Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC

ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

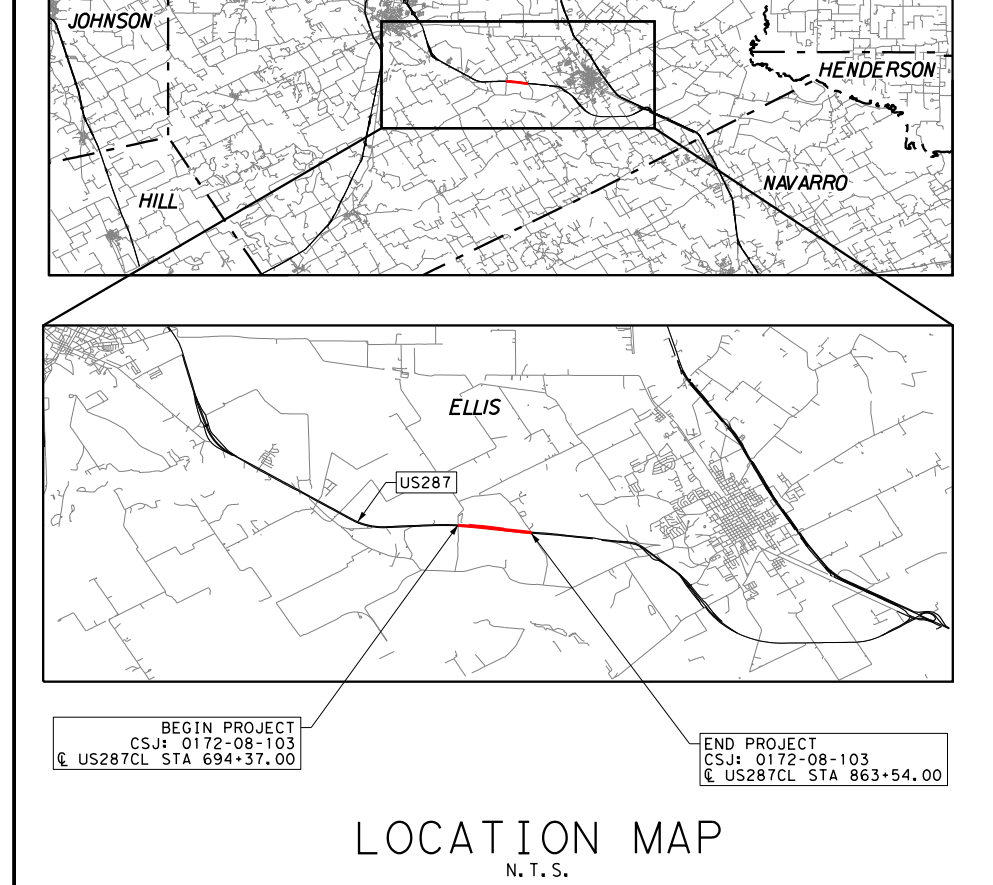
ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	45 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH
U-TURNS	15 MPH

PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES:
1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
4. CURBS ON FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
5. ALL CROSS STREET RADII ARE 50′ AND DRIVEWAY RADII ARE 20′ (UNLESS NOTED OTHERWISE).
6. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE. CURVE DATA IS NOT INCLUDED
7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
9. SURVEY AND SUE PROVIDED BY THE FEASIBILITY STUDY (10/22/2020)
10. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INDURANCE RATE MAPS 48139C0135F, 48139C0155F, AND 48139C0175F. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
12. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
13. 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.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.

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
KAUFMAN
HENDERSON
NAVARRO
HILL
ELLIS
US287
BEGIN PROJECT CSJ: 0172-08-103 ℄ US287CL STA 694+37.00
END PROJECT CSJ: 0172-08-103 ℄ US287CL STA 863+54.00

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*	*10/20/23*

EQUATIONS: NONE
RR CROSSINGS: NONE

OCTOBER 20, 2023
ROLL 1 OF 8

c:\bms\bridgefarmer-pw\nhi.luong@bridgefarmer.com\dms22049\038502-SCH-PP-01.dgn
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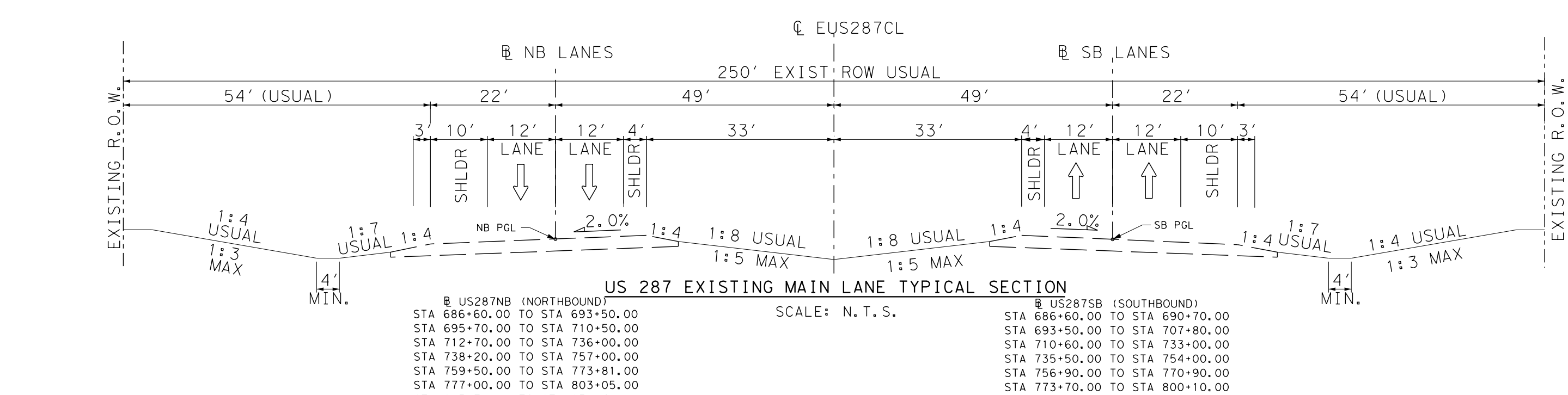
PLAN LEGEND:

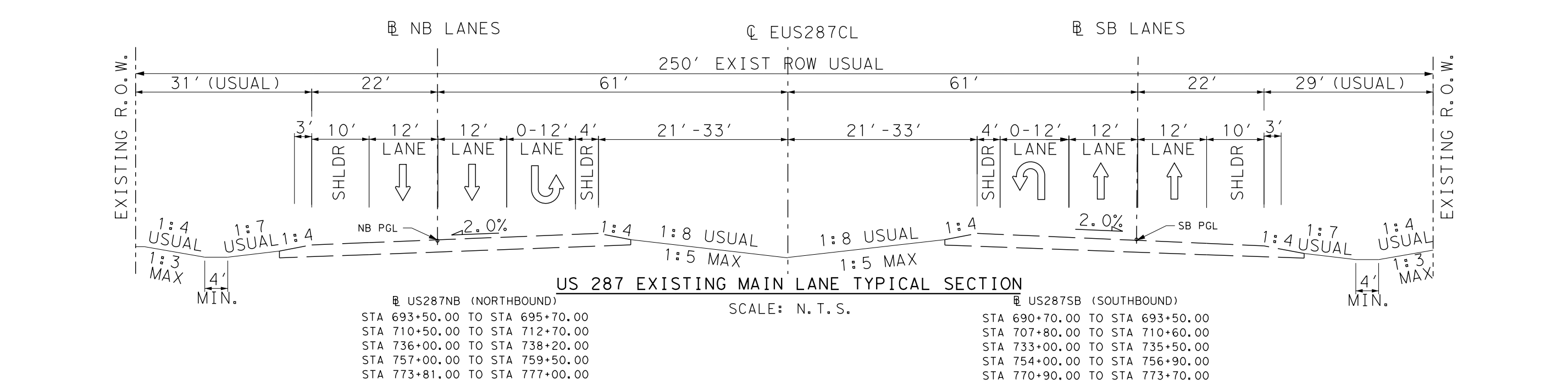
🟨	PROPOSED MAIN LANES
🟩	PROPOSED FRONTAGE RD/ CROSS ST
🟧	PROPOSED BRIDGE
🟪	PROPOSED SHARED-USE-PATH
🟥	PROPOSED SIDEWALK
🟦	PROPOSED RAMP
🟦	FEMA FLOODPLAIN
⬛	PROPOSED INTERIM PAVEMENT
▨	PAVEMENT REMOVAL
▨	BUILDING DISPLACEMENT
▬	ATTENUATOR
▬	PROPOSED SSTR
▬	PROPOSED SSCB
▬	MBGF END TREATMENT
— - - —	EXISTING RIGHT-OF-WAY
— — —	EXISTING PROPERTY LINE
— - - —	PROPOSED RIGHT-OF-WAY
▬	PROPOSED RETAINING WALL
▭	PROPOSED DRAINAGE CULVERT
▭	EXISTING DRAINAGE CULVERT
XXXXXX	PARCEL ID
→	FLOW DIRECTION
— • • • →	DITCH FLOW LINE


℄ EUS287CL
℄ NB LANES
℄ SB LANES
250′ EXIST ROW USUAL
54′ (USUAL)
22′
49′
49′
22′
54′ (USUAL)
3′ 10′ 12′ 12′ 4′
33′
33′
4′ 12′ 12′ 10′ 3′
SHLDR LANE LANE SHLDR
SHLDR LANE LANE SHLDR
EXISTING R.O.W.
EXISTING R.O.W.
NB PGL
SB PGL
2.0%
2.0%
1:4 USUAL
1:3 MAX
1:7 USUAL
1:4
1:8 USUAL
1:5 MAX
1:8 USUAL
1:5 MAX
1:4
1:7 USUAL
1:4 USUAL
1:3 MAX
4′ MIN.
4′ MIN.

US 287 EXISTING MAIN LANE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND)
STA 686+60.00 TO STA 693+50.00
STA 695+70.00 TO STA 710+50.00
STA 712+70.00 TO STA 736+00.00
STA 738+20.00 TO STA 757+00.00
STA 759+50.00 TO STA 773+81.00
STA 777+00.00 TO STA 803+05.00
STA 805+70.00 TO STA 830+40.00
STA 835+50.00 TO STA 864+60.00

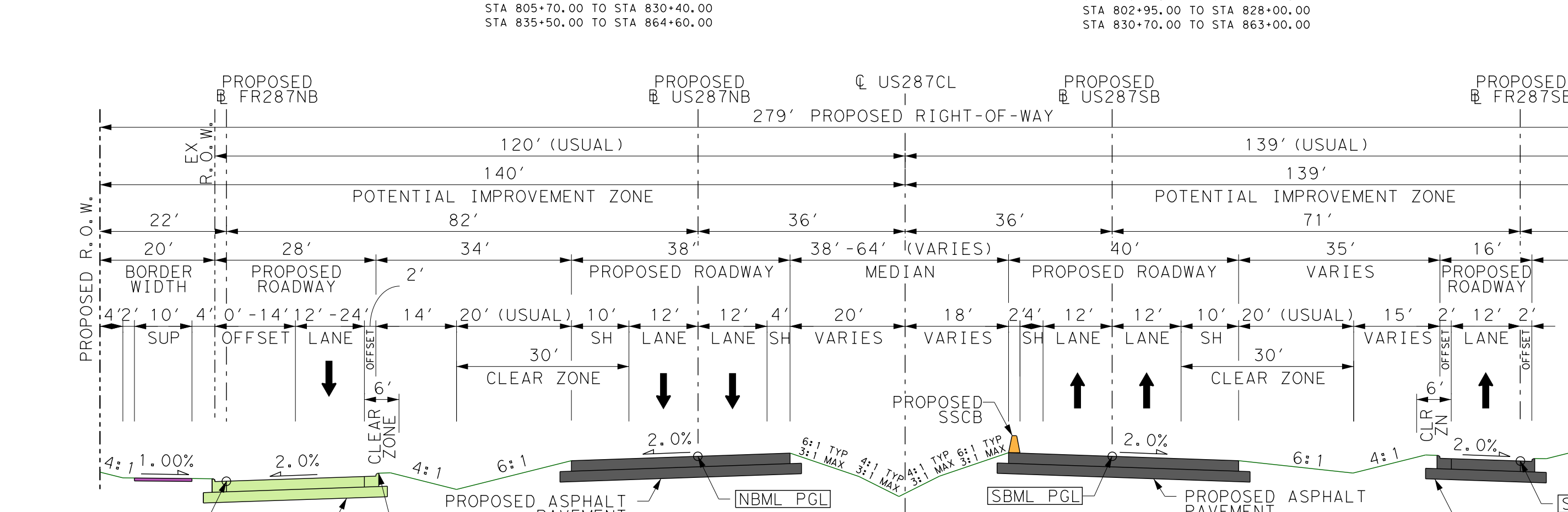
℄ US287SB (SOUTHBOUND)
STA 686+60.00 TO STA 690+70.00
STA 693+50.00 TO STA 707+80.00
STA 710+60.00 TO STA 733+00.00
STA 735+50.00 TO STA 754+00.00
STA 756+90.00 TO STA 770+90.00
STA 773+70.00 TO STA 800+10.00
STA 802+95.00 TO STA 828+00.00
STA 830+70.00 TO STA 863+00.00


℄ NB LANES
℄ EUS287CL
℄ SB LANES
250′ EXIST ROW USUAL
31′ (USUAL)
22′
61′
61′
22′
29′ (USUAL)
3′ 10′ 12′ 12′ 0-12′ 4′
21′-33′
21′-33′
4′ 0-12′ 12′ 12′ 10′ 3′
SHLDR LANE LANE LANE SHLDR
SHLDR LANE LANE LANE SHLDR
EXISTING R.O.W.
EXISTING R.O.W.
NB PGL
SB PGL
2.0%
2.0%
1:4 USUAL
1:3 MAX
1:7 USUAL
1:4
1:8 USUAL
1:5 MAX
1:8 USUAL
1:5 MAX
1:4
1:7 USUAL
1:4 USUAL
1:3 MAX
4′ MIN.
4′ MIN.

US 287 EXISTING MAIN LANE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND)
STA 693+50.00 TO STA 695+70.00
STA 710+50.00 TO STA 712+70.00
STA 736+00.00 TO STA 738+20.00
STA 757+00.00 TO STA 759+50.00
STA 773+81.00 TO STA 777+00.00
STA 803+05.00 TO STA 805+70.00

℄ US287SB (SOUTHBOUND)
STA 690+70.00 TO STA 693+50.00
STA 707+80.00 TO STA 710+60.00
STA 733+00.00 TO STA 735+50.00
STA 754+00.00 TO STA 756+90.00
STA 770+90.00 TO STA 773+70.00
STA 800+10.00 TO STA 802+95.00


PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED ℄ FR287SB
279′ PROPOSED RIGHT-OF-WAY
120′ (USUAL)
140′
139′ (USUAL)
139′
POTENTIAL IMPROVEMENT ZONE
POTENTIAL IMPROVEMENT ZONE
22′
82′
36′
36′
71′
32′
20′
28′
34′
38″
38′-64′ (VARIES)
40′
35′
16′
30′
BORDER WIDTH
PROPOSED ROADWAY
PROPOSED ROADWAY
MEDIAN
PROPOSED ROADWAY
VARIES
PROPOSED ROADWAY
VARIES
4′2′ 10′ 4′ 0′-14′ 12′-24′ 14′ 20′ (USUAL) 10′ 12′ 12′ 4′ 20′
18′ 2′4′ 12′ 12′ 10′ 20′ (USUAL) 15′ 2′ 12′ 2′
SUP
OFFSET
LANE
SH LANE LANE SH
VARIES
VARIES
SH LANE LANE SH
VARIES
LANE
30′ CLEAR ZONE
30′ CLEAR ZONE
6′ CLEAR ZONE
6′ CLR ZN
PROPOSED R.O.W.
EX. R.O.W.
EXISTING R.O.W.
PROPOSED SSCB
4:1
1.00%
2.0%
2.0%
2.0%
2.0%
6:1
4:1
6:1
4:1
NBFR PGL
NBML PGL
SBML PGL
SBFR PGL
PROPOSED PAVEMENT
TYPE 2 CURB (TYP.)
PROPOSED ASPHALT PAVEMENT
PROPOSED ASPHALT PAVEMENT
PROPOSED PAVEMENT

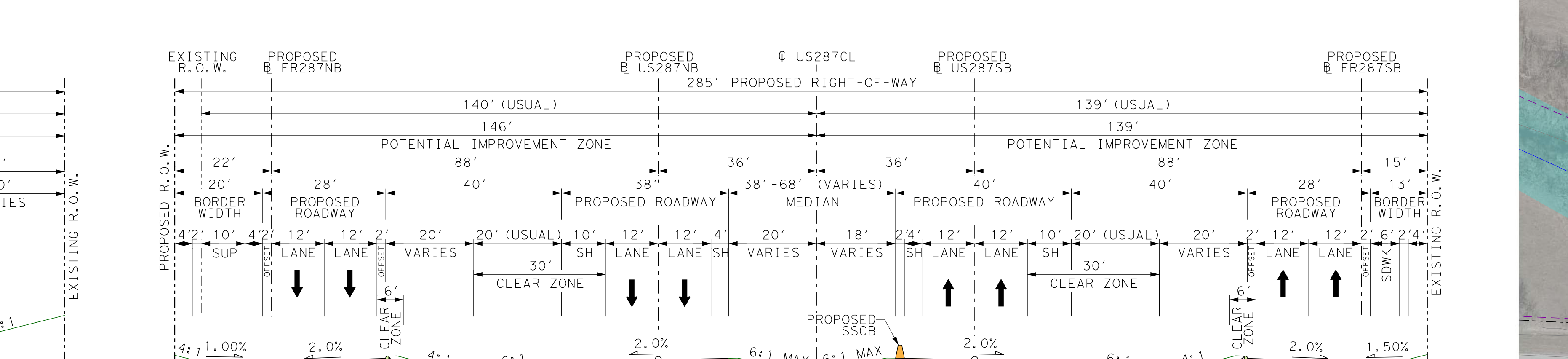
US 287 PROPOSED TYPICAL SECTION WITH ASPHALT MAINLANE
SCALE: N.T.S.

℄ FR287NB (NORTHBOUND)
STA 1709+50.00 TO STA 1727+92.38

℄ US287NB (NORTHBOUND)
STA 704+00.00 TO STA 720+00.30
STA 859+80.00 TO STA 863+60.00

℄ US287SB (SOUTHBOUND)
STA 703+50.00 TO STA 720+01.08
STA 859+69.00 TO STA 863+00.00

℄ FR287SB (SOUTHBOUND)
STA 1710+00.00 TO STA 1720+00.29


EXISTING R.O.W.
PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED ℄ FR287SB
285′ PROPOSED RIGHT-OF-WAY
140′ (USUAL)
146′
139′ (USUAL)
139′
POTENTIAL IMPROVEMENT ZONE
POTENTIAL IMPROVEMENT ZONE
22′
88′
36′
36′
88′
15′
20′
28′
40′
38″
38′-68′ (VARIES)
40′
40′
28′
13′
BORDER WIDTH
PROPOSED ROADWAY
PROPOSED ROADWAY
MEDIAN
PROPOSED ROADWAY
PROPOSED ROADWAY
BORDER WIDTH
4′2′ 10′ 4′2′ 12′ 12′ 2′ 20′ 20′ (USUAL) 10′ 12′ 12′ 4′ 20′
18′ 2′4′ 12′ 12′ 10′ 20′ (USUAL) 20′ 2′ 12′ 12′ 2′ 6′2′4′
SUP
LANE LANE
VARIES
SH LANE LANE SH
VARIES
VARIES
SH LANE LANE SH
VARIES
LANE LANE
SDWK
30′ CLEAR ZONE
30′ CLEAR ZONE
6′ CLEAR ZONE
PROPOSED R.O.W.
EXISTING R.O.W.
PROPOSED SSCB
4:1
1.00%
2.0%
2.0%
2.0%
2.0%
1.50%
6:1
6:1 MAX
6:1 MAX
6:1
4:1
NBFR PGL
NBML PGL
SBML PGL
SBFR PGL
PROPOSED PAVEMENT
TYPE 2 CURB (TYP.)
PROPOSED PAVEMENT
PROPOSED PAVEMENT
PROPOSED PAVEMENT

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

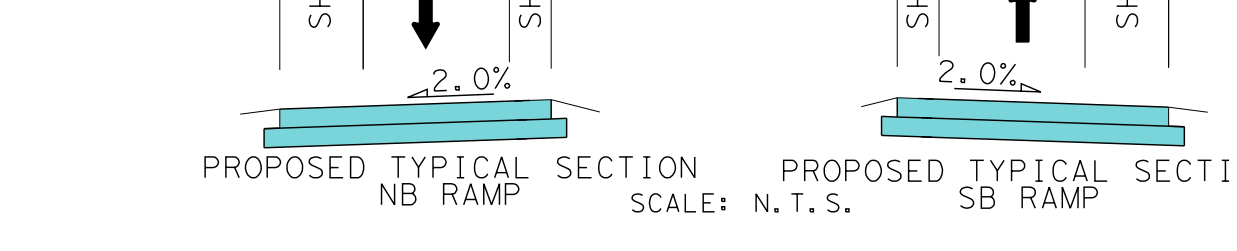
℄ FR287NB (NORTHBOUND)
STA 1727+92.38 TO STA 1758+29.20
STA 1765+09.77 TO STA 1831+97.47
STA 1838+79.23 TO STA 1845+60.00

℄ US287NB (NORTHBOUND)
STA 720+00.30 TO STA 742+51.23
STA 765+87.60 TO STA 824+47.39
STA 836+58.84 TO STA 855+55.00

℄ US287SB (SOUTHBOUND)
STA 720+01.08 TO STA 745+86.06
STA 764+82.83 TO STA 822+54.41
STA 839+03.05 TO STA 855+44.00

℄ FR287SB (SOUTHBOUND)
STA 1720+00.29 TO STA 1740+04.91
STA 1754+95.88 TO STA 1821+81.50
STA 1828+61.78 TO STA 1841+60.00

PARCEL ID	OWNER
181025	RS ELLIS TEXAS INVESTMENTS LLC
283027	TOTO PROPERTIES LLC
227368	MELDOR PROPERTIES LLC
187287	K & A PARTNERS LLC
187306	CUEVAS FRANCISCO
187370	HOLMES SALVAGE INC
187359	D & G STORE LLC
274727	AHMAD TARIQ
187289	AHMAD TARIQ
187360	CASEY ALCANTAR LLC
230874	VICTRON STORES LP
269222	VICTOR E BALLAS LLC & VA CAPITAL LLC
230875	VICTRON STORES LP
269223	REALM DEVELOPMENT INC
269224	REALM DEVELOPMENT INC
269225	REALM DEVELOPMENT INC
279952	TEXAS CENTRAL RAILROAD & INFRASTRUCTURE INC
141158	BAE JAE CHANG & POK SUN
141185	RS WAXAHACHIE287 INVESTMENTS LLC
141175	SINGH SAJVIR & JAGWINDER
141171	ONCOR ELECTRIC DELIVERY COMPANY
138489	MR W FIREWORKS
187311	D&S FARMS OF SCV LLC
141172	JRLS ESTATES LLC
141170	GETZENDANER TRUST
141173	OBR HOLDING COMPANY LLC
141179	GETZENDANER TRUST
141177	MEYER MOTORSPORTS INC
187301	GETZENDANER TRUST


8′ 14′ 4′
SHLDR LANE SHLDR
2.0%
4′ 14′ 8′
SHLDR LANE SHLDR
2.0%

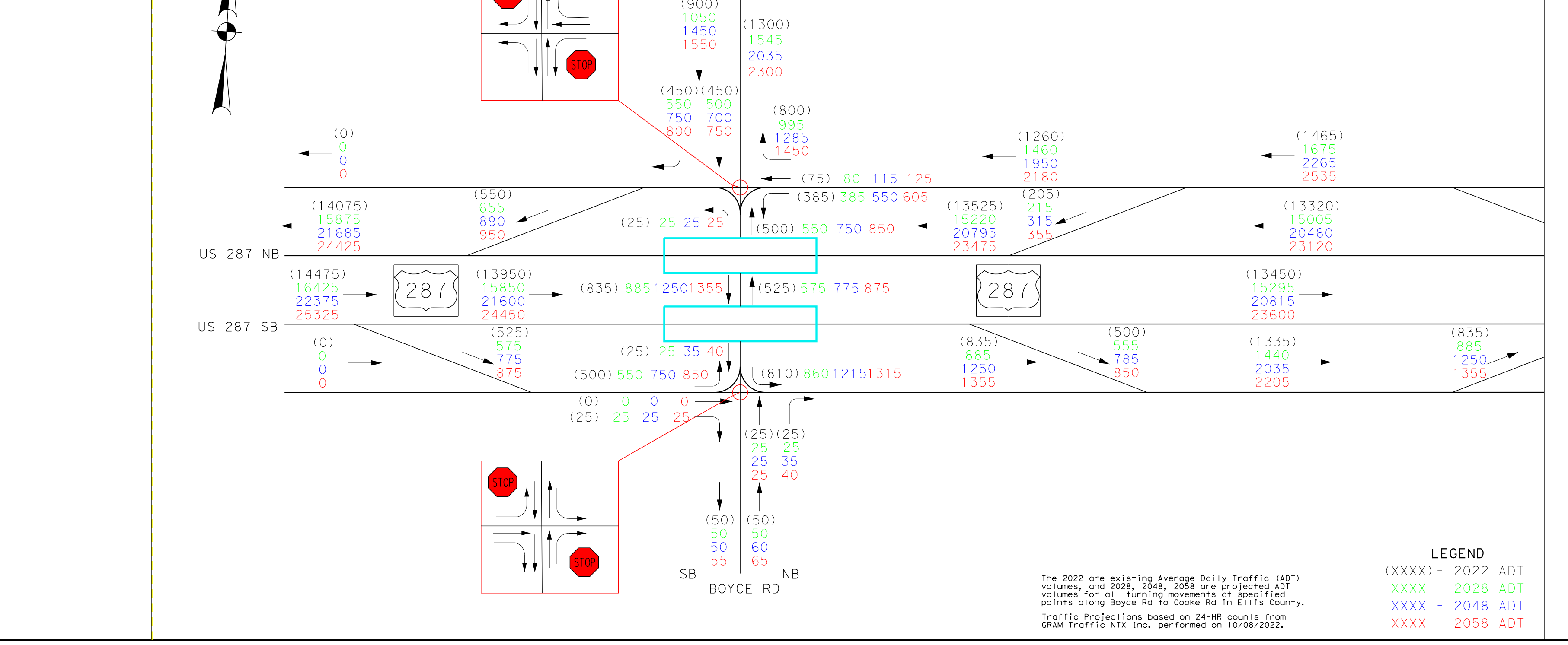
PROPOSED TYPICAL SECTION NB RAMP
PROPOSED TYPICAL SECTION SB RAMP
SCALE: N.T.S.

RETAINING WALL SUMMARY

WALL NAME	BEGIN WALL	OFFSET	END WALL	OFFSET	WALL LENGTH
RWSBFR1725	℄FR287SB STA 1722+10.00	11.00′ RT	℄FR287NB STA 1726+20.00	11.00′ RT	410.00
RWSBFR1737	℄FR287SB STA 1736+30.00	52.98′ LT	℄FR287NB STA 1738+80.00	43.39′ LT	250.73

US 287 HORIZONTAL CURVE DATA

CHAIN	DESCRIPTION	CURVE	P.C.				P.I.				P.T.				TANGENT (FT)	LENGTH (FT)	RADIUS (FT)
			STATION	NORTHING	EASTING	BEARING	STATION	NORTHING	EASTING	DELTA	STATION	NORTHING	EASTING	BEARING			
℄ US287	US 287 CENTERLINE	US287CL1	707+62.16	6,806,919.19	2,513,676.10	N 86° 23′ 33.78" E	709+51.77	6,806,931.12	2,513,865.34	1° 43′ 27.61" (LT)	711+41.36	6,806,948.74	2,514,054.13	N 84° 40′ 06.17" E	189.62	379.20	12600.00
		US287CL2	711+41.36	6,806,948.74	2,514,054.13	N 82° 29′ 05.84" E	715+71.21	6,807,004.95	2,514,480.29	3° 54′ 27.95" (RT)	720+00.72	6,807,032.00	2,514,909.29	N 86° 23′ 33.78" E	429.85	859.36	12600.00
		US287CL3	731+09.05	6,807,101.73	2,516,015.41	N 86° 23′ 33.78" E	750+22.20	6,807,222.10	2,517,924.78	9° 30′ 35.68" (RT)	769+26.57	6,807,025.36	2,519,827.79	S 84° 05′ 50.54" E	1913.16	3817.52	23000.00
℄ US287NB	US 287 NORTHBOUND	US287NB1	710+25.10	6,806,985.63	2,513,935.37	N 86° 23′ 33.78" E	712+40.59	6,806,999.19	2,514,150.43	2° 28′ 04.75" (LT)	714+56.01	6,807,022.00	2,514,364.72	N 83° 55′ 29.04" E	215.49	430.92	10004.00
		US287NB2	714+56.01	6,807,022.00	2,514,364.72	N 83° 55′ 29.04" E	717+28.20	6,807,050.80	2,514,635.37	2° 28′ 04.75" (RT)	720+00.30	6,807,067.93	2,514,907.02	N 86° 23′ 33.78" E	272.19	544.29	12636.00
		US287NB3	731+08.62	6,807,137.66	2,516,013.15	N 86° 23′ 33.78" E	750+24.77	6,807,258.22	2,517,925.50	9° 30′ 35.68" (RT)	769+32.12	6,807,061.17	2,519,831.49	S 84° 05′ 50.54" E	1916.15	3823.50	23036.00
℄ US287SB	US 287 SOUTHBOUND	US287SB1	705+12.59	6,806,853.58	2,513,430.17	N 86° 23′ 33.78" E	709+27.67	6,806,879.70	2,513,844.43	3° 46′ 25.09" (LT)	713+42.45	6,806,933.02	2,514,256.07	N 82° 37′ 08.70" E	415.08	829.87	12600.00
		US287SB2	713+42.45	6,806,933.02	2,514,256.07	N 82° 37′ 08.70" E	716+71.88	6,806,975.34	2,514,582.77	3° 46′ 25.09" (RT)	720+01.08	6,806,996.07	2,514,911.55	N 86° 23′ 33.78" E	329.43	658.62	10000.00
		US287SB3	731+09.40	6,807,065.80	2,516,017.68	N 86° 23′ 33.78" E	750+19.56	6,807,185.99	2,517,924.06	9° 30′ 35.68" (RT)	769+20.95	6,806,989.55	2,519,824.09	S 84° 05′ 50.54" E	1910.16	3811.55	22964.00
℄ FR287NB	FR 287 NORTHBOUND	FR287NB1	1731+08.32	6,807,219.50	2,516,007.99	N 86° 23′ 33.78" E	1750+31.29	6,807,340.49	2,517,927.15	9° 30′ 35.68" (RT)	1769+45.43	6,807,142.73	2,519,839.93	S 84° 05′ 50.54" E	1922.97	3837.11	23118.00
℄ FR287SB	FR 287 SOUTHBOUND	FR287SB1	1709+09.18	6,806,829.11	2,513,829.09	N 86° 29′ 05.98" E	1709+68.22	6,806,832.73	2,513,888.02	2° 14′ 45.28" (LT)	1710+27.24	6,806,838.65	2,513,946.76	N 84° 14′ 20.69" E	59.04	118.07	3012.00
		FR287SB2	1713+54.37	6,806,871.49	2,514,272.23	N 84° 14′ 20.69" E	1714+10.53	6,806,877.13	2,514,328.11	2° 09′ 13.09" (RT)	1714+66.68	6,806,880.66	2,514,384.16	N 86° 23′ 33.78" E	56.16	112.31	2988.00
		FR287SB3	1731+08.61	6,806,983.97	2,516,022.84	N 86° 23′ 33.78" E	1750+11.95	6,807,103.72	2,517,922.41	9° 30′ 35.68" (RT)	1769+06.55	6,806,907.98	2,519,815.66	S 84° 05′ 50.54" E	1903.34	3797.94	22882.00
℄ RNBENBOYCE	BOYCE NB RAMP	RNBENBOYCE1	10+00.00	6,807,156.89	2,515,936.79	N 86° 23′ 33.78" E	11+19.67	6,807,164.42	2,516,056.22	2° 24′ 19.77" (LT)	12+39.31	6,807,176.96	2,516,175.23	N 83° 59′ 14.02" E	119.67	239.31	5700.00
		RNBENBOYCE2	12+39.31	6,807,176.96	2,516,175.23	N 83° 59′ 14.02" E	15+32.62	6,807,207.68	2,516,466.93	4° 16′ 07.63" (RT)	18+25.66	6,807,216.61	2,516,760.11	N 88° 15′ 21.65" E	293.31	586.35	7870.00
		RNBENBOYCE3	18+25.66	6,807,216.61	2,516,760.11	N 88° 15′ 21.65" E	20+69.64	6,807,224.04	2,517,003.98	1° 12′ 40.83" (RT)	23+13.61	6,807,226.30	2,517,247.96	N 89° 28′ 02.49" E	243.99	487.96	23080.00
℄ RSBEXBOYCE	BOYCE SB RAMP	RSBEXBOYCE1	10+00.00	6,806,993.43	2,515,060.33	N 86° 23′ 33.78" E	12+01.87	6,807,006.13	2,515,261.81	4° 03′ 24.29" (RT)	14+03.58	6,807,004.54	2,515,463.68	S 89° 33′ 01.93" E	201.87	403.58	5700.00
		RSBEXBOYCE2	14+03.58	6,807,004.54	2,515,463.68	S 89° 33′ 01.93" E	16+82.31	6,807,002.36	2,515,742.40	4° 03′ 24.29" (LT)	19+60.80	6,807,019.89	2,516,020.57	N 86° 23′ 33.78" E	278.73	557.22	7870.00
		RSBEXBOYCE3	19+60.80	6,807,019.89	2,516,020.57	N 86° 23′ 33.78" E	21+34.29	6,807,030.81	2,516,193.72	0° 52′ 02.76" (RT)	23+07.77	6,807,039.10	2,516,367.01	N 87° 15′ 36.55" E	173.49	346.97	22918.00
		RSBEXBOYCE3	19+60.80	6,807,019.89	2,516,020.57	N 86° 23′ 33.78" E	21+34.29	6,807,030.81	2,516,193.72	0° 52′ 02.76" (RT)	23+07.77	6,807,039.10	2,516,367.01	N 87° 15′ 36.55" E	173.49	346.97	22918.00
		RSBEXBOYCE4	23+07.77	6,807,039.10	2,516,367.01	N 87° 15′ 36.55" E	24+73.13	6,807,047.01	2,516,532.18	3° 19′ 24.41" (RT)	26+38.40	6,807,045.32	2,516,697.53	S 89° 24′ 59.05" E	165.36	330.63	5700.00
		RSBEXBOYCE5	26+38.40	6,807,045.32	2,516,697.53	S 89° 24′ 59.05" E	27+48.49	6,807,044.20	2,516,807.61	1° 56′ 47.67" (LT)	28+58.55	6,807,046.82	2,516,917.67	N 88° 38′ 13.29" E	110.09	220.15	6480.00


BOYCE RD
SB
NB
(900) 1050 1450 1550
(1300) 1545 2035 2300
(450)(450) 550 500 750 700 800 750
(800) 995 1285 1450
(0) 0 0 0
(75) 80 115 125
(385) 385 550 605
(14075) 15875 21685 24425
(550) 655 890 950
(25) 25 25 25
(500) 550 750 850
(1260) 1460 1950 2180
(1465) 1675 2265 2535
(13525) 15220 20795 23475
(205) 215 315 355
(13320) 15005 20480 23120
US 287 NB
(14475) 16425 22375 25325
287
(13950) 15850 21600 24450
(835) 885 1250 1355
(525) 575 775 875
(13450) 15295 20815 23600
US 287 SB
(0) 0 0 0
(525) 575 775 875
(25) 25 35 40
(500) 550 750 850
(810) 860 1215 1315
(835) 885 1250 1355
(500) 555 785 850
(1335) 1440 2035 2205
(835) 885 1250 1355
(0) 0 0 0
(25) 25 25 25
(25)(25) 25 25 25 35 25 40
(50) 50 50 55
(50) 50 60 65
SB
NB
BOYCE RD

The 2022 are existing Average Daily Traffic (ADT) volumes, and 2028, 2048, 2058 are projected ADT volumes for all turning movements at specified points along Boyce Rd to Cooke Rd in Ellis County.

