Texas Department of Transportation

DALLAS DISTRICT

WILLIAM L. HALE, P.E. DISTRICT ENGINEER

DESIGN SCHEMATIC

SH 114

FROM: 1.236 MI E OF INTERNATIONAL PKY

TO: SH 183

NET LENGTH OF PROJECT = 11.63 MI

CSJ: 0353-04-056 FROM 1.236 MI E OF INTERNATIONAL PKY TO SPUR 348
CSJ: 0353-04-084 U-TURN AT SH 161
CSJ: 0353-06-025 FROM SPUR 348 TO 0.087 MILES EAST OF ROCHELLE
CSJ: 0353-06-050 FROM 0.087 MI E OF ROCHELLE TO 0.203 MI W OF TOM BRANIFF
CSJ: 0353-06-054: FROM 0.203 MI W OF TOM BRANIFF TO SH 183
CSJ: 0581-02-121 FROM TEXAS PLAZA TO LP 12/IH-35E SPLIT

Dallas County

HIGHWAY CLASSIFICATION

URBAN FREEWAY

MAY 2009

Design Speeds

MAINLANES - 70 MPH
RAMPS - 50 MPH
DIRECT CONNECTORS - 50 MPH
FRONTAGE ROADS - 45 MPH
CROSS STREETS - 45 MPH
MANAGED HOV LANES - 70 MPH (MAINLANES), 50 MPH (RAMPS)

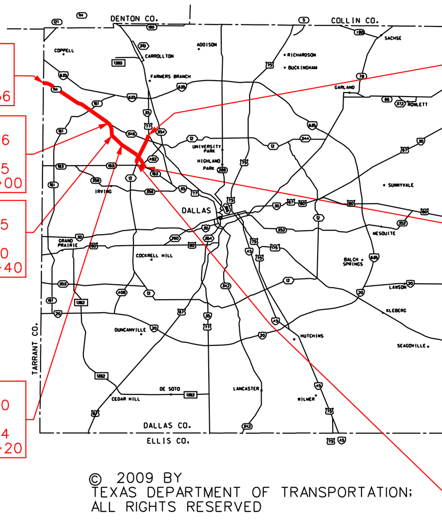
Average Daily Traffic 2008 (2028)

SH 121 TO SH 161:	149,400 (224,200)
SH 161 TO SH 348:	154,000 (231,000)
SPUR 348 TO LOOP 12:	147,300 (221,000)
LOOP 12 TO SH 183:	116,700 (175,000)

HIGHWAY VOLUMES INCLUDE MAIN AND MANAGED HOV LANES ONLY

SOURCE: NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS

ROLLS 1-10: SH 114 PLAN AND PROFILE
ROLLS 11-12: LOOP 12 PLAN AND PROFILE
ROLLS 13-23: SH 114 AND LOOP 12 PROFILES



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DART CITY OF IRVING

PREPARED BY BRIDGEFARMER & ASSOCIATES, INC. UNDER THE SUPERVISION OF

STERLING C. FORSYTHE, III	SHAHRIAR AZAD	WEIYIH TEE
P.E. NO. 57339	P.E. NO. 91682	P.E. NO. 98478
DATE: 05/11/09	DATE: 05/11/09	DATE: 05/11/09

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
TBPE REGISTRATION NO. 264
12801 NORTH CENTRAL EXPRESSWAY, 4TH FLOOR
DALLAS, TEXAS 75243
TEL: (972) 231-8800 FAX: (972) 231-5900

