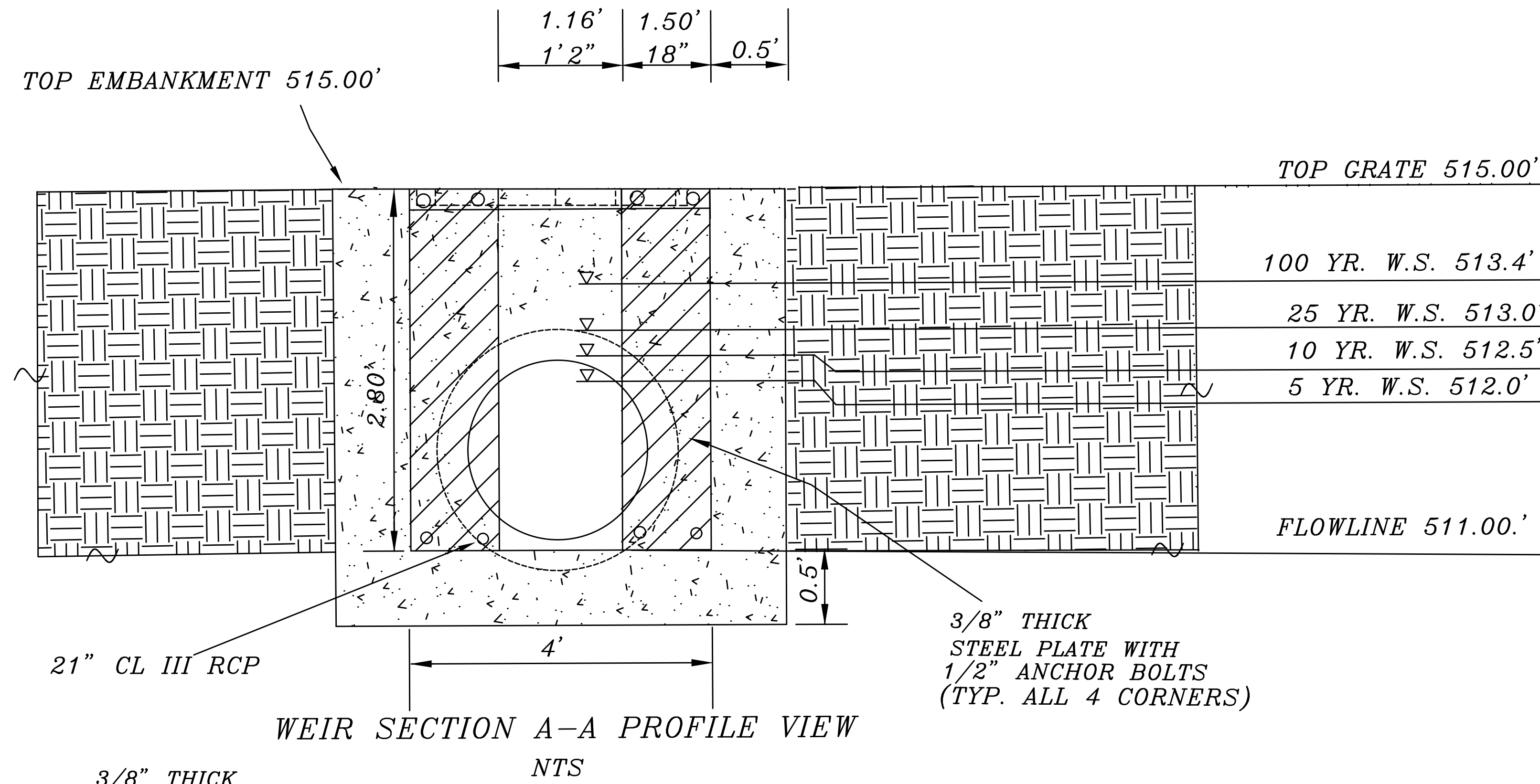


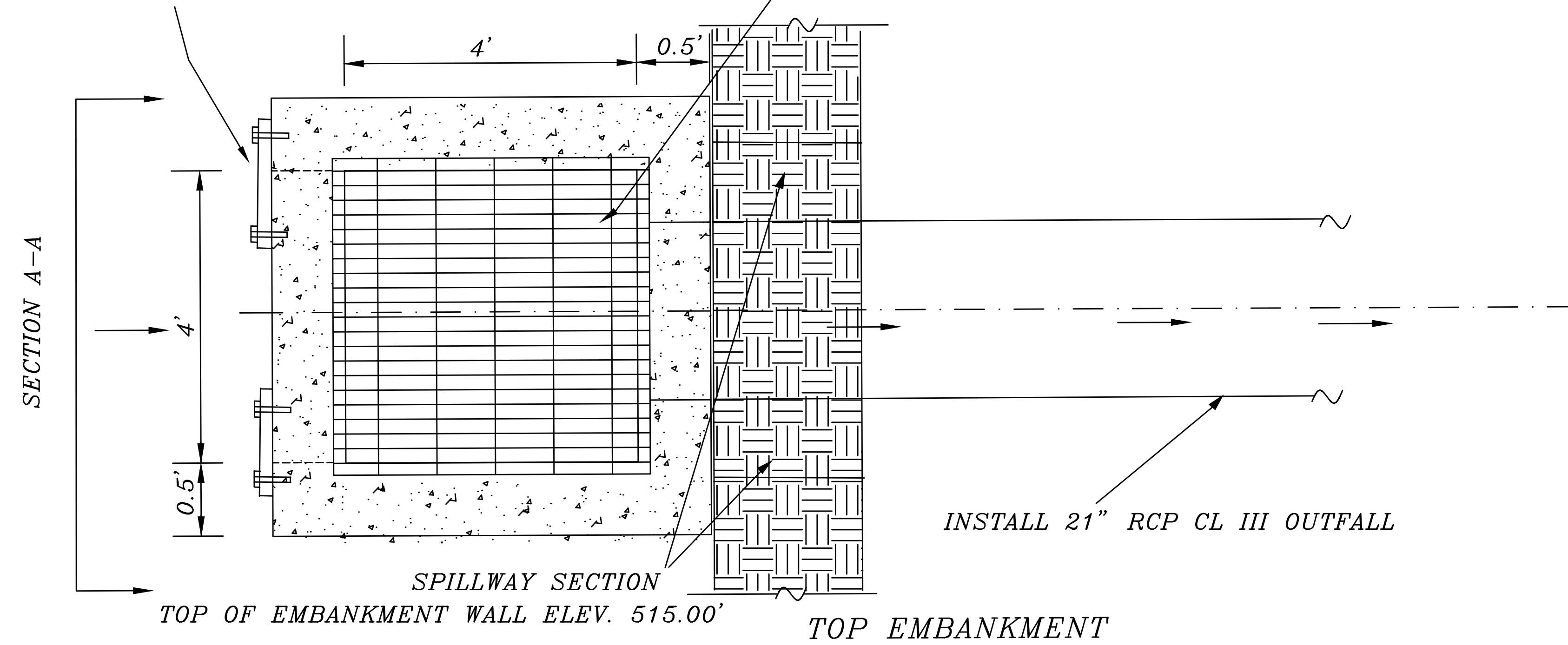
4'X4' GRATE INLET / WEIR W/ ORIFICE DETAIL



WEIR SECTION A-A PROFILE VIEW
NTS

3/8" THICK
STEEL PLATE WITH
1/2" ANCHOR BOLTS
(TYP. ALL 4 CORNERS)

TYPE 4 GALVANIZED GRATE / TRASH RACK
4'-2" X 4'-2"



4X4 GRATE INLET/WEIR W/ ORIFICE PLAN VIEW
NTS

TOP GRATE 515.00'

100 YR. W.S. 513.4'

25 YR. W.S. 513.0'

10 YR. W.S. 512.5'

5 YR. W.S. 512.0'

FLOWLINE 511.00'

3/8" THICK
STEEL PLATE WITH
1/2" ANCHOR BOLTS
(TYP. ALL 4 CORNERS)

WEIR CALCULATIONS

Rectangular Suppressed Weir

$$Q = 3.33(L)(h1)^{3/2}$$

$$Q = \text{Exist. Conditions Flowrate} = 11.6 \text{ cfs}$$

$$h1 = \text{Height of Weir at 100 yr elev} = 3.0'$$

