

NOTE: SEE SHEET NO. 10 FOR SIGN LOCATION AND DIMENSION DETAILS.

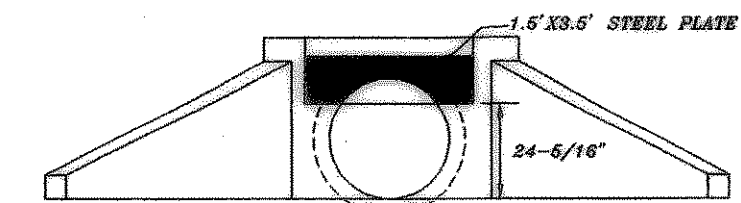
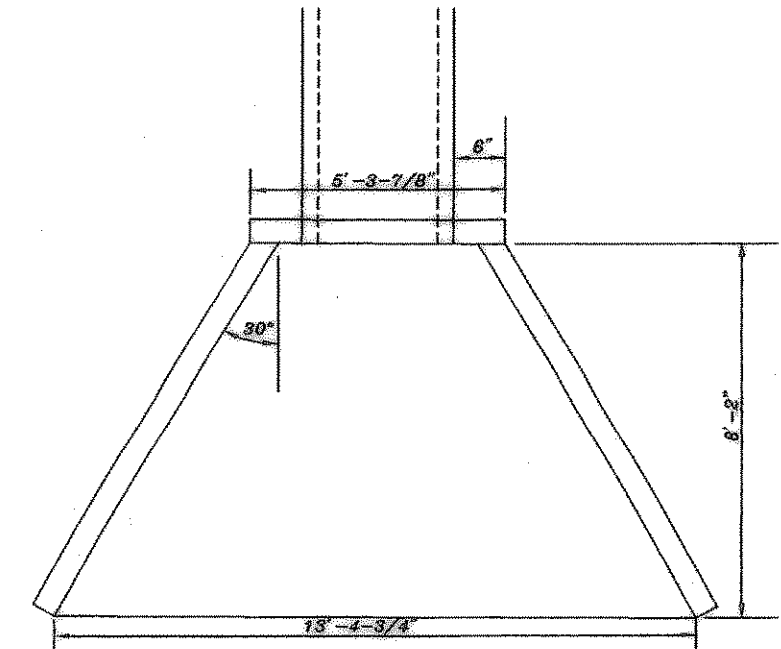
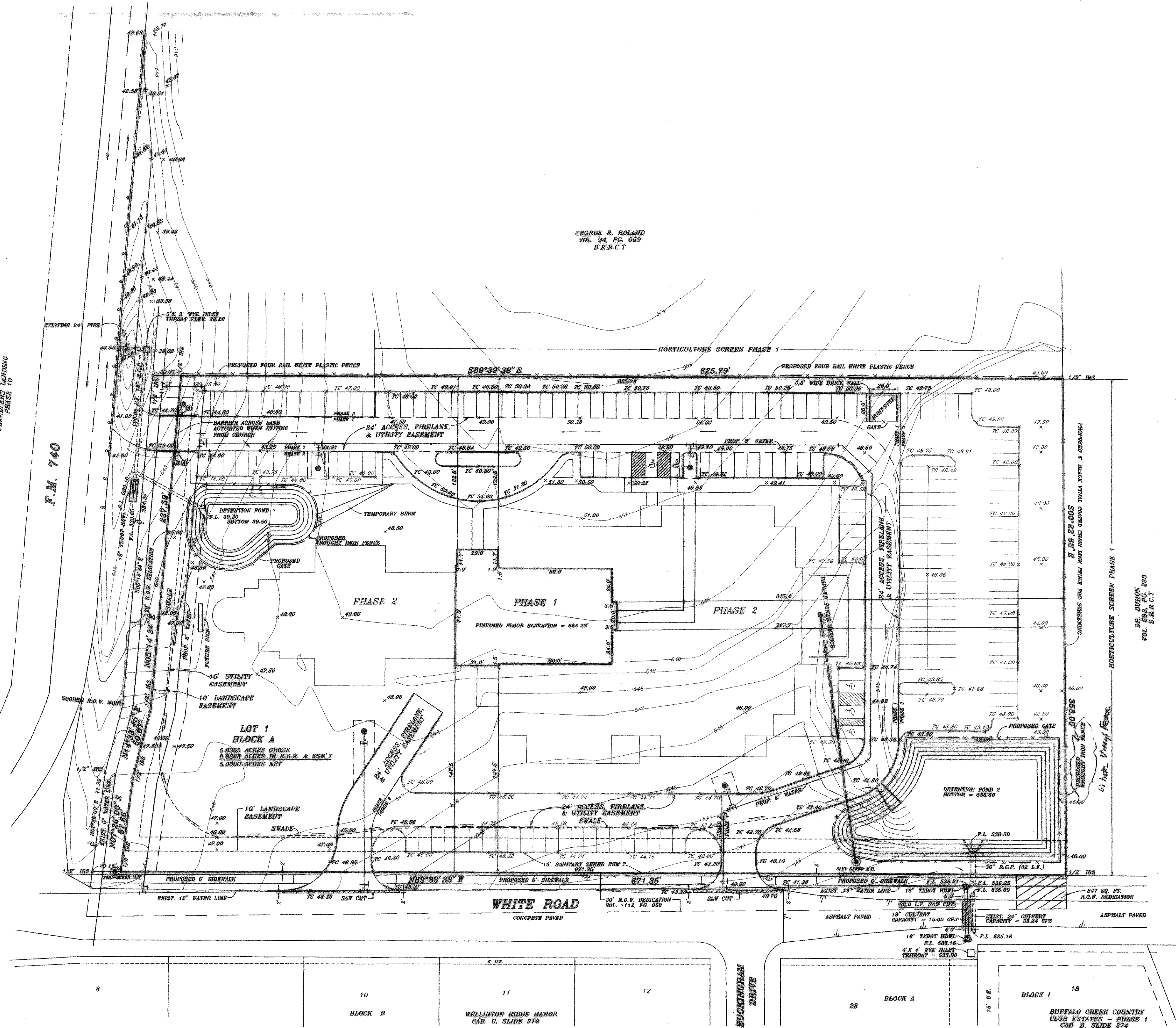
SIGN LEGEND
 (C) EXIT TO RIGHT
 ABSOLUTELY NO LEFT TURN
 (C) EXIT ONLY
 DO NOT ENTER

