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DALLAS DISTRICT DESIGN SCHEMATIC

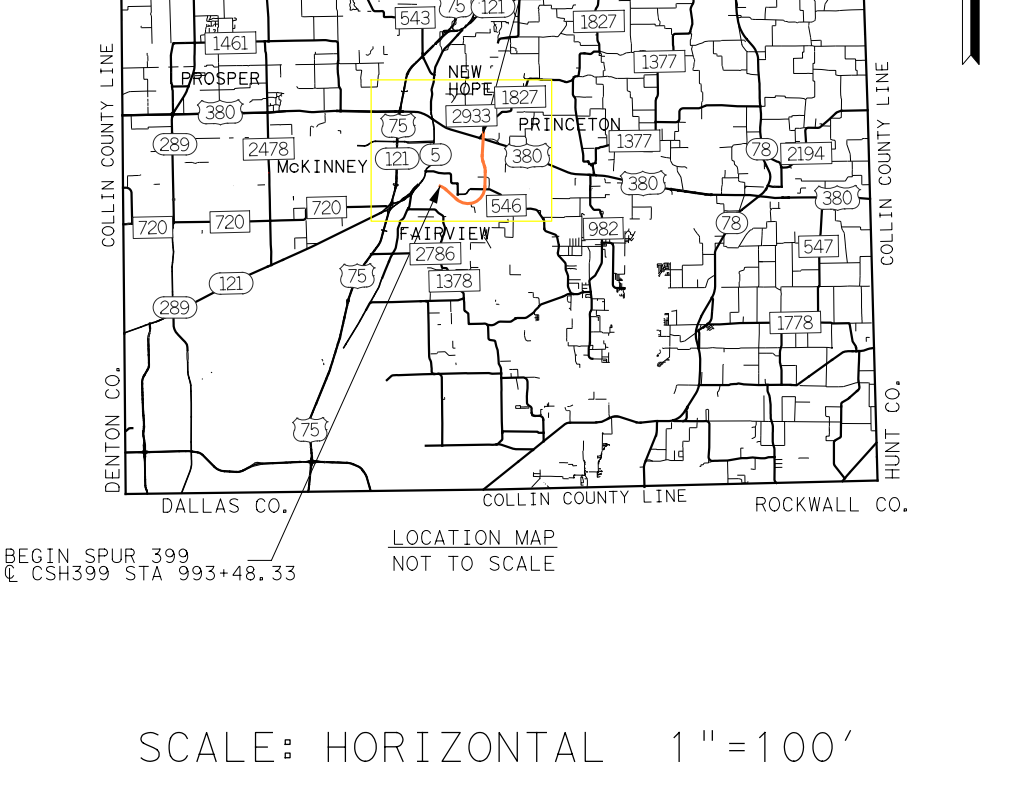
CEASON CLEMENS, P.E.
DALLAS DISTRICT ENGINEER

PUBLIC HEARING SCHEMATIC

CSJ: 0364-04-051, 0047-05-058 & 0047-10-002
FROM: US 75
TO: US 380
COLLIN COUNTY
FUNCTIONAL CLASS: URBAN FREEWAY
ORANGE ALTERNATIVE LENGTH: 7.0 MILES

DESIGN SPEEDS

MAINLANES (FREEWAY):	70 MPH
GENERAL RAMPS (PRINCIPAL ARTERIAL):	40-50 MPH
FRONTAGE ROADS (COLLECTOR):	35-45 MPH
CROSS STREETS (MAJOR COLLECTOR):	30 MPH



LOCATION MAP
NOT TO SCALE

SCALE: HORIZONTAL 1"=100'
SCALE: VERTICAL 1"=10'

