

DETENTION STORAGE

ELEVATION	AREA
550.00	4200 s.f.
548.00	4200 s.f.
546.00	4200 s.f.
544.00	1992 s.f.
542.00	862 s.f.
TOTAL	23,854 s.f.
REQUIRED STORAGE	23,163 s.f.
PROVIDED STORAGE	23,854 s.f.

EXIST. 12" WATER
21" RCP
Melrose Lane
EXIST. 8" SEWER

**LARSEN SCHOOL ADDITION
DETENTION CALCULATIONS**

Pond Drainage Basin = 2.73 Acres
Release Rate = 7.93

Present Conditions
C = 0.80
T₁ = 10
T₂ = 0.80
T₃ = 24.0

Future Conditions Q=CIA
10 min = (.80)(0.80)(2.73) = 24.0 cfs

Flow for Storm Durations	C	Q
10 min.	0.80	24.0
15 min.	0.80	24.0
20 min.	0.80	24.0
30 min.	0.80	24.0
40 min.	0.80	24.0
50 min.	0.80	24.0
60 min.	0.80	24.0
70 min.	0.80	24.0
80 min.	0.80	24.0
90 min.	0.80	24.0
100 min.	0.80	24.0

15 min Storm Inflow	15 (22.11)	60	16,899
Outflow (0.5)(25)(7.93)	80 sec/min		5,948
Storage			13,951
20 min Storm Inflow	15 (20.36)	60	24,468
Outflow (0.5)(30)(7.93)	80 sec/min		7,137
Storage			17,331
30 min Storm Inflow	30 (16.95)	60	30,510
Outflow (0.5)(40)(7.93)	80 sec/min		9,816
Storage			20,694
40 min Storm Inflow	40 (14.25)	60	34,200
Outflow (0.5)(50)(7.93)	80 sec/min		11,895
Storage			22,305
50 min Storm Inflow	50 (12.28)	60	36,840
Outflow (0.5)(60)(7.93)	80 sec/min		14,274
Storage			22,566
60 min Storm Inflow	60 (11.06)	60	39,816
Outflow (0.5)(70)(7.93)	80 sec/min		16,833
Storage			23,183
70 min Storm Inflow	70 (9.82)	60	41,244
Outflow (0.5)(80)(7.93)	80 sec/min		19,032
Storage			22,212
80 min Storm Inflow	80 (9.09)	60	43,632
Outflow (0.5)(90)(7.93)	80 sec/min		21,411
Storage			22,221
90 min Storm Inflow	80 (8.80)	60	46,440
Outflow (0.5)(100)(7.93)	80 sec/min		23,780
Storage			22,660

*STORAGE REQUIRED 23,163c.f.

