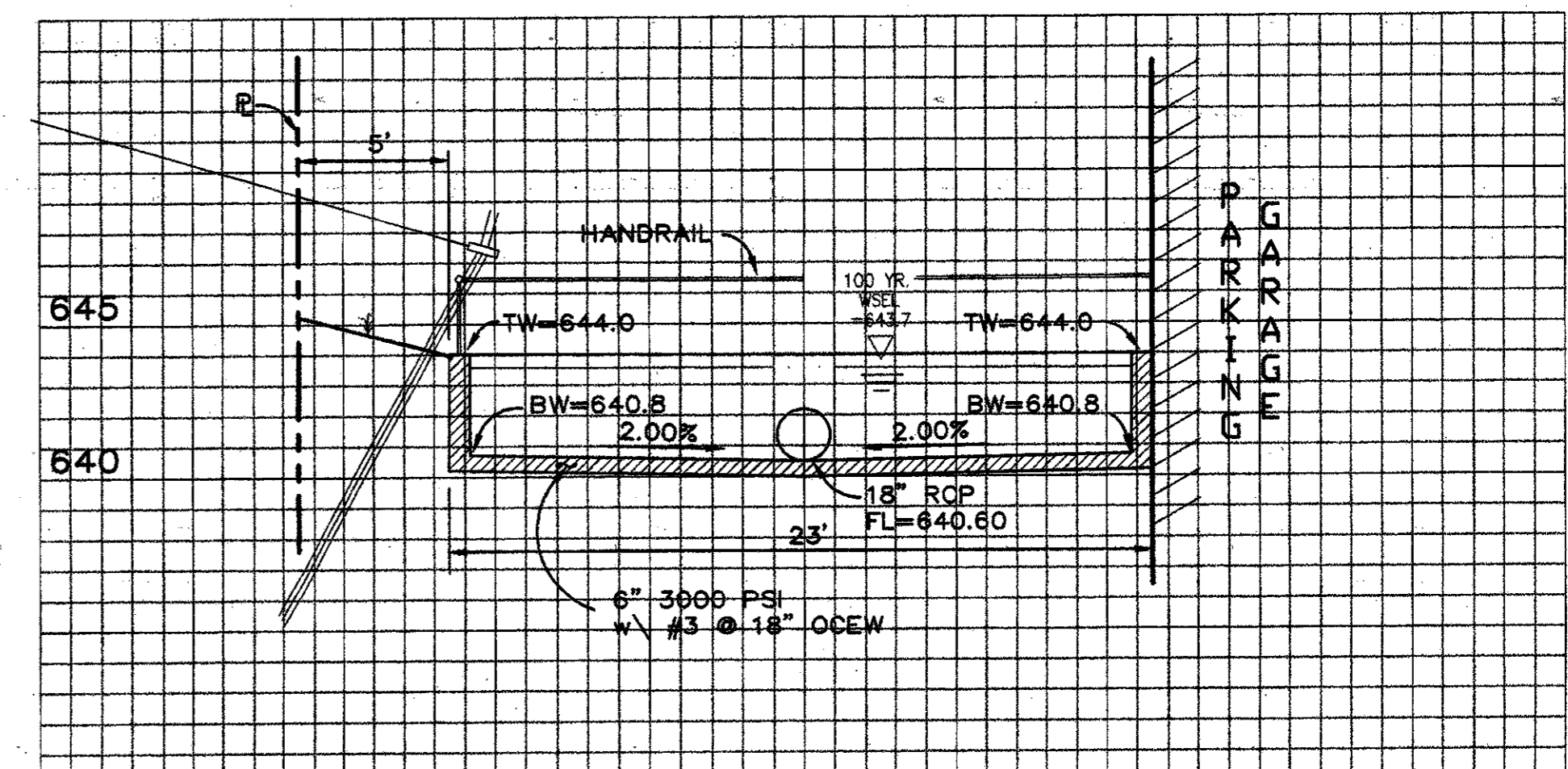
**DETENTION CALCULATIONS**

STORM	INFLOW	OUTFLOW	REQUIRED VOLUME	DETENTION PROVIDED
20 min	24132	13890	10242	11900 c.f.
30 min	29988	18120	11868	
40 min	34464	22550	11914	
50 min	37920	27180	10740	

**EXISTING CONDITIONS** AREA = 3.38 acres  
C = 0.80  
to = 10 min  
I<sub>25</sub> = 7.44 in/hr  
Q<sub>25</sub> = (0.60)(7.44)(3.38) = 15.1 cfs (MAXIMUM RELEASE RATE)

**DEVELOPED CONDITIONS**  
C = 0.85  
to = 10 min  
I<sub>100</sub> = 8.85 in/hr  
Q<sub>100</sub> = (0.85)(8.85)(3.38) = 25.5 cfs

**OUTLET CALCULATION**  
PIPE DIAMETER 18"  
WS 643.7  
Q = CA<sup>2/3</sup>  
[0.70] (1.77) [2(32.2)(2.35)]<sup>2/3</sup> = 15.2 cfs



**AS-BUILT**  
6/11/98

NOTE: THESE PLANS HAVE BEEN REVISED TO CONFORM WITH CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR.

ROBERT R. JEBB  
REGISTERED PROFESSIONAL ENGINEER  
55228  
7/17/97

Detention Structure						
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DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
HM	STL	06/09/97	AS SHOWN	FC	C97138	C-3