Traffic Projections based on 24-HR counts from GRAM Traffic NTX Inc. performed on 10/08/2022.

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

TRANSMISSION TOWER
141185
540′ DECELERATION LANE
150′ TAPER
℄ FR287NB
BEGIN CONSTRUCTION ℄ US287NB STA 704+00.00 MATCH EXISTING PAVEMENT
BEGIN PROJECT CSJ: 0172-08-103 ℄ US288CL STA 694+37.00 MATCH EXISTING PAVEMENT
℄ US287NB
℄ US287CL
EXISTING RIGHT-OF-WAY
BEGIN CONSTRUCTION ℄ FR287NB STA 1709+50.00 MATCH EXISTING PAVEMENT
PROPOSED RIGHT-OF-WAY
G
141171
141172
R=30′
R=50′
R=25′
R=30′
R=10′
1690+00
1695+00
1700+00
1705+00
1710+00
1715+00
1720+00
1725+00
1730+00
1735+00
690+00
695+00
700+00
705+00
710+00
715+00
720+00
725+00
730+00
735+00
10+00
15+00
287
279952
℄ FR287NB
℄ US287CL
US287NB1
℄ US287NB
US287NB2
PROPOSED CULVERT 1 5-10′X7′ MBC US EL = 486.39′ ℄ FR287NB STA 1721+14.69
BEGIN BRIDGE CULVERT ℄ US287CL STA 721+97.59
END BRIDGE CULVERT ℄ US287CL STA 722+78.41
PROPOSED RIGHT-OF-WAY
EXISTING CULVERT TO BE REMOVED 5-8′X4′ MBC
300′ TAPER (MAINLANE)
PROPOSED CULVERT 2A 1-8′X4′ RCB US EL = 485.09′ ℄ FR287NB STA 1730+96.20
BEGIN TAPER ℄ US287NB STA 729+41.34
END TAPER ℄ US287NB STA 726+41.13
EXISTING CULVERT TO BE REMOVED 1-8′X4′ RCB
La = 400′
RNBENBOYCE1
141173
R=30′ (TYP.)
BEGIN BRIDGE CULVERT ℄ US287NB STA 732+02.29
END BRIDGE CULVERT ℄ US287NB STA 732+02.29
PROPOSED CULVERT 2B 3-8′X4′ MBC US EL = 485.09′ ℄ FR287NB STA 1734+08.08
US287NB3
℄ RNBENBOYCE
RNBENBOYCE3
FR287NB1
RNBENBOYCE2
US287CL3
96.24′
638.19′
517.82′
507.53′
281.00′
713.00′
141158
EXISTING RIGHT-OF-WAY
141175
Boyce Rd EXIT ½ MILE
℄ US287SB
℄ FR287SB
BEGIN CONSTRUCTION ℄ US287SB STA 703+50.00 MATCH EXISTING PAVEMENT
BEGIN CONSTRUCTION ℄ FR287SB STA 1710+00.00 MATCH EXISTING PAVEMENT
TRANSMISSION TOWER
US287SB1
138489
187311
R=40′
R=5′
R=30′
FR287SB1
R=50′
R=300′
R=316′
FR287SB2
℄ US287SB
℄ FR287SB
US287SB2
Boyce Rd
℄ US287SB STA 721+47.00
RSBEXBOYCE1
87.34′
130.00′
87.28′
RWSBFR1725
PROPOSED CULVERT 1 5-10′X7′ MBC DS EL = 484.50′ ℄ FR287SB STA 1723+65.01
PROPOSED ROW
RSBEXBOYCE2
R=30′ (TYP)
EXIT
℄ US287SB STA 729+41.00
BEGIN BRIDGE CULVERT ℄ US287SB STA 730+97.81
END BRIDGE CULVERT ℄ US287SB STA 731+41.99
PROPOSED ROW
PROPOSED CULVERT 2A 1-8′X4′ RCB DS EL = 482.85′ ℄ FR287SB STA 1731+04.94
81.12′
55.75′
81.09′
RSBEXBOYCE3
℄ RSBEXBOYCE
R=20′
187301
EXISTING CULVERT TO BE REMOVED 3-8′X4′ MBC
PROPOSED CULVERT 2B 3-8′X4′ MBC DS EL = 482.85′ ℄ FR287SB STA 1731+20.85
Cooke Rd EXIT ½ MILE
℄ US287SB STA 736+30.00
RSBEXBOYCE4
FR287SB3
RWSBFR1737
US287SB3

MATCH LINE STA 740+00 CSJ: 0172-08-103

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

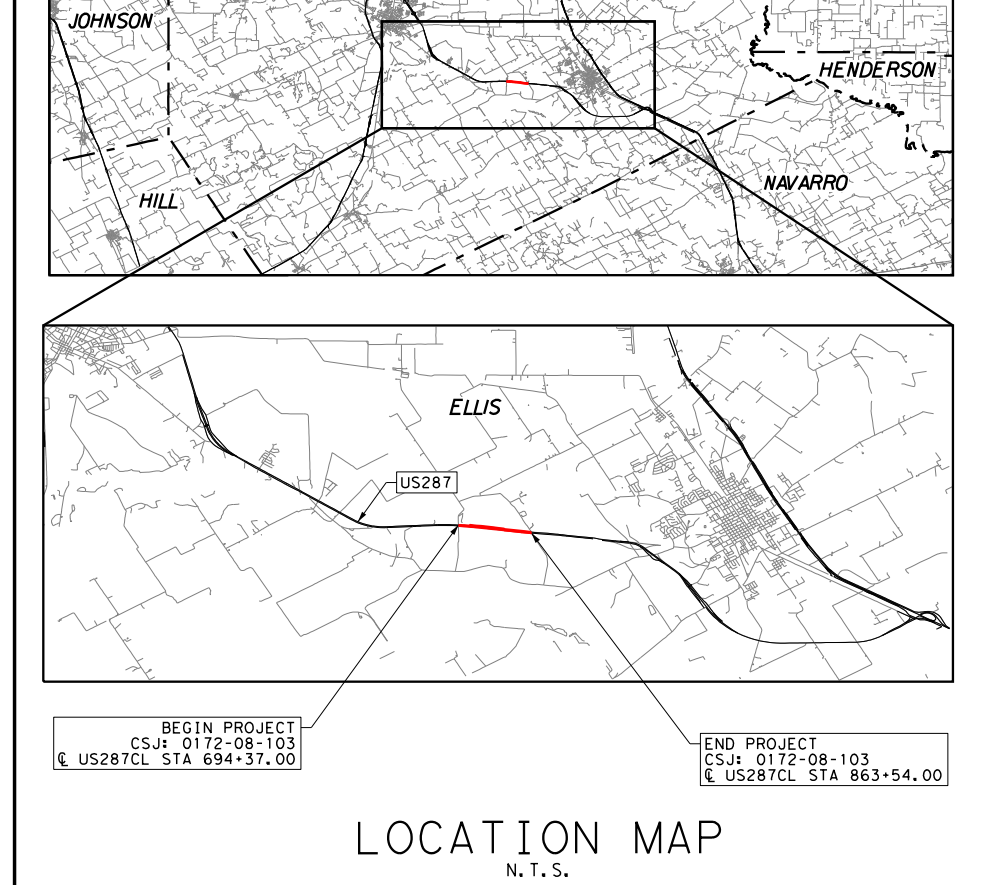
ROADWAY TYPE / DESIGN SPEED
MAINLANES 65 MPH
RAMPS 45 MPH
FRONTAGE ROADS 45 MPH
CROSS STREETS (MINIMUM) 30 MPH
U-TURNS 15 MPH

PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES:
1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
4. CURBS ON FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
5. ALL CROSS STREET RADII ARE 50′ AND DRIVEWAY RADII ARE 20′ (UNLESS NOTED OTHERWISE).
6. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE. CURVE DATA IS NOT INCLUDED
7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
9. SURVEY AND SUE PROVIDED BY THE FEASIBILITY STUDY (10/22/2020)
10. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INDURANCE RATE MAPS 48139C0135F, 48139C0155F, AND 48139C0175F. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
12. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
13. 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.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.

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
KAUFMAN
HENDERSON
NAVARRO
HILL
ELLIS
US287
BEGIN PROJECT CSJ: 0172-08-103 ℄ US287CL STA 694+37.00
END PROJECT CSJ: 0172-08-103 ℄ US287CL STA 863+54.00

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:

JOHN NGUYEN 86489 10/20/23
NAME P.E. NO. DATE

EQUATIONS: NONE
RR CROSSINGS: NONE

OCTOBER 20, 2023
ROLL 1 OF 8

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Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	45 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH
U-TURNS	15 MPH

PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES:
1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
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7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
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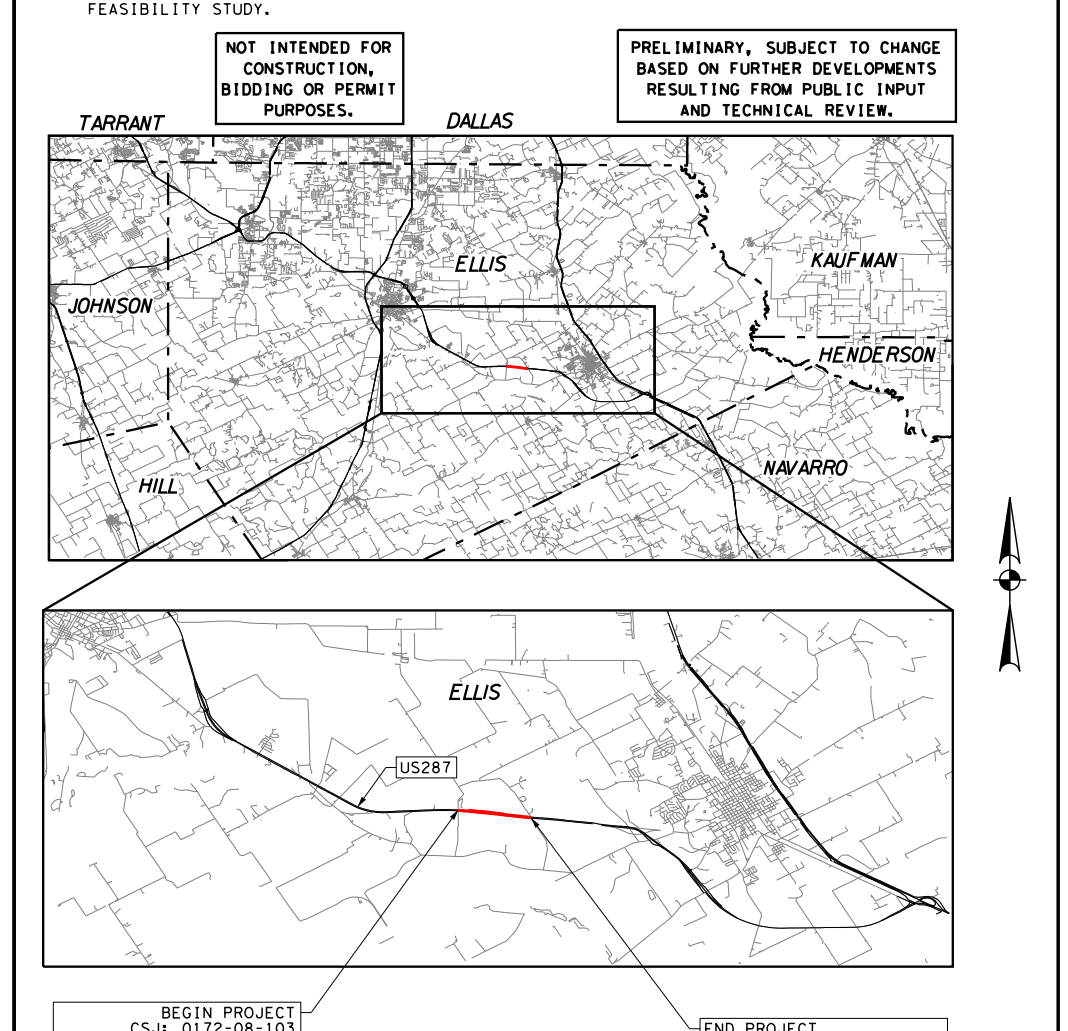
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.

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
KAUFMAN
HENDERSON
HILL
NAVARRO
ELLIS
US287
BEGIN PROJECT CSJ: 0172-08-103 ℄ US287CL STA 694+37.00
END PROJECT CSJ: 0172-08-103 ℄ US287CL STA 863+54.00

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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JOHN NGUYEN — 86489 — 10/20/23
NAME — P.E. NO. — DATE

EQUATIONS: NONE
RR CROSSINGS: NONE

OCTOBER 20, 2023
ROLL 2 OF 8

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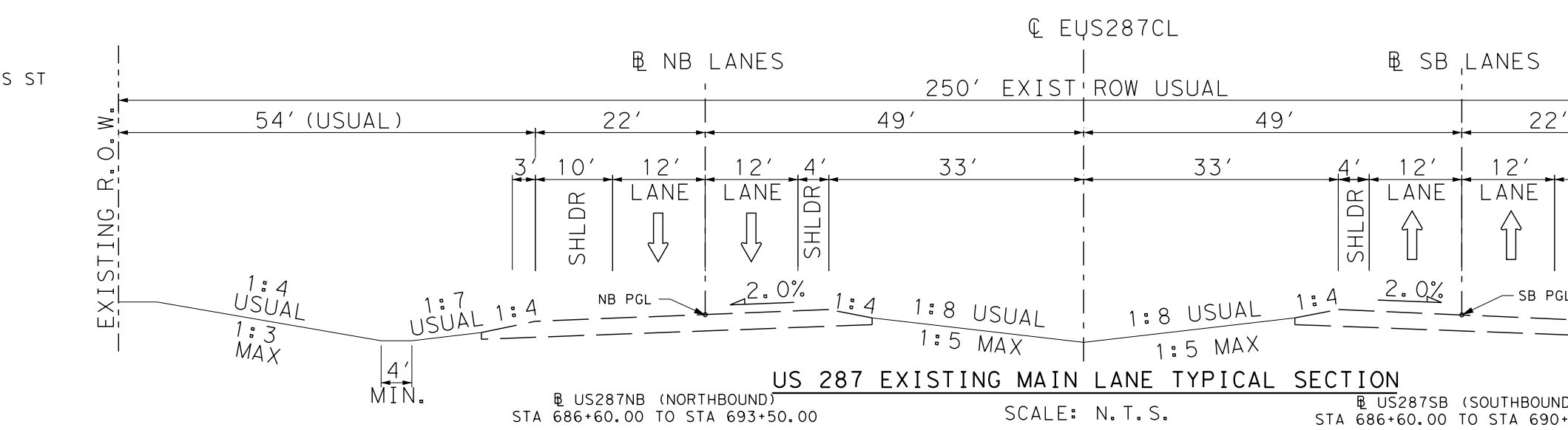
PLAN LEGEND:
- 🟨 PROPOSED MAIN LANES
- 🟩 PROPOSED FRONTAGE RD/ CROSS ST
- 🟧 PROPOSED BRIDGE
- 🟪 PROPOSED SHARED-USE-PATH
- 🟥 PROPOSED SIDEWALK
- 🟦 PROPOSED RAMP
- 🟦 FEMA FLOODPLAIN
- ⬛ PROPOSED INTERIM PAVEMENT
- ▨ PAVEMENT REMOVAL
- ▨ BUILDING DISPLACEMENT
- ATTENUATOR
- PROPOSED SSTR
- PROPOSED SSCB
- MBGF END TREATMENT
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED RETAINING WALL
- PROPOSED DRAINAGE CULVERT
- EXISTING DRAINAGE CULVERT
- XXXXXX PARCEL ID
- FLOW DIRECTION
- DITCH FLOW LINE

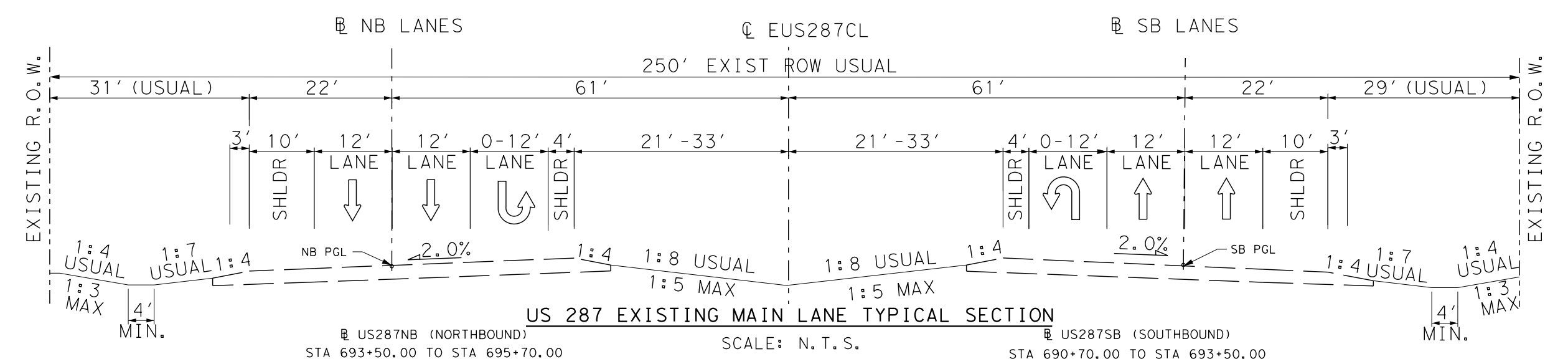


℄ EUS287CL
℄ NB LANES
℄ SB LANES
250' EXIST ROW USUAL
54' (USUAL)
22'
49'
49'
22'
54' (USUAL)
3'
10'
12'
12'
4'
33'
33'
4'
12'
12'
10'
3'
SHLDR
LANE
LANE
SHLDR
SHLDR
LANE
LANE
SHLDR
1:4 USUAL
1:3 MAX
1:7 USUAL
1:4
NB PGL
2.0%
1:4
1:8 USUAL
1:5 MAX
1:8 USUAL
1:5 MAX
1:4
2.0%
SB PGL
1:4
1:7 USUAL
1:4 USUAL
1:3 MAX
4' MIN.
4' MIN.
EXISTING R.O.W.
EXISTING R.O.W.

US 287 EXISTING MAIN LANE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND)
STA 686+60.00 TO STA 693+50.00
STA 695+70.00 TO STA 710+50.00
STA 712+70.00 TO STA 736+00.00
STA 738+20.00 TO STA 757+00.00
STA 759+50.00 TO STA 773+81.00
STA 777+00.00 TO STA 803+05.00
STA 805+70.00 TO STA 830+40.00
STA 835+50.00 TO STA 864+60.00

℄ US287SB (SOUTHBOUND)
STA 686+60.00 TO STA 690+70.00
STA 693+50.00 TO STA 707+80.00
STA 710+60.00 TO STA 733+00.00
STA 735+50.00 TO STA 754+00.00
STA 756+90.00 TO STA 770+90.00
STA 773+70.00 TO STA 800+10.00
STA 802+95.00 TO STA 828+00.00
STA 830+70.00 TO STA 863+00.00

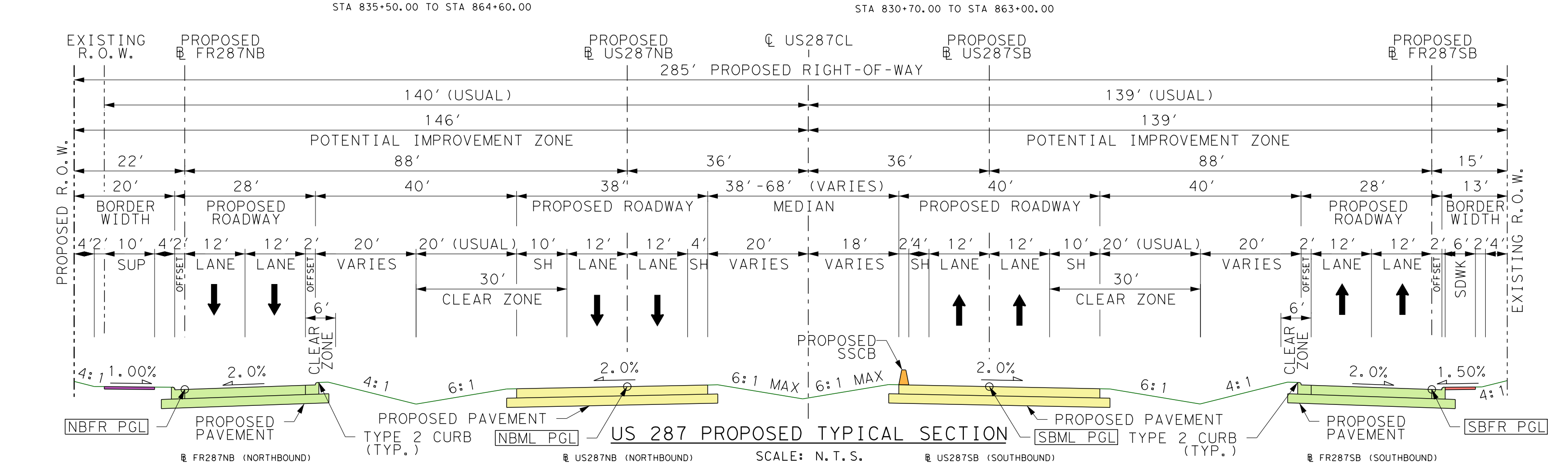


℄ NB LANES
℄ EUS287CL
℄ SB LANES
250' EXIST ROW USUAL
31' (USUAL)
22'
61'
61'
22'
29' (USUAL)
3'
10'
12'
12'
0-12'
4'
21'-33'
21'-33'
4'
0-12'
12'
12'
10'
3'
SHLDR
LANE
LANE
LANE
SHLDR
SHLDR
LANE
LANE
LANE
SHLDR
1:4 USUAL
1:7 USUAL
1:3 MAX
1:4
NB PGL
2.0%
1:4
1:8 USUAL
1:5 MAX
1:8 USUAL
1:5 MAX
1:4
2.0%
SB PGL
1:4
1:7 USUAL
1:4 USUAL
1:3 MAX
4' MIN.
4' MIN.
EXISTING R.O.W.
EXISTING R.O.W.

US 287 EXISTING MAIN LANE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND)
STA 693+50.00 TO STA 695+70.00
STA 710+50.00 TO STA 712+70.00
STA 736+00.00 TO STA 738+20.00
STA 757+00.00 TO STA 759+50.00
STA 773+81.00 TO STA 777+00.00
STA 803+05.00 TO STA 805+70.00

℄ US287SB (SOUTHBOUND)
STA 690+70.00 TO STA 693+50.00
STA 707+80.00 TO STA 710+60.00
STA 733+00.00 TO STA 735+50.00
STA 754+00.00 TO STA 756+90.00
STA 770+90.00 TO STA 773+70.00
STA 800+10.00 TO STA 802+95.00



EXISTING R.O.W.
PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED ℄ FR287SB
285' PROPOSED RIGHT-OF-WAY
140' (USUAL)
139' (USUAL)
146'
139'
POTENTIAL IMPROVEMENT ZONE
POTENTIAL IMPROVEMENT ZONE
22'
88'
36'
36'
88'
15'
20'
28'
40'
38"
38'-68' (VARIES)
40'
40'
28'
13'
BORDER WIDTH
PROPOSED ROADWAY
PROPOSED ROADWAY
MEDIAN
PROPOSED ROADWAY
PROPOSED ROADWAY
BORDER WIDTH
4'2' 10' 4'2'
SUP
12' 12' 2'
LANE LANE
20'
VARIES
20' (USUAL)
30'
CLEAR ZONE
10' 12' 12' 4'
SH LANE LANE SH
20' VARIES
18' VARIES
2'4' 12' 12' 10'
SH LANE LANE SH
20' (USUAL)
30'
CLEAR ZONE
20' VARIES
2' 12' 12' 2'
LANE LANE
6'2'4"
SDWK
OFFSET
CLEAR ZONE
6'
PROPOSED SSCB
4:1
1.00%
2.0%
4:1
6:1
2.0%
6:1 MAX
6:1 MAX
2.0%
6:1
4:1
2.0%
1.50%
4:1
NBFR PGL
PROPOSED PAVEMENT
PROPOSED PAVEMENT
TYPE 2 CURB (TYP.)
NBML PGL
SBML PGL
PROPOSED PAVEMENT
TYPE 2 CURB (TYP.)
PROPOSED PAVEMENT
SBFR PGL
PROPOSED R.O.W.
EXISTING R.O.W.

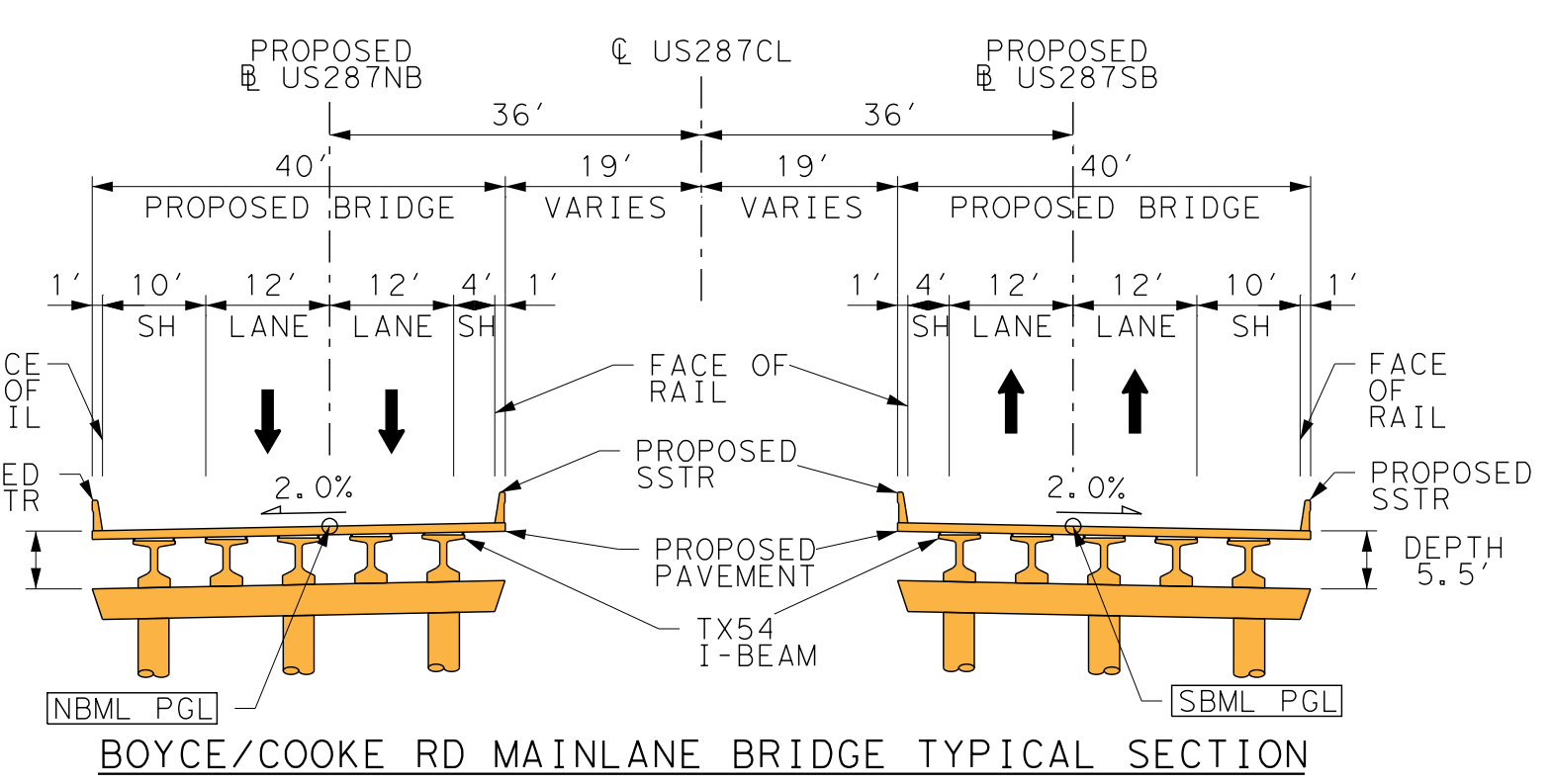
US 287 PROPOSED TYPICAL SECTION
SCALE: N.T.S.

℄ FR287NB (NORTHBOUND)
STA 1727+92.38 TO STA 1758+29.20
STA 1765+09.77 TO STA 1831+97.47
STA 1838+79.23 TO STA 1845+60.00

℄ US287NB (NORTHBOUND)
STA 720+00.30 TO STA 742+51.23
STA 765+87.60 TO STA 824+47.39
STA 836+58.84 TO STA 855+55.00

℄ US287SB (SOUTHBOUND)
STA 720+01.08 TO STA 745+86.06
STA 764+82.83 TO STA 822+54.41
STA 839+03.05 TO STA 855+44.00

℄ FR287SB (SOUTHBOUND)
STA 1720+00.29 TO STA 1740+04.91
STA 1754+95.88 TO STA 1821+81.50
STA 1828+61.78 TO STA 1841+60.00

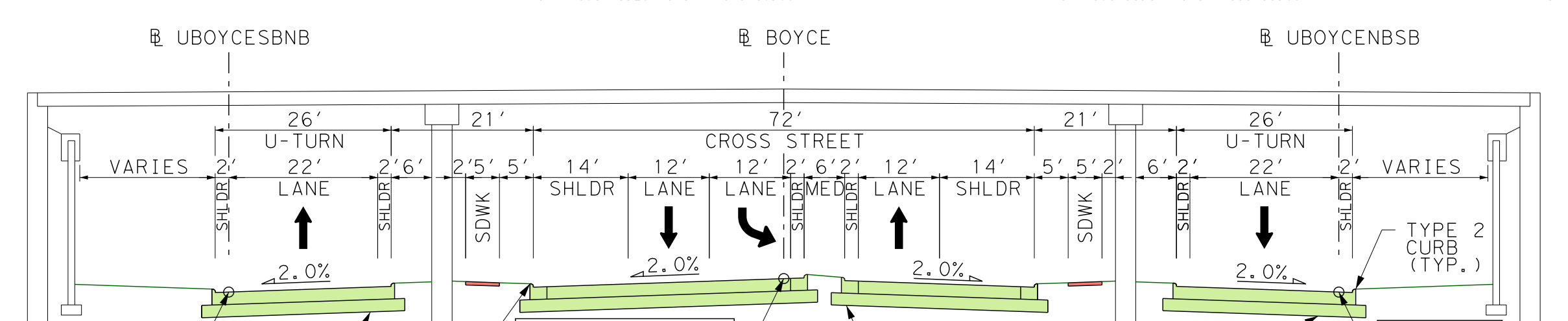


PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
36'
36'
40'
19'
19'
40'
PROPOSED BRIDGE
VARIES
VARIES
PROPOSED BRIDGE
1' 10' 12' 12' 4' 1'
SH LANE LANE SH
1' 4' 12' 12' 10' 1'
SH LANE LANE SH
FACE OF RAIL
FACE OF RAIL
FACE OF RAIL
FACE OF RAIL
PROPOSED SSTR
PROPOSED SSTR
2.0%
2.0%
PROPOSED SSTR
PROPOSED PAVEMENT
PROPOSED SSTR
DEPTH 5.5'
DEPTH 5.5'
TX54 I-BEAM
NBML PGL
SBML PGL

BOYCE/COOKE RD MAINLANE BRIDGE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND)
STA 755+37.00 TO STA 757+87.00
STA 828+57.00 TO STA 831+97.00

℄ US287SB (SOUTHBOUND)
STA 755+37.00 TO STA 757+87.00
STA 828+88.00 TO STA 832+28.00

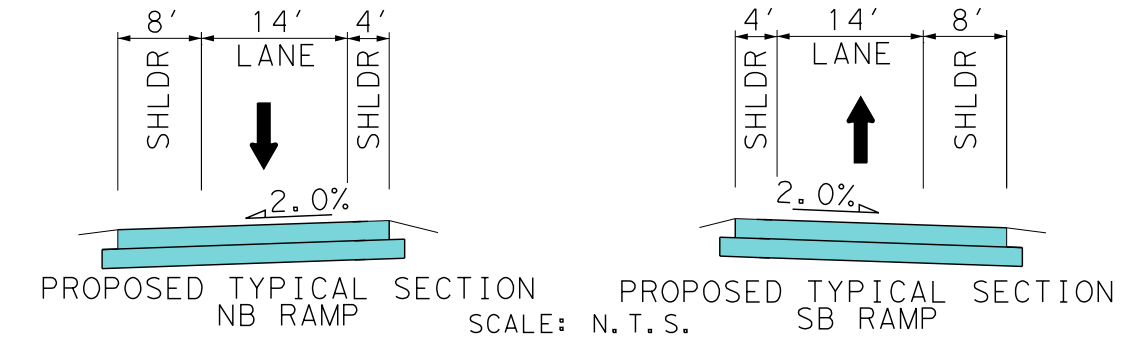


℄ UBOYCESBNB
℄ BOYCE
℄ UBOYCENBSB
26'
21'
72'
21'
26'
U-TURN
CROSS STREET
U-TURN
VARIES
2'
22'
LANE
2'6'
2'5'
5'
14'
SHLDR
12'
LANE
12'
LANE
2'6'2'
MED
12'
LANE
14'
SHLDR
5'
5'2'
6'2'
22'
LANE
2'
VARIES
SHLDR
SHLDR
SDWK
SDWK
SHLDR
SHLDR
2.0%
2.0%
2.0%
2.0%
TYPE 2 CURB (TYP.)
TYPE 2 CURB (TYP.)
UTURN PGL
PROPOSED PAVEMENT
CROSS STREET PGL
PROPOSED PAVEMENT
PROPOSED PAVEMENT
UTURN PGL

BOYCE ROAD TYPICAL SECTION
SCALE: N.T.S.
STA 15+35.20 TO STA 17+19.85

NOTE: CROSS STREETS ARE BUILT FOR FOUR-LANE ULTIMATE, BUT STRIPPED FOR TWO-LANE WITH TURN LANES AS SHOWN.