$$L = \text{Length of Weir}$$

$$11.2 = 3.33L (2.4)^{3/2}$$

$$L = .9 \text{ ft.} = 11 \text{ in.}$$

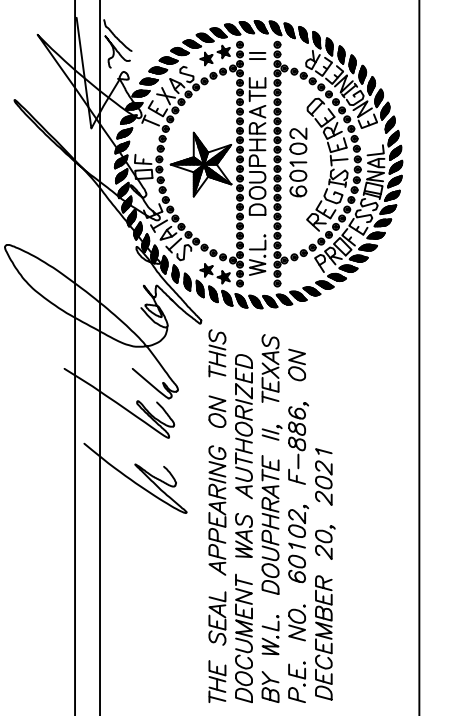
STORAGE VOLUME STAGE

STORM	d	ELEVATION	Qactual	Qallowable	VOLUME
5 YR	1.0	513.00 ft	6.6 cfs	6.6 cfs	4,036cf
10 YR	1.5	513.20 ft	8.0 cfs	8.0 cfs	4,460cf
25 YR	2.0	513.50 ft	8.9cfs	8.9 cfs	5371cf
100 YR	2.4	514.00 ft	11.2cfs	11.2 cfs	6702cf

REVISED TO CONFORM TO CONSTRUCTION RECORDS.

W. L. D.

DATE: 1-9-23



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DETENTION POND WEIR DETAILS
ST BENEDICT'S ANGLICAN CHURCH
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

REVISION	W.L.D.
CHECKED	G.C.W.
DRAWN	
SCALE	1" = 30' H 1" = 5' V
DATE	DEC, 2021
PROJECT	21007
	52