Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 90% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ:
0172-04-049
0172-13-009

CSJ LIMITS:
FROM: EAST OF SH360 TO WEST OF OLD FORTWORTH ROAD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	50 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH

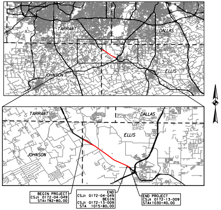
PROJECT LENGTH = 4.7 MILES

NOTES:

1. TYPICAL SECTIONS ARE NOT TO SCALE. DIMENSIONS ARE TO FACE OF CURB.
2. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
3. NOISE ANALYSIS WILL BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS.
4. WHERE POSSIBLE, NEW AND REVISED EXIT AND ENTRANCE RAMPS ARE DESIGNED TO MEET THE DESIRABLE SPACING BETWEEN RAMPS AND DRIVEWAYS, SIDE STREETS OR CROSS STREETS. WHEN THE DESIRABLE SPACING CAN NOT BE ACHIEVED, CHANNELIZATION METHODS WILL BE IMPLEMENTED IN FINAL DESIGN.
5. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
6. SURVEY AND SUE PROVIDED BY ARS ENGINEERS, INC. (12/05/2022).
7. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE.
8. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. ALL RADII ARE 20' UNLESS OTHERWISE NOTED.
11. THE YEAR 2022 REFLECT THE EXISTING ADT VOLUMES COUNTED ON 10/25/2022, WHEREAS THE YEARS 2028, 2048 AND 2058 ARE PROJECTED ADT VOLUMES.

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

PRELIMINARY, SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.


TARRANT
DALLAS
JOHNSON
ELLIS
BEGIN PROJECT CSJ: 0172-04-049 STA: 782+80.00
END CSJ: 0172-04-049 BEGIN CSJ: 0172-13-009 STA 1015+80.00
END PROJECT CSJ: 0172-13-009 STA: 1030+40.00

LOCATION MAP
N.T.S.

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
TBPE REGISTRATION NO. 264

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

PRELIMINARY FOR INTERIM REVIEW ONLY
THESE DOCUMENTS ARE FOR REVIEW AND ARE NOT INTENDED FOR BIDDING OR CONSTRUCTION PURPOSES. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

NAME	P.E. NO.	DATE
JOHN NGUYEN	86489	09/08/23

EQUATIONS: NONE
RR CROSSINGS: NONE

SEP 08, 2023
ROLL 4 OF 12

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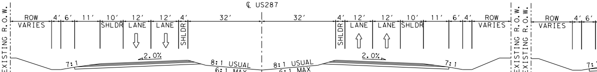
PLAN LEGEND:

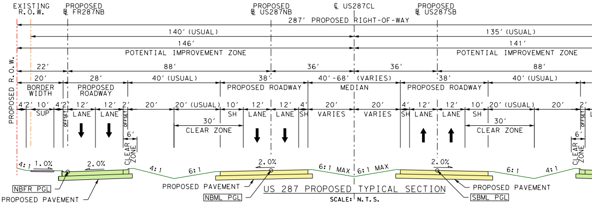
🟨	PROPOSED MAIN LANES
🟩	PROPOSED FRONTAGE RD/ CROSS ST
🟧	PROPOSED BRIDGE
🟪	PROPOSED SHARED-USE-PATH
🟥	PROPOSED SIDEWALK
🟦	PROPOSED RAMP
▭	FEMA FLOODPLAIN (ZONE AE)
▭	FEMA FLOODPLAIN (ZONE A)
▨	PAVEMENT REMOVAL
▩	BUILDING DISPLACEMENT
-·-·-	EXISTING RIGHT-OF-WAY
— — —	EXISTING PROPERTY LINE
-·-·-	PROPOSED RIGHT-OF-WAY
-·-·-	PROPOSED DRAINAGE EASEMENT
▬	ATTENUATOR
▬	PROPOSED SSTR
▬	PROPOSED RETAINING WALL
▭	PROPOSED DRAINAGE CULVERT
▭	EXISTING DRAINAGE CULVERT
XXXXX	PARCEL ID
⟶	FLOW DIRECTION
-··· ⟶	DITCH FLOW LINE


℄ US287
EXISTING R.O.W.
ROW VARIES
4' 6' 11' 10' 12' 12' 4' 32' 32' 4' 12' 12' 10' 11' 6' 4'
SHLDR
LANE
LANE
SHLDR
2.0%
7:1
8:1 USUAL
6:1 MAX

℄ US287NB (NORTHBOUND)
STA 809+40.02 TO STA 852+42.07
STA 865+38.48 TO STA 902+39.92
STA 916+32.51 TO STA 1024+70.00

US 287 EXISTING TYPICAL SECTION

℄ US287SB (SOUTHBOUND)
STA 782+80.00 TO STA 852+42.07
STA 865+38.48 TO STA 902+39.92
STA 916+32.51 TO STA 1022+90.00

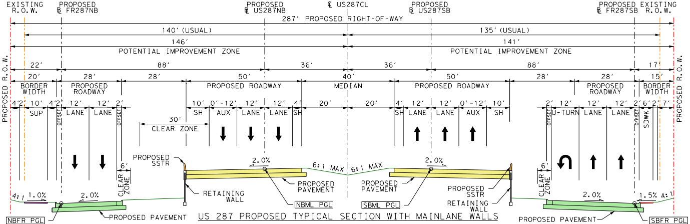

EXISTING R.O.W.
PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
287' PROPOSED RIGHT-OF-WAY
140' (USUAL)
135' (USUAL)
146'
141'
POTENTIAL IMPROVEMENT ZONE
PROPOSED R.O.W.
22'
88'
36'
36'
88'
20'
28'
40' (USUAL)
38'
40'-68' (VARIES)
38'
40' (USUAL)
BORDER WIDTH
PROPOSED ROADWAY
MEDIAN
4' 2' 10' 4' 2' 12' 12' 2' 20' 20' (USUAL) 10' 12' 12' 4' 20' 20' 4' 12' 12' 10' 20' (USUAL) 20' 2'
SUP
OFFSET
LANE
SH
VARIES
30' CLEAR ZONE
6' CLEAR ZONE
4:1
1.0%
2.0%
6:1
6:1 MAX
NBFR PGL
NBML PGL
SBML PGL
PROPOSED PAVEMENT

US 287 PROPOSED TYPICAL SECTION
SCALE: N.T.S.