PARCEL ID	OWNER
141179	GETZENDANER TRUST
141177	MEYER MOTORSPORTS INC
187301	GETZENDANER TRUST
187290	MEYER MOTORSPORTS INC
236735	MP HOLDINGS LLC
190374	MEYER MOTORSPORTS INC
190361	FUENTES JULIA E
199108	WALTHER LARRY &
190412	VERBINDEN II LLC ENNIS 183 ACRES SERIES
286820	BENOIT PREMIUM THREADING LLC
190373	KIRVEN FARMS



8'
14'
4'
SHLDR
LANE
SHLDR
2.0%
4'
14'
8'
SHLDR
LANE
SHLDR
2.0%

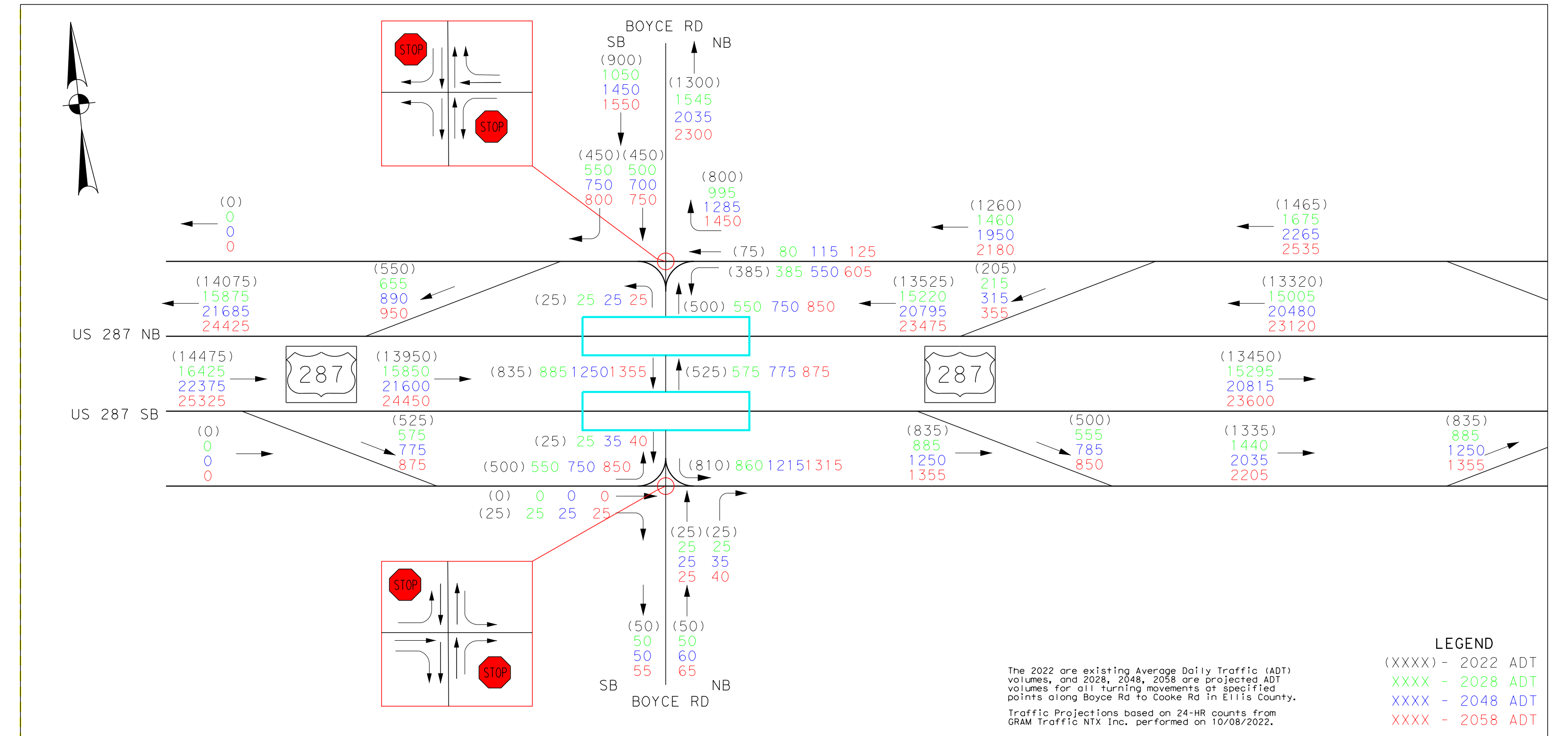
PROPOSED TYPICAL SECTION NB RAMP
PROPOSED TYPICAL SECTION SB RAMP
SCALE: N.T.S.

US287 SUPERELEVATION

CHAIN	DESIGN SPEED (MPH)	BEGIN TRANSITION STATION	BEGIN TRANSITION e (%)	END TRANSITION STATION	END TRANSITION e (%)
℄FR287NB	45	1753+70.00	2.00	1755+00.00	-0.84
		1758+40.00	-0.84	1759+70.00	2.00

RETAINING WALL SUMMARY

WALL NAME	BEGIN WALL	OFFSET	END WALL	OFFSET	WALL LENGTH
RWNBML750	℄US287NB STA 743+16.24	23.00' LT	℄US287NB STA 755+41.24	23.00' LT	1226.18
RWNBML763	℄US287NB STA 765+87.92	42.00' LT	℄US287NB STA 767+97.74	48.97' LT	808.46
RWSBML750	℄US287SB STA 745+86.06	23.00' RT	℄US287SB STA 755+13.72	23.00' RT	926.77
RWSBML763	℄US287SB STA 758+14.11	24.33' RT	℄US287SB STA 764+82.83	52.34' RT	668.30
RWSBFR1782	℄FR287SB STA 1780+40.00	11.00' RT	℄FR287SB STA 1783+80.00	11.00' RT	340.00



BOYCE RD
SB
NB
(900)
1050
1450
1550
(1300)
1545
2035
2300
(450)(450)
550 500
750 700
800 750
(800)
995
1285
1450
(75) 80 115 125
(385) 385 550 605
(0)
0
0
0
(1260)
1460
1950
2180
(1465)
1675
2265
2535
(14075)
15875
21685
24425
(550)
655
890
950
(25) 25 25 25
(500) 550 750 850
(13525)
15220
20795
23475
(205)
215
315
355
(13320)
15005
20480
23120
US 287 NB
(14475)
16425
22375
25325
287
(13950)
15850
21600
24450
(835) 885 1250 1355
(525) 575 775 875
287
(13450)
15295
20815
23600
US 287 SB
(0)
0
0
0
(525)
575
775
875
(25) 25 35 40
(500) 550 750 850
(810) 860 1215 1315
(835)
885
1250
1355
(500)
555
785
850
(1335)
1440
2035
2205
(835)
885
1250
1355
(0) 0 0 0
(25) 25 25 25
(25)(25)
25 25
25 35
25 40
(50)(50)
50 50
50 60
55 65
SB
NB
BOYCE RD
STOP
STOP
STOP
STOP

The 2022 are existing Average Daily Traffic (ADT) volumes, and 2028, 2048, 2058 are projected ADT volumes for all turning movements at specified points along Boyce Rd to Cooke Rd in Ellis County.

Traffic Projections based on 24-HR counts from GRAM Traffic NTX Inc. performed on 10/08/2022.

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

MATCH LINE STA 740+00 CSJ: 0172-08-103

BOYCE RD
END CONSTRUCTION ℄ BOYCE STA 21+70.00 MATCH EXISTING PAVEMENT
℄ US287NB STA 756+62.89= ℄ BOYCE STA 16+63.66
RWNBML750
PROPOSED RIGHT-OF-WAY
141177
END SUPERELEVATION TRANSITION (-)0.84% ℄ FR287NB STA 1755+00.00
US287CL3
FR287NB1
END APPX R.O.W. BEGIN SURVEYED R.O.W.
BEGIN BRIDGE ℄ US287NB STA 755+07.00
US287NB3
RNBENBOYCE5
BEGIN SUPERELEVATION TRANSITION (+)2.0% ℄ FR287NB STA 1753+70.00
℄ RNBENBOYCE
RNBENBOYCE4
PROPOSED RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY
℄ US287NB
141179
RNBENBOYCE3
℄ FR287NB
℄ US287CL
150' STORAGE
140' DECELERATION
R=3'
PROPOSED RIGHT-OF-WAY
525' DECELERATION LANE (U-TURN)
160' TAPER
300' TAPER (MAINLANE)
La = 400'
R=70' (TYP.)
℄ UBOYCENBSB
BEGIN SUPERELEVATION TRANSITION (-)0.84% ℄ FR287NB STA 1758+40.00
END BRIDGE ℄ US287NB STA 758+12.00
END TAPER ℄ US287NB STA 758+75.65
PROPOSED MBGF
R=30' (TYP)
END SUPERELEVATION TRANSITION (+)2.0% ℄ FR287NB STA 1759+70.00
TEXAS MOTORPLEX
BEGIN TAPER ℄ US287NB STA 761+75.62
RNBENCOOKE1
187290
RWNBML763
RNBENCOOKE2
R=30' (TYP)
R=30' (TYP)
℄ RNBENCOOKE
RNBENCOOKE3
PROPOSED RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY
190374
PROPOSED CULVERT 4 3-6'X5' MBC US EL = 487.91' ℄ FR287NB STA 1779+51.32
RNBENCOOKE4
60.00'
598.00'
355.00'
END BRIDGE CULVERT ℄ US287CL STA 780+68.94
EXISTING CULVERT TO BE REMOVED 3-6'X5' MBC
R=30' (TYP)
R=30' (TYP)
R=30' (TYP)
R=30' (TYP)
PROPOSED RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY
℄ FR287NB
℄ US287CL
190412
℄ US287NB
℄ RNBEXBOYCE
RNBEXBOYCE1
RNBEXBOYCE2
287
287
287
287
1745+00
1750+00
1755+00
1760+00
1765+00
1770+00
1775+00
1780+00
1785+00
1790+00
1795+00
1800+00
1805+00
745+00
750+00
755+00
760+00
765+00
770+00
775+00
780+00
785+00
790+00
795+00
800+00
805+00
810+00
10+00
15+00
20+00
25+00
30+00
R=5'
PROPOSED MBGF
BEGIN BRIDGE ℄ US287SB STA 755+12.00
FR287SB3
US287SB3
℄ US287SB
℄ FR287SB
EXISTING RIGHT-OF-WAY
RWSBML750
℄ UBOYCESBNB
℄ US287SB STA 756+61.75 = ℄ BOYCE STA 15+91.40
R=3'
END APPX R.O.W. BEGIN SURVEYED R.O.W.
PROPOSED ROW
R=70'
R=96'
R=3'
R=10' (TYP.)
313' TAPER
Cooke Rd
RSBEXCOOKE1
℄ US287SB STA 758+23.50
C&M TRAILERS
END BRIDGE ℄ US287SB STA 758+12.00
EXISTING CULVERT TO BE REMOVED 2-6'X3' MBC
BEGIN CONSTRUCTION ℄ BOYCE STA 11+40.00 MATCH EXISTING PAVEMENT
℄ BOYCE
BOYCE RD
PROPOSED RIGHT-OF-WAY
EX. MONUMENT
RSBEXCOOKE2
RWSBML763
EXIT
℄ US287SB STA 765+78.50
RSBEXCOOKE3
℄ RSBEXCOOKE
R=30' (TYP)
R=30' (TYP)
RSBEXCOOKE4
EXISTING RIGHT-OF-WAY
236735
RSBEXCOOKE5
BEGIN BRIDGE CULVERT ℄ US287CL STA 780+39.05
190361
PROPOSED ROW
PROPOSED CULVERT 4 3-6'X5' MBC DS EL = 486.05' ℄ FR287SB STA 1781+57.21
76.23'
100.00'
76.25'
RWSBFR1782
199108
190373
℄ FR287SB
℄ US287SB
EXISTING RIGHT-OF-WAY
RSBENBOYCE1
℄ RSBENBOYCE
RSBENBOYCE2
EXISTING R.O.W.
PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED ℄ FR287SB
275' PROPOSED RIGHT-OF-WAY
134' (USUAL)
135' (USUAL)
140'
135'
POTENTIAL IMPROVEMENT ZONE
POTENTIAL IMPROVEMENT ZONE
22'
82'
36'
36'
82'
17'
20'
40'
22'
38"
38'-68' (VARIES)
40'
22'
40'
15'
BORDER WIDTH
PROPOSED ROADWAY
PROPOSED ROADWAY
MEDIAN
PROPOSED ROADWAY
PROPOSED ROADWAY
BORDER WIDTH
4'2' 10' 4'2'
SUP
12' 12' 12' 2'
LANE LANE LANE
10' 12' 12' 4'
SH LANE LANE SH
20' VARIES
18' VARIES
2'4' 12' 12' 10'
SH LANE LANE SH
2' 12' 12' 12' 2'
LANE LANE LANE
6'2'6'
SDWK
OFFSET
CLEAR ZONE
6'
PROPOSED SSTR
PROPOSED SSCB
PROPOSED SSTR
RETAINING WALL
RETAINING WALL
4:1
1.00%
2.0%
2.0%
6:1 MAX
6:1 MAX
2.0%
2.0%
1.50%
4:1
NBFR PGL
PROPOSED PAVEMENT
TYPE 2 CURB (TYP.)
NBML PGL
PROPOSED PAVEMENT
PROPOSED PAVEMENT
SBML PGL
TYPE 2 CURB (TYP.)
PROPOSED PAVEMENT
SBFR PGL
PROPOSED R.O.W.
EXISTING R.O.W.

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

℄ FR287NB (NORTHBOUND)
STA 1758+29.20 TO STA 1765+09.77
STA 1831+97.47 TO STA 1838+79.23

℄ US287NB (NORTHBOUND)
STA 742+51.23 TO STA 755+37.00
STA 757+87.00 TO STA 765+87.60
STA 824+47.39 TO STA 828+57.00
STA 831+97.00 TO STA 836+58.84

℄ US287SB (SOUTHBOUND)
STA 745+86.06 TO STA 755+37.00
STA 757+87.00 TO STA 764+82.83
STA 822+54.41 TO STA 828+88.00
STA 832+28.00 TO STA 839+03.05

℄ FR287SB (SOUTHBOUND)
STA 1740+04.91 TO STA 1754+95.88
STA 1821+81.50 TO STA 1828+61.78

US 287 HORIZONTAL CURVE DATA

CHAIN	DESCRIPTION	CURVE	P.C. STATION	P.C. NORTHING	P.C. EASTING	P.C. BEARING	P.I. STATION	P.I. NORTHING	P.I. EASTING	P.I. DELTA	P.T. STATION	P.T. NORTHING	P.T. EASTING	P.T. BEARING	TANGENT (FT)	LENGTH (FT)	RADIUS (FT)
℄ US287	US 287 CENTERLINE	US287CL3	731+09.05	6,807,101.73	2,516,015.41	N 86° 23' 33.78" E	750+22.20	6,807,222.10	2,517,924.78	9° 30' 35.68" (RT)	769+26.57	6,807,025.36	2,519,827.79	S 84° 05' 50.54" E	1913.16	3817.52	23000.00
℄ US287NB	US 287 NORTHBOUND	US287NB3	731+08.62	6,807,137.66	2,516,013.15	N 86° 23' 33.78" E	750+24.77	6,807,258.22	2,517,925.50	9° 30' 35.68" (RT)	769+32.12	6,807,061.17	2,519,831.49	S 84° 05' 50.54" E	1916.15	3823.50	23036.00
℄ US287SB	US 287 SOUTHBOUND	US287SB3	731+09.40	6,807,065.80	2,516,017.68	N 86° 23' 33.78" E	750+19.56	6,807,185.99	2,517,924.06	9° 30' 35.68" (RT)	769+20.95	6,806,989.55	2,519,824.09	S 84° 05' 50.54" E	1910.16	3811.55	22964.00
℄ FR287NB	FR 287 NORTHBOUND	FR287NB1	1731+08.32	6,807,219.50	2,516,007.99	N 86° 23' 33.78" E	1750+31.29	6,807,340.49	2,517,927.15	9° 30' 35.68" (RT)	1769+45.43	6,807,142.73	2,519,839.93	S 84° 05' 50.54" E	1922.97	3837.11	23118.00
℄ FR287SB	FR 287 SOUTHBOUND	FR287SB3	1731+08.61	6,806,983.97	2,516,022.84	N 86° 23' 33.78" E	1750+11.95	6,807,103.72	2,517,922.41	9° 30' 35.68" (RT)	1769+06.55	6,806,907.98	2,519,815.66	S 84° 05' 50.54" E	1903.34	3797.94	22882.00
℄ RNBENBOYCE	BOYCE NB RAMP	RNBENBOYCE3	18+25.66	6,807,216.61	2,516,760.11	N 88° 15' 21.65" E	20+69.64	6,807,224.04	2,517,003.98	1° 12' 40.83" (RT)	23+13.61	6,807,226.30	2,517,247.96	N 89° 28' 02.49" E	243.99	487.96	23080.00
		RNBENBOYCE4	23+13.61	6,807,226.30	2,517,247.96	N 89° 28' 02.49" E	25+14.24	6,807,228.17	2,517,448.58	4° 01' 54.26" (LT)	27+14.70	6,807,244.13	2,517,648.57	N 85° 26' 08.23" E	200.63	401.09	5700.00
		RNBENBOYCE5	27+14.70	6,807,244.13	2,517,648.57	N 85° 26' 08.23" E	28+10.80	6,807,251.78	2,517,744.36	5° 30' 05.64" (RT)	29+06.75	6,807,250.21	2,517,840.44	S 89° 03' 46.14" E	96.09	192.04	2000.00
℄ RNBENCOOKE	COOKE NB RAMP	RNBENCOOKE1	10+00.00	6,807,145.03	2,519,156.02	S 85° 47' 18.41" E	11+32.85	6,807,135.28	2,519,288.51	1° 56' 03.00" (LT)	12+65.67	6,807,130.00	2,519,421.26	S 87° 43' 21.41" E	132.85	265.67	7870.00
		RNBENCOOKE2	12+65.67	6,807,130.00	2,519,421.26	S 87° 43' 21.41" E	15+00.50	6,807,120.67	2,519,655.90	3° 25' 05.71" (RT)	17+35.19	6,807,097.36	2,519,889.57	S 84° 18' 15.70" E	234.83	469.52	7870.00
		RNBENCOOKE3	21+24.81	6,807,058.69	2,520,277.27	S 84° 18' 15.70" E	23+03.16	6,807,040.99	2,520,454.74	3° 35' 03.54" (LT)	24+81.39	6,807,034.42	2,520,632.96	S 87° 53' 19.24" E	178.35	356.58	5700.00
		RNBENCOOKE4	24+81.39	6,807,034.42	2,520,632.96	S 87° 53' 19.24" E	26+95.86	6,807,026.52	2,520,847.29	3° 47' 28.70" (RT)	29+10.18	6,807,004.46	2,521,060.62	S 84° 05' 50.54" E	214.47	428.79	6480.00
℄ RSBEXCOOKE	COOKE SB RAMP	RSBEXCOOKE1	10+00.00	6,807,073.56	2,518,549.23	S 87° 17' 10.26" E	12+61.82	6,807,061.16	2,518,810.75	5° 15' 35.45" (RT)	15+23.27	6,807,024.84	2,519,070.04	S 82° 01' 34.81" E	261.82	523.27	5700.00
		RSBEXCOOKE2	15+23.27	6,807,024.84	2,519,070.04	S 82° 01' 34.81" E	17+25.53	6,806,996.79	2,519,270.34	2° 56' 39.52" (LT)	19+27.69	6,806,979.06	2,519,471.82	S 84° 58' 14.34" E	202.26	404.42	7870.00
		RSBEXCOOKE3	19+27.69	6,806,979.06	2,519,471.82	S 84° 58' 14.34" E	21+02.36	6,806,963.74	2,519,645.82	0° 52' 23.80" (RT)	22+77.03	6,806,945.78	2,519,819.56	S 84° 05' 50.54" E	174.67	349.34	22920.00
		RSBEXCOOKE4	23+82.06	6,806,934.98	2,519,924.04	S 84° 05' 50.54" E	25+65.03	6,806,916.16	2,520,106.04	3° 40' 38.06" (RT)	27+47.88	6,806,885.71	2,520,286.47	S 80° 25' 12.48" E	182.98	365.83	5700.00
		RSBEXCOOKE5	27+47.88	6,806,885.71	2,520,286.47	S 80° 25' 12.48" E	30+01.48	6,806,843.51	2,520,536.53	3° 40' 38.06" (LT)	32+54.91	6,806,817.43	2,520,788.78	S 84° 05' 50.54" E	253.60	507.02	7900.00
℄ RNBEXBOYCE	BOYCE NB RAMP	RNBEXBOYCE1	10+00.00	6,806,794.65	2,523,090.01	S 84° 05' 50.54" E	12+03.57	6,806,773.72	2,523,292.50	3° 35' 55.39" (RT)	14+07.01	6,806,740.12	2,523,493.28	S 80° 29' 55.15" E	203.57	407.01	6480.00
		RNBEXBOYCE2	14+07.01	6,806,740.12	2,523,493.28	S 80° 29' 55.15" E	15+79.03	6,806,711.72	2,523,662.94	3° 27' 26.20" (LT)	17+50.95	6,806,693.61	2,523,834.01	S 83° 57' 21.35" E	172.02	343.94	5700.00
℄ RSBENBOYCE	BOYCE SB RAMP	RSBENBOYCE1	10+00.00	6,806,584.38	2,523,042.98	S 84° 05' 50.54" E	12+53.60	6,806,558.30	2,523,295.23	3° 40' 38.06" (LT)	15+07.02	6,806,548.45	2,523,548.64	S 87° 46' 28.60" E	253.60	507.02	7900.00
		RSBENBOYCE2	15+07.02	6,806,548.45	2,523,548.64	S 87° 46' 28.60" E	16+90.00	6,806,541.34	2,523,731.47	3° 40' 38.06" (RT)	18+72.85	6,806,522.53	2,523,913.48	S 84° 05' 50.54" E	182.98	365.83	5700.00
℄ UBOYCENBSB	BOYCE NB U-TURN	UBOYCENBSB1	10+00.00	6,807,194.73	2,518,725.30	N 86° 51' 49.85" W	10+78.86	6,807,199.05	2,518,646.56	95° 12' 35.43" (LT)	11+19.64	6,807,120.23	2,518,649.41	S 2° 04' 25.28" E	78.86	119.64	72.00
		UBOYCENBSB2	11+51.78	6,807,088.12	2,518,650.57	S 2° 04' 25.28" E	12+17.50	6,807,022.44	2,518,652.95	84° 46' 58.38" (LT)	12+58.32	6,807,018.84	2,518,718.58	S 86° 51' 23.66" E	65.73	106.54	72.00
℄ UBOYCESBNB	BOYCE SB U-TURN	UBOYCESBNB1	10+00.00	6,807,045.69	2,518,410.37	S 87° 37' 46.71" E	10+77.81	6,807,042.47	2,518,488.12	94° 26' 38.57" (LT)	11+18.68	6,807,120.24	2,518,485.30	N 2° 04' 25.28" W	77.81	118.68	72.00
		UBOYCESBNB2	11+50.78	6,807,152.31	2,518,484.14	N 2° 04' 25.28" W	12+17.41	6,807,218.90	2,518,481.73	85° 33' 43.72" (LT)	12+58.30	6,807,221.64	2,518,415.16	N 87° 38' 08.99" W	66.63	107.52	72.00

MATCH LINE STA 810+00 CSJ: 0172-08-103

Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER
US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY
CSJ: 0172-08-103
CSJ LIMITS: FROM: WEST OF BOYCE RD TO: EAST OF COOKE RD
FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL
ROADWAY TYPE / DESIGN SPEED: MAINLANES 65 MPH; RAMPS 45 MPH; FRONTAGE ROADS 45 MPH; CROSS STREETS (MINIMUM) 30 MPH; U-TURNS 15 MPH
PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC
NOTES: 1.–16. (as printed at left)
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PRELIMINARY, SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.
LOCATION MAP N.T.S.
BRIDGEFARMER & ASSOCIATES, INC. CONSULTING ENGINEERS TBPE REGISTRATION NO. 264
PRELIMINARY FOR INTERIM REVIEW ONLY
JOHN NGUYEN 86489 10/20/23
EQUATIONS: NONE RR CROSSINGS: NONE
OCTOBER 20, 2023
ROLL 2 OF 8
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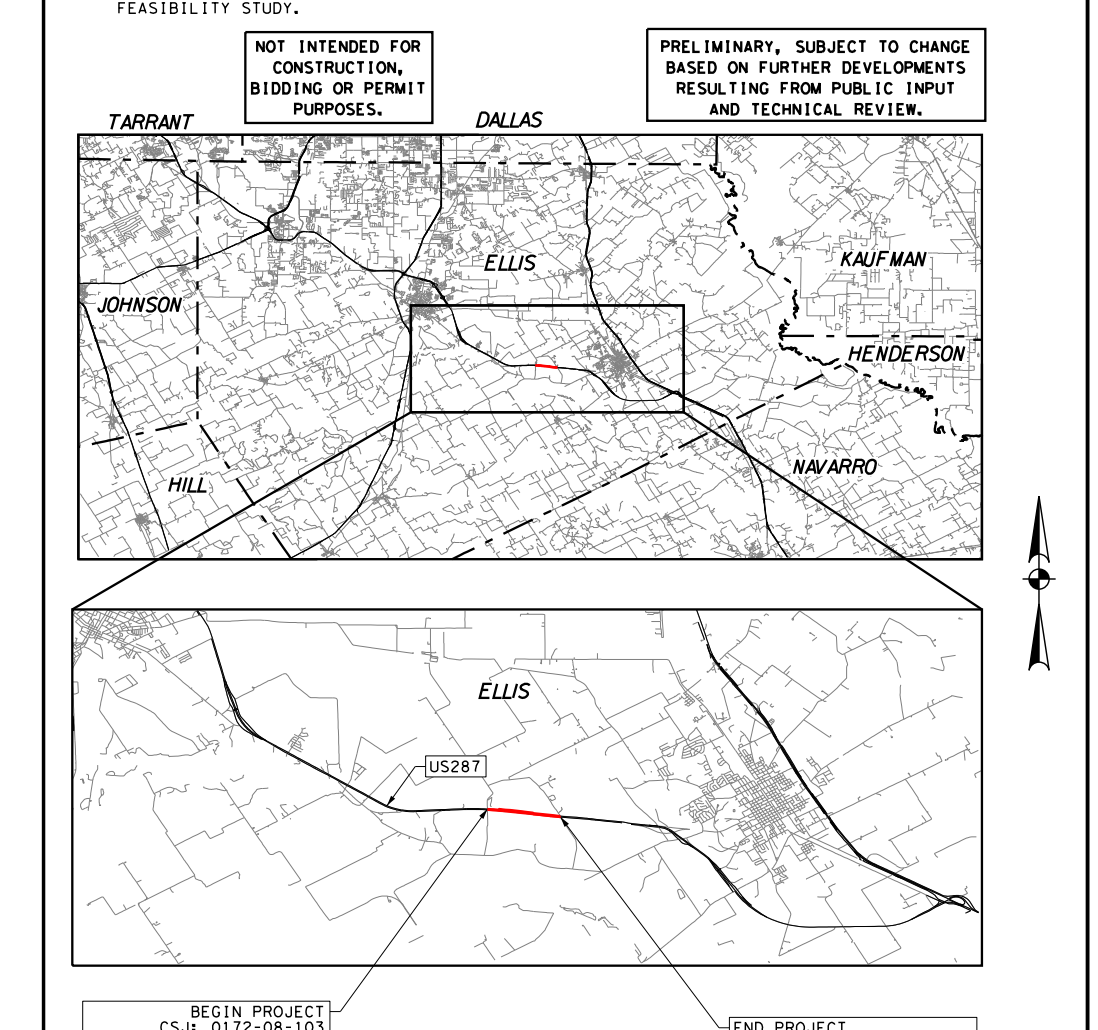


TARRANT
DALLAS
JOHNSON
ELLIS
KAUFMAN
HENDERSON
HILL
NAVARRO
US287
BEGIN PROJECT CSJ: 0172-08-103 ℄ US287CL STA 694+37.00
END PROJECT CSJ: 0172-08-103 ℄ US287CL STA 863+54.00

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD
FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

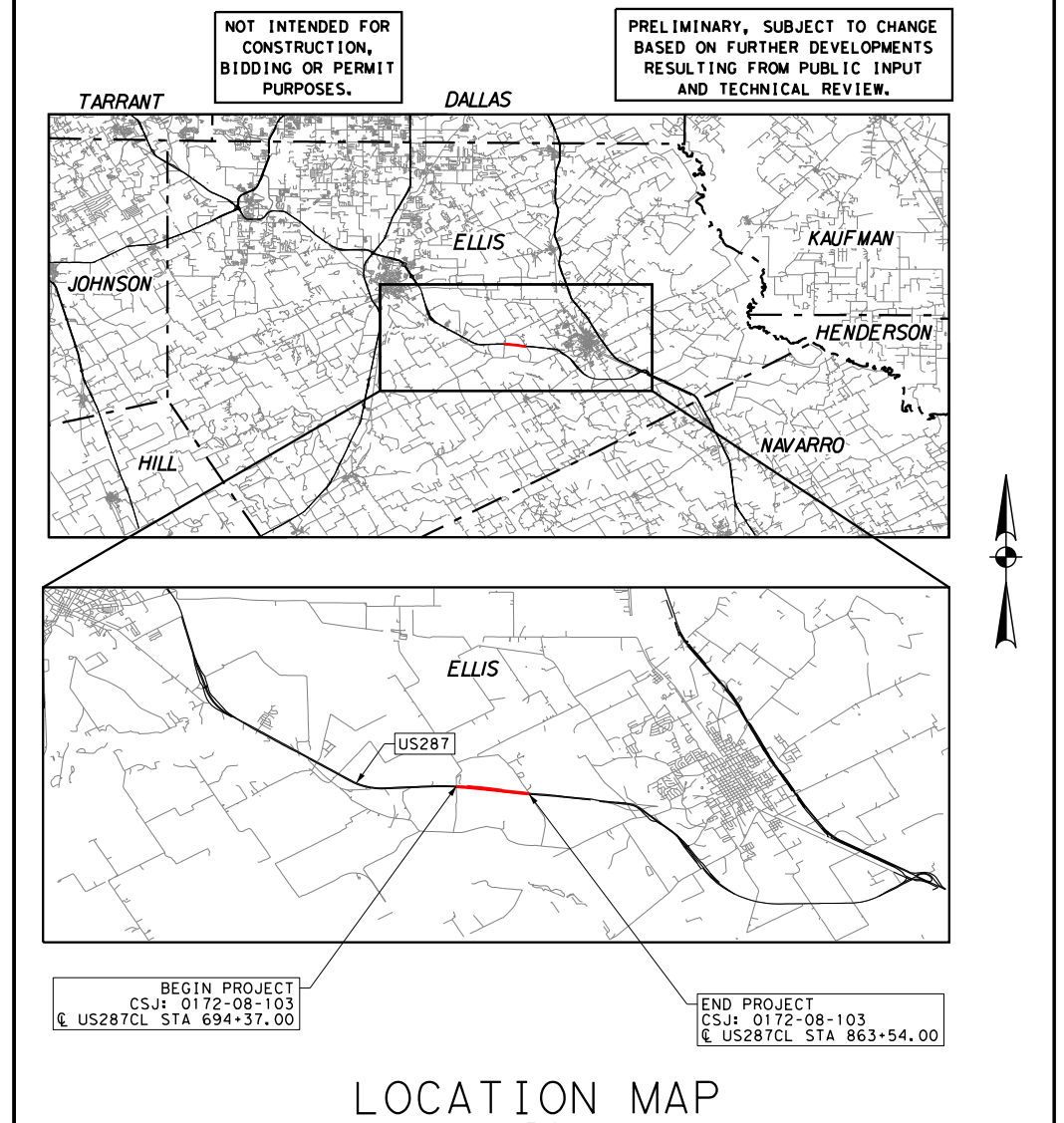
ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	45 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH
U-TURNS	15 MPH

PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES:
1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
4. CURBS ON FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
5. ALL CROSS STREET RADII ARE 50' AND DRIVEWAY RADII ARE 20' (UNLESS NOTED OTHERWISE).
6. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE. CURVE DATA IS NOT INCLUDED
7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
9. SURVEY AND SUE PROVIDED BY THE FEASIBILITY STUDY (10/22/2020)
10. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INDURANCE RATE MAPS 48139C0135F, 48139C0155F, AND 48139C0175F. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
12. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
13. 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.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.

