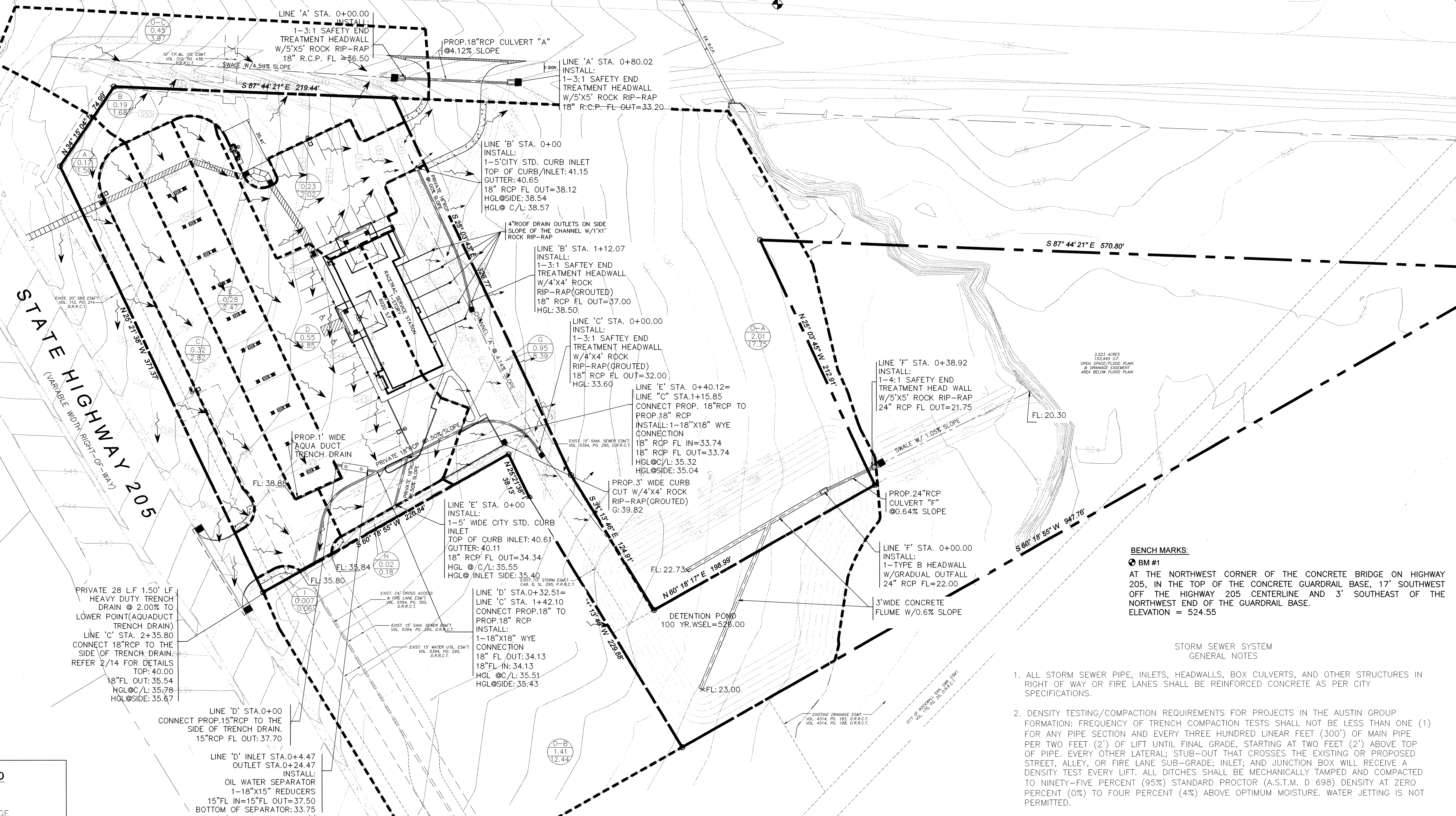


STATE HIGHWAY 276
(120' RIGHT-OF-WAY)



BENCH MARKS:
 BM #1
 AT THE NORTHWEST CORNER OF THE CONCRETE BRIDGE ON HIGHWAY 205, IN THE TOP OF THE CONCRETE GUARDRAIL BASE, 17' SOUTHWEST OFF THE HIGHWAY 205 CENTERLINE AND 3' SOUTHEAST OF THE NORTHWEST END OF THE GUARDRAIL BASE. ELEVATION = 524.55