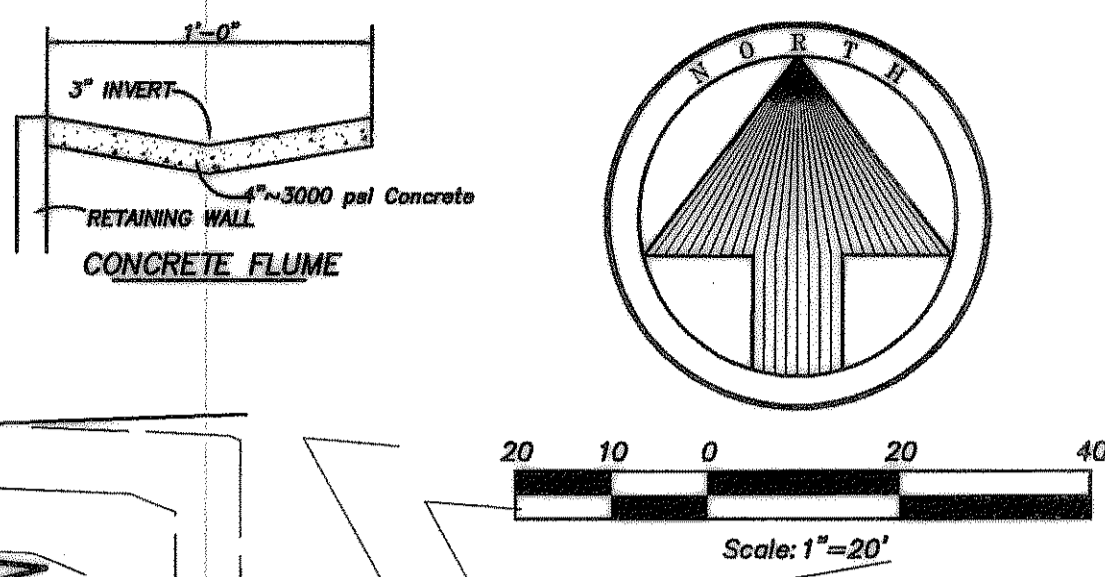
DETENTION POND RELEASE CALCULATIONS

Return Period (yrs.)	Q Allw (cfs)	Storage (ft³)	Min. Pond Elevation	Q at Min. Pond Elevation (cfs)
10	5.53	15472	548.61	5.38
25	6.34	16065	548.22	5.75
50	7.07	20221	548.74	6.32
100	7.88	22719	550.00	7.84

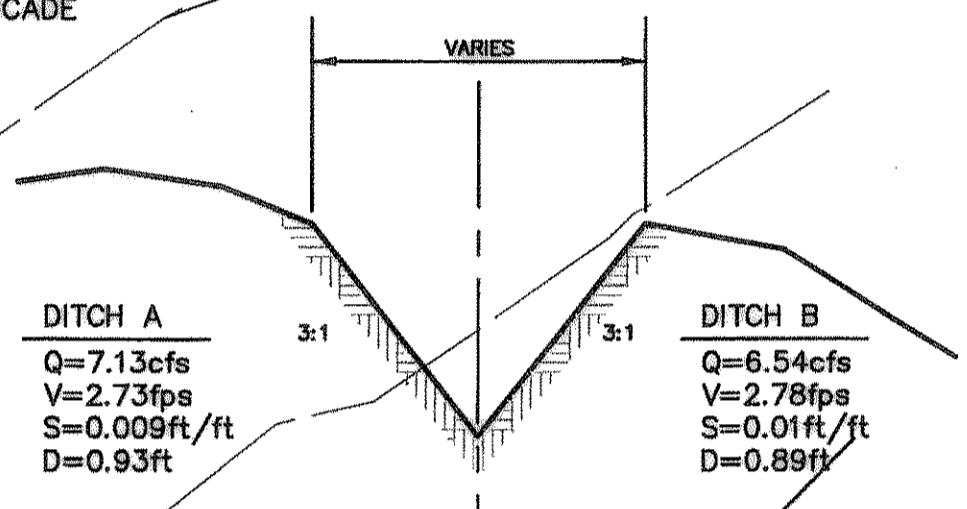
CURVE DATA

D	= 79°53'10"
R	= 70.00'
T	= 58.62'
L	= 97.60'