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
KAUFMAN
HENDERSON
HILL
NAVARRO
US287
BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00
END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00

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:

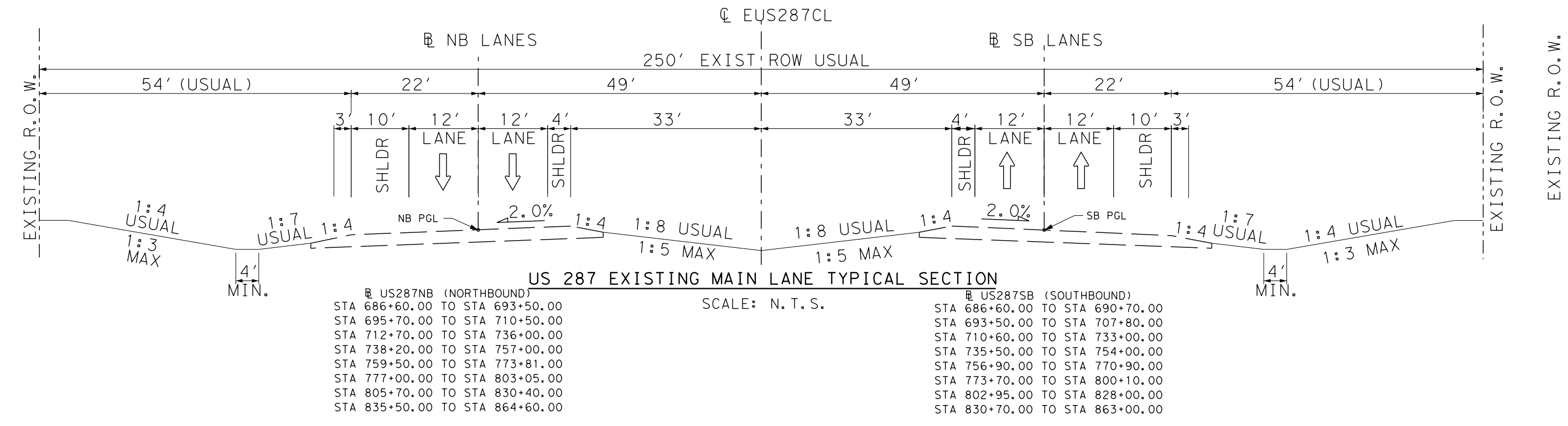
JOHN NGUYEN	86489	10/20/23
NAME	P.E. NO.	DATE

EQUATIONS: NONE
RR CROSSINGS: NONE

OCTOBER 20, 2023
ROLL 3 OF 8

11/10/2023 1:11:51 PM
c:\bms\bridgefarmer-pw\nhi.luong@bridgefarmer.com\dms22049\038502-SCH-PP-03.dgn

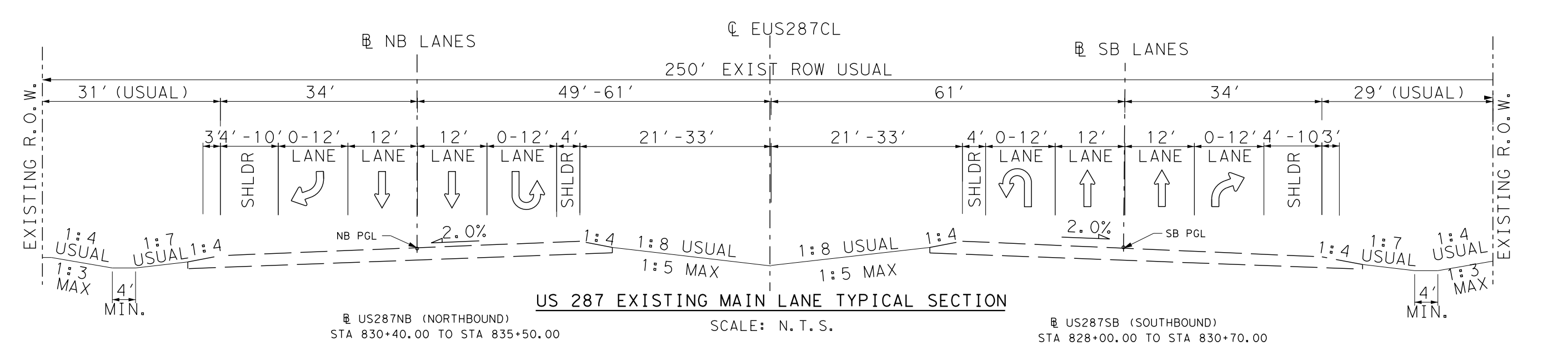
PLAN LEGEND:
- 🟨 PROPOSED MAIN LANES
- 🟩 PROPOSED FRONTAGE RD/ CROSS ST
- 🟧 PROPOSED BRIDGE
- 🟪 PROPOSED SHARED-USE-PATH
- 🟥 PROPOSED SIDEWALK
- 🟦 PROPOSED RAMP
- 🟦 FEMA FLOODPLAIN
- ⬜ PROPOSED INTERIM PAVEMENT
- ▨ PAVEMENT REMOVAL
- ▨ BUILDING DISPLACEMENT
- ATTENUATOR
- PROPOSED SSTR
- PROPOSED SSCB
- MBGF END TREATMENT
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED RETAINING WALL
- PROPOSED DRAINAGE CULVERT
- EXISTING DRAINAGE CULVERT
- XXXXXX PARCEL ID
- FLOW DIRECTION
- DITCH FLOW LINE


℄ NB LANES
℄ EUS287CL
℄ SB LANES
250' EXIST ROW USUAL
54' (USUAL)
22'
49'
33'
SHLDR
LANE
2.0%
NB PGL
SB PGL
1:4 USUAL
1:7 USUAL
1:3 MAX
1:8 USUAL
1:5 MAX
4' MIN.
EXISTING R.O.W.

US 287 EXISTING MAIN LANE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND)
STA 686+00.00 TO STA 693+50.00
STA 695+70.00 TO STA 710+50.00
STA 712+70.00 TO STA 736+00.00
STA 738+20.00 TO STA 757+00.00
STA 759+50.00 TO STA 773+81.00
STA 777+00.00 TO STA 803+05.00
STA 805+70.00 TO STA 830+40.00
STA 835+50.00 TO STA 864+60.00

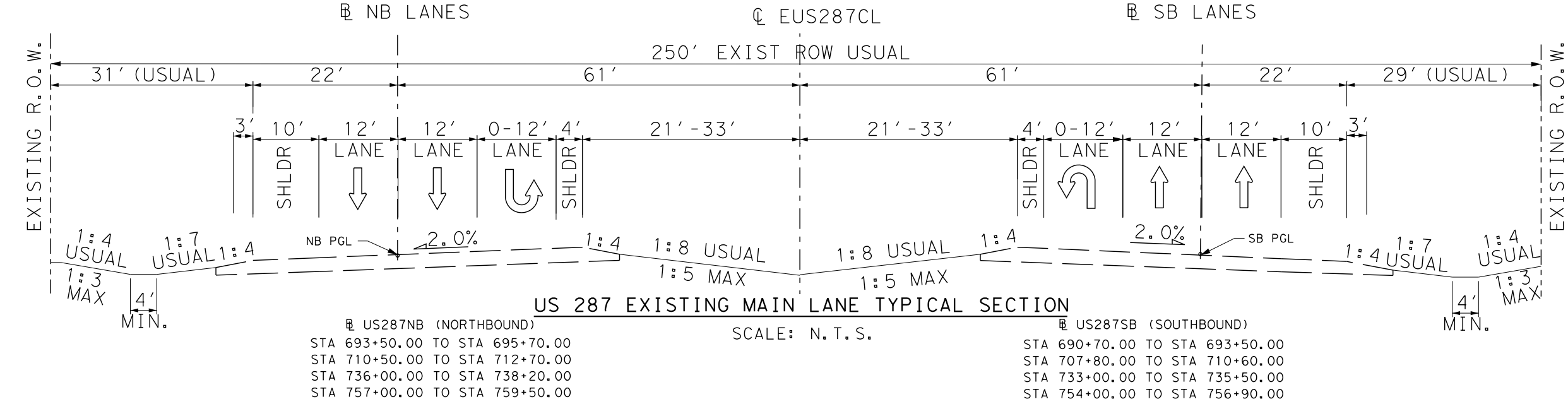
℄ US287SB (SOUTHBOUND)
STA 686+60.00 TO STA 690+70.00
STA 693+50.00 TO STA 707+80.00
STA 710+60.00 TO STA 733+00.00
STA 735+50.00 TO STA 754+00.00
STA 756+90.00 TO STA 770+90.00
STA 773+70.00 TO STA 800+10.00
STA 802+95.00 TO STA 828+00.00
STA 830+70.00 TO STA 863+00.00


℄ NB LANES
℄ EUS287CL
℄ SB LANES
250' EXIST ROW USUAL
31' (USUAL)
34'
49'-61'
61'
29' (USUAL)
3'4'-10' 0-12' 12' 12' 0-12' 4'
21'-33'
SHLDR
LANE
2.0%
NB PGL
SB PGL
1:4 USUAL
1:7 USUAL
1:3 MAX
1:8 USUAL
1:5 MAX
4' MIN.
EXISTING R.O.W.

US 287 EXISTING MAIN LANE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND)
STA 830+40.00 TO STA 835+50.00

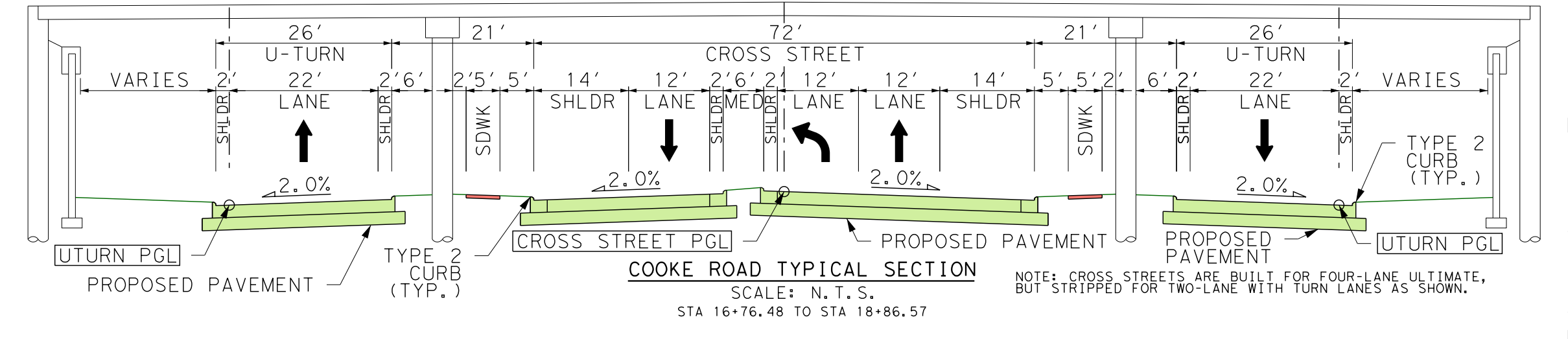
℄ US287SB (SOUTHBOUND)
STA 828+00.00 TO STA 830+70.00


℄ NB LANES
℄ EUS287CL
℄ SB LANES
250' EXIST ROW USUAL
31' (USUAL)
22'
61'
29' (USUAL)
21'-33'
SHLDR
LANE
2.0%
NB PGL
SB PGL
1:4 USUAL
1:7 USUAL
1:3 MAX
1:8 USUAL
1:5 MAX
4' MIN.
EXISTING R.O.W.

US 287 EXISTING MAIN LANE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND)
STA 693+50.00 TO STA 695+70.00
STA 710+50.00 TO STA 712+70.00
STA 736+00.00 TO STA 738+20.00
STA 757+00.00 TO STA 759+50.00
STA 773+81.00 TO STA 777+00.00
STA 803+05.00 TO STA 805+70.00

℄ US287SB (SOUTHBOUND)
STA 690+70.00 TO STA 693+50.00
STA 707+80.00 TO STA 710+60.00
STA 733+00.00 TO STA 735+50.00
STA 754+00.00 TO STA 756+90.00
STA 770+90.00 TO STA 773+70.00
STA 800+10.00 TO STA 802+95.00

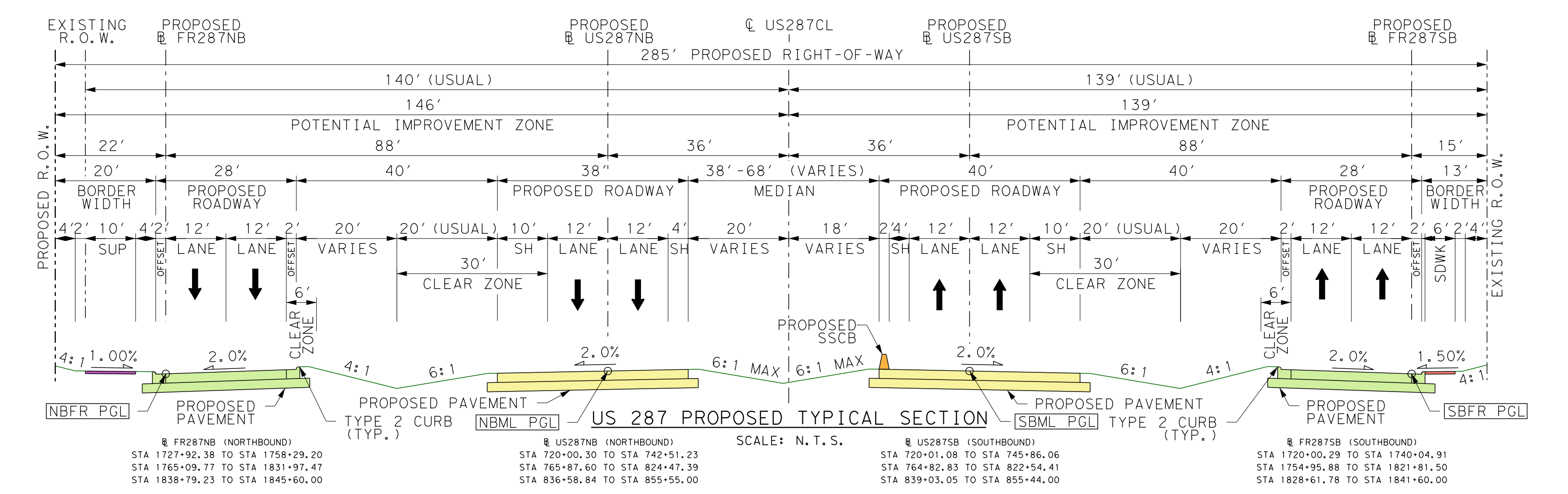

℄ UCOOKESBNB
℄ COOKE
℄ UCOOKENBSB
26'
U-TURN
22'
LANE
VARIES
21'
72'
CROSS STREET
14'
SHLDR
SDWK
MED
2.0%
UTURN PGL
CROSS STREET PGL
PROPOSED PAVEMENT
TYPE 2 CURB (TYP.)

COOKE ROAD TYPICAL SECTION
SCALE: N.T.S.
STA 16+76.48 TO STA 18+86.57

NOTE: CROSS STREETS ARE BUILT FOR FOUR-LANE ULTIMATE, BUT STRIPPED FOR TWO-LANE WITH TURN LANES AS SHOWN.

RETAINING WALL SUMMARY

WALL NAME	BEGIN WALL	OFFSET	END WALL	OFFSET	WALL LENGTH
RWNBML827	ⒷUS287NB STA 824+47.39	23.00' LT	ⒷUS287NB STA 828+44.72	23.00' LT	396.65
RWNBML835	ⒷUS287NB STA 831+84.88	23.00' LT	ⒷUS287NB STA 837+97.40	23.00' LT	612.87
RWNBML845	ⒷUS287NB STA 839+36.08	23.00' LT	ⒷUS287NB STA 848+50.63	23.00' LT	914.88
RWNBML850	ⒷUS287NB STA 846+47.02	62.00' LT	ⒷUS287NB STA 855+55.00	26.26' LT	908.89
RWNBML861	ⒷUS287NB STA 859+80.00	23.00' LT	ⒷUS287NB STA 863+60.00	23.00' LT	380.00
RWSBML827	ⒷUS287SB STA 822+54.41	35.41' RT	ⒷUS287SB STA 828+85.13	23.00' RT	632.02
RWSBML835	ⒷUS287SB STA 832+40.13	23.00' RT	ⒷUS287SB STA 839+03.05	23.00' RT	662.36
RWSBML852	ⒷUS287SB STA 845+64.09	54.00' RT	ⒷUS287SB STA 855+44.00	23.00' RT	980.65
RWSBML861	ⒷUS287SB STA 859+69.00	23.00' RT	ⒷUS287SB STA 863+00.00	23.00' RT	331.00


EXISTING R.O.W.
PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED ℄ FR287SB
285' PROPOSED RIGHT-OF-WAY
140' (USUAL)
146'
139' (USUAL)
139'
POTENTIAL IMPROVEMENT ZONE
88'
36'
15'
22'
20'
28'
40'
38"
38'-68' (VARIES)
13'
BORDER WIDTH
PROPOSED ROADWAY
MEDIAN
4'2' 10' 4'2' 12' 12' 2' 20' 20' (USUAL) 10' 12' 12' 4' 20' 18' 2'4' 12' 12' 10' 20' (USUAL) 20' 2' 12' 12' 2' 6'2'4'
SUP
OFFSET
LANE
VARIES
SH
SDWK
30'
CLEAR ZONE
6'
1.00%
2.0%
1.50%
4:1
6:1
6:1 MAX
PROPOSED SSCB
NBFR PGL
NBML PGL
SBML PGL
SBFR PGL
PROPOSED PAVEMENT
TYPE 2 CURB (TYP.)
PROPOSED R.O.W.
EXISTING R.O.W.

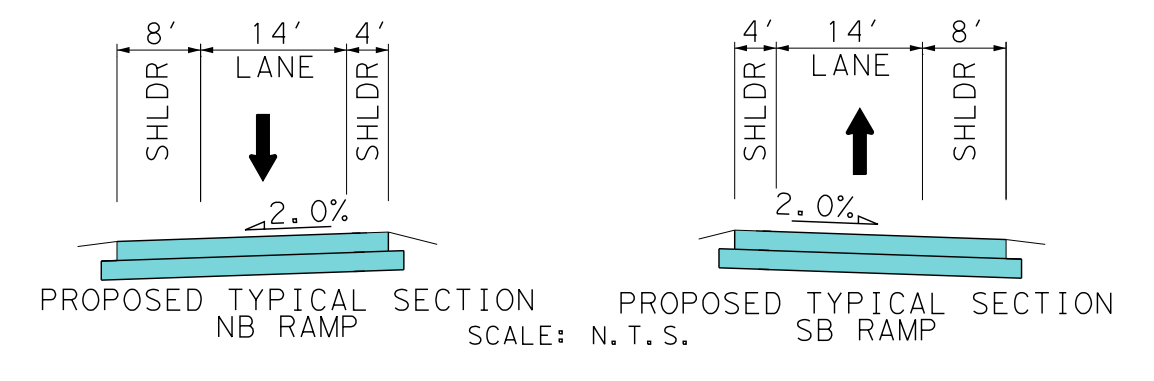
US 287 PROPOSED TYPICAL SECTION
SCALE: N.T.S.

℄ FR287NB (NORTHBOUND)
STA 1727+92.38 TO STA 1758+29.20
STA 1765+09.77 TO STA 1831+97.47
STA 1838+79.23 TO STA 1845+60.00

℄ US287NB (NORTHBOUND)
STA 720+00.30 TO STA 742+51.23
STA 765+87.60 TO STA 824+47.39
STA 836+58.84 TO STA 855+55.00

℄ US287SB (SOUTHBOUND)
STA 720+01.08 TO STA 745+86.06
STA 764+82.83 TO STA 822+54.41
STA 839+03.05 TO STA 855+44.00

℄ FR287SB (SOUTHBOUND)
STA 1720+00.29 TO STA 1740+04.91
STA 1754+95.88 TO STA 1821+81.50
STA 1828+61.78 TO STA 1841+60.00

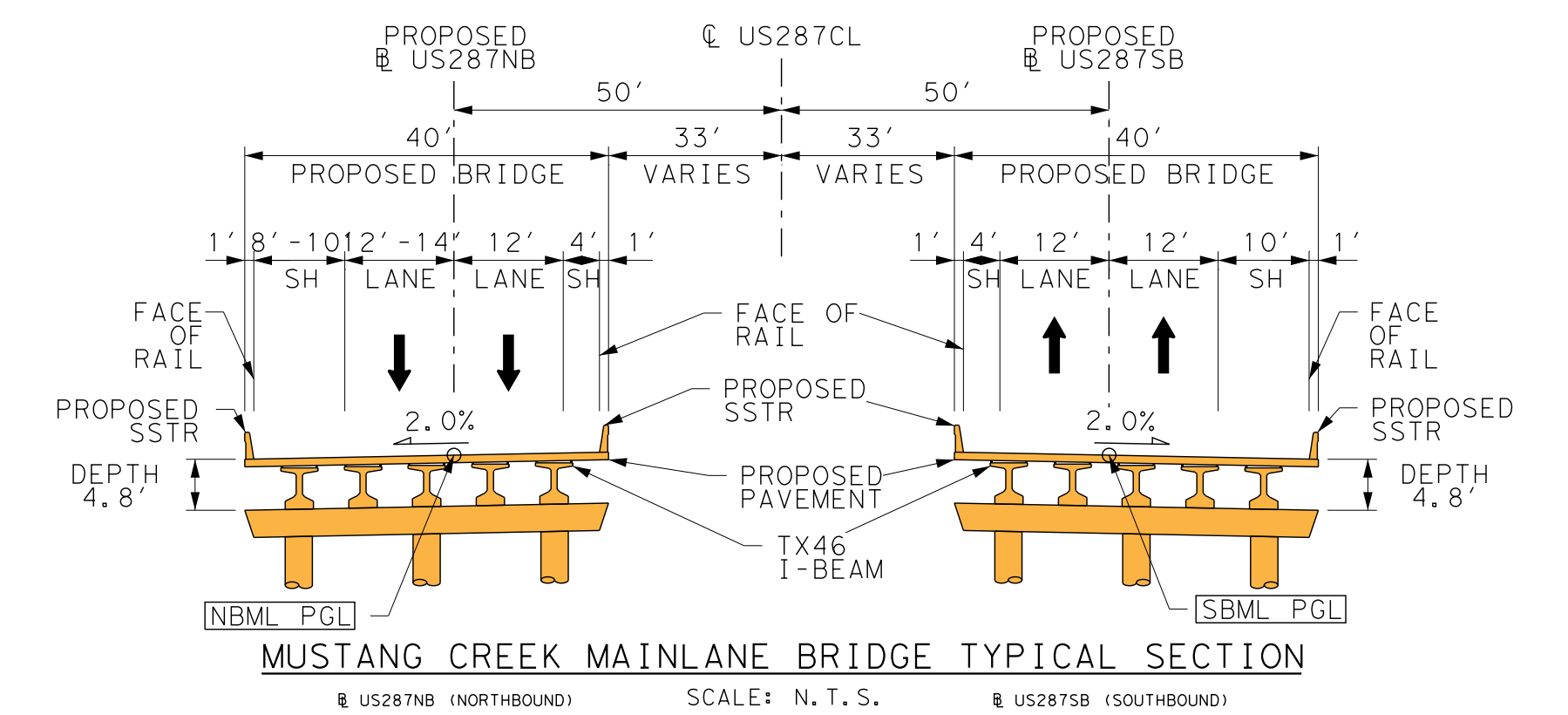

8'
14'
4'
SHLDR
LANE
2.0%

PROPOSED TYPICAL SECTION
NB RAMP

PROPOSED TYPICAL SECTION
SB RAMP

SCALE: N.T.S.

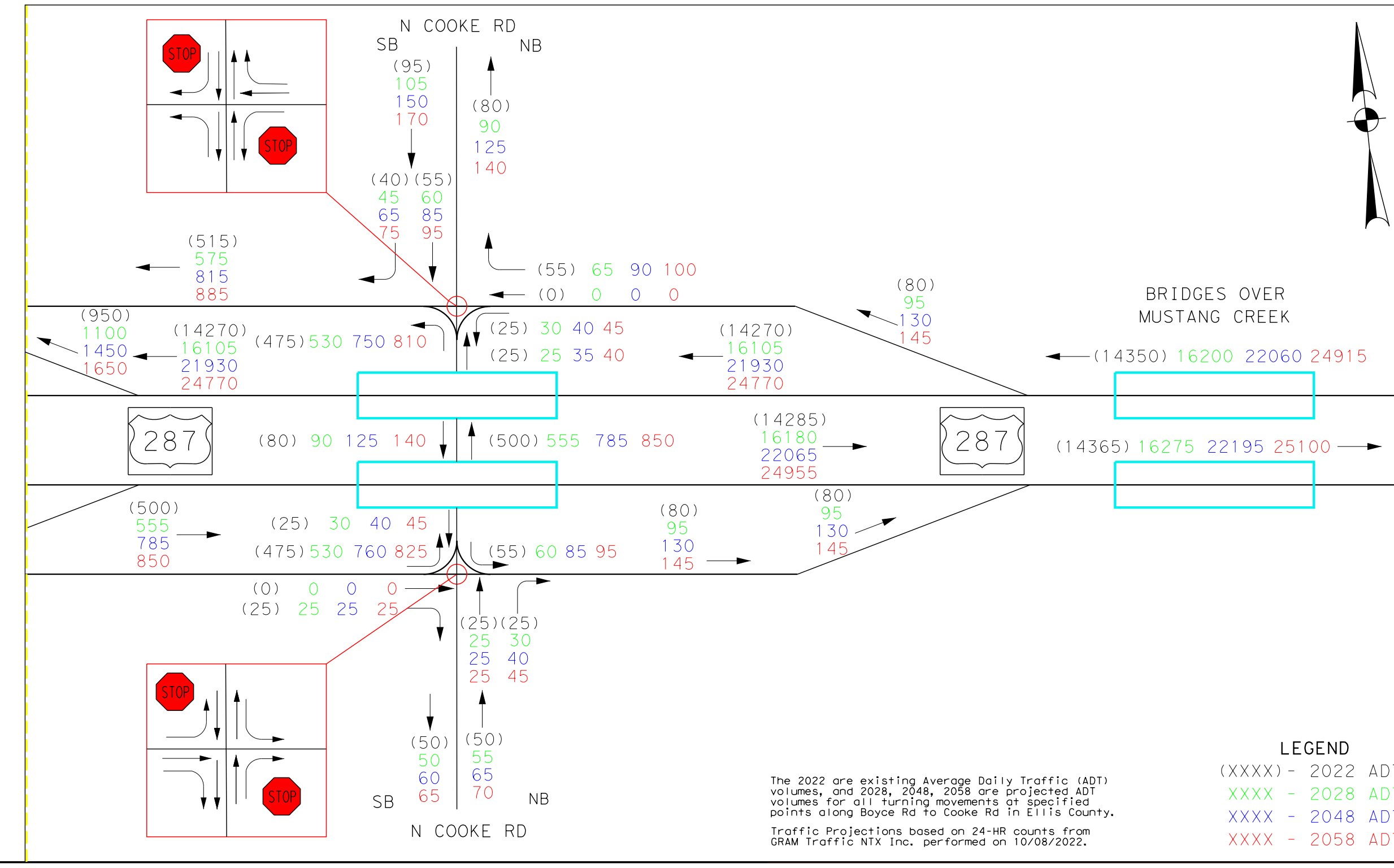
PARCEL ID	OWNER
278777	VERBINDEN II LLC ENNIS 183 ACRES SERIES
190414	LARSON PAUL C TRUSTEE OF THE
190428	CAMPBELL KEVIN & KIRK
239304	SPANIEL GLYNN GENE
-	PROPERTY NOT FOUND
-	PROPERTY NOT FOUND


PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
50'
40'
33'
PROPOSED BRIDGE
VARIES
1' 8'-10' 12'-14' 12' 4' 1'
1' 4' 12' 12' 10' 1'
SH
LANE
FACE OF RAIL
PROPOSED SSTR
PROPOSED PAVEMENT
TX46 I-BEAM
DEPTH 4.8'
2.0%
NBML PGL
SBML PGL

MUSTANG CREEK MAINLANE BRIDGE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND)
STA 855+55.00 TO STA 859+80.00

℄ US287SB (SOUTHBOUND)
STA 855+44.00 TO STA 859+69.00


N COOKE RD
SB
NB
STOP
(95) 105 150 170
(80) 90 125 140
(40)(55) 45 60 65 85 75 95
(515) 575 815 885
(55) 65 90 100
(0) 0 0 0
(950) 1100 1450 1650
(14270) 16105 21930 24770
(475) 530 750 810
(25) 30 40 45
(25) 25 35 40
(14270) 16105 21930 24770
(80) 95 130 145
BRIDGES OVER MUSTANG CREEK
(14350) 16200 22060 24915
287
(80) 90 125 140
(500) 555 785 850
(14285) 16180 22065 24955
(14365) 16275 22195 25100
(500) 555 785 850
(25) 30 40 45
(475) 530 760 825
(55) 60 85 95
(80) 95 130 145
(80) 95 130 145
(0) 0 0 0
(25) 25 25 25
(25)(25) 25 30 25 40 25 45
(50) 50 60 65
(50) 55 65 70
NB
SB

The 2022 are existing Average Daily Traffic (ADT) volumes, and 2028, 2048, 2058 are projected ADT volumes for all turning movements at specified points along Boyce Rd to Cooke Rd in Ellis County.

Traffic Projections based on 24-HR counts from GRAM Traffic NTX Inc. performed on 10/08/2022.