℄ FR287NB (NORTHBOUND)
STA 1974+89.72 TO STA 1993+80.00
STA 2004+40.00 TO STA 2014+00.00
STA 2015+35.00 TO STA 2030+75.28

℄ US287NB (NORTHBOUND)
STA 975+03.51 TO STA 977+99.60
STA 1004+40.00 TO STA 1014+04.00
STA 1015+50.00 TO STA 1024+70.00

℄ US287SB (SOUTHBOUND)
STA 974+95.85 TO STA 981+20.00
STA 1008+00.00 TO STA 1014+00.00
STA 1015+95.00 TO STA 1022+90.00


EXISTING R.O.W.
PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED ℄ FR287SB
EXISTING R.O.W.
287' PROPOSED RIGHT-OF-WAY
140' (USUAL)
135' (USUAL)
146'
141'
POTENTIAL IMPROVEMENT ZONE
PROPOSED R.O.W.
22'
88'
36'
36'
88'
17'
20'
28'
28'
50'
40'
50'
28'
28'
15'
BORDER WIDTH
PROPOSED ROADWAY
MEDIAN
4' 2' 10' 4' 2' 12' 12' 2' 10' 0'-12' 12' 12' 4' 20' 20' 4' 12' 12' 0'-12' 10' 2' 12' 12' 12' 2' 6' 2' 7'
SUP
LANE
SH
AUX
U-TURN
SDWK
OFFSET
30' CLEAR ZONE
6' CLEAR ZONE
PROPOSED SSTR
RETAINING WALL
PROPOSED PAVEMENT
NBFR PGL
NBML PGL
SBML PGL
SBFR PGL
4:1
1.0%
2.0%
6:1 MAX
1.5%

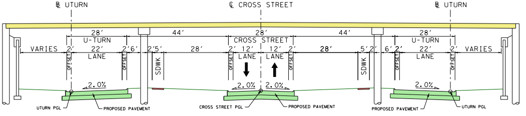
US 287 PROPOSED TYPICAL SECTION WITH MAINLANE WALLS
SCALE: N.T.S.

℄ FR287NB (NORTHBOUND)
STA 1993+80.00 TO STA 2004+40.00

℄ US287NB (NORTHBOUND)
STA 977+99.60 TO STA 1004+40.00

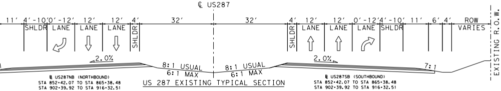
℄ US287SB (SOUTHBOUND)
STA 981+20.00 TO STA 1008+00.00

℄ FR287SB (SOUTHBOUND)
STA 1991+80.00 TO STA 1996+40.00
STA 2021+00.00 TO STA 2025+46.12

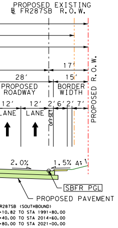

℄ UTURN
℄ CROSS STREET
℄ UTURN
28' U-TURN
44'
28' CROSS STREET
44'
28' U-TURN
VARIES
2'
22' LANE
2' 6'
2' 5'
28'
2' 12' 12' 2'
LANE
LANE
28'
5' 2'
6' 2'
22' LANE
2'
VARIES
OFFSET
SDWK
2.0%
UTURN PGL
PROPOSED PAVEMENT
CROSS STREET PGL
PROPOSED PAVEMENT
PROPOSED PAVEMENT
UTURN PGL

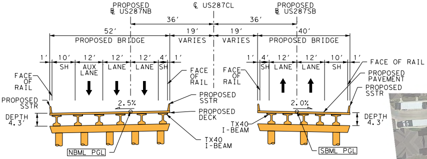
CROSS STREET TYPICAL SECTION
WARD RD

CHAIN	DESIGN SPEED (MPH)
US287NB	65
US287SB	65


℄ US287
11' 4'-10' 0'-12' 12' 12' 4' 32' 32' 4' 12' 12' 0'-12' 4'-10' 11' 6' 4' ROW VARIES
SHLDR LANE LANE LANE SHLDR SHLDR LANE LANE LANE SHLDR
2.0% 2.0%
8:1 USUAL 6:1 MAX 8:1 USUAL 6:1 MAX 7:1
EXISTING R.O.W.
℄ US287NB (NORTHBOUND) STA 852+42.07 TO STA 865+38.48 STA 902+39.92 TO STA 916+32.51
℄ US287SB (SOUTHBOUND) STA 852+42.07 TO STA 865+38.48 STA 902+39.92 TO STA 916+32.51

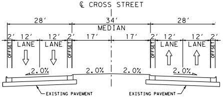
US 287 EXISTING TYPICAL SECTION


PROPOSED ℄ FR287SB
EXISTING R.O.W.
17' 28' 15'
PROPOSED ROADWAY
BORDER WIDTH
PROPOSED R.O.W.
12' 12' 2' 6' 2' 7'
LANE LANE
OFFSET
2.0% 1.5% 4:1
SBFR PGL
PROPOSED PAVEMENT
R287SB (SOUTHBOUND)
+10.82 TO STA 1991+80.00
+40.00 TO STA 2014+60.00
+80.00 TO STA 2021+00.00


PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
36' 36'
52' 19' 19' 40'
PROPOSED BRIDGE VARIES VARIES PROPOSED BRIDGE
1' 10' 12' 12' 12' 4' 1'
SH AUX LANE LANE LANE SH
1' 4' 12' 12' 10' 1'
SH LANE LANE SH
FACE OF RAIL
FACE OF RAIL
FACE OF RAIL
FACE OF RAIL
PROPOSED SSTR
PROPOSED SSTR
PROPOSED DECK
PROPOSED PAVEMENT
PROPOSED SSTR
2.5% 2.0%
DEPTH 4.3'
DEPTH 4.3'
TX40 I-BEAM
TX40 I-BEAM
NBML PGL
SBML PGL

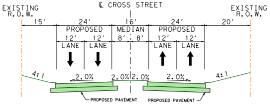
US 287 PROPOSED TYPICAL SECTION AT WARD RD

SCALE: N.T.S.