CHANDLER LANDING
 PHASE 10

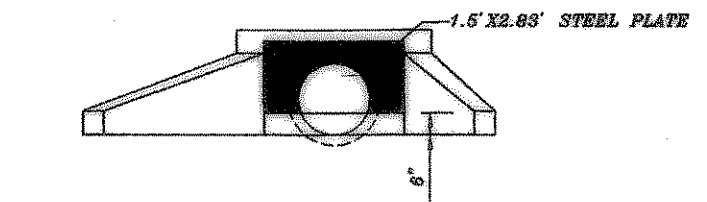
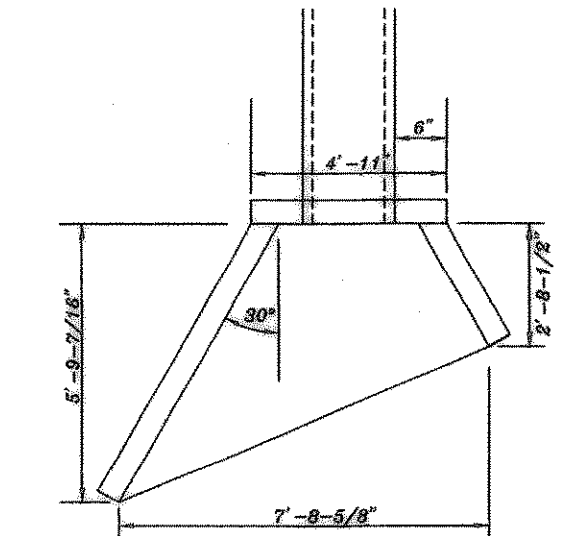
F.M. 740

GEORGE R. ROLAND
 VOL. 94, PG. 559
 D.R.R.C.T.