Roll: 9 of 23

DATE APPROVED

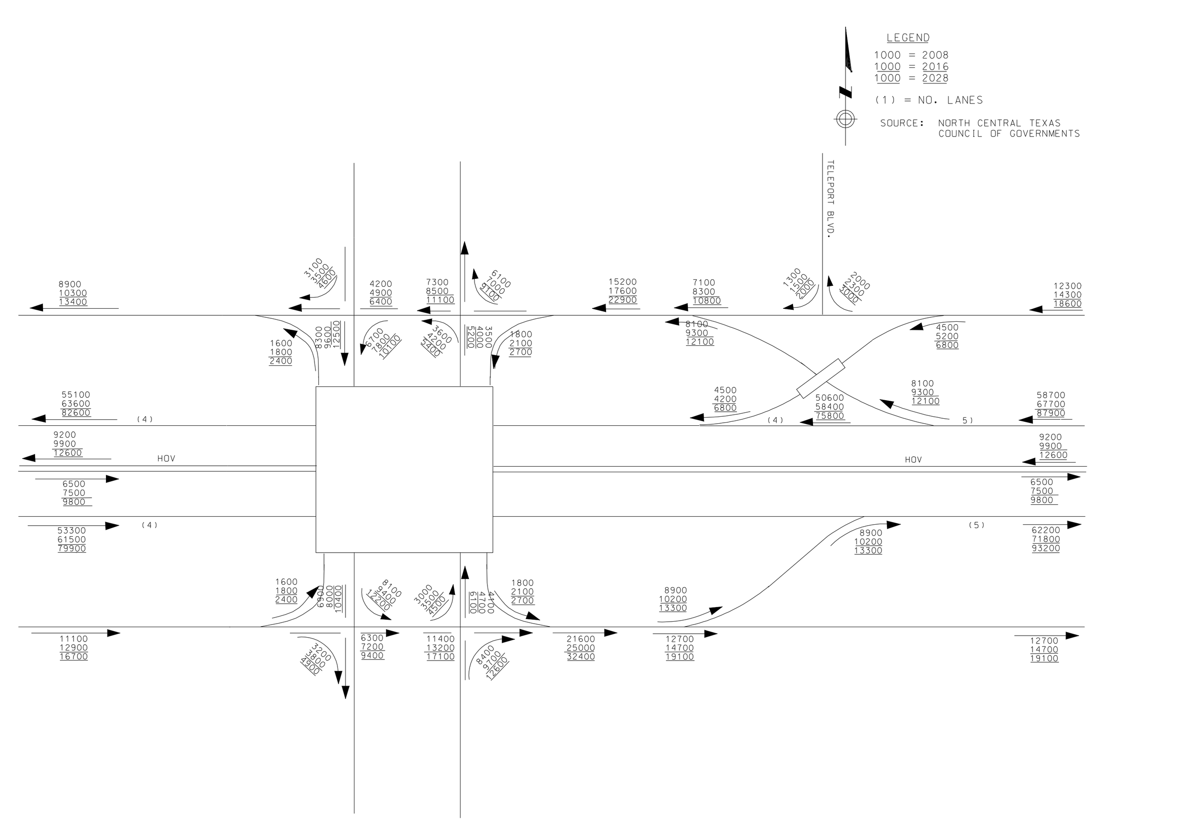
DATE SUBMITTED

DATE REVISED

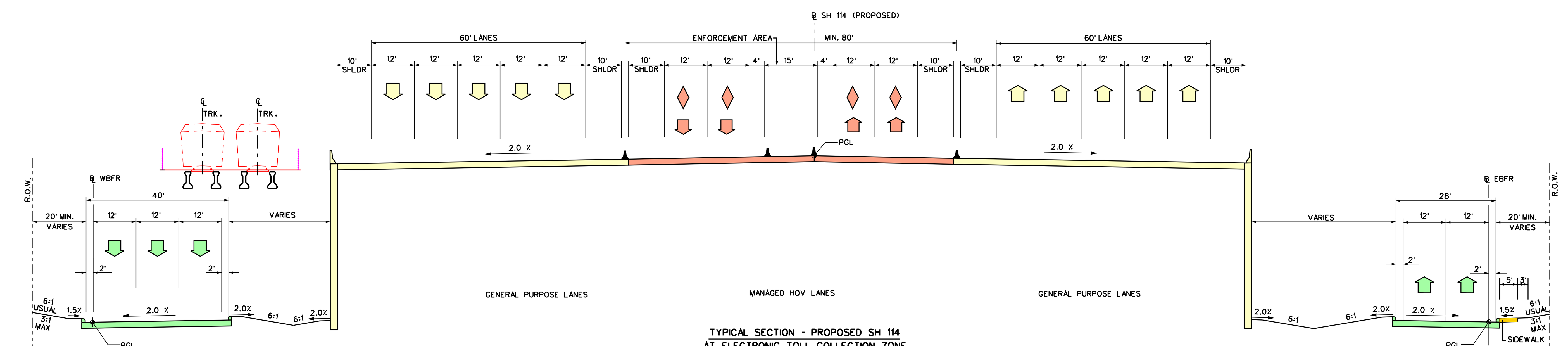
DESIGN SCHEMATIC NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