℄ CROSS STREET
28' 34' 28'
MEDIAN
2' 12' 12' 2' 17' 17' 2' 12' 12' 2'
OFFSET LANE LANE OFFSET OFFSET LANE LANE OFFSET
2.0% 2.0% 2.0% 2.0%
EXISTING PAVEMENT
EXISTING PAVEMENT

EXISTING CROSS STREET TYPICAL SECTION

PADERA LAKE BLVD


EXISTING R.O.W.
℄ CROSS STREET
EXISTING R.O.W.
15' 24' 16' 24' 20'
PROPOSED MEDIAN PROPOSED
12' 12' 8' 8' 12' 12'
LANE LANE LANE LANE
4:1 2.0% 2.0% 2.0% 2.0% 4:1
PROPOSED PAVEMENT
PROPOSED PAVEMENT

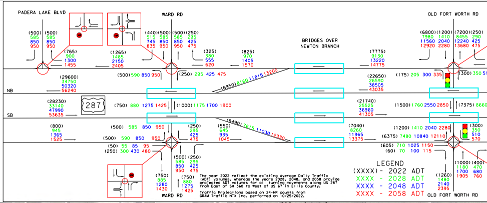
CROSS STREET TYPICAL SECTION

PADERA LAKE

RETAINING WALL SUMMARY					
WALL NAME	BEGIN WALL	OFFSET	END WALL	OFFSET	WALL LENGTH (LF)
RWNBML977	℄US287NB STA 966+01.42	56.00' LT	℄US287NB STA 987+46.88	23.00' LT	2145.28
RWNBML996	℄US287NB STA 989+54.11	23.00' LT	℄US287NB STA 1002+29.89	56.00' LT	1276.01
RWSBML977	℄US287SB STA 965+04.55	56.00 RT	℄US287SB STA 987+31.18	23.00' RT	2227.92
RWSBML995	℄US287SB STA 989+37.77	23.00' RT	℄US287SB STA 1002+12.65	54.84' RT	1276.21
RWABUTWARD1	℄WARD STA 11+86.91	102.54' LT	℄WARD STA 13+03.06	102.54' LT	116.15
RWABUTWARD2	℄WARD STA 11+98.99	102.97' RT	℄WARD STA 13+16.25	102.90' RT	116.26

US287 SUPERELEVATION			
BEGIN TRANSITION		END TRANSITION	
STATION	e (%)	STATION	e (%)
1005+31.00	2.00	1006+42.00	-2.60
1023+56.00	-2.60	1024+54.00	1.48
1005+56.00	-2.00	1005+85.00	-3.20
1022+76.00	-3.20	1022+90.00	-3.76

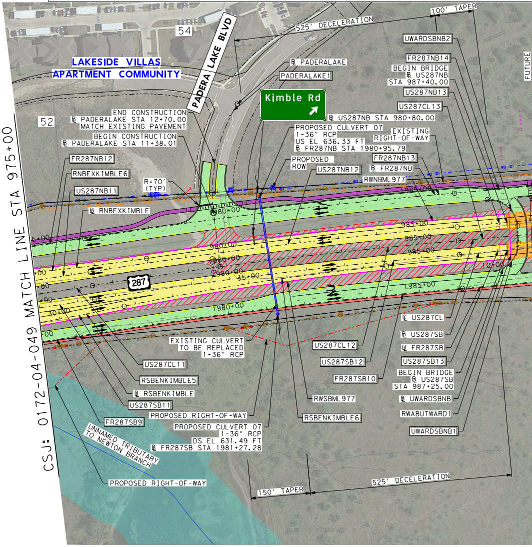
PARCEL ID	OWNER	PROPERTY IMPACT	AREA (ACRES)
45	WESTSIDE PRESERVE DEVELOPMENT LLC	ROW ACQUISITION	2.24
49	MIDLOTHIAN WEST LLC	ROW ACQUISITION	1.13
52	KRUTHIN LLC	N / A	N / A
54	MIDLOTHIAN LAKESIDE VILLAS LP	ROW ACQUISITION	0.94
56	KRUTHIN LLC	ROW ACQUISITION	0.35
58	KRUTHIN LLC	ROW ACQUISITION	0.46
60	KRUTHIN 67 LLC & MIDLOTHIAN 67 LLC	ROW ACQUISITION	0.06
62	KRUTHIN LLC	N / A	N / A
51	SINGH HARDIP	ROW ACQUISITION	0.05
53	FOX DEVELOPMENT LP	ROW ACQUISITION	0.86
55	BRYANT ALFRED D ESTATE	ROW ACQUISITION	0.17
57	AJP ADVANTAGE LLC	ROW ACQUISITION	0.47
64	MIDLOTHIAN CITY OF	ROW ACQUISITION	0.54
66	SOARING SMILES PROPERTY MANAGEMENT LLC	N / A	N / A
68	FOSTER JOHN B	N / A	N / A