HORIZ. SCALE IN FEET
VERT. SCALE IN FEET

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NOVEMBER 2022

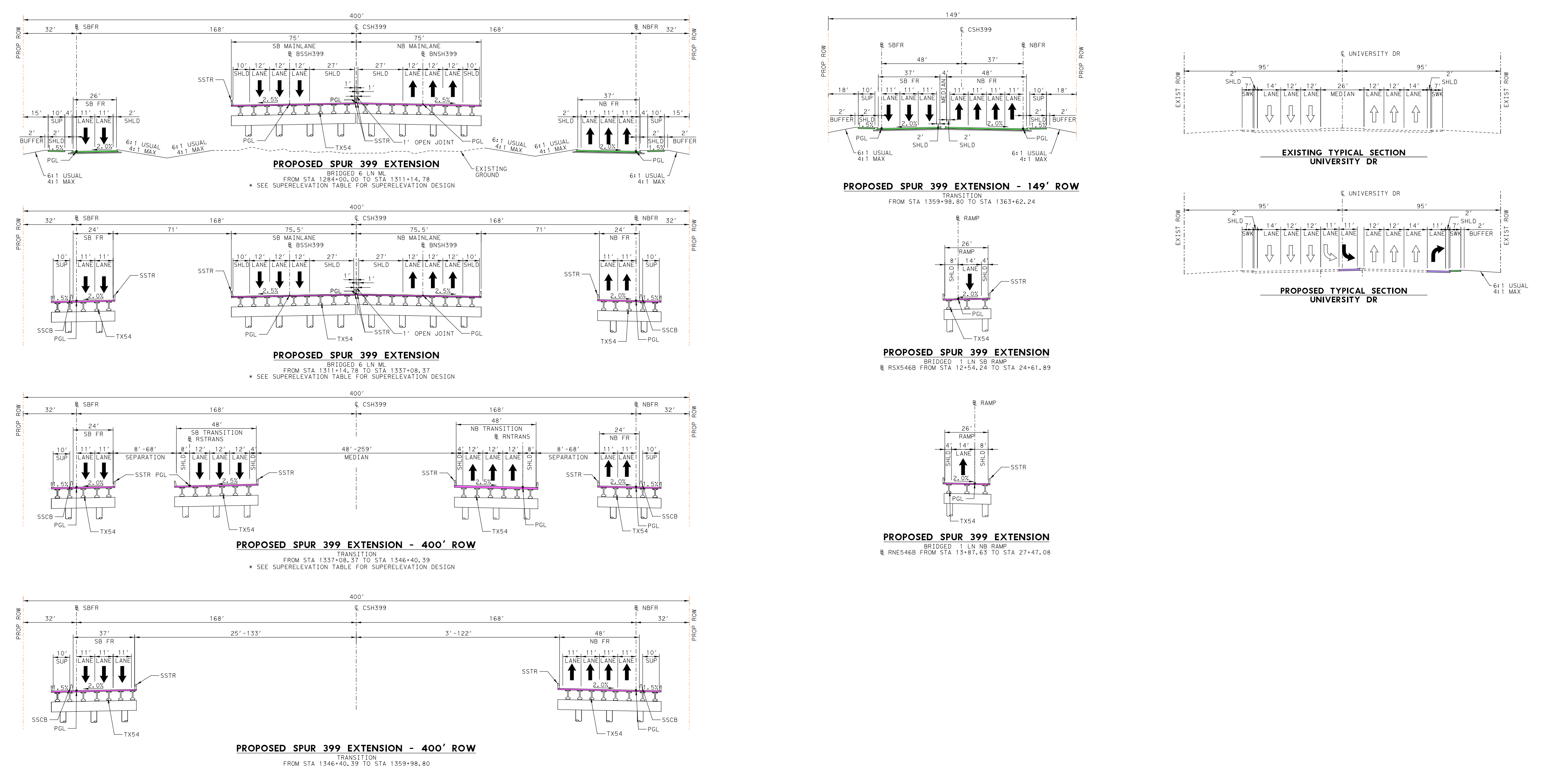
PRELIMINARY
SUBJECT TO REVISIONS

SCHEMATIC PREPARED BY:
DAVID SUTTON — NAME
120142 — P.E. NUMBER
NOVEMBER 2022 — DATE

NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

ROLL 4 OF 8

HDR
Firm Registration No. F-754
17111 Preston Road, Suite 300
Dallas, Texas 75248-1229
972.960.4400