CURVE DATA

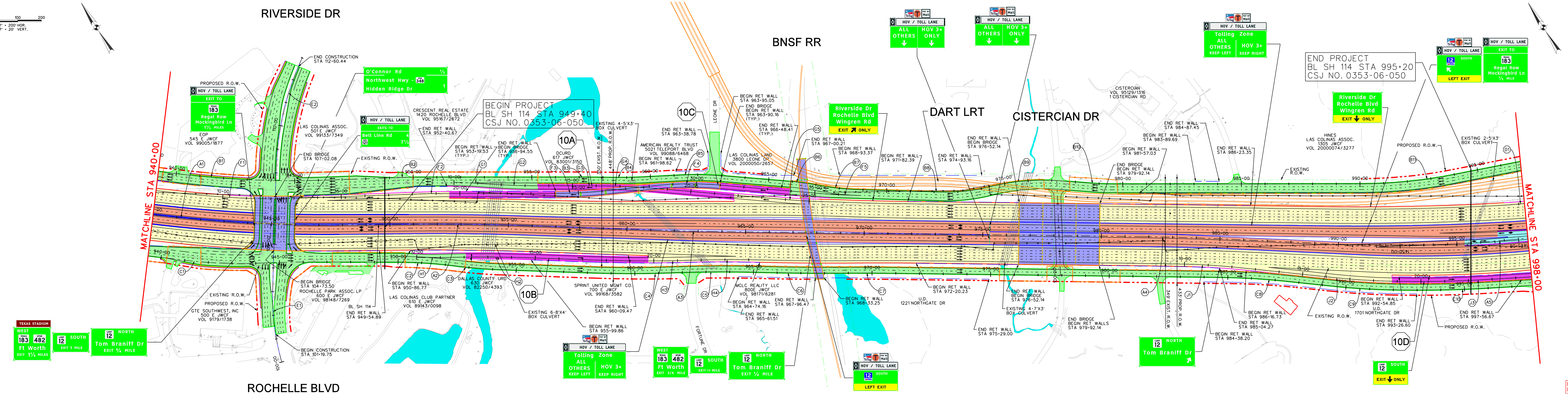
STREET NAME	CURVE NO.	CURVE NAME	DELTA	DEGREE	TANGENT	LENGTH	RADIUS	PI STATION	PC STATION	PT STATION
MAINLANE										
SH 114	A1	B114L-17	18° 22'57.85" LT	0° 57'20.61"	970.05	1,923.43	5,995.00	938+33.39	928+63.34	947+86.77
	A2	BL114-18	2° 32'43.22" RT	0° 31'49.68"	239.95	479.83	10,801.00	953+26.72	950+86.77	955+66.60
	A3	BL114-19	1° 15'33.47" LT	0° 31'58.92"	118.13	236.25	10,749.00	962+29.01	961+10.88	963+47.13
	A4	BL114-20	1° 56'18.93" RT	0° 31'06.48"	186.97	373.91	11,051.00	983+62.10	981+75.13	985+49.03
	A5	BL114-21	8° 13'50.91" LT	1° 08'45.30"	359.76	718.27	5,000.00	993+62.59	990+02.83	997+21.11
FRONTAGE ROAD										
WB FRONTAGE ROAD	B1	FRWB12-13	7° 27'30.70" LT	1° 25' 56.62"	260.72	520.70	4,000.00	943+69.88	941+09.16	946+29.87
	B2	FRWB12-14	1° 58'33.99" RT	1° 54'35.49"	51.74	103.47	3,000.00	949+85.11	949+33.37	950+36.84
	B3	FRWB12-15	0° 51'37.21" RT	0° 30'50.57"	83.68	167.36	11,146.00	957+59.44	956+75.76	958+43.13
	B4	FRWB12-16	3° 55'20.15" LT	2° 51'01.93"	68.89	137.60	2,010.00	959+11.95	958+43.13	959+80.72
	B5	FRWB12-17	7° 51'00.03" RT	3° 43'48.70"	105.39	210.45	1,536.00	962+13.19	961+07.62	963+18.07
	B6	FRWB12-18	6° 00'35.94" RT	5° 12'31.35"	57.74	115.38	1,100.00	966+49.88	965+92.14	967+07.52
	B7	FRWB12-19	9° 08'41.77" LT	5° 12'31.34"	87.97	175.57	1,100.00	967+95.49	967+07.52	968+83.09
	B8	FRWB12-20	15° 37'20.49" LT	7° 38'21.97"	102.89	204.50	750.00	973+31.84	972+28.95	974+33.45
	B9	FRWB12-21	18° 17'31.29" RT	6° 01'52.08"	152.95	303.29	950.00	975+86.40	973+33.45	977+36.74
	B10	FRWB12-22	4° 23'11.33" LT	5° 43'46.48"	38.30	76.56	1,000.00	979+17.27	978+78.97	979+55.53
	B11	FRWB12-23	10° 58'29.22" LT	2° 51'53.24"	192.13	383.09	2,000.00	991+98.62	990+06.49	993+89.58
EB FRONTAGE ROAD	C1	FREB-39	9° 16'57.77" LT	2° 51'53.24"	162.37	324.03	2,000.00	942+58.57	940+96.20	944+20.22
	C2	FREB-41	7° 24'35.37" RT	2° 51'53.24"	129.51	258.65	2,000.00	951+16.98	949+87.48	952+46.13
	C3	FREB-42	5° 26'39.35" LT	2° 51'53.25"	95.09	190.04	2,000.00	953+41.22	952+46.13	954+36.17
	C4	FREB-43	3° 58'06.29" LT	1° 08'04.45"	174.96	349.77	5,050.00	959+83.42	958+08.47	961+58.24
	C5	FREB-44	3° 28'35.04" RT	0° 56'44.83"	183.84	367.57	6,058.00	963+42.08	961+58.24	965+25.81
	C6	FREB-45	1° 51'05.07" LT	0° 30'56.23"	179.55	359.06	11,112.00	967+05.35	965+25.81	968+84.87
	C7	FREB-46	1° 05'02.86" RT	0° 31'49.15"	102.22	204.43	10,803.99	969+87.09	968+84.87	970+89.30