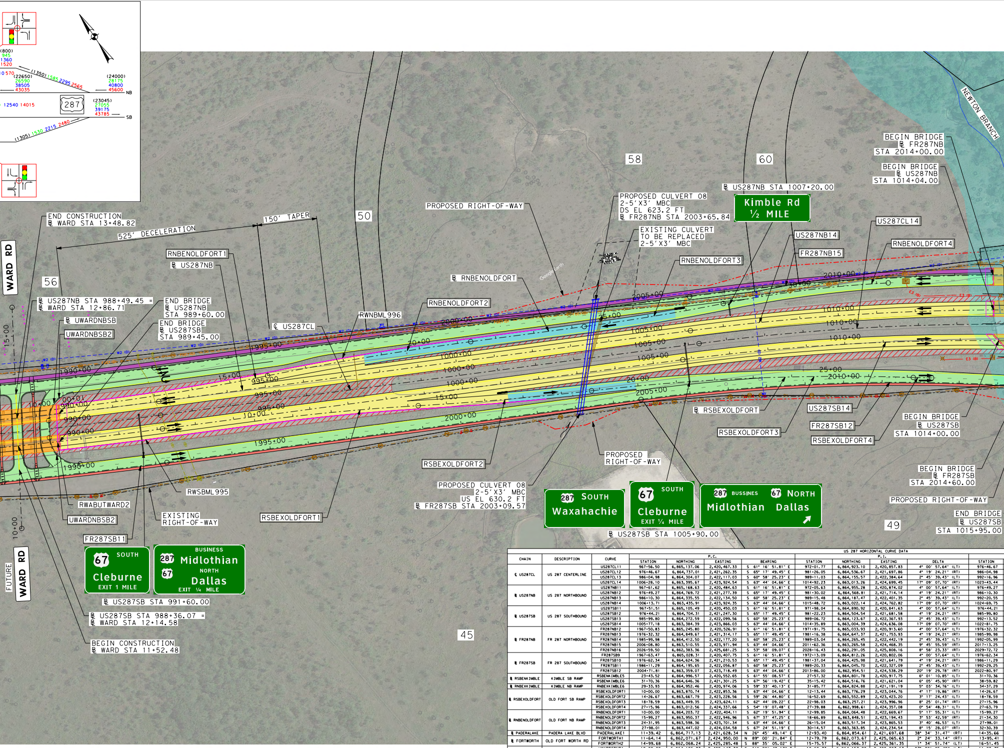

PADERA LAKE BLVD
WARD RD
BRIDGES OVER NEWTON BRANCH
OLD FORT WORTH RD
NB
SB
287
WARD RD
OLD FORT WORTH RD
(29600) 34750 50320 56240
(28230) 33140 47990 53635
(6950) 8160 11815 13205
(6490) 7615 11030 12330
(22650) 26590 38505 43035
(21740) 25525 36960 41305
(7040) 8260 11965 13375
(7775) 9130 13220 14775

LEGEND
(XXXX) - 2022 ADT
XXXX - 2028 ADT
XXXX - 2048 ADT
XXXX - 2058 ADT

The year 2022 reflect the existing Average Daily Traffic (ADT) volumes, whereas the years 2028, 2048, and 2058 provide projected ADT volumes for all turning movements along US 287 from East of SH 360 to West of US 67 in Ellis County.

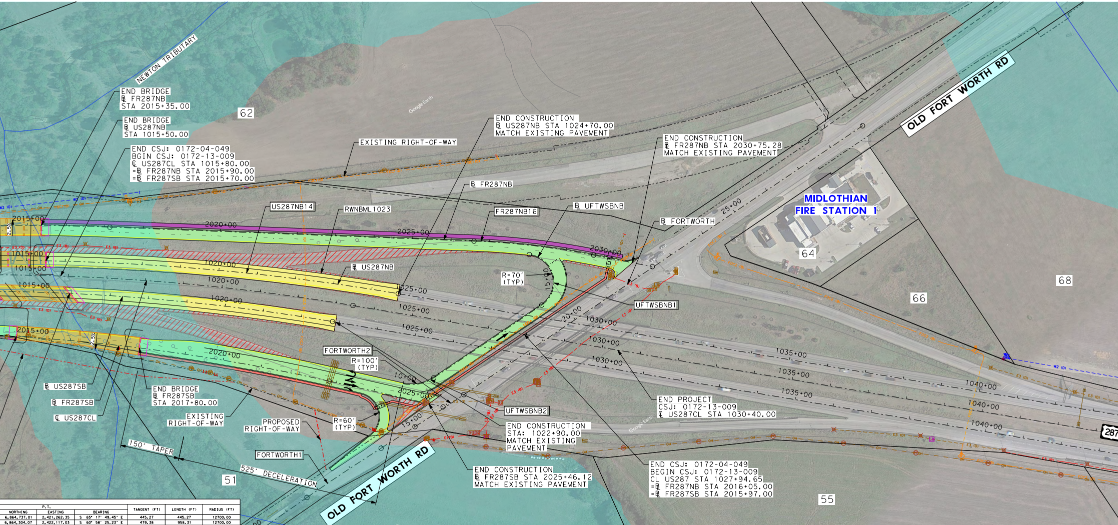
Traffic Projections based on 24-HR counts from GRAM Traffic NTX Inc. performed on 10/25/2022.


MATCH LINE STA 975+00
CSJ: 0172-04-049
LAKESIDE VILLAS APARTMENT COMMUNITY
PADERA LAKE BLVD
Kimble Rd
54
52
287
100' TAPER
525' DECELERATION
UWARDSBNB2
FR287NB14
BEGIN BRIDGE ℄ US287NB STA 987+40.00
US287NB13
US287CL13
℄ US287NB STA 980+80.00
℄ PADERALAKE
PADERALAKE1
END CONSTRUCTION ℄ PADERALAKE STA 12+70.00 MATCH EXISTING PAVEMENT
BEGIN CONSTRUCTION ℄ PADERALAKE STA 11+38.01
PROPOSED CULVERT 07 1-36" RCP US EL 636.33 FT ℄ FR287NB STA 1980+95.79
EXISTING RIGHT-OF-WAY
PROPOSED ROW
FR287NB13
℄ FR287NB
US287NB12
RWNBML977
FR287NB12
RNBEXKIMBLE6
US287NB11
R=70' (TYP)
℄ RNBEXKIMBLE
980+00
985+00
1985+00
1980+00
35+00
10+00
30+00
℄ US287CL
℄ US287SB
℄ FR287SB
US287SB13
US287CL12
US287SB12
FR287SB10
BEGIN BRIDGE ℄ US287SB STA 987+25.00
℄ UWARDSBNB
RWABUTWARD1
UWARDSBNB1
RWSBML977
RSBENKIMBLE6
EXISTING CULVERT TO BE REPLACED 1-36" RCP
US287CL11
RSBENKIMBLE5
℄ RSBENKIMBLE
US287SB11
PROPOSED RIGHT-OF-WAY
FR287SB9
PROPOSED CULVERT 07 1-36" RCP DS EL 631.49 FT ℄ FR287SB STA 1981+27.28
UNNAMED TRIBUTARY TO NEWTON BRANCH
PROPOSED RIGHT-OF-WAY
150' TAPER
525' DECELERATION
FUTURE