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

US 287 HORIZONTAL CURVE DATA

CHAIN	DESCRIPTION	CURVE	P.C. STATION	P.C. NORTHING	P.C. EASTING	P.C. BEARING	P.I. STATION	P.I. NORTHING	P.I. EASTING	P.I. DELTA	P.T. STATION	P.T. NORTHING	P.T. EASTING	P.T. BEARING	TANGENT (FT)	LENGTH (FT)	RADIUS (FT)
Ⓑ US287	US 287 CENTERLINE	US287CL4	823+31.23	6,806,469.55	2,525,203.80	S 84° 05′ 50.54″ E	826+03.23	6,806,441.58	2,525,474.36	2° 23′ 50.12″ (LT)	828+75.15	6,806,424.95	2,525,745.85	S 86° 29′ 40.66″ E	272.00	543.92	13000.00
		US287CL5	835+03.36	6,806,386.54	2,526,372.88	S 86° 29′ 40.66″ E	842+05.41	6,806,343.61	2,527,073.62	4° 01′ 14.80″ (RT)	849+06.88	6,806,251.66	2,527,769.61	S 82° 28′ 25.87″ E	702.05	1403.52	20000.00
		US287CL6	849+06.88	6,806,251.66	2,527,769.61	S 82° 28′ 25.87″ E	851+94.10	6,806,214.04	2,528,054.36	1° 38′ 43.83″ (LT)	854+81.27	6,806,184.62	2,528,340.06	S 84° 07′ 09.69″ E	287.21	574.39	20000.00
Ⓑ US287NB	US 287 NORTHBOUND	US287NB4	823+36.79	6,806,505.36	2,525,207.50	S 84° 05′ 50.54″ E	826+08.03	6,806,477.47	2,525,477.31	2° 23′ 50.12″ (LT)	828+79.20	6,806,460.88	2,525,748.05	S 86° 29′ 40.66″ E	271.25	542.41	12964.00
		US287NB5	835+99.29	6,806,416.85	2,526,466.79	S 86° 29′ 40.66″ E	838+62.58	6,806,400.76	2,526,729.59	2° 22′ 30.97″ (RT)	841+25.79	6,806,373.78	2,526,991.49	S 84° 07′ 09.69″ E	263.29	526.49	12700.00
Ⓑ US287SB	US 287 SOUTHBOUND	US287SB4	823+25.61	6,806,433.74	2,525,200.10	S 84° 05′ 50.54″ E	825+98.36	6,806,405.69	2,525,471.41	2° 23′ 50.12″ (LT)	828+71.04	6,806,389.02	2,525,743.65	S 86° 29′ 40.66″ E	272.75	545.43	13036.00
		US287SB5	833+96.10	6,806,356.91	2,526,267.73	S 86° 29′ 40.66″ E	842+12.46	6,806,307.00	2,527,082.56	4° 40′ 29.17″ (RT)	850+27.91	6,806,190.84	2,527,890.61	S 81° 49′ 11.49″ E	816.35	1631.80	20000.00
		US287SB6	850+27.91	6,806,190.84	2,527,890.61	S 81° 49′ 11.49″ E	852+80.78	6,806,154.86	2,528,140.91	2° 17′ 58.20″ (LT)	855+33.59	6,806,128.95	2,528,392.46	S 84° 07′ 09.69″ E	252.88	505.69	12600.00
Ⓑ FR287NB	FR 287 NORTHBOUND	FR287NB2	1823+50.10	6,806,586.93	2,525,215.94	S 84° 05′ 50.54″ E	1826+19.63	6,806,559.21	2,525,484.04	2° 23′ 50.12″ (LT)	1828+89.08	6,806,542.73	2,525,753.06	S 86° 29′ 40.66″ E	269.53	538.98	12882.00
		FR287NB3	1835+39.91	6,806,502.94	2,526,402.68	S 86° 29′ 40.66″ E	1838+25.77	6,806,485.46	2,526,688.00	5° 03′ 06.58″ (RT)	1841+11.26	6,806,442.92	2,526,970.68	S 81° 26′ 34.08″ E	285.86	571.35	6480.00
Ⓑ FR287SB	FR 287 SOUTHBOUND	FR287SB4	1823+11.21	6,806,352.18	2,525,191.67	S 84° 05′ 50.54″ E	1825+85.68	6,806,323.95	2,525,464.68	2° 23′ 50.12″ (LT)	1828+60.07	6,806,307.17	2,525,738.64	S 86° 29′ 40.66″ E	274.47	548.86	13118.00
		FR287SB5	1833+85.14	6,806,275.07	2,526,262.72	S 86° 29′ 40.66″ E	1841+98.14	6,806,225.36	2,527,074.21	4° 40′ 29.17″ (RT)	1850+10.25	6,806,109.68	2,527,878.94	S 81° 49′ 11.49″ E	813.01	1625.11	19918.00
Ⓑ RNBEXBOYCE	BOYCE NB RAMP	RNBEXBOYCE3	21+73.00	6,806,649.17	2,524,253.72	S 83° 57′ 21.35″ E	24+37.36	6,806,621.33	2,524,516.61	3° 50′ 51.97″ (RT)	27+01.52	6,806,575.92	2,524,777.04	S 80° 06′ 29.39″ E	264.36	528.52	7870.00
		RNBEXBOYCE4	27+01.52	6,806,575.92	2,524,777.04	S 80° 06′ 29.39″ E	28+84.73	6,806,544.45	2,524,957.52	3° 40′ 54.73″ (LT)	30+67.81	6,806,524.63	2,525,139.65	S 83° 47′ 24.12″ E	183.21	366.29	5700.00
Ⓑ RSBENBOYCE	BOYCE SB RAMP	RSBENBOYCE2	15+07.02	6,806,548.45	2,523,548.64	S 87° 46′ 28.60″ E	16+90.00	6,806,541.34	2,523,731.47	3° 40′ 38.06″ (RT)	18+72.85	6,806,522.53	2,523,913.48	S 84° 05′ 50.54″ E	182.98	365.83	5700.00
		RSBENBOYCE3	24+60.27	6,806,462.12	2,524,497.78	S 84° 05′ 50.54″ E	26+74.17	6,806,440.12	2,524,710.55	3° 06′ 49.46″ (LT)	28+87.96	6,806,429.71	2,524,924.20	S 87° 12′ 40.00″ E	213.90	427.70	7870.00
		RSBENBOYCE4	28+87.96	6,806,429.71	2,524,924.20	S 87° 12′ 40.00″ E	30+37.47	6,806,422.44	2,525,073.53	3° 00′ 18.16″ (RT)	31+86.91	6,806,407.35	2,525,222.28	S 84° 12′ 21.84″ E	149.51	298.95	5700.00
Ⓑ RNBEXCOOKE	COOKE NB RAMP	RNBEXCOOKE1	10+00.00	6,806,486.72	2,526,471.07	S 86° 29′ 40.66″ E	10+72.10	6,806,482.31	2,526,543.04	0° 38′ 49.03″ (RT)	11+44.19	6,806,477.09	2,526,614.94	S 85° 50′ 51.63″ E	72.10	144.19	12770.00
		RNBEXCOOKE2	11+44.19	6,806,477.09	2,526,614.94	S 85° 50′ 51.63″ E	13+93.40	6,806,459.05	2,526,863.50	4° 24′ 17.55″ (RT)	16+42.37	6,806,421.97	2,527,109.94	S 81° 26′ 34.08″ E	249.21	498.18	6480.00
		RNBEXCOOKE3	16+42.37	6,806,421.97	2,527,109.94	S 81° 26′ 34.08″ E	17+93.75	6,806,399.44	2,527,259.64	2° 40′ 35.61″ (LT)	19+45.08	6,806,383.93	2,527,410.22	S 84° 07′ 09.69″ E	151.38	302.71	6480.00
		RNBEXCOOKE4	20+99.69	6,806,368.09	2,527,564.01	S 84° 07′ 09.69″ E	23+93.89	6,806,337.95	2,527,856.67	4° 16′ 54.24″ (RT)	26+87.81	6,806,286.04	2,528,146.25	S 79° 50′ 15.45″ E	294.20	588.13	7870.00
		RNBEXCOOKE5	26+87.81	6,806,286.04	2,528,146.25	S 79° 50′ 15.45″ E	29+42.76	6,806,241.06	2,528,397.20	4° 16′ 54.24″ (LT)	31+97.47	6,806,214.94	2,528,650.81	S 84° 07′ 09.69″ E	254.95	509.66	6820.00
Ⓑ RSBENCOOKE	COOKE SB RAMP	RSBENCOOKE1	10+00.00	6,806,281.59	2,526,349.39	S 86° 14′ 49.46″ E	11+52.49	6,806,271.61	2,526,501.55	2° 41′ 45.88″ (LT)	13+04.92	6,806,268.80	2,526,654.02	S 88° 56′ 35.34″ E	152.49	304.92	6480.00
		RSBENCOOKE2	13+04.92	6,806,268.80	2,526,654.02	S 88° 56′ 35.34″ E	15+53.76	6,806,264.21	2,526,902.81	4° 59′ 58.14″ (RT)	18+02.29	6,806,237.96	2,527,150.27	S 83° 56′ 37.20″ E	248.84	497.37	5700.00
		RSBENCOOKE3	18+02.29	6,806,237.96	2,527,150.27	S 83° 56′ 37.20″ E	19+81.37	6,806,219.06	2,527,328.35	1° 01′ 42.05″ (RT)	21+60.44	6,806,196.97	2,527,506.06	S 82° 54′ 55.14″ E	179.08	358.15	19955.00
		RSBENCOOKE4	21+60.44	6,806,196.97	2,527,506.06	S 82° 54′ 55.14″ E	24+09.78	6,806,166.22	2,527,753.50	3° 37′ 45.55″ (LT)	26+58.95	6,806,151.19	2,528,002.39	S 86° 32′ 40.70″ E	249.34	498.51	7870.00
		RSBENCOOKE5	26+58.95	6,806,151.19	2,528,002.39	S 86° 32′ 40.70″ E	28+21.17	6,806,141.42	2,528,164.31	2° 43′ 30.51″ (RT)	29+83.33	6,806,123.95	2,528,325.59	S 83° 49′ 10.19″ E	162.22	324.38	6820.00
Ⓑ COOKE	COOKE RD	XSCOOKE1	14+01.72	6,806,073.35	2,526,065.35	N 30° 29′ 36.26″ W	14+28.64	6,806,096.55	2,526,051.69	5° 08′ 15.66″ (RT)	14+55.52	6,806,120.87	2,526,040.16	N 25° 21′ 20.60″ W	26.92	53.80	600.00
		XSCOOKE2	19+07.05	6,806,528.91	2,525,846.79	N 25° 21′ 20.60″ W	19+33.97	6,806,553.24	2,525,835.27	5° 08′ 15.66″ (LT)	19+60.85	6,806,576.43	2,525,821.61	N 30° 29′ 36.26″ W	26.92	53.80	600.00
Ⓑ UCOOKENBSB	COOKE NB U-TURN	UCOOKENBSB1	10+00.00	6,806,487.94	2,526,058.68	N 86° 29′ 40.66″ W	11+04.96	6,806,494.36	2,525,953.91	18° 51′ 39.94″ (LT)	11+28.62	6,806,399.51	2,525,998.86	S 25° 21′ 20.60″ E	104.96	128.62	62.00
		UCOOKENBSB2	11+82.09	6,806,351.19	2,526,021.76	S 25° 21′ 20.60″ E	12+24.62	6,806,312.76	2,526,039.97	61° 08′ 20.06″ (LT)	12+58.92	6,806,310.16	2,526,082.42	S 86° 29′ 40.66″ E	42.53	76.83	72.00
Ⓑ UCOOKESBNB	COOKE SB U-TURN	UCOOKESBNB1	10+00.00	6,806,343.01	2,525,742.32	S 86° 23′ 59.62″ E	11+05.16	6,806,336.41	2,525,847.28	18° 57′ 20.98″ (LT)	11+28.72	6,806,431.44	2,525,802.24	N 25° 21′ 20.60″ W	105.16	128.72	62.00
		UCOOKESBNB2	11+82.24	6,806,479.80	2,525,779.33	N 25° 21′ 20.60″ W	12+24.64	6,806,518.12	2,525,761.17	60° 59′ 35.61″ (LT)	12+58.88	6,806,520.82	2,525,718.85	N 86° 20′ 56.21″ W	42.41	76.65	72.00

MATCH LINE STA 810+00 CSJ: 0172-08-103
BENOIT MANUFACTURING AND REGIONAL CENTER
N COOKE RD
286820
190414
190428
190373
239304
PROPOSED RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY
℄ FR287NB
℄ RNBEXBOYCE
℄ US287NB
℄ US287CL
℄ US287NB STA 814+64.00
EXIT
R=25'
R=40'
R=30' (TYP)
RNBEXBOYCE3
RNBEXBOYCE4
Boyce Rd
R=30' (TYP)
RWNBML827
US287NB4
FR287NB2
℄ US287NB STA 822+64.00
℄ UCOOKESBNB
BEGIN BRIDGE
℄ US287NB STA 828+57.00
PROPOSED ROW
END CONSTRUCTION
℄ COOKE STA 22+55.37
MATCH EXISTING PAVEMENT
COOKE2
R=50'
℄ US287NB STA 830+14.35 = ℄ COOKE STA 18+22.63
RADIO TOWER
R=3'
R=70'
R=15' (TYP)
PROPOSED RIGHT-OF-WAY
R=70'
R=3'
TRANSMISSION TOWER
R=10'
END SURVEYED R.O.W., BEGIN APPX R.O.W.
R=5'
R=60'
END BRIDGE
℄ US287NB
STA 831+97.00
PROPOSED MBGF
RWNBML835
525' DECELERATION LANE (U-TURN)
160' TAPER
EXISTING RIGHT-OF-WAY
℄ FR287NB
℄ US287CL
FR287NB3
℄ US287NB
RNBEXCOOKE1
PROPOSED RIGHT-OF-WAY
RNBEXCOOKE2
US287NB5
RNBEXCOOKE3
US287CL5
END CONSTRUCTION
℄ FR287NB STA 1842+50.00
RWNBML845
RWNBML850
RNBEXCOOKE4
Boyce Rd
EXIT ½ MILE
℄ US287NB
STA 845+23.50
℄ US287NB
STA 845+24.00
RNBEXCOOKE5
℄ RNBEXCOOKE
℄ US287NB
STA 854+47.50
Cooke Rd
BEGIN BRIDGE
℄ US287NB
STA 855+55.00
END BRIDGE
℄ US287NB
STA 859+80.00
PROPOSED MBGF
RWNBML861
PROPOSED MBGF
END PROJECT
CSJ: 0172-08-103
STA: 863+54.00
MATCH EXISTING PAVEMENT
END CONSTRUCTION
℄ US287NB STA 863+60.00
MATCH EXISTING PAVEMENT
MUSTANG CREEK
PROPERTY NOT FOUND
℄ US287NB
STA 866+53.50
Cooke Rd
EXIT ¼ MILE
℄ US287NB
STA 869+28.00
Boyce Rd
EXIT 1 MILE
287
1815+00
1820+00
1825+00
815+00
820+00
825+00
835+00
840+00
845+00
850+00
855+00
860+00
865+00
870+00
875+00
1840+00
1845+00
1850+00
1855+00
1860+00
1865+00
1870+00
1875+00
℄ US287SB
℄ FR287SB
℄ RSBENBOYCE
EXISTING RIGHT-OF-WAY
RSBENBOYCE3
RSBENBOYCE4
RWSBML827
FR287SB4
BEGIN TAPER
℄ US287SB STA 824+24.99
US287SB4
END TAPER
℄ US287SB
STA 827+22.00
PROPOSED MBGF
BEGIN BRIDGE
℄ US287SB
STA 828+73.00
℄ US287SB STA 830+06.19 = ℄ COOKE STA 17+40.42
R=60'
R=96'
R=5'
R=70'
R=10'
TRANSMISSION TOWER
La = 400'
300' TAPER (MAINLANE)
160' TAPER
525' DECELERATION LANE (U-TURN)
COOKE1
℄ COOKE
R=9'
R=30'
END BRIDGE
℄ US287SB
STA 832+28.00
℄ UCOOKENBSB
R=70'
R=3'
R=10'
R=3'
PROPOSED RIGHT-OF-WAY
RSBENCOOKE1
END SURVEYED R.O.W.
BEGIN APPX R.O.W.
RWSBML835
℄ FR287SB
USACE DRIVEWAY
℄ RSBENCOOKE
RSBENCOOKE2
RSBENCOOKE3
RSBENCOOKE4
PROPOSED MBGF
FR287SB5
US287SB5
EXISTING RIGHT-OF-WAY
END CONSTRUCTION
℄ FR287SB STA 1841+60.00
BEGIN CONSTRUCTION
℄ COOKE STA 13+00.00
MATCH EXISTING PAVEMENT
US287CL6
RSBENCOOKE5
FR287SB6
RWSBML852
BEGIN BRIDGE
℄ US287SB
STA 855+44.00
END BRIDGE
℄ US287SB
STA 859+69.00
END CONSTRUCTION
℄ US287SB STA 863+00.00
MATCH EXISTING PAVEMENT
RWSBML861
EXISTING R.O.W.
PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED ℄ FR287SB
275' PROPOSED RIGHT-OF-WAY
134' (USUAL)
140'
135' (USUAL)
135'
POTENTIAL IMPROVEMENT ZONE
82'
36'
22'
20'
40'
38"
38'-68' (VARIES)
17'
15'
BORDER WIDTH
PROPOSED ROADWAY
MEDIAN
SUP
LANE
SH
VARIES
SDWK
CLEAR ZONE
PROPOSED SSTR
PROPOSED SSCB
RETAINING WALL
2.0%
1.00%
1.50%
6:1 MAX
NBFR PGL
NBML PGL
SBML PGL
SBFR PGL
PROPOSED PAVEMENT
TYPE 2 CURB (TYP.)
PROPOSED R.O.W.
EXISTING R.O.W.
US 287 PROPOSED TYPICAL SECTION
SCALE: N.T.S.
℄ FR287NB (NORTHBOUND)
STA 1758+29.20 TO STA 1765+09.77
STA 1831+97.47 TO STA 1838+79.23
℄ US287NB (NORTHBOUND)
STA 742+51.23 TO STA 755+37.00
STA 757+87.00 TO STA 765+87.60
STA 824+47.39 TO STA 828+57.00
STA 831+97.00 TO STA 836+58.84
℄ US287SB (SOUTHBOUND)
STA 745+86.06 TO STA 755+37.00
STA 757+87.00 TO STA 764+82.83
STA 822+54.41 TO STA 828+88.00
STA 832+28.00 TO STA 839+03.05
℄ FR287SB (SOUTHBOUND)
STA 1740+04.91 TO STA 1754+95.88
STA 1821+81.50 TO STA 1828+61.78
MATCH LINE STA 880+00 CSJ: 0172-08-103

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD
FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

ROADWAY TYPE / DESIGN SPEED
MAINLANES 65 MPH
RAMPS 45 MPH
FRONTAGE ROADS 45 MPH
CROSS STREETS (MINIMUM) 30 MPH
U-TURNS 15 MPH

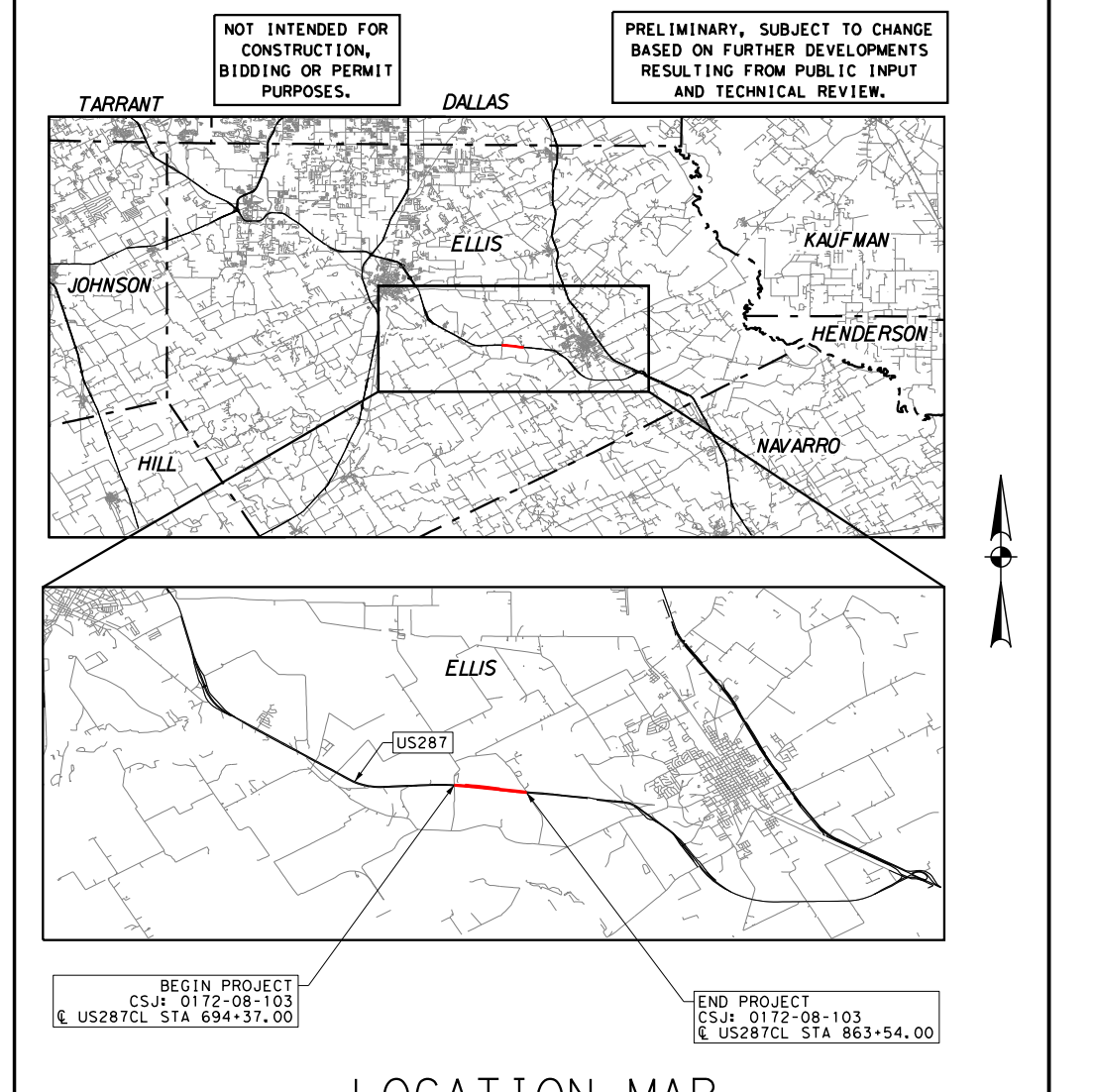
PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES: 1.–16. (as at left)

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PRELIMINARY, SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.

LOCATION MAP
N.T.S.
BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
TBPE REGISTRATION NO. 264

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:
JOHN NGUYEN 86489 10/20/23
NAME P.E. NO. DATE
EQUATIONS: NONE
RR CROSSINGS: NONE
OCTOBER 20, 2023
ROLL 3 OF 8
© 2023 BY TEXAS DEPARTMENT OF TRANSPORTATION
ALL RIGHTS RESERVED


TARRANT
DALLAS
JOHNSON
ELLIS
KAUFMAN
HENDERSON
HILL
NAVARRO
US287
BEGIN PROJECT
END PROJECT

11/10/2023 1:12:54 PM

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Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

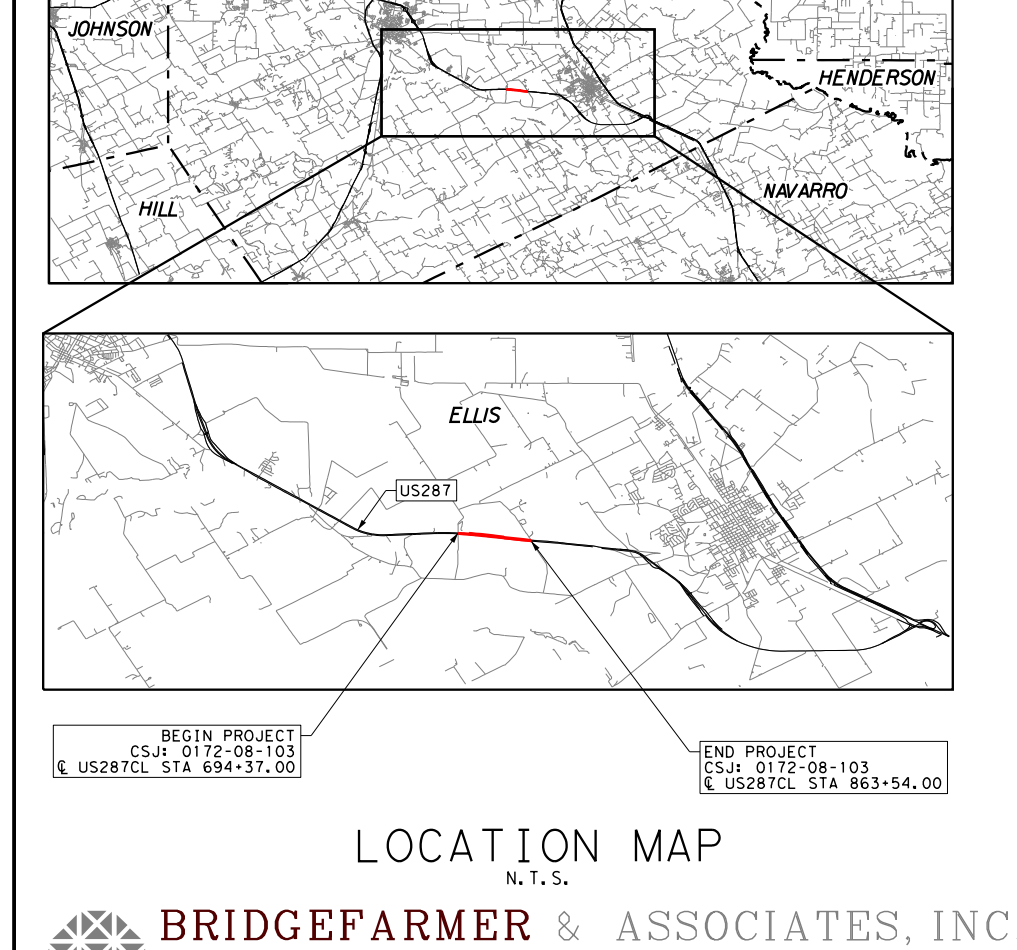
ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	45 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH
U-TURNS	15 MPH

PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES:
1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
4. CURBS ON FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
5. ALL CROSS STREET RADII ARE 50' AND DRIVEWAY RADII ARE 20' (UNLESS NOTED OTHERWISE).
6. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE. CURVE DATA IS NOT INCLUDED
7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
9. SURVEY AND SUE PROVIDED BY THE FEASIBILITY STUDY (10/22/2020)
10. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INDURANCE RATE MAPS 48139C0135F, 48139C0155F, AND 48139C0175F. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
12. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
13. 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.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.

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
KAUFMAN
HENDERSON
HILL
NAVARRO
ELLIS
US287
BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00
END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00

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	10/20/23

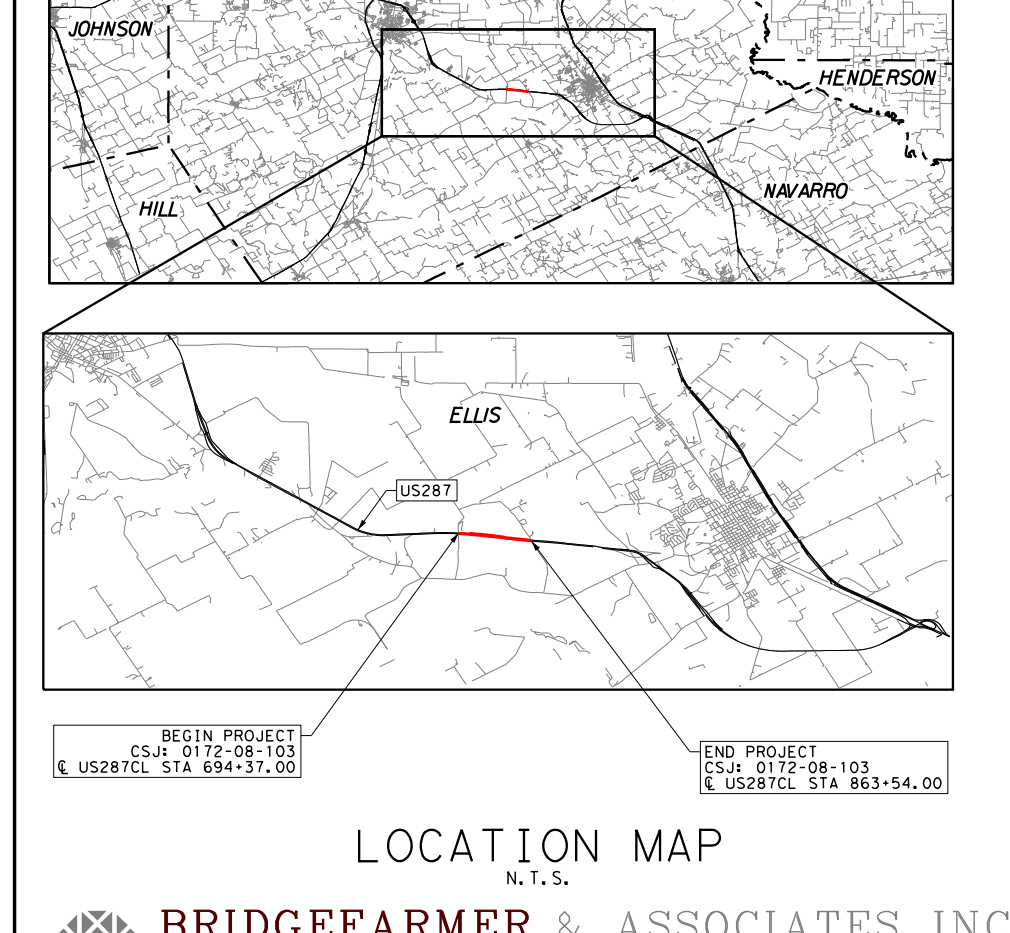
EQUATIONS: NONE
RR CROSSINGS: NONE

OCTOBER 20, 2023
ROLL 4 OF 8

550
540
530
520
510
500
490
480
470
0.02%
BEGIN CONSTRUCTION
CSJ: 0172-08-103
℄ US287NB STA 704+00.00
ELEV 498.69'
MATCH EXISTING PAVEMENT
EXISTING GROUND
ex = 0.56'
K = 200
L = 300.00'
VPC 713+80.00'
EL. = 493.80
(-)0.50 %
PVI 715+30.00'
EL = 493.05
(+)1.00 %
VPT 716+80.00'
EL. = 494.55
PROPOSED CULVERT 1
5-10'X7' MBC
US 486.39
DS 484.50
HW50 491.36
HW100 491.79
TW50 490.40
TW100 490.57
VPC 719+50.00'
EL. = 497.25
(+)1.00 %
PVI 722+00.00
EL = 499.75
(-)1.50 %
EXISITNG CULVERT
TO BE REMOVED
5-8'X4' MBC
ex = -1.56'
K = 200
L = 500.00'
VPT 724+50.00'
EL. = 496.00
ex = 1.56'
K = 200
L = 500.00'
VPC 725+00.00'
EL. = 495.25
(-)1.50 %
PVI 727+50.00'
EL = 491.50'
(+)1.00 %
VPT 730+00.00'
EL. = 494.00
PROPOSED PGL
PROPOSED CULVERT 2A
1-8'X4' RCB
US 485.09
DS 482.85
HW50 488.66
HW100 489.08
TW50 487.38
TW100 487.60
VPC 730+60.00'
EL. = 494.60
EXISITNG CULVERT
TO BE REMOVED
1-8'X4' RCB
ex = -0.56'
K = 200
L = 300.00'
(+)1.00 %
PVI 732+10.00
EL = 496.10'
(-)0.50 %
EXISITNG CULVERT
TO BE REMOVED
3-8'X4' MBC
PROPOSED CULVERT 2B
3-8'X4' RCB
US 485.09
DS 482.85
HW50 488.66
HW100 489.08
TW50 487.38
TW100 487.60
VPT 733+60.00'
EL. = 495.35
PVI 734+50.00'
EL = 494.90'
(-)1.00 %
ex = 3.41'
K = 179
L = 700.00'
VPC 736+20.00'
EL. = 493.20
(-)1.00 %
PVI 739+70.00
EL = 489.70'
(+)2.90 %
VPT 743+20.00'
EL. = 499.85
VPC 749+10.00'
EL. = 516.96
OVERALL BRIDGE LENGTH = 305'
105'
101'
99'
PVI 756+60.00
EL = 538.71'
(+)2.90 %
(-)2.90 %
BEGIN BRIDGE
STA 755+07.00
ELEV 525.93
END BRIDGE
STA 758+12.00
ELEV 525.94
STRUCTURAL DEPTH 4.83'
MIN VERT CLR 18.80'
MIN VERT CLR 16.52'
MIN VERT CLR 17.78'
℄ BOYCE
EXISITNG CULVERT
TO BE REMOVED
2-6'X3' MBC
ex = -10.88'
K = 259
L = 1,500.00'
VPT 764+10.00'
EL. = 516.96
US287NB
ex = 1.50'
K = 208
L = 500.00'
VPC 764+90.00'
EL. = 514.64
(-)2.90 %
PVI 767+40.00
EL = 507.39'
(-)0.50 %
VPT 769+90.00'
EL. = 506.14
(-)0.50 %
VPC 770+70.00
EL. = 505.74
PVI 771+70.00
EL = 505.24'
(-)1.51 %
VPT 772+70.00'
EL. = 503.73
ex = -0.25'
K = 198
L = 200.00'
ex = 0.80'
K = 159
L = 320.00'
VPC 775+40.00'
EL. = 499.66
(-)1.51 %
PVI 777+00.00
EL = 497.24'
(+)0.50 %
VPT 778+60.00'
EL. = 498.04
VPC 778+60.00'
EL. = 498.04
(+)0.50 %
PVI 780+10.00
EL = 498.79'
(-)1.00 %
ex = -0.56'
K = 200
L = 300.00'
PROPOSED CULVERT 4
3-6'X5' MBC
US 487.91
DS 486.05
HW50 490.79
HW100 491.08
TW50 488.92
TW100 489.00
EXISITNG CULVERT
TO BE REMOVED
3-6'X5' MBC
VPT 781+60.00'
EL. = 497.29
VPC 781+70.00'
EL. = 497.19
(-)1.00 %
ex = 0.66'
K = 171
L = 300.00'
PVI 783+20.00
EL = 495.69'
(+)0.75 %
VPT 784+70.00'
EL. = 496.82
EXISTING GROUND
PROPOSED PGL
VPC 793+00.00'
EL. = 503.05
(+)0.75 %
PVI 795+50.00
EL = 504.92'
(-)0.50 %
ex = -0.78'
K = 400
L = 500.00'
VPT 798+00.00'
EL. = 503.67
ex = 0.25'
K = 200
L = 200.00'
VPC 802+10.00'
EL. = 501.62
(-)0.50 %
PVI 803+10.00
EL = 501.12'
(+)0.50 %
VPT 804+10.00'
EL. = 501.62
VPC 805+00.00'
EL. = 502.07
(+)0.50 %
PVI 806+00.00
EL = 502.57'
(-)0.50 %
ex = -0.25'
K = 200
L = 200.00'
VPT 807+00.00'
EL. = 502.07
MATCH LINE STA 807+50
498.74
498.69 498.69
498.19 498.62
497.69 498.45
497.19 498.28
496.69 498.07
496.19 497.78
495.69 497.49
495.19 497.39
494.70 497.25
494.20 496.92
493.71 496.47
493.56 495.97
493.91 495.59
494.75 495.31
495.75 495.00
496.75 494.80
497.69 494.63
498.19 494.32
498.19 494.16
497.69 493.89
496.69 493.68
495.25 493.50
494.00 493.25
493.25 493.19
493.00 493.34
493.25 493.54
494.00 493.63
494.96 493.83
495.51 493.96
495.56 494.15
495.15 494.28
494.40 494.60
493.40 494.77
492.58 495.02
492.30 495.17
492.58 495.45
493.42 495.81
494.82 496.23
496.77 496.88
499.28 497.55
502.17 498.21
505.07 498.91
507.97 499.59
510.87 500.24
513.77 501.25
516.67 501.83
519.41 502.48
521.77 503.17
523.74 503.84
525.33 504.61
526.53 505.27
527.34 505.95
527.77 506.61
527.80 507.21
527.46 507.93
526.72 508.45
525.60 509.04
524.09 509.39
522.20 509.58
519.92 509.49
517.25 509.17
514.35 508.90
511.74 508.44
509.61 507.80
507.96 506.97
506.78 506.07
506.09 505.12
505.57 504.17
504.66 503.32
503.28 502.40
501.77 501.47
500.26 500.60
498.86 499.64
498.04 498.73
497.85 497.75
498.20 496.95
498.25 496.45
497.80 496.21
496.92 496.35
496.38 496.86
496.43 497.45
497.04 498.09
497.79 498.51
498.54 499.24
499.29 499.79
500.04 500.42
500.79 500.97
501.54 501.61
502.30 502.27
503.05 502.81
503.67 503.29
504.05 503.62
504.17 503.83
504.05 503.78
503.67 503.59
503.17 503.42
502.67 503.22
502.17 502.91
501.67 502.83
501.37 502.69
501.57 502.47
502.07 502.27
502.32 502.01
502.07 501.61
705+00
710+00
715+00
720+00
725+00
730+00
735+00
740+00
745+00
750+00
755+00
760+00
765+00
770+00
775+00
780+00
785+00
790+00
795+00
800+00
805+00