	C8	FREB-47	5° 16'59.98" RT	1° 54'35.49"	138.42	276.63	3,000.00	986+07.42	984+69.01	987+45.64
	C9	FREB-48	4° 47'10.44" LT	1° 57'05.37"	122.70	245.26	2,936.00	990+70.53	989+47.83	991+93.09
	C10	FREB-49	4° 33'08.49" LT	1° 06'23.48"	205.81	411.41	5,178.00	993+98.90	991+93.09	996+04.50
DIRECT CONNECTOR										
FROM NB LOOP 12 TO WB SH 114	D1	D12NW14-5	4° 32'39.82" RT	1° 54'35.49"	119.03	237.94	3,000.00	1447+76.57	1446+57.54	1448+95.48
CROSS STREET										
RIVERSIDE DR / ROCHELLE BLVD	E1	CSROC-1	17° 37'03.18" RT	5° 43'55.08"	154.97	307.36	1,000.00	101+54.97	100+00.00	103+07.36
	E2	CSROC-2	23° 13'36.20" RT	4° 46'33.71"	246.62	486.32	1,200.00	110+62.69	108+16.08	113+02.40
CISTERCIAN DR	NO CURVE									
RAMP										
WB ENTRANCE FROM TOM BRANIFF	F1	RWETOM-1	6° 03'13.42" LT	1° 58'32.58"	153.35	306.41	2,900.00	11+53.35	10+00.00	13+06.41
	F2	RWETOM-2	1° 58'33.99" RT	1° 58'32.58"	50.01	100.02	2,900.00	19+05.72	18+55.71	19+55.73
	F3	RWETOM-3	5° 57'21.41" LT	2° 51'53.24"	104.04	207.9	2,000.00	25+08.83	24+04.79	26+12.69
	F4	RWETOM-4	10° 44'38.51" RT	3° 49'10.99"	141.05	281.28	1,500.00	29+58.42	28+17.36	30+98.64
	F5	RWETOM-5	3° 08'05.83" LT	2° 53'05.94"	54.35	108.66	1,986.00	35+46.97	34+92.62	36+01.29
WB EXIT TO ROCHELLE	G1	RWXROC-1	4° 00'00.00" RT	3° 47'03.83"	52.87	105.70	1,514.00	10+52.87	10+00.00	11+05.70
	G2	RWXROC-2	4° 00'00.00" LT	1° 59'07.08"	100.78	201.48	2,886.00	12+53.53	11+52.74	13+54.22
	G3	RWXROC-3	0° 41'33.26" RT	0° 30'56.57"	67.15	134.29	11,110.00	15+71.37	15+04.22	16+38.52
	G4	RWXROC-4	4° 11'49.67" RT	1° 58'32.58"	106.27	212.44	2,900.00	17+44.78	16+38.52	18+50.95
	G5	RWXROC-5	3° 25'31.29" LT	1° 58'32.58"	86.71	173.37	2,900.00	24+79.11	23+92.40	25+65.77
EB ENTRANCE FROM ROCHELLE	H1	REETOM-1	3° 44'05.04" LT	3° 47'03.83"	49.36	98.69	1,514.00	10+49.36	10+00.00	10+98.69
	H2	REETOM-2	3° 07'09.13" RT	0° 56'49.34"	164.72	329.36	6,050.00	13+17.69	11+52.97	14+82.34
	H3	REETOM-3	3° 40'06.25" LT	0° 56'21.39"	195.35	390.56	6,100.00	19+51.43	17+56.08	21+46.64
	H4	REETOM-4	3° 03'02.62" RT	0° 56'21.39"	162.44	324.80	6,100.00	23+09.08	21+46.64	24+71.44
EB EXIT TO TOM BRANIFF	J1	REXTOM-1	4° 39'58.67" RT	1° 58'32.58"	118.16	236.18	2,900.00	11+18.16	10+00.00	12+36.18
	J2	REXTOM-2	4° 47'10.44" LT	1° 58'32.58"	121.20	242.25	2,900.00	17+56.26	16+35.06	18+77.31
	J3	REXTOM-3	4° 33'08.49 LT	1° 06'51.37"	204.38	408.55	5,142.00	20+81.70	18+77.31	22+85.86