(800)
945
1360
1520
570
(22650)
26590
38505
43035
(1350) 1585 2295 2565
(24000)
28175
40800
45600
NB
12540 14015
287
(23045)
27055
39175
43785
SB
(1305) 1530 2215 2480
END CONSTRUCTION
℄ WARD STA 13+48.82
525' DECELERATION
150' TAPER
50
58
60
PROPOSED RIGHT-OF-WAY
PROPOSED CULVERT 08
2-5'X3' MBC
DS EL 623.2 FT
℄ FR287NB STA 2003+65.84
Kimble Rd
½ MILE
℄ US287NB STA 1007+20.00
BEGIN BRIDGE
℄ FR287NB
STA 2014+00.00
BEGIN BRIDGE
℄ US287NB
STA 1014+04.00
NEWTON BRANCH
EXISTING CULVERT
TO BE REPLACED
2-5'X3' MBC
US287CL14
US287NB14
FR287NB15
RNBENOLDFORT4
RNBENOLDFORT3
RNBENOLDFORT1
℄ US287NB
℄ RNBENOLDFORT
RNBENOLDFORT2
RWNBML996
℄ US287CL
WARD RD
56
℄ US287NB STA 988+49.45 =
℄ WARD STA 12+86.71
END BRIDGE
℄ US287NB
STA 989+60.00
END BRIDGE
℄ US287SB
STA 989+45.00
℄ UWARDNBSB
UWARDNBSB2
15+00
10+00
990+00
995+00
1000+00
1005+00
1010+00
1995+00
2000+00
2005+00
2010+00
2020+00
20+00
25+00
℄ RSBEXOLDFORT
RSBEXOLDFORT3
RSBEXOLDFORT4
US287SB14
FR287SB12
BEGIN BRIDGE
℄ US287SB
STA 1014+00.00
BEGIN BRIDGE
℄ FR287SB
STA 2014+60.00
PROPOSED RIGHT-OF-WAY
END BRIDGE
℄ US287SB
STA 1015+95.00
49
PROPOSED
RIGHT-OF-WAY
RSBEXOLDFORT2
PROPOSED CULVERT 08
2-5'X3' MBC
US EL 630.2 FT
℄ FR287SB STA 2003+09.57
RSWSBML995
RWABUTWARD2
UWARDNBSB2
EXISTING
RIGHT-OF-WAY
RSBEXOLDFORT1
FR287SB11
287 SOUTH
Waxahachie
67 SOUTH
Cleburne
EXIT ¼ MILE
287 BUSSINES 67 NORTH
Midlothian Dallas
℄ US287SB STA 1005+90.00
67 SOUTH
Cleburne
EXIT 1 MILE
287 BUSINESS
Midlothian
67 NORTH
Dallas
EXIT ¼ MILE
℄ US287SB STA 991+60.00
℄ US287SB STA 988+36.07 =
℄ WARD STA 12+14.58
BEGIN CONSTRUCTION
℄ WARD STA 11+52.48
FUTURE
WARD RD
45
Google Earth