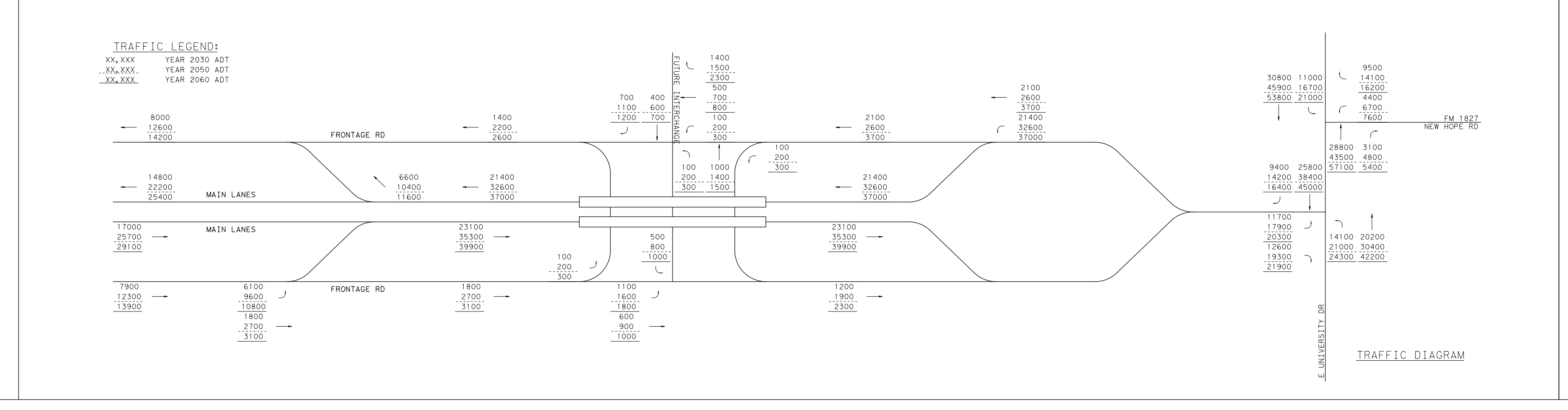

PROP ROW
℞ SBFR
SB FR
SUP
LANE
SHLD
BUFFER
PGL
6:1 USUAL
4:1 MAX
SSTR
SSCB
TX54
SEPARATION
PROPOSED SPUR 399 EXTENSION
PROPOSED SPUR 399 EXTENSION
PROPOSED SPUR 399 EXTENSION - 145' ROW
PROPOSED SPUR 399 EXTENSION - 40' ROW
PROPOSED SPUR 399 EXTENSION - 40' ROW
EXISTING TYPICAL SECTION
UNIVERSITY DR
PROPOSED TYPICAL SECTION
UNIVERSITY DR