550
540
530
520
510
500
490
480
470
0.45%
BEGIN CONSTRUCTION
CSJ: 0172-08-103
℄ US287SB STA 703+50.00
ELEV 498.39'
MATCH EXISTING PAVEMENT
ex = 0.45'
K = 158
L = 240.00'
VPC 714+80.00'
EL. = 492.52
(-)0.51 %
PVI 716+00.00
EL = 491.90'
(+)1.00 %
VPT 717+20.00'
EL. = 493.10
PROPOSED CULVERT 1
5-10'X7' MBC
US 486.39
DS 484.50
HW50 491.36
HW100 491.79
TW50 490.40
TW100 490.57
VPC 721+10.00'
EL. = 491.00
(+)1.00 %
PVI 722+70.00
EL = 498.60'
(-)0.60 %
EXISITNG CULVERT
TO BE REMOVED
5-8'X4' MBC
ex = -0.64'
K = 200
L = 320.00'
VPT 724+30.00'
EL. = 497.64
PROPOSED CULVERT 2A-2B
4-8'X4' MBC
US 485.09
DS 482.85
HW50 488.66
HW100 489.08
TW50 487.38
TW100 487.60
EXISITNG CULVERT
TO BE REMOVED
4-8'X4' MBC
ex = 3.07'
K = 199
L = 700.00'
VPC 737+20.00'
EL. = 489.90
(-)0.60 %
PVI 740+70.00
EL = 487.80'
(+)2.91 %
VPT 744+20.00'
EL. = 497.99
PROPOSED PGL
EXISTING GROUND
VPC 750+70.00'
EL. = 516.90
OVERALL BRIDGE LENGTH = 300'
98'
103'
99'
PVI 756+72.76
EL = 534.28'
(+)2.91 %
(-)2.90 %
BEGIN BRIDGE
STA 755+12.00
ELEV 525.03
END BRIDGE
STA 758+12.00
ELEV 525.17
STRUCTURAL DEPTH 4.84'
MIN VERT CLR 17.77'
MIN VERT CLR 17.84'
MIN VERT CLR 17.08'
℄ BOYCE RD
EXISITNG CULVERT
TO BE REMOVED
2-6'X3' MBC
ex = -8.72'
K = 207
L = 1,200.00'
VPT 762+70.00'
EL. = 516.96
US287SB
ex = 1.50'
K = 208
L = 500.00'
VPC 764+50.00'
EL. = 511.74
(-)2.90 %
PVI 767+00.00
EL = 504.49
(-)0.50 %
VPT 769+50.00'
EL. = 503.24
PROPOSED CULVERT 4
3-6'X5' MBC
US 487.91
DS 486.05
HW50 490.79
HW100 491.08
TW50 488.92
TW100 489.00
EXISTING CULVERT
TO BE REMOVED
3-6'X5' MBC
ex = 1.06'
K = 189
L = 400.00'
VPC 785+70.00'
EL. = 495.14
(-)0.50 %
PVI 787+70.00
EL = 494.14'
(+)1.62 %
VPT 789+70.00'
EL. = 497.38
VPC 790+70.00'
EL. = 499.00
(+)1.62 %
PVI 793+20.00
EL = 503.05'
(-)0.50 %
ex = -1.33'
K = 236
L = 500.00'
VPT 795+70.00'
EL. = 501.80
EXISTING GROUND
PROPOSED PGL
(-)0.50 %
VPC 807+40.00'
EL. = 495.95
MATCH LINE STA 807+50
498.56
498.08 498.40
497.56 498.52
497.05 498.62
496.53 498.27
496.02 497.85
495.50 497.68
494.99 497.45
494.47 496.96
493.96 496.46
493.45 495.55
492.93 494.53
492.43 493.83
492.36 493.09
492.91 492.46
493.90 491.93
494.90 491.56
495.90 491.44
496.90 491.05
497.70 490.87
498.00 489.25
497.80 489.84
497.22 489.65
496.62 489.83
496.02 489.87
495.42 489.67
494.82 489.55
494.22 489.43
493.62 488.99
493.02 489.89
492.42 490.39
491.82 491.33
491.22 492.20
490.62 494.61
490.02 491.95
489.58 491.74
489.63 491.77
490.19 492.06
491.24 492.85
492.80 493.58
494.86 494.18
497.42 495.09
500.31 496.07
503.22 496.64
506.13 497.27
509.04 497.93
511.95 498.89
514.87 499.69
517.75 500.21
520.28 501.14
522.31 501.82
523.87 502.74
524.94 503.83
525.52 505.34
525.63 504.67
525.24 506.23
524.38 506.45
523.03 506.53
521.19 506.61
518.87 506.68
516.09 506.50
513.19 506.32
510.35 506.22
507.93 505.87
505.99 505.24
504.53 504.50
503.55 503.63
502.99 502.58
502.49 501.75
501.99 501.30
501.49 500.71
500.99 498.45
500.49 497.63
499.99 496.52
499.49 495.58
498.99 494.67
498.49 494.21
497.99 493.41
497.49 492.32
496.99 493.67
496.49 494.00
495.99 494.52
495.49 495.25
495.02 495.56
494.94 496.32
495.39 496.98
496.38 497.64
497.87 498.40
499.47 499.16
500.75 499.72
501.61 500.08
502.04 500.64
502.05 501.03
501.65 501.04
501.15 501.08
500.65 500.85
500.15 500.67
499.65 500.50
499.15 500.70
498.65 501.08
498.15 502.25
497.65 499.61
497.15 499.57
496.65 499.66
496.15 499.40
705+00
710+00
715+00
720+00
725+00
730+00
735+00
740+00
745+00
750+00
755+00
760+00
765+00
770+00
775+00
780+00
785+00
790+00
795+00
800+00
805+00

Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER
US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY
CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD
FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL
ROADWAY TYPE | DESIGN SPEED
MAINLANES | 65 MPH
RAMPS | 45 MPH
FRONTAGE ROADS | 45 MPH
CROSS STREETS (MINIMUM) | 30 MPH
U-TURNS | 15 MPH
PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC
NOTES:
1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
4. CURBS ON FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
5. ALL CROSS STREET RADII ARE 50' AND DRIVEWAY RADII ARE 20' (UNLESS NOTED OTHERWISE).
6. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE. CURVE DATA IS NOT INCLUDED
7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
9. SURVEY AND SUE PROVIDED BY THE FEASIBILITY STUDY (10/22/2020)
10. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INDURANCE RATE MAPS 48139C0135F, 48139C0155F, AND 48139C0175F. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
12. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
13. 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.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.
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
KAUFMAN
HENDERSON
HILL
NAVARRO
ELLIS
US287
BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00
END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00

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:
JOHN NGUYEN | 86489 | 10/20/23
NAME | P.E. NO. | DATE
EQUATIONS: NONE
RR CROSSINGS: NONE
OCTOBER 20, 2023
ROLL 4 OF 8
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Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC

ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	45 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH
U-TURNS	15 MPH

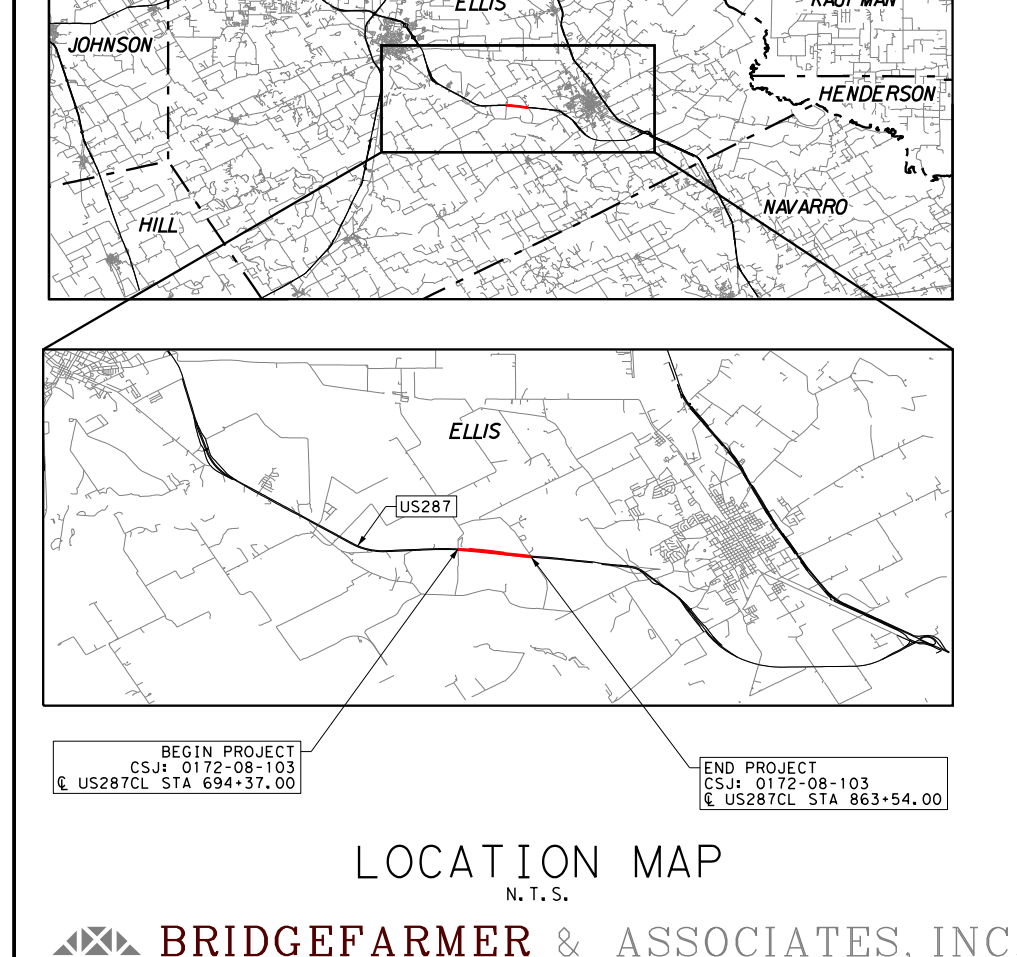
PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES:

1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
4. CURBS ON FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
5. ALL CROSS STREET RADII ARE 50' AND DRIVEWAY RADII ARE 20' (UNLESS NOTED OTHERWISE).
6. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE. CURVE DATA IS NOT INCLUDED
7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
9. SURVEY AND SUE PROVIDED BY THE FEASIBILITY STUDY (10/22/2020)
10. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INDURANCE RATE MAPS 48139C0135F, 48139C0155F, AND 48139C0175F. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
12. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
13. 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.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.

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
KAUFMAN
HENDERSON
HILL
NAVARRO
ELLIS
US287
BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00
END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00

LOCATION MAP
N.T.S.

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

100 0 100 200
SCALE: 1" = 100' HORIZONTAL
5 0 5 10
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	10/20/23

EQUATIONS: NONE
RR CROSSINGS: NONE

OCTOBER 20, 2023
ROLL 5 OF 8

c:\bms\bridgefarmer-pw\nhi.luong@bridgefarmer.com\dms22049\038502-SCH-PR-05.dgn
11/10/2023 1:13:09 PM

550
540
530
520
510
500
490
480
470
MATCH LINE STA 807+50
ex = 0.25'
K = 200
L = 200.00'
VPC 807+90.00'
EL. = 501.62
(-)0.50 %
PVI 808+90.00
EL = 501.12'
(+)0.50 %
VPT 809+90.00'
EL. = 501.62
VPC 811+10.00'
EL. = 502.22
(+)0.50 %
PVI 812+10.00
EL = 502.72'
(-)0.50 %
VPT 813+10.00'
EL. = 502.22
ex = -0.25'
K = 200
L = 200.00'
EXISTING GROUND
ex = 2.39'
K = 176
L = 580.00'
VPC 818+80.00'
EL. = 499.37
(-)0.50 %
PVI 821+70.00
EL = 497.92'
(+)2.80 %
VPT 824+60.00'
EL. = 506.04
PROPOSED PGL
VPC 824+70.00'
EL. = 506.32
OVERALL BRIDGE LENGTH = 340'
100'
120'
120'
PVI 830+30.00
EL = 522.00'
(+)2.80 %
(-)3.00 %
BEGIN BRIDGE
STA 828+57.00
ELEV 513.28
END BRIDGE
STA 831+97.00
ELEV 512.99
STRUCTURAL DEPTH 5.50'
MIN VERT CLR 16.93'
MIN VERT CLR 17.23'
MIN VERT CLR 16.63'
℄ COOKE
ex = -8.12'
K = 193
L = 1,120.00'
VPT 835+90.00'
EL. = 505.20
550 500
540 490
530 480
520 470
510 460
500 450
490 440
480 430
470 420
IDENTICAL POINT
PROPOSED PGL
ex = 1.25'
K = 160
L = 400.00'
VPC 850+50.00'
EL. = 461.40
(-)3.00 %
PVI 852+50.00
EL = 455.40'
(-)0.50 %
VPT 854+50.00'
EL. = 454.40
STRUCTURAL DEPTH 4.80'
EXISTING GROUND
OVERALL BRIDGE LENGTH = 425'
85'
85'
85'
85'
85'
BEGIN BRIDGE
STA 855+55.00
ELEV 453.88
(-)0.50 %
VPC 856+40.00'
EL. = 453.45
PVI 857+40.00
EL = 452.95'
MUSTANG CREEK
(-)1.10 %
VPT 858+40.00'
EL. = 451.85
ex = -0.15'
K = 331
L = 200.00'
END BRIDGE
STA 859+80.00
ELEV 450.30
100 YR WSE = 445.00
50 YR WSE = 444.32
0.62%
END CONSTRUCTION
CSJ: 0172-08-103
℄ US287NB STA 863+60.00
ELEV 446.11'
MATCH EXISTING PAVEMENT
US287NB
501.57 501.61
501.37 501.40
501.67 501.21
502.17 501.03
502.47 500.89
502.27 500.61
501.77 500.47
501.27 500.28
500.77 500.06
500.27 499.91
499.77 499.85
499.28 499.76
499.18 499.30
499.65 499.23
500.69 499.09
502.29 498.82
504.46 498.64
507.14 498.36
509.52 498.40
511.39 498.17
512.74 497.63
513.57 496.92
513.89 495.99
513.69 494.54
512.96 492.88
511.72 491.18
509.97 489.51
507.69 487.56
504.90 484.84
501.90 482.99
498.90 480.74
495.90 477.91
492.90 475.50
489.90 473.23
486.90 470.65
483.90 468.30
480.90 465.90
477.90 463.53
474.90 460.98
471.90 458.36
468.90 455.86
465.90 453.33
462.90 451.28
459.98 449.32
457.61 448.26
455.86 447.10
454.73 447.09
454.15 447.10
453.65 432.96
453.10 428.82
452.27 427.93
451.19 424.20
450.08 447.03
448.98 446.81
447.88 446.38
446.77 446.28
445.86
445.19
444.69
444.69
445.45
445.30
445.28
445.30
445.49
445.08
445.13
445.00
445.85
447.18
448.69
451.07
452.78
454.56
456.17
457.61
459.22
460.36
461.63
462.36
463.33
463.34
463.75
464.52
464.51
464.51
464.52
464.48
464.27
463.81
810+00
815+00
820+00
825+00
830+00
835+00
840+00
845+00
850+00
855+00
860+00
865+00
870+00
875+00
880+00
885+00
500
490
480
470
460
450
440
430
420

550
540
530
520
510
500
490
480
470
MATCH LINE STA 807+50
ex = 0.25'
K = 200
L = 200.00'
PVI 808+40.00
EL = 495.45'
(+)0.50 %
VPT 809+40.00'
EL. = 495.95
VPC 813+30.00'
EL. = 497.90
(+)0.50 %
PVI 814+30.00
EL = 498.40'
(-)0.50 %
VPT 815+30.00'
EL. = 497.90
ex = -0.25'
K = 200
L = 200.00'
ex = 3.30'
K = 242
L = 800.00'
VPC 817+10.00'
EL. = 497.00
(-)0.50 %
PVI 821+10.00
EL = 495.00'
(+)2.80 %
VPT 825+10.00'
EL. = 506.20
VPC 825+20.00'
EL. = 506.48
PROPOSED PGL
EXISTING GROUND
OVERALL BRIDGE LENGTH = 355'
110'
120'
125'
PVI 830+80.00
EL = 522.16'
(+)2.80 %
(-)3.00 %
BEGIN BRIDGE
STA 828+73.00
ELEV 513.14
END BRIDGE
STA 832+28.00
ELEV 513.33
STRUCTURAL DEPTH 5.50'
MIN VERT CLR 16.66'
MIN VERT CLR 17.31'
MIN VERT CLR 18.15'
℄ COOKE RD
ex = -8.12'
K = 193
L = 1,120.00'
VPT 836+40.00'
EL. = 505.36
550 490
540 480
530 470
520 460
510 450
500 440
490 430
480 420
470 410
IDENTICAL POINT
PROPOSED PGL
ex = 1.25'
K = 160
L = 400.00'
VPC 851+40.00'
EL. = 460.36
(-)3.00 %
PVI 853+40.00
EL = 454.36'
(-)0.50 %
VPT 855+40.00'
EL. = 453.36
EXISTING GROUND
STRUCTURAL DEPTH 4.80'
BEGIN BRIDGE
STA 855+44.00
ELEV 453.34
OVERALL BRIDGE LENGTH = 425'
85'
85'
85'
85'
85'
(-)0.50 %
MUSTANG CREEK
VPC 858+20.00'
EL. = 451.96
PVI 859+20.00
EL = 451.46'
(-)1.37 %
VPT 860+20.00'
EL. = 450.09
ex = -0.22'
K = 230'
L = 200.00'
END BRIDGE
STA 859+69.00
ELEV 450.74
100 YR WSE = 444.95
50 YR WSE = 444.28
0.97%
END CONSTRUCTION
CSJ: 0172-08-103
℄ US287SB STA 863+00.00
ELEV 446.26'
MATCH EXISTING PAVEMENT
US287SB
495.74 499.30
495.79 499.05
496.25 499.08
496.75 498.85
497.25 498.74
497.75 498.39
498.13 497.96
498.03 497.77
497.55 497.40
497.05 497.33
496.72 497.05
496.80 497.26
497.29 496.81
498.19 496.82
499.51 496.83
501.23 496.44
503.37 496.37
505.93 496.21
508.56 495.92
510.68 495.63
512.29 494.51
513.38 493.87
513.96 492.19
514.01 494.38
513.55 492.95
512.57 490.73
511.07 488.96
509.06 487.17
506.52 484.65
503.56 482.50
500.56 479.46
497.56 477.06
494.56 474.14
491.56 471.57
488.56 469.06
485.56 466.27
482.56 463.62
479.56 460.57
476.56 458.54
473.56 456.36
470.56 454.22
467.56 452.24
464.56 450.53
461.56 449.02
458.68 447.75
456.36 447.22
454.68 447.08
453.61 447.39
453.06 428.41
452.56 429.07
452.06 427.32
451.42 426.63
450.36 446.89
449.00 447.17
447.63 446.50
446.26
445.59
445.44
445.29
445.15
445.30
445.30
445.58
445.58
445.43
445.30
445.30
445.09
446.63
447.96
449.37
451.80
453.39
455.37
457.11
458.36
459.68
461.22
462.06
462.37
463.34
463.51
463.50
464.06
464.29
464.18
464.19
464.79
464.59
464.19
464.33
464.35
464.08
464.04
464.20
464.67
465.76
467.16
468.42
469.89
471.69
473.66
475.95
477.75
810+00
815+00
820+00
825+00
830+00
835+00
840+00
845+00
850+00
855+00
860+00
865+00
870+00
875+00
880+00
885+00
490
480
470
460
450
440
430
420
410

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD

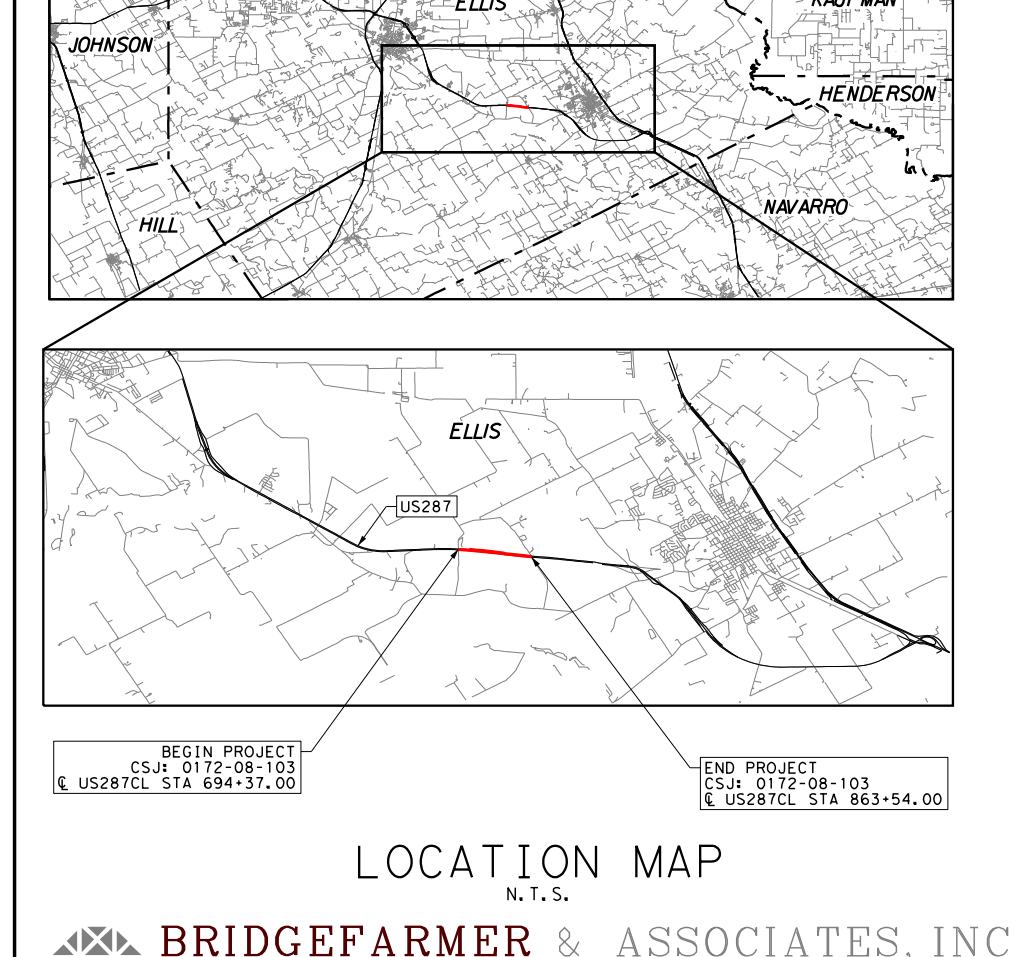
FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

ROADWAY TYPE / DESIGN SPEED
MAINLANES 65 MPH
RAMPS 45 MPH
FRONTAGE ROADS 45 MPH
CROSS STREETS (MINIMUM) 30 MPH
U-TURNS 15 MPH

PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES: 1.–16. (as above)

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
KAUFMAN
HENDERSON
HILL
NAVARRO
ELLIS
US287
BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00
END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00

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:
JOHN NGUYEN 86489 10/20/23
EQUATIONS: NONE
RR CROSSINGS: NONE
OCTOBER 20, 2023
ROLL 5 OF 8
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Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

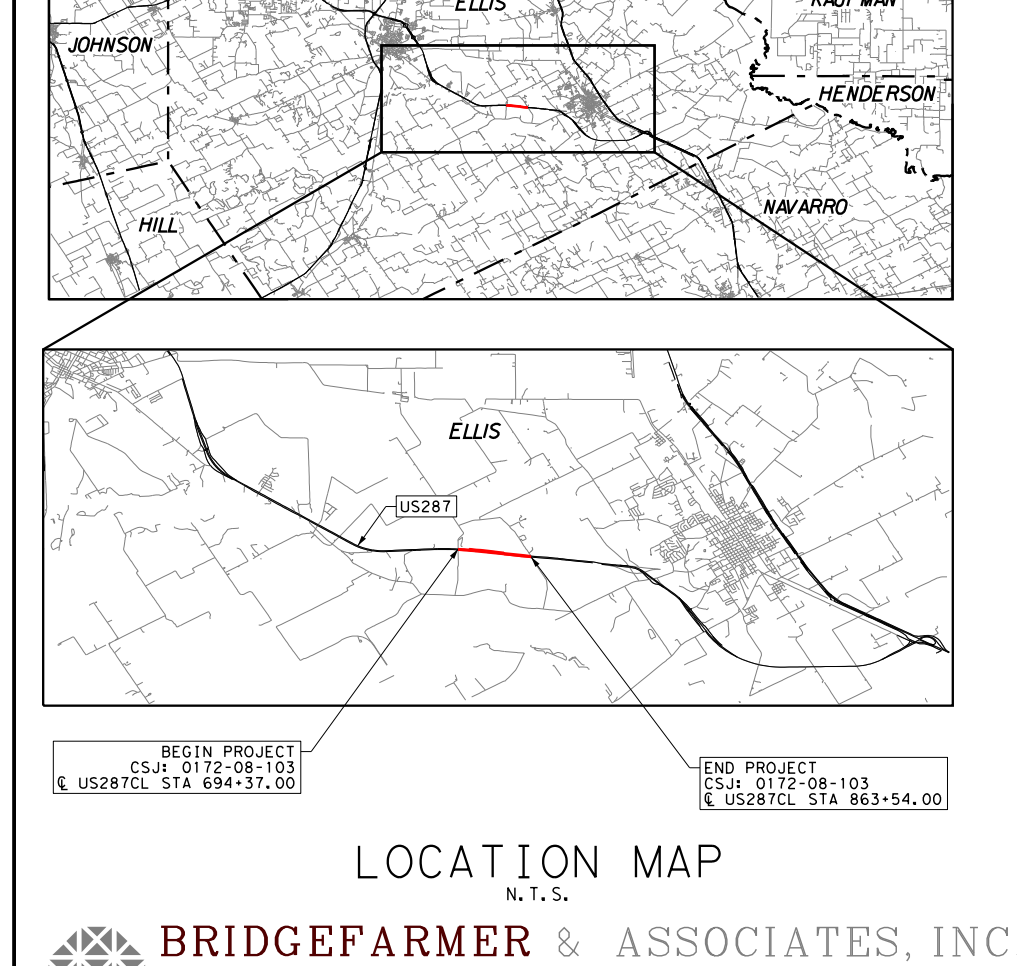
ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	45 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH
U-TURNS	15 MPH

PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES:
1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
4. CURBS ON FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
5. ALL CROSS STREET RADII ARE 50' AND DRIVEWAY RADII ARE 20' (UNLESS NOTED OTHERWISE).
6. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE. CURVE DATA IS NOT INCLUDED
7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
9. SURVEY AND SUE PROVIDED BY THE FEASIBILITY STUDY (10/22/2020)
10. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INDURANCE RATE MAPS 48139C0135F, 48139C0155F, AND 48139C0175F. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
12. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
13. 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.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.

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
ELLIS
KAUFMAN
JOHNSON
HENDERSON
HILL
NAVARRO
ELLIS
US287

BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00

END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00

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	10/20/23

EQUATIONS: NONE
RR CROSSINGS: NONE

OCTOBER 20, 2023
ROLL 6 OF 8

11/10/2023 1:13:23 PM
c:\bms\bridgefarmer-pw\nhi.luong@bridgefarmer.com\dms22049\038502-SCH-PR-06.dgn

520
510
500
490
480
470
460
450
BEGIN CONSTRUCTION
CSJ: 0172-08-103
℄ FR287NB STA 1709+50.00
ELEV 494.92'
MATCH EXISTING PAVEMENT
0.07%
ex = 0.18'
K = 137
L = 140.00'
VPC 1710+70.00' EL. = 494.29'
PVI 1711+40.00 EL = 493.92'
VPT 1712+10.00' EL. = 494.27
(-)0.52 %
(+)0.50 %
VPC 1712+70.00' EL. = 494.57
PVI 1713+40.00 EL = 494.92'
VPT 1714+10.00' EL. = 494.57
ex = -0.18'
K = 140
L = 140.00'
(-)0.50 %
ex = 0.40'
K = 80
L = 160.00'
VPC 1716+00.00' EL. = 493.62
PVI 1716+80.00 EL = 493.22'
VPT 1717+60.00' EL. = 494.42
(+)1.50 %
PROPOSED CULVERT 1
5-10'X7' MBC
US 486.39
DS 484.50
HW25 490.95
HW100 491.79
TW25 490.21
TW100 490.57
VPC 1719+80.00' EL. = 497.72
PVI 1721+30.00 EL = 499.97'
VPT 1722+80.00' EL. = 497.72
ex = -1.12'
K = 100
L = 300.00'
(-)1.50 %
ex = 0.62'
K = 80
L = 200.00'
VPC 1726+30.00' EL. = 492.47
PVI 1727+30.00 EL = 490.97'
VPT 1728+30.00' EL. = 491.97
(+)1.00 %
PROPOSED CULVERT 2A
1-8'X4' RCB
US 485.09
DS 482.85
HW25 488.33
HW100 489.08
TW25 487.13
TW100 487.60
VPC 1731+00.00' EL. = 494.67
PVI 1732+00.00 EL = 495.67'
VPT 1733+00.00' EL. = 495.17
ex = -0.37'
K = 133
L = 200.00'
(-)0.50 %
(-)2.50 %
PROPOSED CULVERT 2B
3-8'X4' MBC
US 485.09
DS 482.85
HW25 488.33
HW100 489.08
TW25 487.13
TW100 487.60
PVI 1734+60.00 EL = 494.37'
(-)1.00 %
ex = 0.44'
K = 114
L = 200.00'
VPC 1737+60.00' EL. = 491.37
PVI 1738+60.00 EL = 490.37'
VPT 1739+60.00' EL. = 491.13
(+)0.76 %
EXISTING GROUND
PROPOSED PGL
℄ BOYCE
VPC 1756+70.00' EL. = 504.14
PVI 1757+40.00 EL = 504.68'
VPT 1758+10.00' EL. = 504.32
ex = -0.22'
K = 111
L = 140.00'
ex = 0.18'
K = 139
L = 140.00'
VPC 1758+70.00' EL. = 504.02
PVI 1759+40.00 EL = 503.67'
VPT 1760+10.00' EL. = 504.02
(+)0.50 %
VPC 1764+15.00' EL. = 506.04
PVI 1769+15.00 EL = 508.54'
VPT 1774+15.00' EL. = 500.86
ex = -2.55'
K = 491
L = 1,000.00'
(-)1.54 %
ex = 0.67'
K = 83
L = 210.00'
VPC 1776+25.00' EL. = 497.64
PVI 1777+30.00 EL = 496.02
VPT 1778+35.00' EL. = 497.07
(+)1.00 %
PROPOSED CULVERT 4
3-6'X5' MBC
US 487.91
DS 486.05
HW25 490.43
HW100 491.08
TW25 488.84
TW100 489.00
VPC 1779+00.00' EL. = 497.72
PVI 1779+70.00 EL = 498.42'
VPT 1780+40.00' EL. = 497.72
ex = -0.35'
K = 70
L = 140.00'
(-)1.00 %
ex = 0.33'
K = 84
L = 150.00'
VPC 1782+70.00' EL. = 495.42
PVI 1783+45.00 EL = 494.67'
VPT 1784+20.00' EL. = 495.26
(+)0.78 %
VPC 1791+60.00' EL. = 501.04
PVI 1795+60.00 EL = 504.17'
VPT 1799+60.00' EL. = 502.17
ex = -1.28'
K = 624
L = 800.00'
(-)0.50 %
ex = 0.38'
K = 300
L = 300.00'
VPC 1801+70.00' EL. = 501.12
PVI 1803+20.00 EL = 500.37'
VPT 1804+70.00' EL. = 501.12
VPC 1804+70.00' EL. = 501.12
ex = -0.35'
K = 280
L = 280.00'
FR287NB
1705+00
1710+00
1715+00
1720+00
1725+00
1730+00
1735+00
1740+00
1745+00
1750+00
1755+00
1760+00
1765+00
1770+00
1775+00
1780+00
1785+00
1790+00
1795+00
1800+00
1805+00
MATCH LINE STA 1806+00

520
510
500
490
480
470
460
450
BEGIN CONSTRUCTION
CSJ: 0172-08-103
℄ FR287SB STA 1710+00.00
ELEV 494.76'
MATCH EXISTING PAVEMENT
1.02%
ex = 0.21'
K = 155
L = 160.00'
VPC 1711+50.00' EL. = 493.96
PVI 1712+30.00 EL = 493.54'
VPT 1713+10.00' EL. = 493.94
(-)0.53 %
(+)0.50 %
VPC 1713+10.00' EL. = 493.94
PVI 1713+90.00 EL = 494.34'
VPT 1714+70.00' EL. = 493.94
ex = -0.20'
K = 160
L = 160.00'
(-)0.50 %
ex = 0.26'
K = 93
L = 140.00'
VPC 1717+30.00' EL. = 492.64
PVI 1718+00.00 EL = 492.29'
VPT 1718+70.00' EL. = 492.99
(+)1.00 %
PROPOSED CULVERT 1
5-10'X7' MBC
US 486.39
DS 484.50
HW25 490.95
HW100 491.79
TW25 490.21
TW100 490.57
VPC 1722+60.00' EL. = 496.89
PVI 1723+30.00 EL = 497.59'
VPT 1724+00.00' EL. = 497.17
ex = -0.28'
K = 87
L = 140.00'
(-)0.60 %
PROPOSED CULVERT 2A-2B
4-8'X4' MBC
US 485.09
DS 482.85
HW25 488.33
HW100 489.08
TW25 487.13
TW100 487.60
ex = 0.19'
K = 127
L = 140.00'
VPC 1734+50.00' EL. = 490.87
PVI 1735+20.00 EL = 490.45'
VPT 1735+90.00' EL. = 490.80
(+)0.50 %
EXISTING GROUND
PROPOSED PGL
℄ BOYCE
VPC 1763+70.00' EL. = 504.70
PVI 1764+40.00 EL = 505.05'
VPT 1765+10.00' EL. = 504.70
ex = -0.17'
K = 140
L = 140.00'
(-)0.50 %
PROPOSED CULVERT 4
3-6'X5' MBC
US 487.91
DS 486.05
HW25 490.43
HW100 491.08
TW25 488.84
TW100 489.00
ex = 1.00'
K = 200
L = 400.00'
VPC 1785+30.00' EL. = 494.60
PVI 1787+30.00 EL = 493.60'
VPT 1789+30.00' EL. = 496.60
(+)1.50 %
VPC 1791+50.00' EL. = 499.90
PVI 1793+00.00 EL = 502.15'
VPT 1794+50.00' EL. = 501.40
ex = -0.75'
K = 150
L = 300.00'
FR287SB
1705+00
1710+00
1715+00
1720+00
1725+00
1730+00
1735+00
1740+00
1745+00
1750+00
1755+00
1760+00
1765+00
1770+00
1775+00
1780+00
1785+00
1790+00
1795+00
1800+00
1805+00
MATCH LINE STA 1806+00

Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER
US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY
CSJ: 0172-08-103
CSJ LIMITS: FROM: WEST OF BOYCE RD TO: EAST OF COOKE RD
FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL
PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC
LOCATION MAP
BRIDGEFARMER & ASSOCIATES, INC.
PRELIMINARY FOR INTERIM REVIEW ONLY
JOHN NGUYEN 86489 10/20/23
OCTOBER 20, 2023
ROLL 6 OF 8
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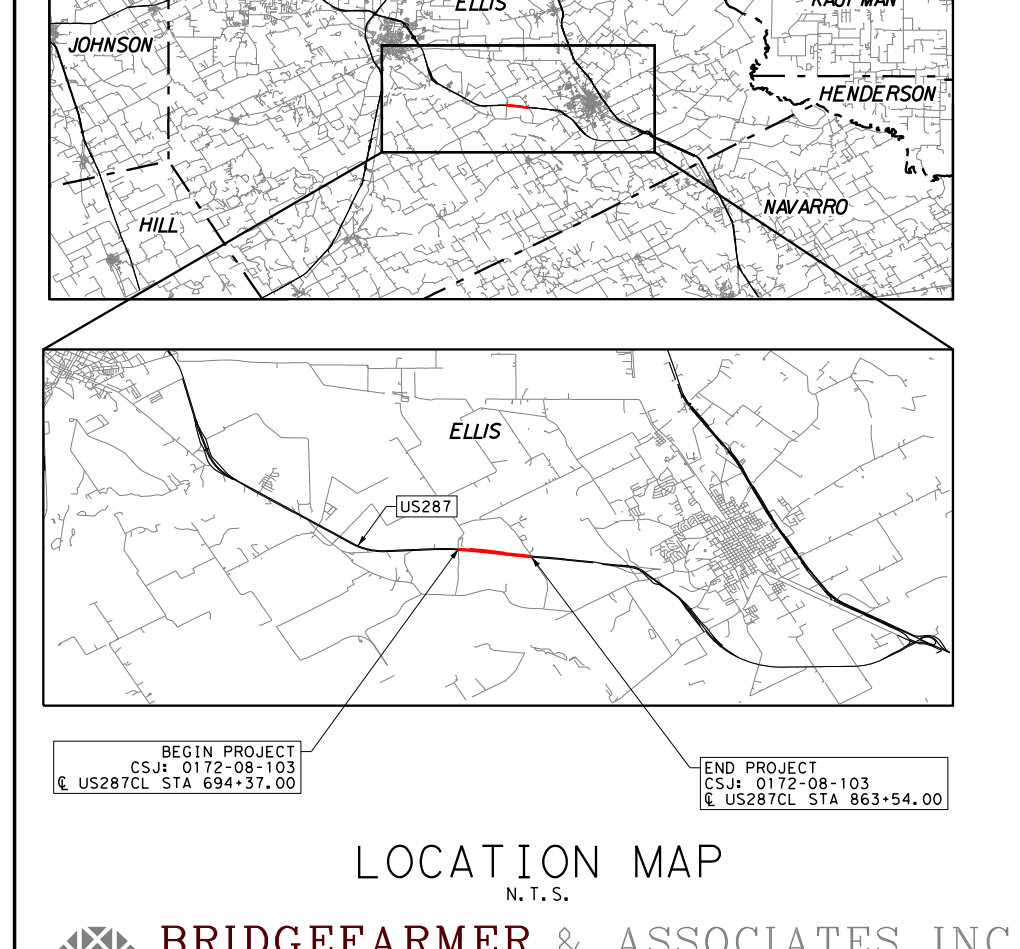

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Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	45 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH
U-TURNS	15 MPH

PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES:

1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
4. CURBS ON FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
5. ALL CROSS STREET RADII ARE 50' AND DRIVEWAY RADII ARE 20' (UNLESS NOTED OTHERWISE).
6. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE. CURVE DATA IS NOT INCLUDED
7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
9. SURVEY AND SUE PROVIDED BY THE FEASIBILITY STUDY (10/22/2020)
10. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INDURANCE RATE MAPS 48139C0135F, 48139C0155F, AND 48139C0175F. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
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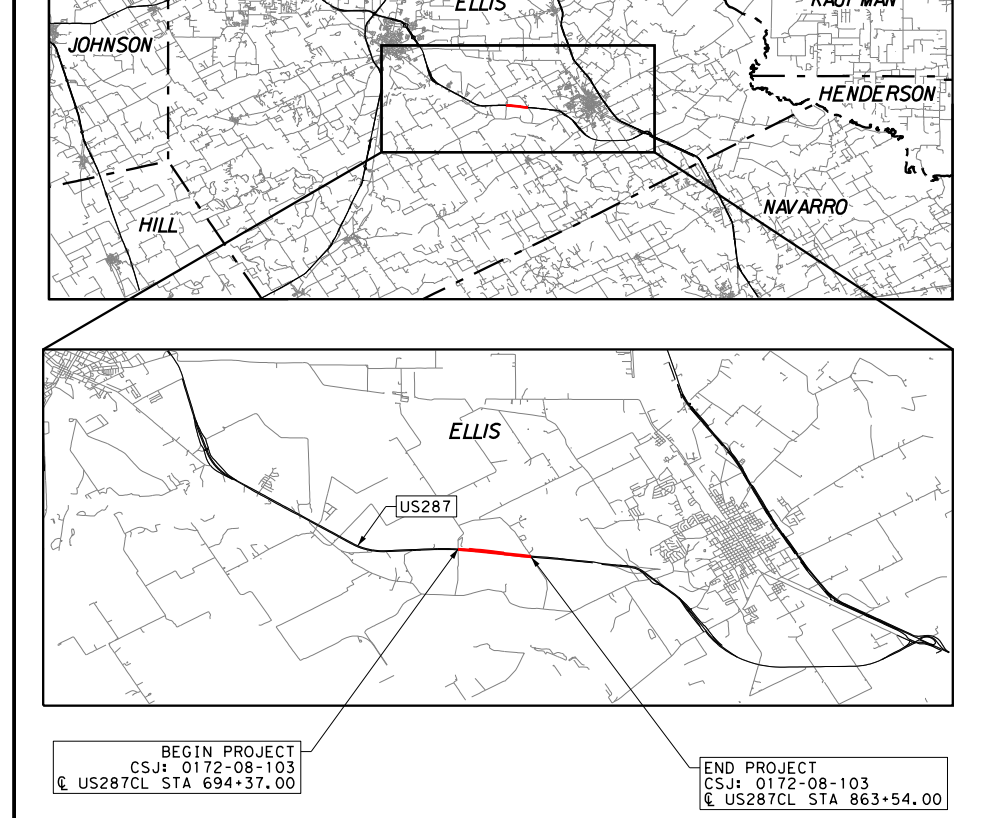
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.

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
ELLIS
JOHNSON
KAUFMAN
HENDERSON
HILL
NAVARRO
ELLIS
US287

BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00

END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00

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:

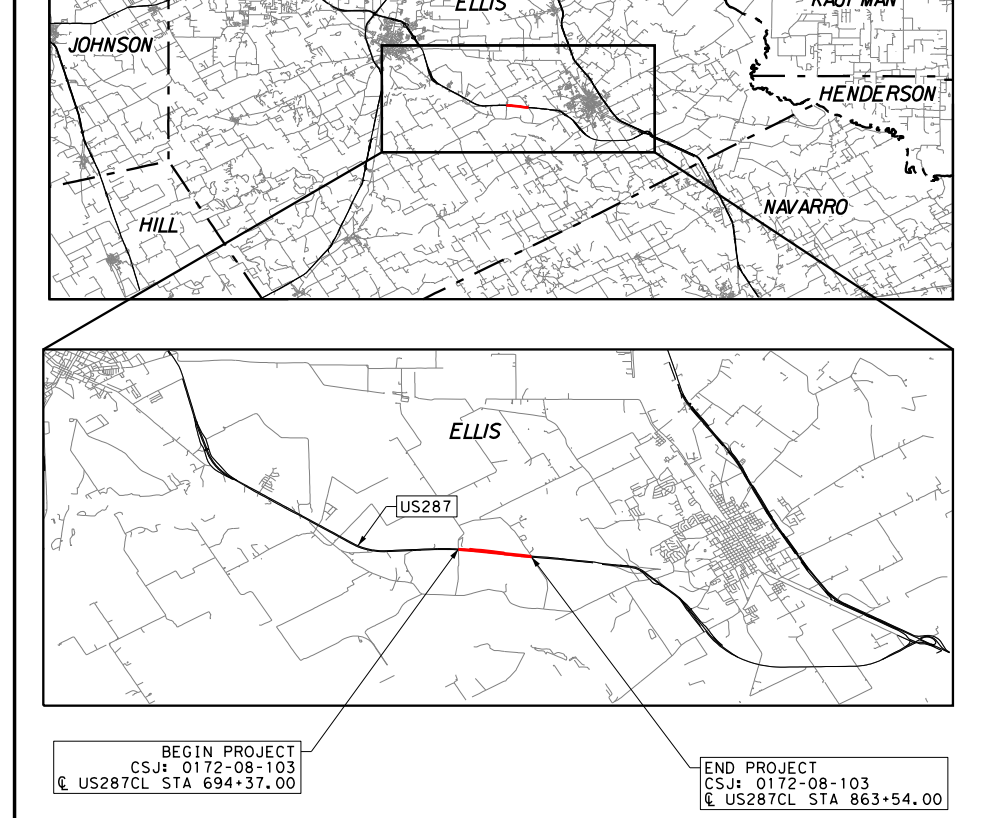
NAME	P.E. NO.	DATE
JOHN NGUYEN	*86489*	*10/20/23*

EQUATIONS: NONE
RR CROSSINGS: NONE

OCTOBER 20, 2023
ROLL 7 OF 8

MATCH LINE STA 1806+00
520
510
500
490
480
470
460
450
ex = 0.19'
K = 150
L = 150.00'
PVI 1806+10.00 EL = 501.82'
VPC 1808+10.00' EL. = 500.82
VPT 1809+60.00' EL. = 500.82
PVI 1811+50.00 EL = 501.77'
(-)0.50 %
(-)0.50 %
(+)0.50 %
(+)0.50 %
(-)0.50 %
ex = -0.35'
K = 280
L = 280.00'
VPT 1807+50.00' EL. = 501.12
PVI 1808+85.00 EL = 500.44'
VPC 1809+60.00' EL. = 500.82
ex = -0.47'
K = 380
L = 380.00'
VPT 1813+40.00' EL. = 500.82
PROPOSED PGL
EXISTING GROUND
ex = 0.17'
K = 135
L = 135.00'
VPC 1819+87.50' EL. = 497.58
VPT 1821+22.50' EL. = 497.58
PVI 1821+90.00 EL = 497.92'
(-)0.50 %
(+)0.50 %
(+)0.50 %
(-)0.70 %
PVI 1820+55.00 EL = 497.24'
VPC 1821+22.50' EL. = 497.58
VPT 1822+57.50' EL. = 497.45
ex = -0.20'
K = 112
L = 135.00'
(-)0.70 %
PVI 1826+60.00 EL = 494.62'
VPC 1825+40.00' EL. = 495.46
ex = -0.39'
K = 185
L = 240.00'
VPC 1827+80.00' EL. = 492.22
VPT 1827+80.00' EL. = 492.22
ex = 1.45'
K = 138
L = 400.00'
℄ COOKE
(-)2.00 %
(-)2.00 %
(+)0.90 %
PVI 1829+80.00 EL = 488.22'
VPT 1831+80.00' EL. = 490.02
PVI 1837+00.00 EL = 494.70'
(+)0.90 %
(-)3.00 %
VPC 1835+50.00' EL. = 493.35
VPT 1838+50.00' EL. = 490.20
ex = -1.46'
K = 77
L = 300.00'
END CONSTRUCTION
CSJ: 0172-08-103
℄ FR287NB STA 1845+60.00
ELEV 468.90'
IDENTICAL POINT
520 480
510 470
500 460
490 450
480 440
470 430
460 420
450 410
EXISTING GROUND
MUSTANG CREEK
FR287NB
501.47 501.16
501.32 501.13
500.87 501.39
500.64 501.06
501.00 501.19
501.26 500.85
501.26 500.84
501.00 500.74
500.52 500.12
500.02 499.98
499.52 499.69
499.02 499.47
498.52 498.82
498.02 498.35
497.52 498.21
497.49 498.13
497.70 497.19
497.15 496.65
496.45 496.10
495.74 495.81
494.95 495.39
493.65 495.26
491.84 494.93
490.34 494.92
489.58 495.09
489.53 494.18
490.20 493.89
491.10 493.45
492.00 492.61
492.90 493.07
493.64 493.04
493.24 493.14
491.54 492.69
488.70 492.30
485.70 491.16
482.70 489.04
479.70 484.19
476.70 479.14
473.70 474.16
470.70 469.03
463.56
458.82
452.71
448.41
441.87
439.85
438.15
436.58
436.42
436.55
434.18
427.76
428.55
420.80
436.08
436.17
435.71
435.30
434.85
434.75
434.38
434.05
434.23
434.81
434.12
1810+00
1815+00
1820+00
1825+00
1830+00
1835+00
1840+00
1845+00
1850+00
1855+00
1860+00
1865+00
1870+00
1875+00
1880+00
1885+00
480
470
460
450
440
430
420
410

MATCH LINE STA 1806+00
520
510
500
490
480
470
460
450
ex = 0.38'
K = 300
L = 300.00'
VPC 1806+60.00' EL. = 495.35
VPT 1809+60.00' EL. = 495.35
(-)0.50 %
(+)0.50 %
PVI 1808+10.00 EL = 494.60'
PVI 1814+20.00 EL = 497.65'
(+)0.50 %
(-)0.50 %
VPC 1812+70.00' EL. = 496.90
VPT 1815+70.00' EL. = 496.90
ex = -0.38'
K = 300
L = 300.00'
EXISTING GROUND
PROPOSED PGL
ex = 0.25'
K = 200
L = 200.00'
VPC 1830+40.00' EL. = 489.55
VPT 1832+40.00' EL. = 489.55
(-)0.50 %
(+)0.50 %
℄ COOKE
PVI 1831+40.00 EL = 489.05'
END CONSTRUCTION
CSJ: 0172-08-103
℄ FR287SB STA 1841+60.00
ELEV 486.80
PVI 1839+50.00 EL = 493.10'
(+)0.50 %
(-)3.00 %
VPC 1838+00.00' EL. = 492.35
VPT 1841+00.00' EL. = 488.60
ex = -1.31'
K = 86
L = 300.00'
IDENTICAL POINT
520 480
510 470
500 460
490 450
480 440
470 430
460 420
450 410
EXISTING GROUND
MUSTANG CREEK
FR287SB
495.65 499.56
495.17 499.39
494.97 499.23
495.11 499.06
495.55 498.82
496.05 498.86
496.55 498.78
497.03 498.51
497.26 498.04
497.16 497.75
496.75 497.36
496.25 497.33
495.75 497.22
495.25 497.20
494.75 497.22
494.25 496.96
493.75 496.77
493.25 496.92
492.75 496.32
492.25 496.34
491.75 496.35
491.25 496.99
490.75 497.07
490.25 496.76
489.75 496.06
489.34 494.83
489.39 493.92
489.85 492.45
490.35 490.76
490.85 489.07
491.35 486.99
491.85 484.54
492.35 482.21
492.26 479.42
491.01 476.73
488.60 473.58
470.54
467.39
464.00
460.42
457.34
456.77
455.17
450.29
444.09
440.42
437.15
433.40
430.70
429.01
426.12
429.22
423.14
428.20
427.10
427.10
427.87
427.45
427.64
427.37
427.23
428.34
429.05
427.13
427.35
426.79
426.73
428.24
427.08
427.93
428.09
428.78
430.16
432.48
435.67
437.63
439.33
443.16
447.57
451.86
456.61
462.11
462.42
462.80
1810+00
1815+00
1820+00
1825+00
1830+00
1835+00
1840+00
1845+00
1850+00
1855+00
1860+00
1865+00
1870+00
1875+00
1880+00
1885+00
480
470
460
450
440
430
420
410


TARRANT
DALLAS
ELLIS
JOHNSON
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US287

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TO: EAST OF COOKE RD
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TERRAIN: LEVEL
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RAMPS | 45 MPH
FRONTAGE ROADS | 45 MPH
CROSS STREETS (MINIMUM) | 30 MPH
U-TURNS | 15 MPH
PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC
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BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00
END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00
LOCATION MAP
N.T.S.
BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
TBPE REGISTRATION NO. 264
SCALE: 1" = 100' HORIZONTAL
SCALE: 1" = 10' VERTICAL
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JOHN NGUYEN 86489 10/20/23
NAME P.E. NO. DATE
EQUATIONS: NONE
RR CROSSINGS: NONE
OCTOBER 20, 2023
ROLL 7 OF 8
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Texas Department of Transportation

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CEASON CLEMENS, PE, DISTRICT ENGINEER

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ELLIS COUNTY

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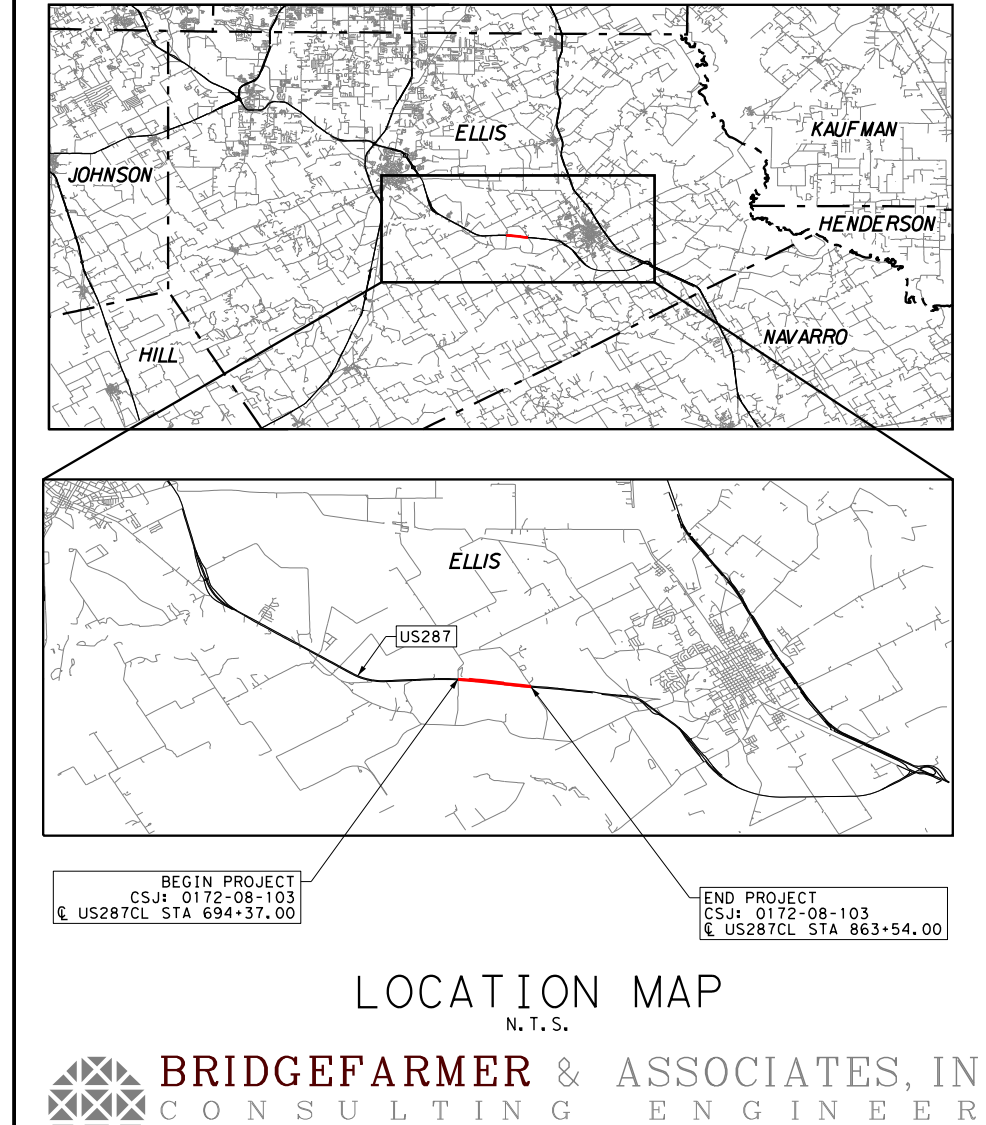
TARRANT
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BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00
END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00

LOCATION MAP
N.T.S.

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

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

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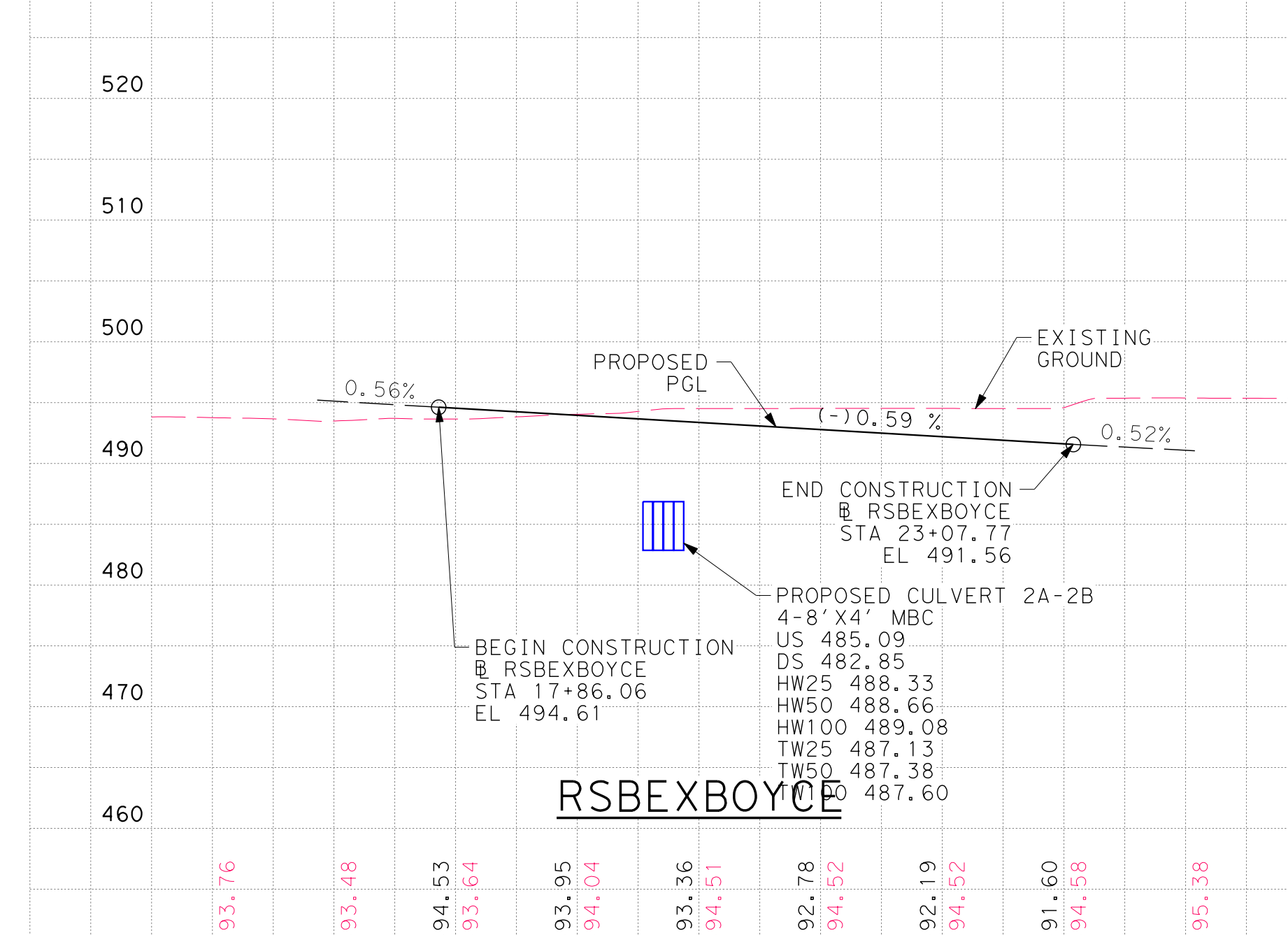
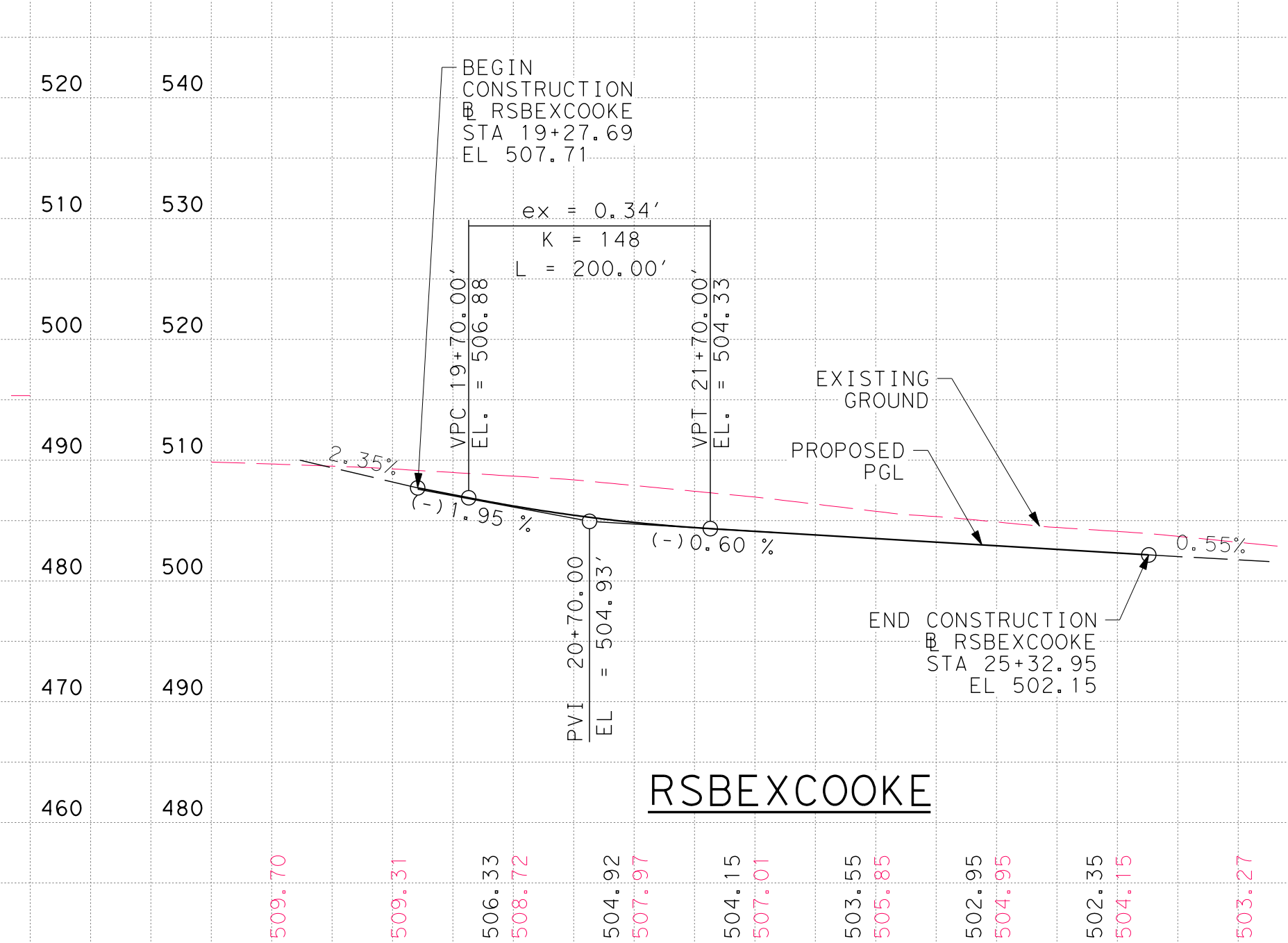
NAME	P.E. NO.	DATE
JOHN NGUYEN	86489	10/20/23

EQUATIONS: NONE
RR CROSSINGS: NONE

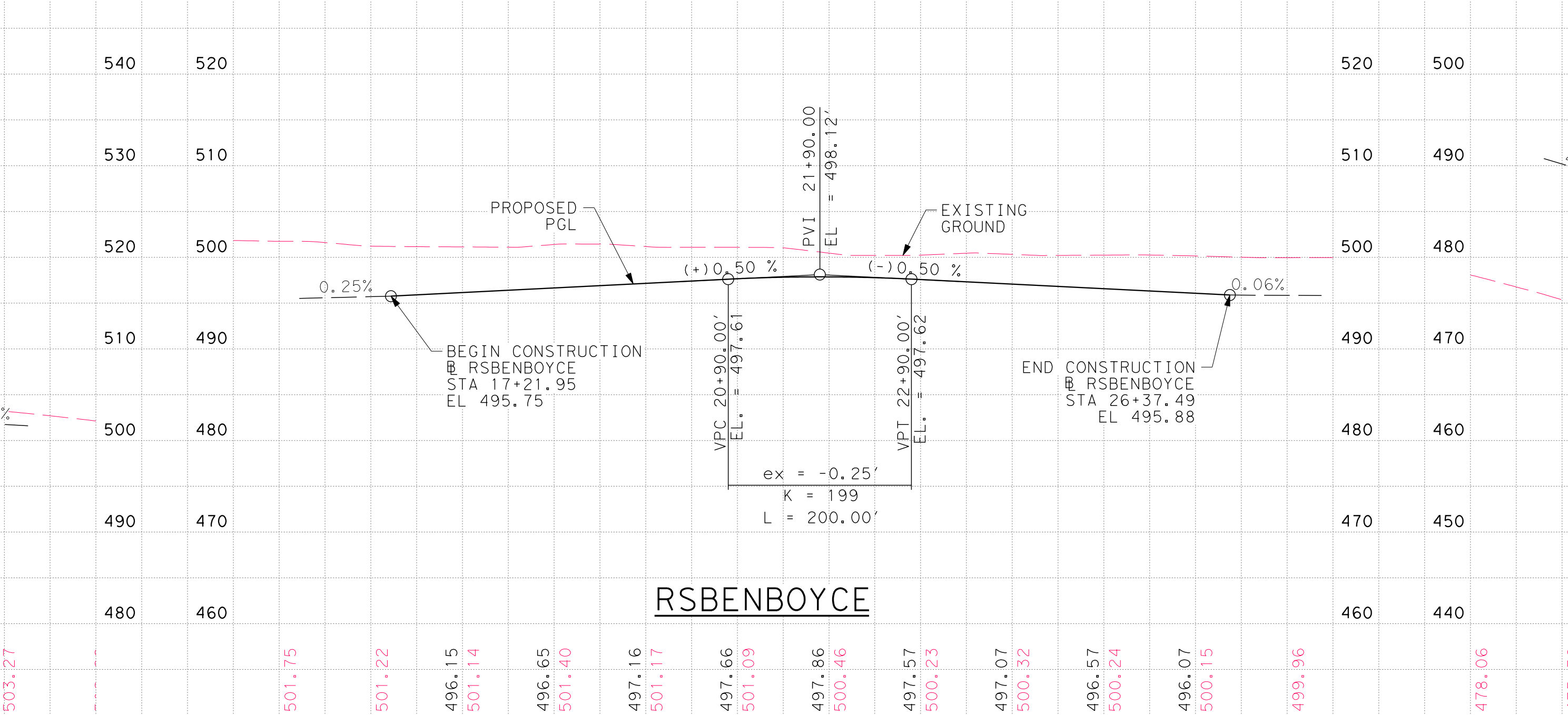
OCTOBER 20, 2023
ROLL 8 OF 8


520
510
500
490
480
470
460
0.56%
PROPOSED PGL
(-)0.59 %
EXISTING GROUND
0.52%
END CONSTRUCTION
℄ RSBEXBOYCE
STA 23+07.77
EL 491.56
PROPOSED CULVERT 2A-2B
4-8′X4′ MBC
US 485.09
DS 482.85
HW25 488.33
HW50 488.66
HW100 489.08
TW25 487.13
TW50 487.38
TW100 487.60
BEGIN CONSTRUCTION
℄ RSBEXBOYCE
STA 17+86.06
EL 494.61
493.76
493.48
494.53
493.64
493.95
494.04
493.36
494.51
492.78
494.52
492.19
494.52
491.60
494.58
495.38
20+00
25+00