US 287 HORIZONTAL CURVE DATA

CHAIN	DESCRIPTION	CURVE	P.C.				P.I.				
			STATION	NORTHING	EASTING	BEARING	STATION	NORTHING	EASTING	DELTA	STATION
℄ US287CL	US 287 CENTERLINE	US287CL11	967+56.50	6,865,137.06	2,420,467.33	S 61° 16' 51.81" E	972+01.77	6,864,923.10	2,420,857.83	4° 00' 57.64" (LT)	976+46.67
		US287CL12	976+46.67	6,864,737.01	2,421,262.35	S 65° 17' 49.45" E	981+26.05	6,864,536.67	2,421,697.86	4° 19' 24.21" (RT)	986+04.98
		US287CL13	986+04.98	6,864,304.07	2,422,117.03	S 60° 58' 25.23" E	989+11.03	6,864,155.57	2,422,384.64	2° 45' 39.43" (LT)	992+16.96
		US287CL14	1006+28.10	6,863,395.67	2,423,924.54	S 63° 44' 04.66" E	1014+92.23	6,863,013.26	2,424,699.45	17° 09' 07.70" (RT)	1023+43.44
℄ US287NB	US 287 NORTHBOUND	US287NB11	967+61.62	6,865,168.63	2,420,484.63	S 61° 16' 51.81" E	972+05.63	6,864,955.28	2,420,874.02	4° 00' 57.64" (LT)	976+49.27
		US287NB12	976+49.27	6,864,769.72	2,421,277.39	S 65° 17' 49.45" E	981+30.02	6,864,568.81	2,421,714.14	4° 19' 24.21" (RT)	986+10.30
		US287NB13	986+10.30	6,864,335.55	2,422,134.50	S 60° 58' 25.23" E	989+15.48	6,864,187.47	2,422,401.35	2° 45' 39.43" (LT)	992+20.55
		US287NB14	1006+13.71	6,863,435.91	2,423,924.35	S 63° 44' 04.66" E	1015+48.72	6,863,022.14	2,424,762.82	17° 09' 07.70" (RT)	1024+69.75
℄ US287SB	US 287 SOUTHBOUND	US287SB11	967+51.51	6,865,105.49	2,420,450.03	S 61° 16' 51.81" E	971+98.04	6,864,890.92	2,420,841.63	4° 00' 57.64" (LT)	976+44.21
		US287SB12	976+44.21	6,864,704.31	2,421,247.30	S 65° 17' 49.45" E	981+22.23	6,864,504.54	2,421,681.58	4° 19' 24.21" (RT)	985+99.80
		US287SB13	985+99.80	6,864,272.59	2,422,099.56	S 60° 58' 25.23" E	989+06.72	6,864,123.67	2,422,367.93	2° 45' 39.43" (LT)	992+13.52
		US287SB14	1005+77.18	6,863,384.39	2,423,866.03	S 63° 44' 04.66" E	1014+35.89	6,863,004.39	2,424,636.08	17° 09' 07.70" (RT)	1022+81.75
℄ FR287NB	FR 287 NORTHBOUND	FR287NB12	1967+50.83	6,865,245.80	2,420,526.91	S 61° 16' 51.81" E	1971+91.75	6,865,033.93	2,420,913.60	4° 00' 57.64" (LT)	1976+32.32
		FR287NB13	1976+32.32	6,864,849.67	2,421,314.17	S 65° 17' 49.45" E	1981+16.38	6,864,647.37	2,421,753.93	4° 19' 24.21" (RT)	1985+99.98
		FR287NB14	1985+99.98	6,864,412.50	2,422,177.20	S 60° 58' 25.23" E	1989+03.04	6,864,265.45	2,422,442.19	2° 45' 39.43" (LT)	1992+05.99
		FR287NB15	2006+08.80	6,863,510.55	2,423,971.94	S 63° 44' 04.66" E	2011+62.36	6,863,265.58	2,424,468.35	9° 45' 55.59" (RT)	2017+13.25
		FR287NB16	2026+59.50	6,862,383.36	2,425,681.25	S 53° 58' 09.07" E	2028+16.43	6,862,291.05	2,425,808.16	8° 58' 23.33" (RT)	2029+72.72
℄ FR287SB	FR 287 SOUTHBOUND	FR287SB9	1967+63.47	6,865,028.31	2,420,407.75	S 61° 16' 51.81" E	1972+13.09	6,864,812.26	2,420,802.06	4° 00' 57.64" (LT)	1976+62.34
		FR287SB10	1976+62.34	6,864,624.36	2,421,210.53	S 65° 17' 49.45" E	1981+37.04	6,864,425.98	2,421,641.79	4° 19' 24.21" (RT)	1986+11.29
		FR287SB11	1986+11.29	6,864,195.65	2,422,056.87	S 60° 58' 25.23" E	1989+20.33	6,864,045.70	2,422,327.09	2° 45' 39.43" (LT)	1992+29.25
		FR287SB12	2004+71.81	6,863,359.07	2,423,718.49	S 63° 44' 04.66" E	2013+86.00	6,862,954.51	2,424,538.29	20° 19' 29.78" (RT)	2022+80.97
℄ RSBENKIMBLE	KIMBLE SB RAMP	RSBENKIMBLE5	23+43.52	6,864,996.57	2,420,552.65	S 61° 55' 08.57" E	27+57.32	6,864,801.78	2,420,917.75	6° 01' 10.85" (LT)	31+70.36
		RSBENKIMBLE6	31+70.36	6,864,646.36	2,421,301.25	S 67° 56' 19.42" E	35+15.42	6,864,516.76	2,421,621.04	6° 05' 45.90" (RT)	38+59.82
℄ RNBEXKIMBLE	KIMBLE NB RAMP	RNBEXKIMBLE6	29+33.93	6,864,952.46	2,420,974.06	S 59° 33' 40.13" E	31+85.77	6,864,824.88	2,421,191.19	5° 03' 34.76" (LT)	34+37.29
℄ RSBEXOLDFORT	OLD FORT SB RAMP	RSBEXOLDFORT1	10+00.00	6,863,870.74	2,422,853.36	S 63° 44' 04.66" E	12+13.44	6,863,776.29	2,423,044.76	4° 17' 19.86" (RT)	14+26.67
		RSBEXOLDFORT2	14+26.67	6,863,667.79	2,423,228.56	S 59° 26' 44.80" E	16+52.69	6,863,552.89	2,423,423.20	3° 17' 24.43" (LT)	18+78.59
		RSBEXOLDFORT3	18+78.59	6,863,449.35	2,423,624.11	S 62° 44' 09.22" E	22+98.03	6,863,257.21	2,423,996.96	8° 25' 01.74" (RT)	27+15.96
		RSBEXOLDFORT4	27+15.96	6,863,012.56	2,424,337.66	S 54° 19' 07.48" E	27+39.88	6,862,998.61	2,424,357.08	0° 54' 48.31" (LT)	27+63.79
℄ RNBENOLDFORT	OLD FORT NB RAMP	RNBENOLDFORT1	10+00.00	6,864,203.72	2,422,404.11	S 62° 19' 51.94" E	12+99.85	6,864,064.48	2,422,669.67	5° 17' 55.31" (LT)	15+99.27
		RNBENOLDFORT2	15+99.27	6,863,950.37	2,422,946.96	S 67° 37' 47.25" E	18+66.89	6,863,848.51	2,423,194.43	3° 53' 42.59" (RT)	21+34.30
		RNBENOLDFORT3	24+31.95	6,863,598.36	2,423,701.34	S 63° 44' 04.66" E	26+15.04	6,863,517.34	2,423,865.53	3° 40' 46.53" (LT)	27+98.01
		RNBENOLDFORT4	27+98.01	6,863,447.02	2,424,034.58	S 67° 24' 51.19" E	30+14.57	6,863,363.85	2,424,234.54	8° 15' 28.07" (RT)	32+30.39
℄ PADERALAKE	PADERA LAKE BLVD	PADERALAKE1	11+39.42	6,864,717.13	2,421,628.34	N 26° 45' 49.14" E	12+93.40	6,864,854.61	2,421,697.68	38° 34' 31.47" (RT)	14+35.66
℄ FORTWORTH	OLD FORT WORTH RD	FORTWORTH1	11+64.14	6,862,071.67	2,424,950.00	N 89° 00' 21.84" E	12+79.79	6,862,073.67	2,425,065.63	2° 24' 33.14" (RT)	13+95.41
		FORTWORTH2	14+99.68	6,862,068.24	2,425,285.48	S 88° 35' 05.02" E	15+75.57	6,862,066.37	2,425,361.35	1° 34' 51.74" (LT)	16+51.45
℄ UWARDSBNB	WARD SB UTURN	UWARDSBNB1	10+00.00	6,864,186.93	2,422,147.32	S 61° 20' 49.17" E	10+68.73	6,864,153.98	2,422,207.63	87° 20' 05.49" (LT)	11+09.75
		UWARDSBNB2	11+53.80	6,864,250.32	2,422,266.25	N 31° 19' 05.34" E	12+29.24	6,864,314.77	2,422,305.46	92° 40' 27.85" (LT)	12+70.25
℄ UWARDNBSB	WARD NB UTURN	UWARDNBSB1	10+00.00	6,864,196.89	2,422,504.01	N 62° 44' 50.82" W	10+67.06	6,864,227.59	2,422,444.39	85° 56' 03.84" (LT)	11+07.99
		UWARDNBSB2	11+52.10	6,864,132.62	2,422,386.60	S 31° 19' 05.34" W	12+29.38	6,864,066.60	2,422,346.43	94° 03' 05.48" (LT)	12+70.29
℄ UFTWSBNB	OLD FTW SB UTURN	UFTWSBNB1	10+00.00	6,862,178.37	2,425,322.06	S 43° 24' 34.88" E	10+44.09	6,862,146.34	2,425,352.36	46° 45' 21.88" (LT)	10+83.24
		UFTWSBNB2	14+21.68	6,862,147.45	2,425,734.89	N 89° 50' 03.24" E	16+17.36	6,862,148.02	2,425,930.57	39° 35' 52.71" (LT)	15+97.10