STORM SEWER SYSTEM GENERAL NOTES

- ALL STORM SEWER PIPE, INLETS, HEADWALLS, BOX CULVERTS, AND OTHER STRUCTURES IN RIGHT OF WAY OR FIRE LANES SHALL BE REINFORCED CONCRETE AS PER CITY SPECIFICATIONS.
- DENSITY TESTING/COMPACTION REQUIREMENTS FOR PROJECTS IN THE AUSTIN GROUP FORMATION: FREQUENCY OF TRENCH COMPACTION TESTS SHALL NOT BE LESS THAN ONE (1) FOR ANY PIPE SECTION AND EVERY THREE HUNDRED LINEAR FEET (300') OF MAIN PIPE PER TWO FEET (2') OF LIFT UNTIL FINAL GRADE, STARTING AT TWO FEET (2') ABOVE TOP OF PIPE, EVERY OTHER LATERAL; STUB-OUT THAT CROSSES THE EXISTING OR PROPOSED STREET, ALLEY, OR FIRE LANE SUB-GRADE; INLET; AND JUNCTION BOX WILL RECEIVE A DENSITY TEST EVERY LIFT. ALL DITCHES SHALL BE MECHANICALLY TAMPED AND COMPACTED TO NINETY-FIVE PERCENT (95%) STANDARD PROCTOR (A.S.T.M. D 698) DENSITY AT ZERO PERCENT (0%) TO FOUR PERCENT (4%) ABOVE OPTIMUM MOISTURE. WATER JETTING IS NOT PERMITTED.
- DENSITY TESTING/COMPACTION REQUIREMENTS FOR PROJECTS IN THE EAGLE FORD FORMATION: TRENCH BACKFILL SHALL CONSIST OF CLAY SOILS AND SHALL BE PLACED IN THIN, LOOSE LIFTS, MOISTURE CONDITIONED TO A MINIMUM OF 3 PERCENTAGE POINTS ABOVE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO A MINIMUM OF 95 PERCENT OF STANDARD PROCTOR (A.S.T.M. D 698) MAXIMUM DRY DENSITY. FREQUENCY OF DENSITY TESTING REQUIREMENTS SHALL BE AS OUTLINED ABOVE.
- STORM DRAINAGE INLETS SHALL BE AS INDICATED ON THE APPROVED CONSTRUCTION PLANS. PER CITY STANDARD REQUIREMENTS ALL INLETS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4200 PSI AT 28 DAYS.
- THE CONTRACTOR SHALL FURNISH A MAINTENANCE BOND IN THE AMOUNT OF 10 % (TEN PERCENT) OF THE TOTAL CONTRACT PRICE TO THE CITY (AS OBLIGEE) TO RUN TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE OF THE PROJECT BY THE CITY.
- SIDES AND BOTTOM OF DETENTION POND SHALL HAVE EITHER SOD OR ANCHORED SEEDED CURLEX PRIOR TO ANY PAVING.

PRE-DEVELOPED DRAINAGE CALCULATIONS (100yr FLOW)

Drainage Area	C	Tc (min)	A (acres)	I-100 (in/hr)	Q-100yr (cfs)	Remark
ENTIRE SITE	0.35	20	6.13	8.30	17.81	AREA UNDER FLOOD PLAIN & EAST FLOOD PLAIN DEDICATED AS AN "OPEN SPACE" W/WALGREEN PLAT.

DEVELOPED DRAINAGE CALCULATIONS (5yr & 100yr FLOW)

Drainage Area	C	Tc (min)	A (acres)	I-5 (in/hr)	Q-5yr (cfs)	I-100 (in/hr)	Q-100yr (cfs)	Remark
A	0.90	10	0.17	5.50	0.84	9.80	1.50	DRAIN TO DETENTION POND
B	0.90	10	0.19	5.50	0.94	9.80	1.68	BY PASS RUNOFF
C	0.90	10	0.32	5.50	1.58	9.80	2.82	DRAIN TO DETENTION POND
D	0.90	10	0.55	5.50	2.72	9.80	4.85	DRAIN TO DETENTION POND
E	0.90	10	0.28	5.50	1.39	9.80	2.47	DRAIN TO DETENTION POND
F	0.90	10	0.23	5.50	1.14	9.80	2.02	DRAIN TO DETENTION POND
G	0.90	10	0.95	5.50	4.70	9.80	8.39	DRAIN TO DETENTION POND
H	0.90	10	0.02	5.50	0.10	9.80	0.18	DRAIN TO DETENTION POND
I	0.90	10	0.007	5.50	0.003	9.80	0.062	DRAIN TO DETENTION POND
O-A	0.90	10	2.01	5.50	9.94	9.80	17.75	DRAIN TO DETENTION POND
O-B	0.90	10	1.41	5.50	6.97	9.80	12.44	DRAIN TO DETENTION POND
O-C	0.90	10	0.45	5.50	2.22	9.80	3.97	BY PASS RUNOFF

DRAINAGE LEGEND

- AREA NO. (A)
- AREA ACREAGE (0.15, 0.46)
- Q100 C.F.S.
- DRAINAGE DIVIDE
- FLOW DIRECTION
- PROPOSED CONTOURS (646)
- EXISTING CONTOURS (645)
- PROPOSED SWALE
- EXISTING DRAINAGE AREA

NOTE:
1. REFER SHEET C7.2 FOR STORM SEWER PROFILES.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

DATE: 4/18/11
 BY: RP
 REVISIONS:
 NO. 1 AS-BUILTS
 KARTAVYA S. PATEL
 LICENSED PROFESSIONAL ENGINEER
 RACETRAC
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 RACETRAC PETROLEUM, INC.
 300 TECHNOLOGY COURT
 SMYRNA, GEORGIA 30082
 (770) 431-7600
 DRAINAGE PLAN
 RACETRAC SERVICE STATION
 SH 205 & SH 276
 ROCKWALL, TEXAS
 SCALE: 1"=40'
 DATE: 5/18/10
 DWG. NO.: 4
 DRAWN BY: CS
 SHEET NO. 7
 REV.

AS-BUILT
 THE DIMENSION GROUP
 FIRM REGISTRATION # F-8396
 CIVIL ENGINEERING • LAND DEVELOPMENT • PLANNING • ARCHITECTURE • CONSTRUCTION MANAGEMENT
 10755 SANDHILL ROAD, DALLAS, TEXAS 75238 TEL: 214-343-9400 FAX: 214-341-9000