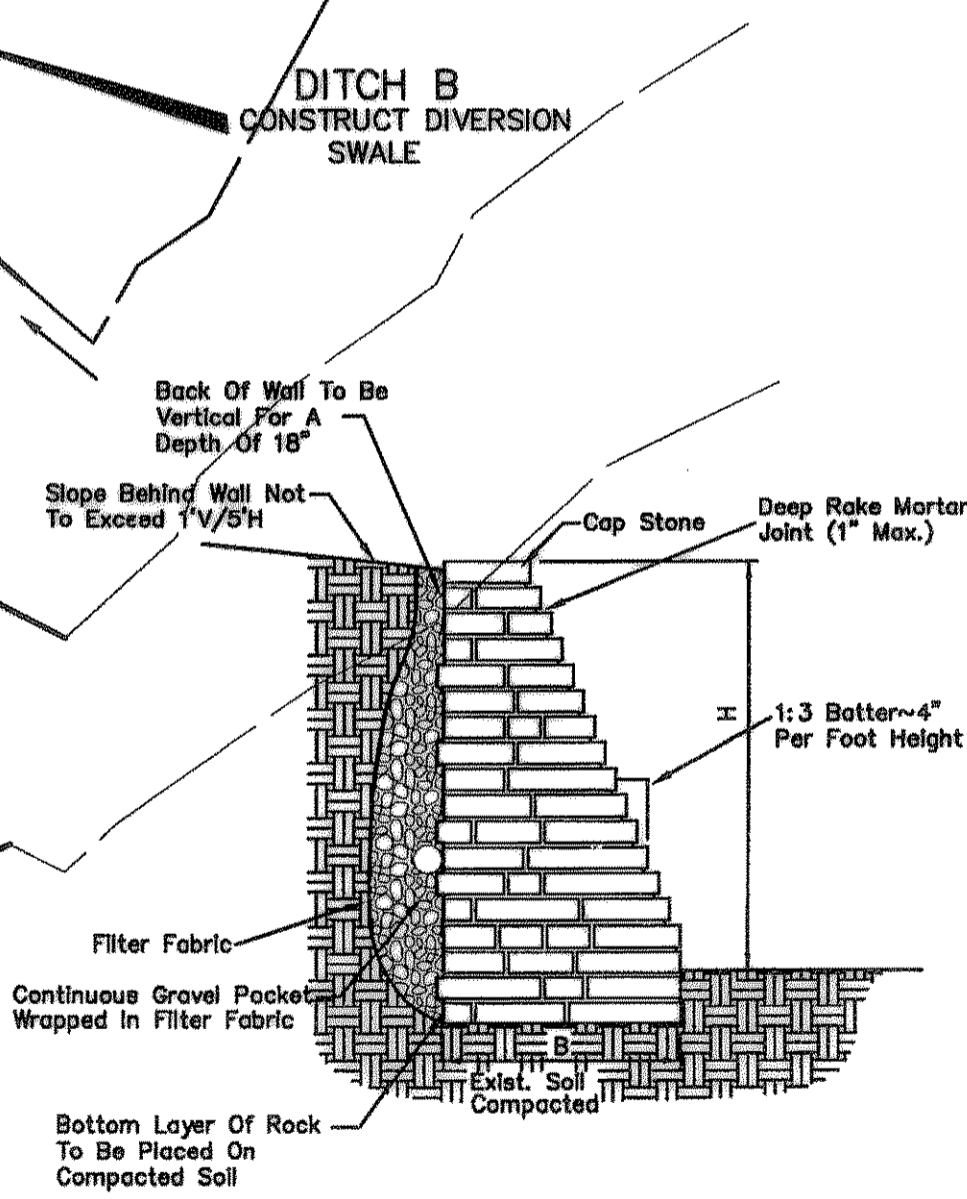
SEE SHEET 7 FOR ACCESS DRIVE



- GENERAL NOTES**
- FIRE LANE PAVING TO BE 6" 3,600 p.s.i. CONCRETE (6 SACK IF MACHINE POUR AND 6 1/2 SACK MINIMUM IF HAND POURED)
 - PARKING AREAS PAVING TO BE 5" 3,000 p.s.i. CONCRETE (6 SACK IF MACHINE POUR AND 6 1/2 SACK MINIMUM IF HAND POURED)
 - NO SAND UNDER PAVEMENT. FOOT ROLLER TO 95% STANDARD DENSITY.
 - ALL FILL TO BE COMPACTED USING SHEEPS FOOT ROLLER.
 - SOD DITCHES



TYPICAL SECTION TEMPORARY DIVERSION SWALE



Stone Gravity Wall Section

RECORD DRAWING

8/10/2006

PAVING & GRADING PLAN
THE LARSEN SCHOOL ADDITION
CITY OF ROCKWALL, TEXAS

TIPTON ENGINEERING, INC.
6330 Broadway Blvd. ~ Suite C ~ Garland, Texas 75043

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
TEI, Inc.	TEI, Inc.	8-2004	1"=20'			4



- LEGEND**
- PROPOSED CONTOURS
 - EXISTING CONTOURS