NEWTON TRIBUTARY
END BRIDGE
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STA 2015+35.00
END BRIDGE
BL US287NB
STA 1015+50.00
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BEGIN CSJ: 0172-13-009
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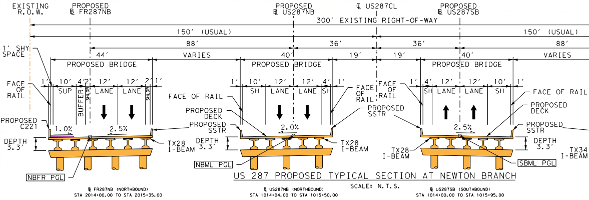
=BL FR287NB STA 2015+90.00
=BL FR287SB STA 2015+70.00
62
EXISTING RIGHT-OF-WAY
END CONSTRUCTION
BL US287NB STA 1024+70.00
MATCH EXISTING PAVEMENT
END CONSTRUCTION
BL FR287NB STA 2030+75.28
MATCH EXISTING PAVEMENT
OLD FORT WORTH RD
MIDLOTHIAN
FIRE STATION 1
BL FR287NB
US287NB14
RWNBML1023
FR287NB16
BL UFTWSBNB
BL FORTWORTH
25+00
2015+00
2020+00
2025+00
2030+00
1015+00
1020+00
1025+00
BL US287NB
R=70′
(TYP)
15+00
UFTWSBNB1
64
66
68
20+00
1030+00
1035+00
1040+00
2.5%
FORTWORTH2
R=100′
(TYP)
10+00
BL US287SB
BL FR287SB
℄ US287CL
END BRIDGE
BL FR287SB
STA 2017+80.00
EXISTING
RIGHT-OF-WAY
PROPOSED
RIGHT-OF-WAY
R=60′
(TYP)
UFTWSBNB2
END PROJECT
CSJ: 0172-13-009
℄ US287CL STA 1030+40.00
END CONSTRUCTION
STA: 1022+90.00
MATCH EXISTING
PAVEMENT
150′ TAPER
525′ DECELERATION
FORTWORTH1
51
END CONSTRUCTION
BL FR287SB STA 2025+46.12
MATCH EXISTING PAVEMENT
END CSJ: 0172-04-049
BEGIN CSJ: 0172-13-009
CL US287 STA 1027+94.65
=BL FR287NB STA 2016+05.00
=BL FR287SB STA 2015+97.00
55
287
NEWTON BRANCH
53
10+00
Google Earth

	P.T.					
NORTHING	EASTING	BEARING	TANGENT (FT)	LENGTH (FT)	RADIUS (FT)
6,864,737.01	2,421,262.35	S 65° 17′ 49.45″ E	445.27	445.27	12700.00
6,864,304.07	2,422,117.03	S 60° 58′ 25.23″ E	479.38	958.31	12700.00
6,864,020.14	2,422,659.09	S 63° 44′ 04.66″ E	306.05	611.98	12700.00
6,862,419.34	2,425,327.13	S 46° 34′ 56.96″ E	864.13	1715.34	5730.00
6,864,769.72	2,421,277.39	S 65° 17′ 49.45″ E	444.01	887.65	12664.00
6,864,335.55	2,422,134.50	S 60° 58′ 25.23″ E	480.74	961.03	12736.00
6,864,052.42	2,422,675.03	S 63° 44′ 04.66″ E	305.18	610.25	12664.00
6,862,379.49	2,425,441.98	S 46° 34′ 56.96″ E	935.01	1856.04	6200.00
6,864,704.31	2,421,247.30	S 65° 17′ 49.45″ E	446.53	892.70	12736.00
6,864,272.59	2,422,099.56	S 60° 58′ 25.23″ E	478.02	955.59	12664.00
6,863,987.85	2,422,643.16	S 63° 44′ 04.66″ E	306.92	613.72	12736.00
6,862,414.19	2,425,259.81	S 46° 34′ 56.96″ E	858.70	1704.56	5694.00
6,864,849.67	2,421,314.17	S 65° 17′ 49.45″ E	440.92	881.48	12576.00
6,864,412.50	2,422,177.20	S 60° 58′ 25.23″ E	484.06	967.67	12824.00
6,864,131.33	2,422,713.97	S 63° 44′ 04.66″ E	303.06	606.01	12576.00
6,862,939.96	2,424,916.02	S 53° 58′ 09.07″ E	553.56	1104.45	6480.00
6,862,180.07	2,425,919.12	S 44° 59′ 45.73″ E	156.93	313.22	2000.00
6,864,624.36	2,421,210.53	S 65° 17′ 49.45″ E	449.62	898.87	12824.00
6,864,195.65	2,422,056.87	S 60° 58′ 25.23″ E	474.70	948.95	12576.00
6,863,908.94	2,422,604.22	S 63° 44′ 04.66″ E	309.04	617.96	12824.00
6,862,290.40	2,425,166.53	S 43° 24′ 34.88″ E	914.19	1809.16	5100.00
6,864,646.36	2,421,301.25	S 67° 56′ 19.42″ E	413.80	826.85	7870.00
6,864,353.93	2,421,925.26	S 61° 50′ 33.52″ E	345.05	689.45	6480.00
6,864,716.93	2,421,418.73	S 64° 37′ 14.89″ E	251.84	503.35	5700.00
6,863,667.79	2,423,228.56	S 59° 26′ 44.80″ E	213.44	426.67	5700.00
6,863,449.35	2,423,624.11	S 62° 44′ 09.22″ E	226.02	451.92	7870.00
6,863,012.56	2,424,337.66	S 54° 19′ 07.48″ E	419.44	837.37	5700.00
6,862,984.97	2,424,376.73	S 55° 13′ 55.79″ E	23.91	47.83	3000.00
6,863,950.37	2,422,946.96	S 67° 37′ 47.25″ E	299.85	599.27	6480.00
6,863,730.08	2,423,434.42	S 63° 44′ 04.66″ E	267.62	535.03	7870.00
6,863,447.02	2,424,034.58	S 67° 24′ 51.19″ E	183.09	366.06	5700.00
6,863,252.82	2,424,420.47	S 59° 09′ 23.13″ E	216.56	432.38	3000.00
6,864,918.86	2,421,837.61	N 65° 20′ 20.61″ E	153.98	296.24	440.00
6,862,070.82	2,425,181.24	S 88° 35′ 05.02″ E	115.65	231.27	5,500.00
6,862,066.59	2,425,437.24	N 89° 50′ 03.24″ E	75.89	151.77	5,500.00
6,864,212.69	2,422,243.35	N 31° 19′ 05.34″ E	68.73	109.75	72.00
6,864,350.94	2,422,239.25	N 61° 21′ 22.50″ W	75.44	116.46	72.00
6,864,170.30	2,422,409.53	S 31° 19′ 05.34″ W	67.06	107.99	72.00
6,864,031.19	2,422,415.13	S 62° 44′ 00.14″ E	77.28	118.19	72.00
6,862,146.47	2,425,396.45	N 89° 50′ 03.24″ E	44.09	83.24	102.00
6,862,274.41	2,425,781.19	N 49° 45′ 49.47″ W	195.68	175.42	72.00