GEOMETRIC CURVE DATA

ROADWAY	CURVE NAME	DELTA	DEGREE	TANGENT	LENGTH	RADIUS	PC STATION	PT STATION	PI STATION	PI NORTHING (Y)	PI EASTING (X)
CSH399	CSH399-13	18° 30′ 54.79"	01° 41′ 06.61"	554.19′	1,098.72′	3,400.00′	1292+84.79	1303+83.50	1298+38.98	7118938.22	2557744.42
	CSH399-14	20° 34′ 13.14"	01° 41′ 06.61"	616.97′	1,220.67′	3,400.00′	1317+07.01	1329+27.68	1323+23.99	7121320.71	2557004.73
BNSH399	BNSH399-11	18° 30′ 54.79"	01° 39′ 56.07"	560.71′	1,111.64′	3,440.00′	1293+22.12	1304+33.76	1298+82.83	7118943.85	2557784.55
	BNSH399-12	20° 34′ 13.14"	01° 42′ 18.83"	609.72′	1,206.31′	3,360.00′	1317+57.27	1329+63.58	1323+66.99	7121325.63	2557045.08
FRNB	FRNB-11	18° 30′ 54.79"	01° 36′ 20.96"	581.57′	1,153.00′	3,568.00′	5296+68.54	5308+21.55	5302+50.12	7118961.88	2557912.98
	FRNB-12	20° 34′ 13.14"	01° 46′ 21.96"	586.49′	1,160.35′	3,232.00′	5321+45.06	5333+05.41	5327+31.55	7121341.40	2557174.21
	FRNB-13	21° 41′ 28.41"	05° 27′ 24.27"	201.16′	397.51′	1,050.00′	5358+32.28	5362+29.80	5360+33.45	7124650.36	2557366.30
	FRNB-14	21° 41′ 28.41"	07° 09′ 43.10"	153.27′	302.87′	800.00′	5362+29.80	5365+32.66	5363+83.06	7124986.74	2557254.61
RNX546B	RNE546B-3	16° 40′ 04.59"	02° 29′ 28.04"	336.93′	669.09′	2,300.00′	22+39.06	29+08.15	25+75.99	7118773.91	2557851.81
RNTRANS	RNTRANS-1	05° 57′ 27.90"	01° 14′ 44.02"	239.38′	478.32′	4,600.00′	10+00.00	14+78.32	12+39.38	7122712.32	2557149.62
	RNTRANS-2	06° 03′ 05.51"	04° 02′ 09.23"	75.04′	149.94′	1,419.65′	20+49.76	21+99.70	21+24.80	7123751.35	2557295.17
BSSH399	BSSH399-11	18° 30′ 54.79"	01° 42′ 18.83"	547.67′	1,085.79′	3,360.00′	1292+44.88	1303+30.67	1297+92.55	7118932.58	2557704.28
	BSSH399-12	20° 34′ 13.14"	01° 39′ 56.07"	624.23′	1,235.03′	3,440.00′	1316+54.17	1328+89.20	1322+78.41	7121315.78	2556964.38
FRSB	FRSB-11	18° 30′ 54.79"	01° 46′ 21.96"	526.81′	1,044.43′	3,232.00′	3289+01.13	3299+45.56	3294+27.94	7118914.56	2557575.85
	FRSB-12	20° 34′ 13.14"	01° 36′ 20.96"	647.46′	1,280.98′	3,568.00′	3312+69.06	3325+50.05	3319+16.53	7121300.01	2556835.25
	FRSB-13	20° 45′ 00.04"	05° 27′ 24.27"	192.24′	380.26′	1,050.00′	3351+05.25	3354+85.51	3352+97.49	7124689.20	2557031.99
	FRSB-14	20° 45′ 00.04"	07° 09′ 43.10"	146.47′	289.72′	800.00′	3354+85.51	3357+75.24	3356+31.98	7124998.45	2557170.15
RSTRANS	RSTRANS-2	05° 00′ 00.00"	01° 14′ 44.02"	200.84′	401.43′	4,600.00′	10+00.00	14+01.43	12+00.84	7122920.24	2557033.48
	RSTRANS-3	05° 00′ 00.00"	04° 40′ 51.70"	53.44′	106.81′	1,224.00′	22+37.15	23+43.96	22+90.59	7124009.78	2557001.57
RSX546B	RSX546B-3	14° 41′ 17.30"	02° 43′ 42.13"	270.66′	538.35′	2,100.00′	24+48.97	29+87.32	27+19.63	7118967.60	2557629.04