HORTICULTURE SCREEN PHASE 1



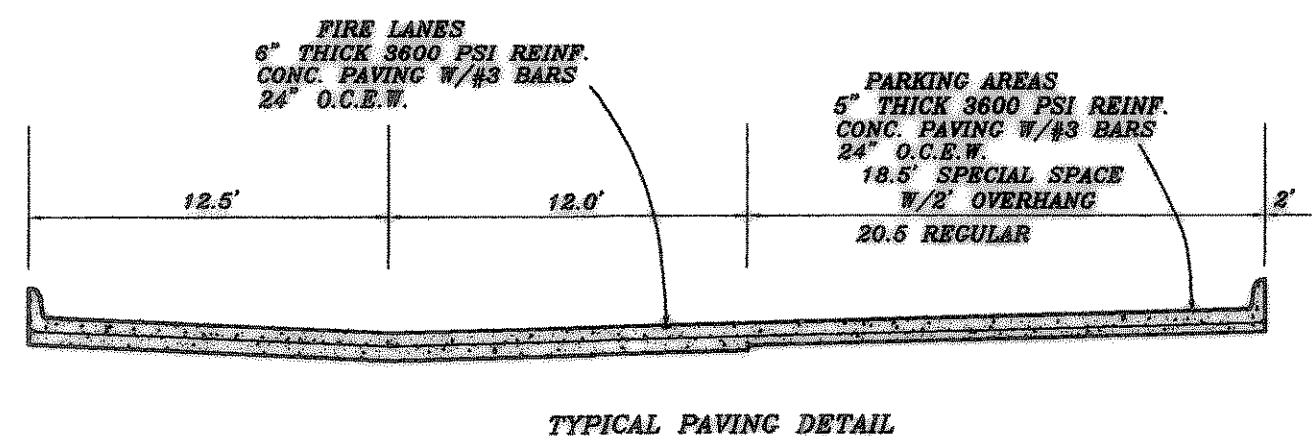
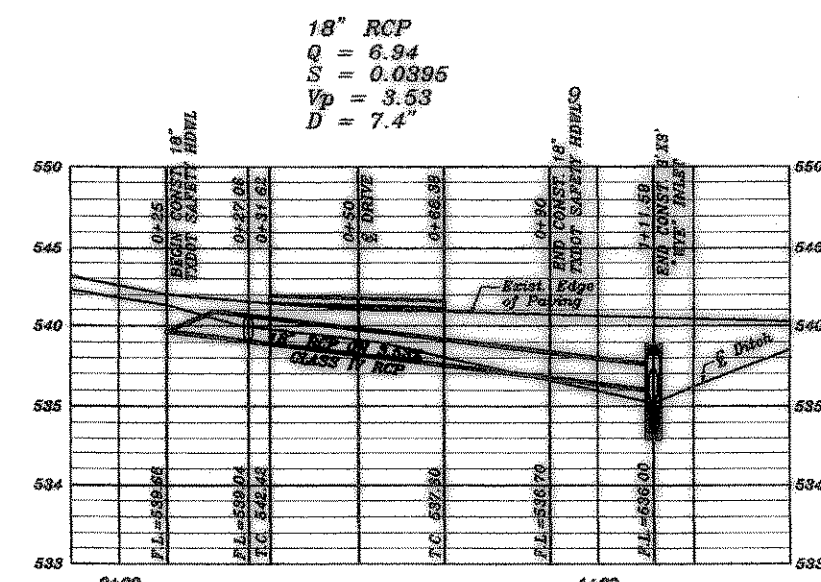
30" RCP ORIFICE EQUATION
 100 Year $Q = 0.62(2gh)^{1/2}$
 $H = 542.92 - 536.50 = 4.42$
 $Q = 44.81$
 $44.81 = 0.62(A)(64.4 \pm 4.42)^{1/2}$
 $A = 4.28 \text{ S.F.}$
 10 Year $Q = (0.62)(4.28)(64.4 \pm 0.96)^{1/2} = 20.86 \text{ cfs}$
 25 Year $Q = (0.62)(4.28)(64.4 \pm 1.54)^{1/2} = 26.43 \text{ cfs}$
 50 Year $Q = (0.62)(4.28)(64.4 \pm 2.75)^{1/2} = 35.57 \text{ cfs}$



18" ORIFICE EQUATION
 100 Year $Q = 0.62(2gh)^{1/2}$
 $H = 542.92 - 539.30 = 3.62$
 $Q = 4.90$
 $4.90 = 0.62(A)(64.4 \pm 3.62)^{1/2}$
 $A = 0.52 \text{ S.F.}$
 10 Year $Q = (0.62)(0.52)(64.4 \pm 0.05)^{1/2} = 3.70 \text{ cfs}$
 25 Year $Q = (0.62)(0.52)(64.4 \pm 0.74)^{1/2} = 4.28 \text{ cfs}$
 50 Year $Q = (0.62)(0.52)(64.4 \pm 1.15)^{1/2} = 4.36 \text{ cfs}$

AS BUILT

DETENTION POND 1 VOLUME REQUIRED - 8,586 CF VOLUME PROVIDED - 8,631 CF 100 YEAR WATER SURFACE ELEVATION = 542.92 50 YEAR WATER SURFACE ELEVATION = 542.45 25 YEAR WATER SURFACE ELEVATION = 542.04 10 YEAR WATER SURFACE ELEVATION = 541.35	DETENTION POND 2 VOLUME REQUIRED - 31,476 CF VOLUME PROVIDED - 44,030 CF 100 YEAR WATER SURFACE ELEVATION = 542.92 50 YEAR WATER SURFACE ELEVATION = 542.45 25 YEAR WATER SURFACE ELEVATION = 542.04 10 YEAR WATER SURFACE ELEVATION = 541.35
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REVISION DESCRIPTION	DATE	SCALE	DESIGN	DRAWN
REVISION PER CITY 7/15/00	2/11/03	1" = 40'	H.L.E.	AC
REVISION PER CITY 10/14/01		1" = 6'		

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GRADING PLAN
FIRST CHRISTIAN CHURCH, DISCIPLES OF CHRIST,
ROCKWALL, TEXAS ADDITION
E. TEAL SURVEY, ABSTRACT NO. 207
CITY OF ROCKWALL

SHEET NO.
 5
 10
 JOB NO.
 9992