EXISTING
R.O.W.
PROPOSED
BL FR287NB
PROPOSED
BL US287NB
℄ US287CL
PROPOSED
BL US287SB
300′ EXISTING RIGHT-OF-WAY
150′ (USUAL)
150′ (USUAL)
88′
36′
36′
88′
1′ SHY
SPACE
44′
VARIES
40′
19′
19′
40′
VARIES
PROPOSED BRIDGE
PROPOSED BRIDGE
PROPOSED BRIDGE
FACE
OF
RAIL
1′
10′
4′
2′
12′
12′
2′
1′
SUP
BUFFER
SHLDR
LANE
LANE
SHLDR
FACE OF RAIL
1′
10′
12′
12′
4′
1′
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FACE
OF
RAIL
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OF
RAIL
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SH
FACE OF RAIL
PROPOSED
DECK
PROPOSED
SSTR
PROPOSED
DECK
PROPOSED
SSTR
PROPOSED
C221
1.0%
2.5%
2.0%
2.5%
PROPOSED
SSTR
DEPTH
3.3′
TX28
I-BEAM
DEPTH
3.3′
TX28
I-BEAM
TX28
I-BEAM
DEPTH
3.3′
TX34
I-BEAM
NBFR PGL
NBML PGL
SBML PGL

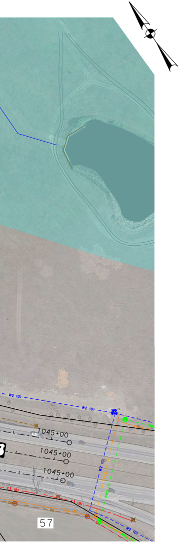
US 287 PROPOSED TYPICAL SECTION AT NEWTON BRANCH

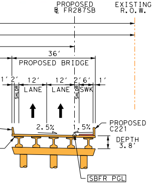
SCALE: N.T.S.

BL FR287NB (NORTHBOUND)
STA 2014+00.00 TO STA 2015+35.00

BL US287NB (NORTHBOUND)
STA 1014+04.00 TO STA 1015+50.00

BL US287SB (SOUTHBOUND)
STA 1014+00.00 TO STA 1015+95.00


W2 (D)
W2 (D)
1045+00
1045+00
1045+00
W2 (D)
FOC2 (D)
WW2 (C)
FOC1 (B)
E3 (B)
E3 (B)
OH
FOC2 (B)
OH
W2 (D)
WW2 (C)
57


PROPOSED
℄ FR287SB
EXISTING
R.O.W.
36′
PROPOSED BRIDGE
1′
2′
12′
12′
2′
6′
1′
SHLDR
LANE
LANE
SHLDR
SWK
2.5%
1.5%
PROPOSED
C221
DEPTH
3.8′
SBFR PGL

℄ FR287SB (SOUTHBOUND)
STA 2014+60.00 TO STA 2017+80.00

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 90% DESIGN SCHEMATIC

ELLIS COUNTY

CSJ:	CSJ LIMITS:
0172-04-049 0172-13-009	FROM: EAST OF SH360 TO WEST OF OLD FORTWORTH ROAD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	50 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH

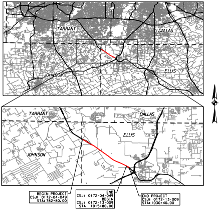
PROJECT LENGTH = 4.7 MILES

NOTES:

1. TYPICAL SECTIONS ARE NOT TO SCALE. DIMENSIONS ARE TO FACE OF CURB.
2. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
3. NOISE ANALYSIS WILL BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS.
4. WHERE POSSIBLE, NEW AND REVISED EXIT AND ENTRANCE RAMPS ARE DESIGNED TO MEET THE DESIRABLE SPACING BETWEEN RAMPS AND DRIVEWAYS, SIDE STREETS OR CROSS STREETS. WHEN THE DESIRABLE SPACING CAN NOT BE ACHIEVED, CHANNELIZATION METHODS WILL BE IMPLEMENTED IN FINAL DESIGN.
5. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
6. SURVEY AND SUE PROVIDED BY ARS ENGINEERS, INC. (12/05/2022).
7. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE.
8. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. ALL RADII ARE 20′ UNLESS OTHERWISE NOTED.
11. THE YEAR 2022 REFLECT THE EXISTING ADT VOLUMES COUNTED ON 10/25/2022, WHEREAS THE YEARS 2028, 2048 AND 2058 ARE PROJECTED ADT VOLUMES.

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

PRELIMINARY, SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.


TARRANT
DALLAS
JOHNSON
ELLIS
TARRANT
DALLAS
ELLIS
JOHNSON
BEGIN PROJECT
CSJ: 0172-04-049
STA:782+80.00
END
CSJ: 0172-04-049
BEGIN
CSJ: 0172-13-009
STA 1015+80.00
END PROJECT
CSJ: 0172-13-009
STA:1030+40.00

LOCATION MAP

N.T.S.

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
TBPE REGISTRATION NO. 264

SCALE: 1" = 100′ HORIZONTAL

SCALE: 1" = 10′ VERTICAL

PRELIMINARY FOR INTERIM REVIEW ONLY
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NAME	P.E. NO.	DATE
JOHN NGUYEN	86489	09/08/23

EQUATIONS: NONE
RR CROSSINGS: NONE

SEP 08, 2023
ROLL 4 OF 12

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