PROPERTY OWNER DATA

ID	OWNER'S NAME	ADDRESS
E127	MAP HOLDINGS LP	1410 N CROSSING DR
E208	MCKINNEY CITY OF	PO BOX 517
E209	DOUGLAS BRAD	227 E LOUISIANA ST
E210	PATEL MALTI	2236 E UNIVERSITY DR
E211	BLACK KELLY & AMY	2310 N WALNUT GROVE RD
E212	SERENO CARLOS	2425 COUNTY ROAD 564
E213	SERENO SIMON	811 S MCDONALD ST
E214	SERENO SIMON	811 S MCDONALD ST
E215	ADER LIVING TRUST THE &	3600 RANCHERO RD
E216	PANNKUK BOBBY JR &	PO BOX 1309
E217	P4 HOLDINGS LLC	3300 N A ST
E218	WEBSTER RICKY JACK JR	2526 E UNIVERSITY DR
E219	MASTER HALCO INC	3010 LYNDON B JOHNSON FWY STE 800
E220	OSTTEND LANDFILL LTD	2540 E UNIVERSITY DR
W115	MCKINNEY UPLANDS LP	1410 N CROSSING DR
W116	MCKINNEY UPLANDS LP	1410 N CROSSING DR
W117	MAP HOLDINGS LP	1410 N CROSSING DR
W118	MCKINNEY CITY OF	PO BOX 517
W207	BROWN BILLY CHARLES	2163 E DAVE BROWN RD
W208	MCKINNEY HILL PARK LLC	924 S BELT LINE RD
W209	CALATX PROPERTIES LLC	2600 STILL SPRINGS DR
W210	CARROLL BILLY CLAUDE	2229 E UNIVERSITY DR
W211	JOHNSON CURTIS L & DEBRA M	2273 E UNIVERSITY DR
W212	MALDONADO MARTIN	860 S STATE HIGHWAY 5
W213	MALDONADO MARTIN	860 S STATE HIGHWAY 5
W214	MONARCH GROUP LLC	5100 ELDORADO PKWY STE 102
W215	RILEY DEBBIE TATE	4606 COUNTY ROAD 408
W216	DYNAMIX INVESTMENT LLC	20 BUCKINGHAM LN
W217	TEXAS RND LLC	2431 E UNIVERSITY DR
W218	TEXAS RND LLC	2431 E UNIVERSITY DR
W219	GAO XIAODONG & JIAQIAN DENG	2431 E UNIVERSITY DR
W220	GAO XIAODONG & JIAQIAN DENG	2431 E UNIVERSITY DR
W221	HERNANDEZ GONZALO & ANTONIA A	2441 E UNIVERSITY DR
W222	RODRIGUEZ ERNESTO F	PO BOX 68
W223	OHM VERTEX LLX	8800 SANTA FE TRL
W224	GONZALES TERRY GLENN	2461 COUNTY ROAD 330
W225	RODRIGUEZ ERNESTO F	PO BOX 68
W226	COSTELLO LAWRENCE J & DALE	2495 COUNTY ROAD 330
W227	OHM VERTEX LLX	8800 SANTA FE TRL
W228	BERHOW JEAN J	2539 COUNTY ROAD 330
W229	COLLINS PROPERTY CO THE	PO BOX 578
W230	AREVALO-FRANCO ARTURO	2115 STICKHORSE LN



MAINLANE SUPERELEVATION

CHAIN NAME	STATION	CROSS SLOPE
℞ S399	1294+18.00	4.90%
	1302+50.00	4.90%
	1311+39.00	-2.50%
	1314+62.00	-2.50%
	1317+51.00	-4.90%
	1328+84.00	-4.90%
	1331+73.00	-2.50%

PROPOSED TAPERS

LOCATION	TYPE	BASELINE	BEGIN	END	TAPER RATE
1	AUX LANE MERGE	SE1-CSH399	1309+93.50 76.00 RT	1315+93.50 64.00 RT	50:1
2	AUX LANE MERGE	SE1-CSH399	1312+46.01 76.00 LT	1317+88.21 64.00 LT	45:1

- EXISTING ROW
- EXISTING PROPERTY LINES
- EXISTING STREAMS
- EXISTING WETLANDS
- EXISTING 100-YR FLOODPLAIN
- EXISTING FLOODWAY
- EXISTING DRAINAGE (BY OTHERS)
- FUTURE ADDITIONS (BY OTHERS)
- PROPOSED IMPROVEMENTS (BY OTHERS)
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW (BY OTHERS)
- PROPOSED EASEMENT (BY OTHERS)
- PROPOSED TRAFFIC BARRIER
- PROPOSED BRIDGE BENTS/ABUTMENTS
- PROPOSED RETAINING WALL
- PROPOSED DRAINAGE
- ➡ DIRECTION OF TRAVEL
- DIRECTION OF FLOW
- 🚦 SIGNALIZED INTERSECTION
- 🟪 PROPOSED BRIDGE
- 🟨 PROPOSED MAINLANES
- 🟦 PROPOSED RAMPS
- 🟩 PROPOSED FRONTAGE ROADS
- 🟪 PROPOSED CROSS STREETS/DRIVEWAYS
- 🟫 PROPOSED SHARED USE PATH (SUP)
- 🟫 PROPOSED TRANSITION
- 🟧 PROJECT BY OTHERS
- ▨ BUILDING DISPLACEMENT
- ▨ POND DISPLACMENT
- ▨ ROADWAY REMOVAL
- XX-X CURVE NUMBER
- WATER EXISTING WATER
- WWL EXISTING SANITARY SEWER
- GP EXISTING GAS
- ELEC EXISTING ELECTRIC
- TELE EXISTING TELEPHONE