ROCHELLE BLVD



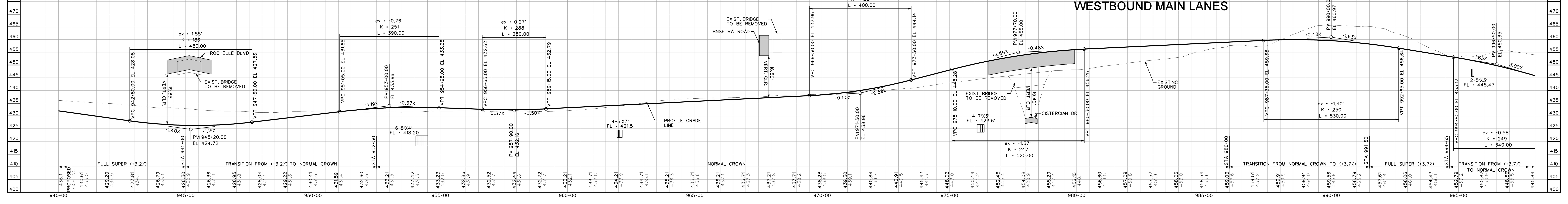
TYPICAL SECTION - PROPOSED SH 114
AT ELECTRONIC TOLL COLLECTION ZONE



LEGEND

- MAIN LANES (DESIGN SPEED=70 MPH)
- FRONTAGE ROADS & CROSS STREETS (DESIGN SPEED=45 MPH)
- MANAGED HOV LANES (DESIGN SPEED=70 MPH) UNLESS NOTED OTHERWISE
- MANAGED HOV WISHBONE RAMPS & DIRECT CONNECTORS (DESIGN SPEED=50 MPH) UNLESS NOTED OTHERWISE
- ENTRANCE & EXIT RAMPS (DESIGN SPEED=50 MPH) UNLESS NOTED OTHERWISE
- BRIDGE
- SIDEWALK (WHERE EXISTING SIDEWALK EXISTS)
- RR TRACKS
- EXISTING R.O.W.
- PROPOSED R.O.W. CSJ: 0581-02-077
- PROPOSED R.O.W.
- PROPOSED CONTROL OF ACCESS
- EXISTING CONTROL OF ACCESS
- RETAINING WALL

PROFILE SH 114 EASTBOUND AND WESTBOUND MAIN LANES



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HIGHWAY VOLUMES INCLUDE MAIN AND MANAGED HOV LANES ONLY
SOURCE: NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
ROLLS 1-10: SH 114 PLAN AND PROFILE
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