NOTES:

1. EXISTING FEATURES WERE PARTIALLY SURVEYED. SCHEMATICS ARE BASED ON PARTIAL SURVEY (2020-2021), AERIAL IMAGERY (2021) AND RECORD PLANS.
2. EXISTING R.O.W SHOWN IS BASED ON INFORMATION FROM ADJACENT PROJECTS AND PROPERTY PARCEL DATA. EXISTING R.O.W MAPPING ONGOING AND TO BE FINALIZED PRIOR TO THE 90% SUBMITTAL.
3. PROPERTY OWNER DATA WAS OBTAINED FROM COLLIN COUNTY APPRAISAL DISTRICT (JULY 2021).
4. APPROXIMATE 100-YEAR FLOODPLAIN LIMITS (2011) WERE OBTAINED FROM COLLIN COUNTY APPRAISAL DISTRICT.
5. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS OTHERWISE NOTED).
6. CURBS ON THE FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS OTHERWISE NOTED).
7. EXISTING DRIVEWAYS WILL REMAIN UNLESS IT IS DETERMINED DURING DETAILED DESIGN STAGE AND COORDINATION WITH THE LOCAL GOVERNMENT THAT THE DRIVEWAY IS A SAFETY ISSUE AND/OR IS LOCATED WITHIN ACCESS DENIAL LIMITS SHOWN.
8. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED R.O.W PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE. INDUCED DISPLACEMENTS WERE DETERMINED WHERE DRIVEWAYS OR PARKING ARE IMPACTED.
9. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
10. WB-67 DESIGN VEHICLE WAS USED IN EVALUATION OF TURNING MOVEMENTS.
11. TRAFFIC SIGNALS SHOWN ON THE SCHEMATIC ARE SUBJECT TO CHANGE BASED ON THE TXMUTCD TRAFFIC SIGNAL WARRANT ANALYSIS.
12. TRAFFIC VOLUMES ON THE TRAFFIC DIAGRAM ARE BASED ON TRAFFIC COUNTS AND GROWTH RATES APPROVED BY TPP (DATE: 10/27/2021)
13. ALL BRIDGE SPANS WILL UTILIZE TX54 WITH A ASSUMED DEPTH OF 6' FROM TOP OF DECK TO BOTTOM OF BEAM.
14. WETLANDS SHOWN ORGINATED FROM FIELD SURVEYS CONDUCTED FROM AUGUST 2020 TO JUNE 2021.
15. SCHEMATICS SHOW CULVERT INFORMATION ONLY. DETAILED DRAINAGE TO BE INCLUDED IN THE PS&E PHASE.
16. ALL PROPOSED BRIDGES UTILIZE TX-54 BEAMS, UNLESS NOTED OTHERWISE.

INSET A
INSET B
INSET A : ALTERNATIVE DESIGN
INSET B : ALTERNATIVE DESIGN
MATCHLINE STA. 1288+00
CSJ NO. 0047-10-002
℞ RSX546B
℞ FRSB
℞ BSSH399
℄ CSH399
℞ FRNB
MASTER HALCO

SPUR 399 PROPOSED PROFILE (70 MPH)
SPUR 399 PROPOSED PROFILE (70 MPH)
MATCHLINE STA. 1288+00
EXIST GROUND @ ℄ CSH399 PGL
PROPOSED @ ℄ CSH399 PGL
590
580
570
560
550
540
530
520
510
500
1290+00

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ROLL 4 OF 8