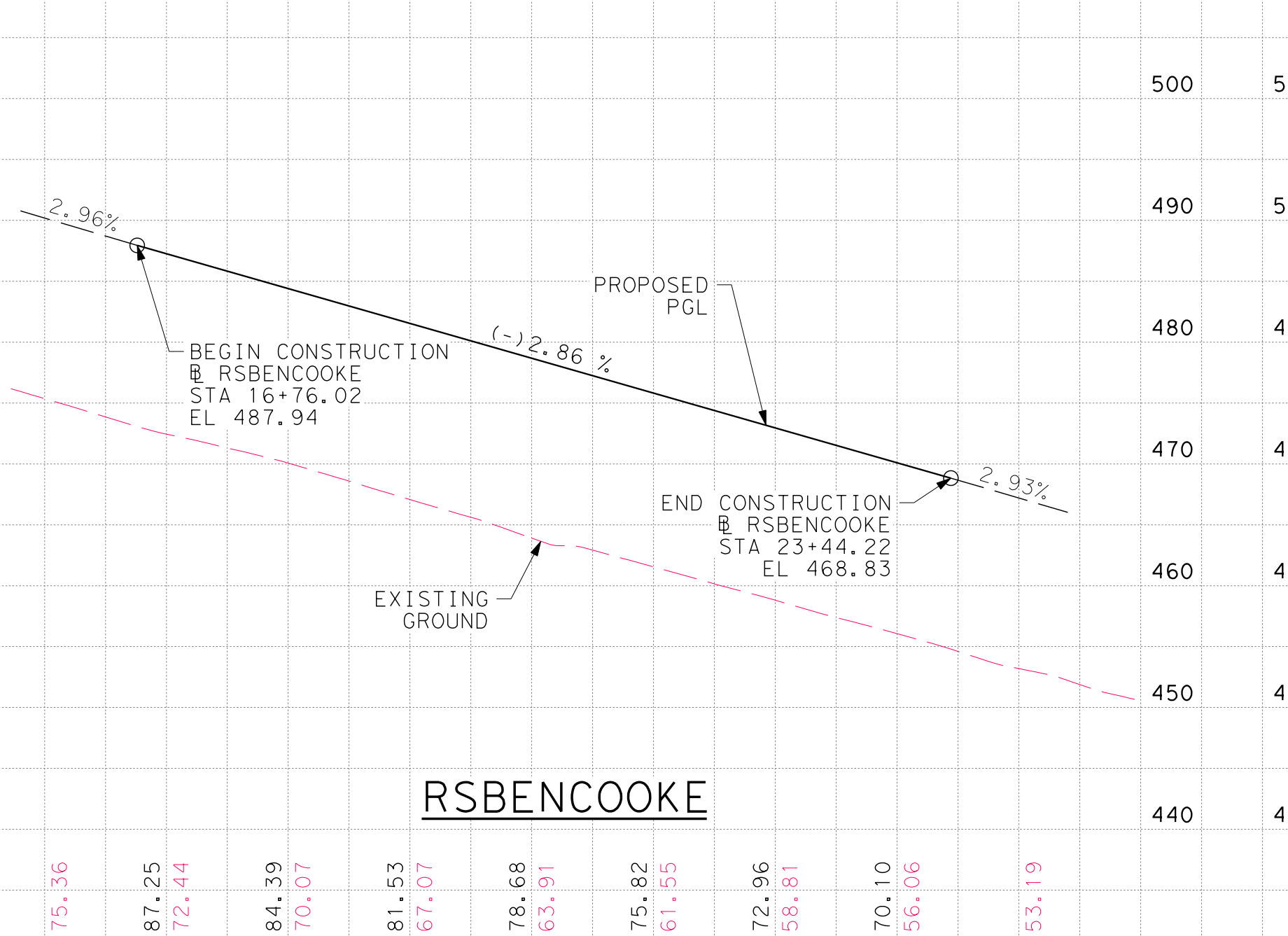
RSBEXBOYCE


540
530
520
510
500
490
480
BEGIN CONSTRUCTION
℄ RSBEXCOOKE
STA 19+27.69
EL 507.71
ex = 0.34′
K = 148
L = 200.00′
VPC 19+70.00′
EL. = 506.88
VPT 21+70.00′
EL. = 504.33
EXISTING GROUND
PROPOSED PGL
2.35%
(-)1.95 %
(-)0.60 %
0.55%
PVI 20+70.00
EL = 504.93′
END CONSTRUCTION
℄ RSBEXCOOKE
STA 25+32.95
EL 502.15
509.70
509.31
506.33
508.72
504.92
507.97
504.15
507.01
503.55
505.85
502.95
504.95
502.35
504.15
503.27
20+00
25+00

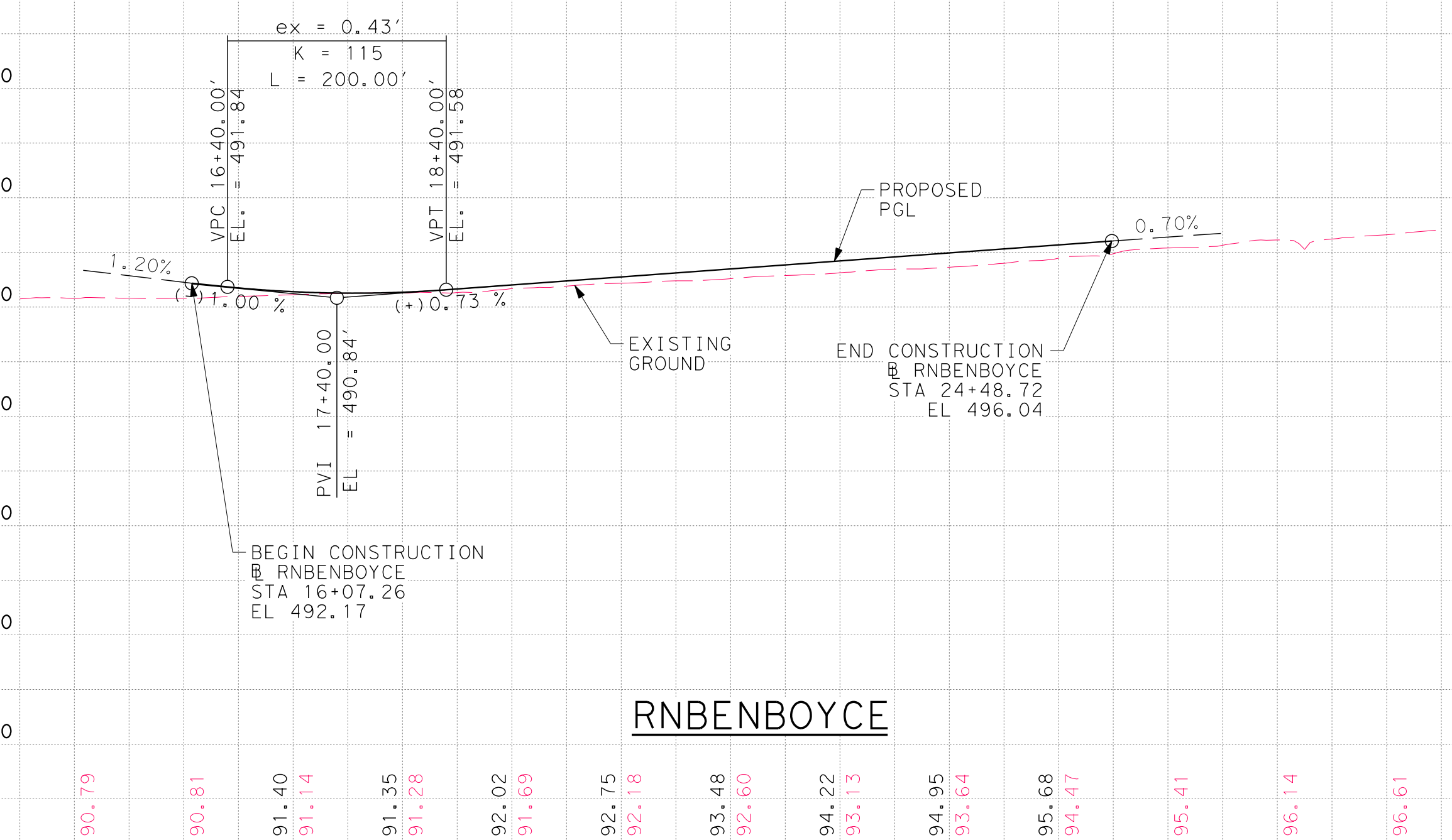
RSBEXCOOKE


520
510
500
490
480
470
460
PROPOSED PGL
EXISTING GROUND
PVI 21+90.00
EL = 498.12′
0.25%
(+)0.50 %
(-)0.50 %
0.06%
BEGIN CONSTRUCTION
℄ RSBENBOYCE
STA 17+21.95
EL 495.75
VPC 20+90.00′
EL. = 497.61
VPT 22+90.00′
EL. = 497.62
ex = -0.25′
K = 199
L = 200.00′
END CONSTRUCTION
℄ RSBENBOYCE
STA 26+37.49
EL 495.88
501.75
501.22
496.15
501.14
496.65
501.40
497.16
501.17
497.66
501.09
497.86
500.46
497.57
500.23
497.07
500.32
496.57
500.24
496.07
500.15
499.96
20+00
25+00

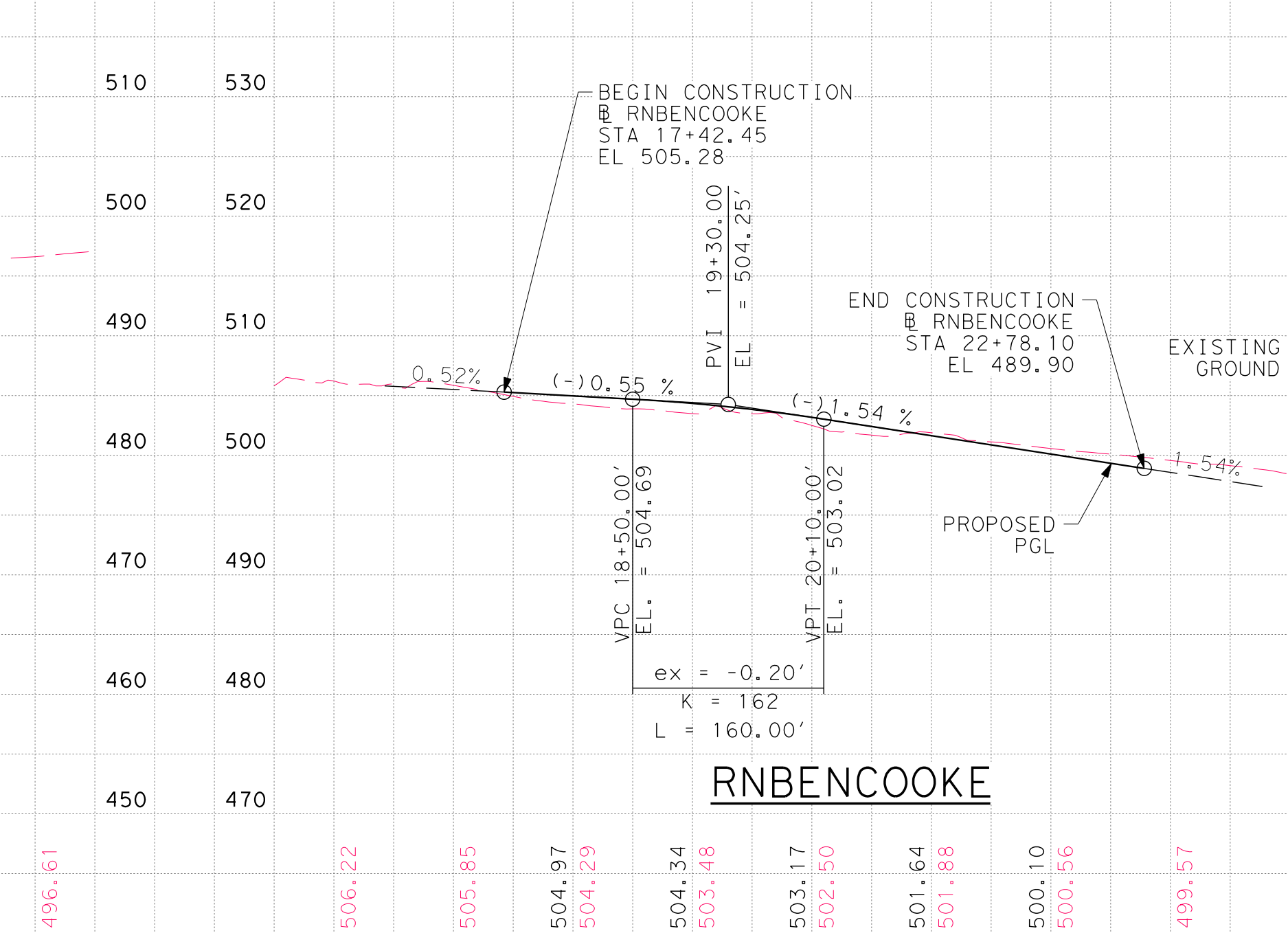
RSBENBOYCE


500
490
480
470
460
450
440
2.96%
BEGIN CONSTRUCTION
℄ RSBENCOOKE
STA 16+76.02
EL 487.94
(-)2.86 %
PROPOSED PGL
END CONSTRUCTION
℄ RSBENCOOKE
STA 23+44.22
EL 468.83
2.93%
EXISTING GROUND
478.06
475.36
487.25
472.44
484.39
470.07
481.53
467.07
478.68
463.91
475.82
461.55
472.96
458.81
470.10
456.06
453.19
15+00
20+00
25+00

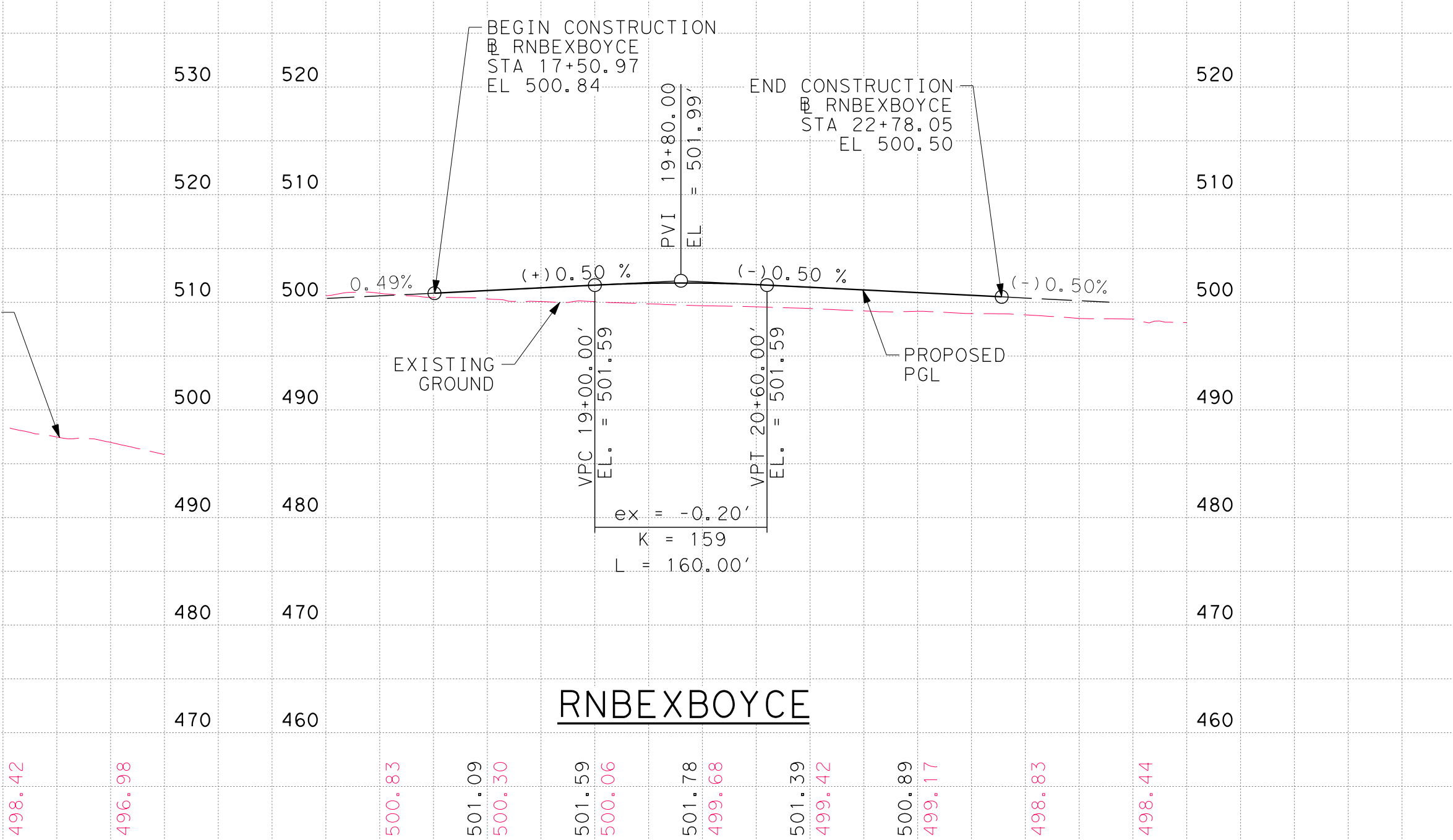
RSBENCOOKE


510
500
490
480
470
460
450
ex = 0.43′
K = 115
L = 200.00′
VPC 16+40.00′
EL. = 491.84
VPT 18+40.00′
EL. = 491.58
PROPOSED PGL
0.70%
1.20%
(-)1.00 %
(+)0.73 %
PVI 17+40.00
EL = 490.84′
EXISTING GROUND
END CONSTRUCTION
℄ RNBENBOYCE
STA 24+48.72
EL 496.04
BEGIN CONSTRUCTION
℄ RNBENBOYCE
STA 16+07.26
EL 492.17
490.79
490.81
491.40
491.14
491.35
491.28
492.02
491.69
492.75
492.18
493.48
492.60
494.22
493.13
494.95
493.64
495.68
494.47
495.41
496.14
496.61
15+00
20+00
25+00

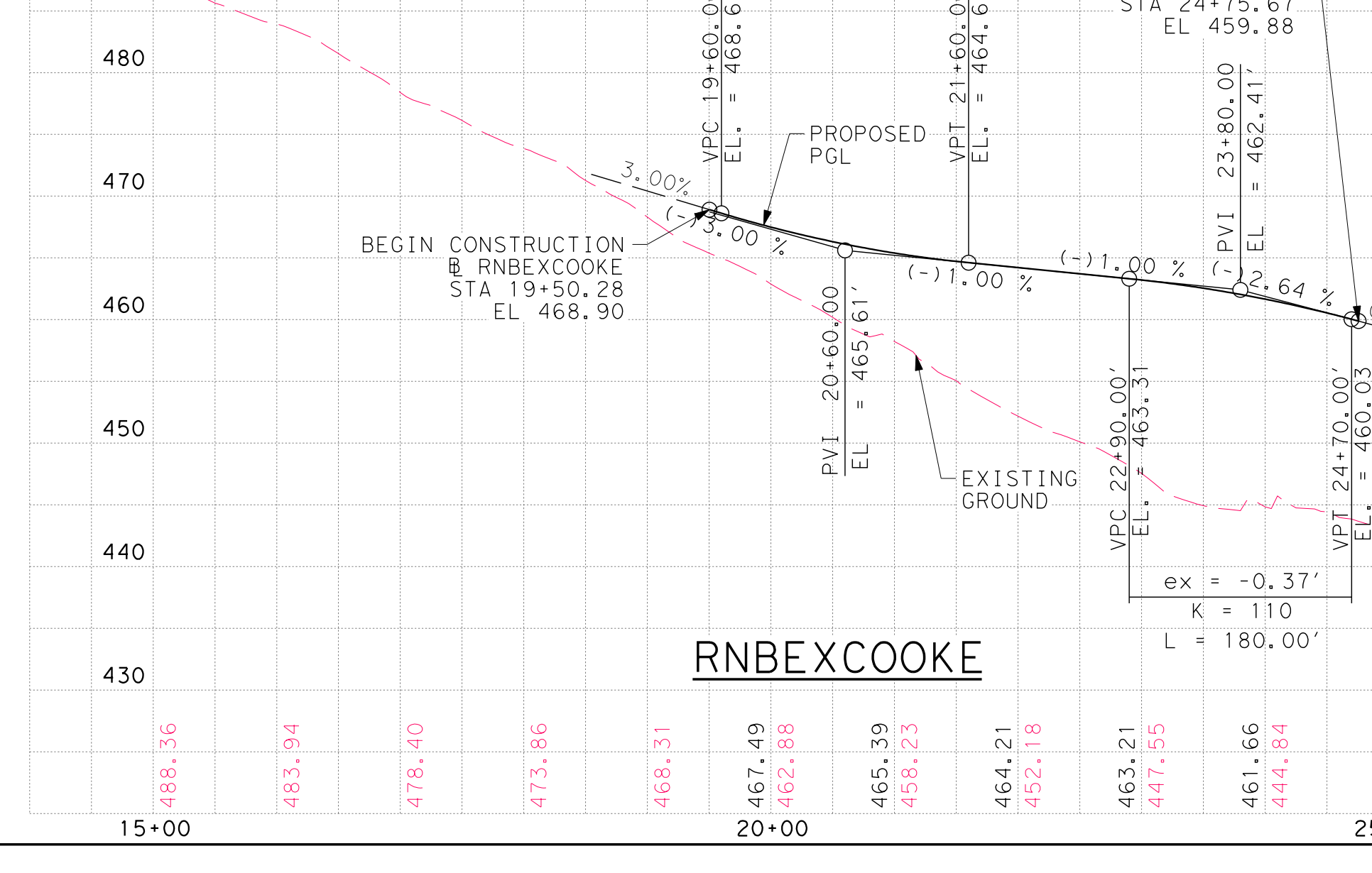
RNBENBOYCE


530
520
510
500
490
480
470
BEGIN CONSTRUCTION
℄ RNBENCOOKE
STA 17+42.45
EL 505.28
PVI 19+30.00
EL = 504.25′
END CONSTRUCTION
℄ RNBENCOOKE
STA 22+78.10
EL 489.90
EXISTING GROUND
0.52%
(-)0.55 %
(-)1.54 %
1.54%
PROPOSED PGL
VPC 18+50.00′
EL. = 504.69
VPT 20+10.00′
EL. = 503.02
ex = -0.20′
K = 162
L = 160.00′
506.22
505.85
504.97
504.29
504.34
503.48
503.17
502.50
501.64
501.88
500.10
500.56
499.57
498.42
496.98
20+00
25+00

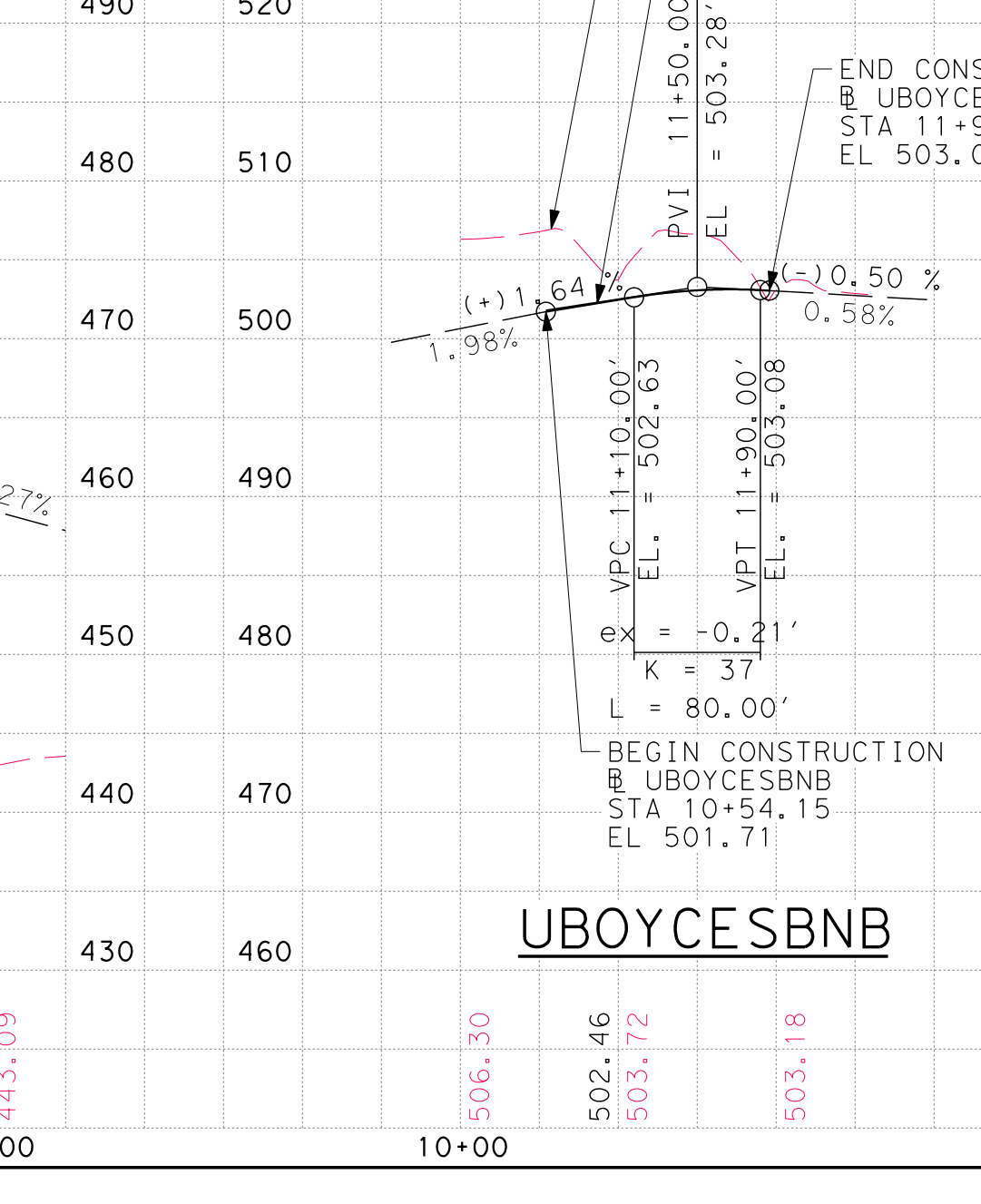
RNBENCOOKE


520
510
500
490
480
470
460
BEGIN CONSTRUCTION
℄ RNBEXBOYCE
STA 17+50.97
EL 500.84
PVI 19+80.00
EL = 501.99
END CONSTRUCTION
℄ RNBEXBOYCE
STA 22+78.05
EL 500.50
0.49%
(+)0.50 %
(-)0.50 %
(-)0.50%
EXISTING GROUND
PROPOSED PGL
VPC 19+00.00′
EL. = 501.59
VPT 20+60.00′
EL. = 501.59
ex = -0.20′
K = 159
L = 160.00′
500.83
501.09
500.30
501.59
500.06
501.78
499.68
501.39
499.42
500.89
499.17
498.83
498.44
20+00

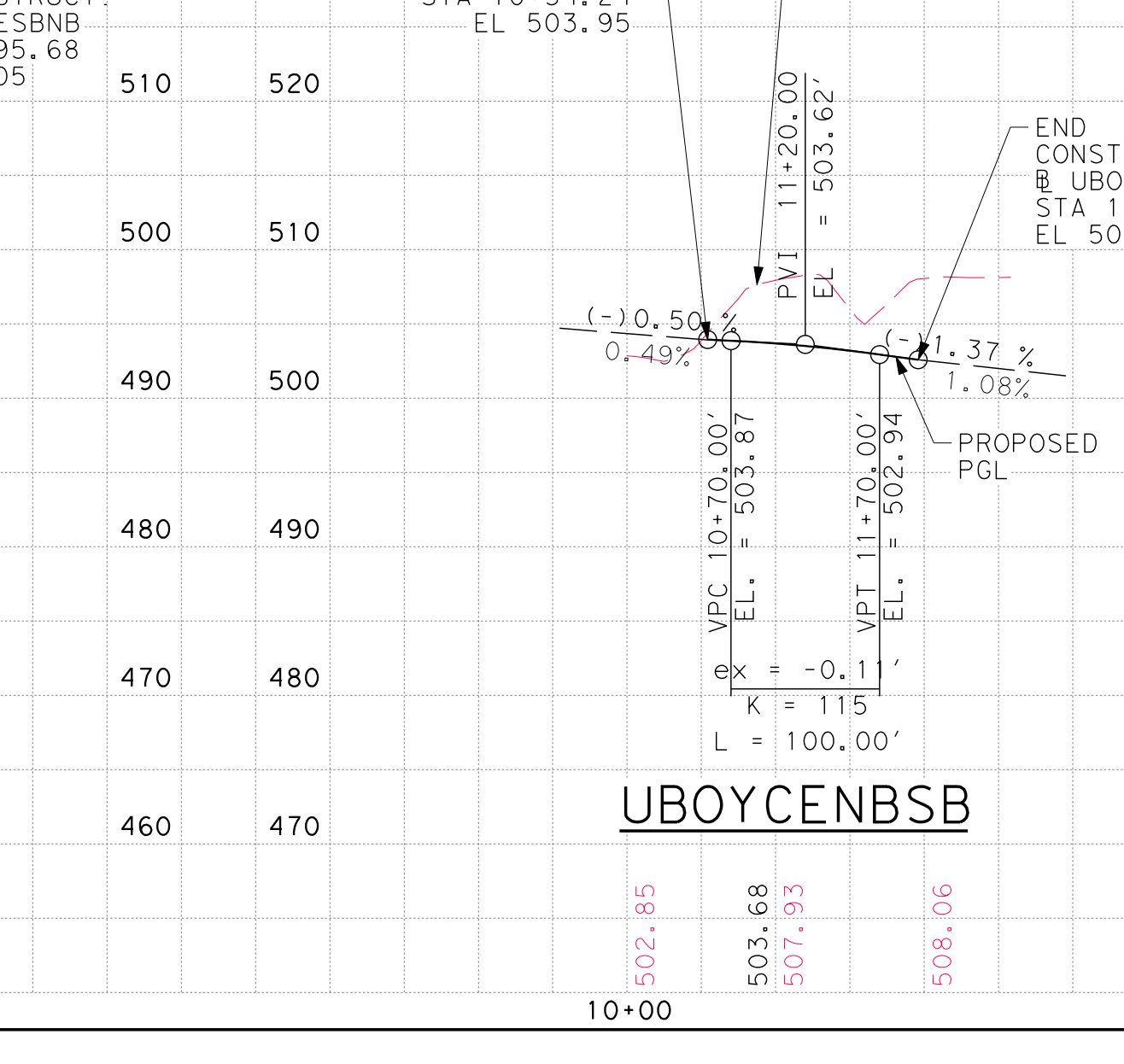
RNBEXBOYCE


490
480
470
460
450
440
430
ex = 0.50′
K = 100
L = 200.00′
VPC 19+60.00′
EL. = 468.61
VPT 21+60.00′
EL. = 464.61
PROPOSED PGL
END CONSTRUCTION
℄ RNBEXCOOKE
STA 24+75.67
EL 459.88
PVI 23+80.00
EL = 462.41′
3.00%
(-)3.00 %
(-)1.00 %
(-)1.00 %
(-)2.64 %
0.27%
BEGIN CONSTRUCTION
℄ RNBEXCOOKE
STA 19+50.28
EL 468.90
PVI 20+60.00
EL = 465.61′
EXISTING GROUND
VPC 22+90.00′
EL. = 463.31
VPT 24+70.00′
EL. = 460.03
ex = -0.37′
K = 110
L = 180.00′
488.36
483.94
478.40
473.86
468.31
467.49
462.88
465.39
458.23
464.21
452.18
463.21
447.55
461.66
444.84
443.09
15+00
20+00
25+00

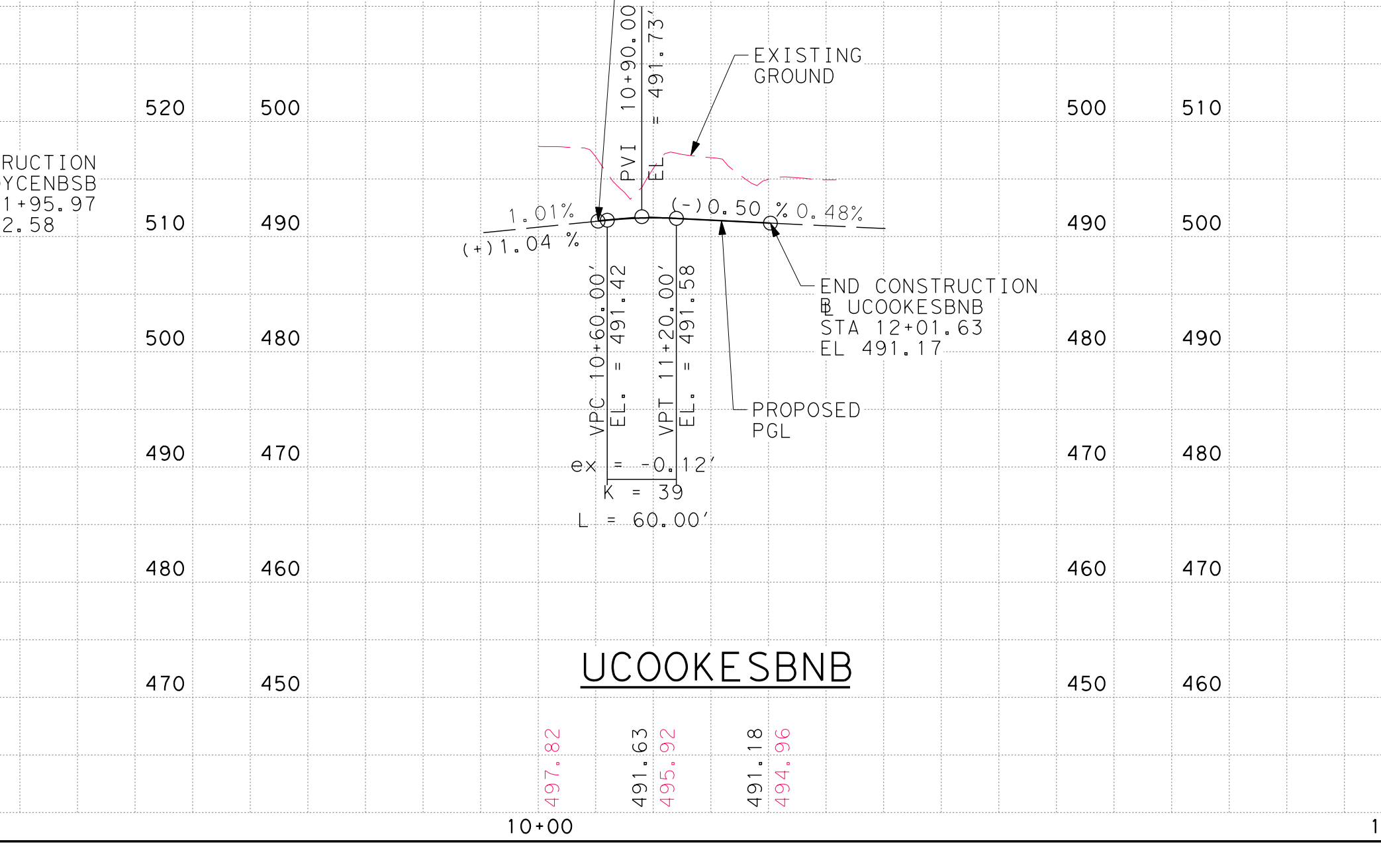
RNBEXCOOKE


520
510
500
490
480
470
460
EXISTING GROUND
PROPOSED PGL
END CONSTRUCTI
℄ UBOYCESBNB
STA 11+95.68
EL 503.05
PVI 11+50.00
EL = 503.28′
(+)1.64 %
1.98%
(-)0.50 %
0.58%
VPC 11+10.00′
EL. = 502.63
VPT 11+90.00′
EL. = 503.08
ex = -0.21′
K = 37
L = 80.00′
BEGIN CONSTRUCTION
℄ UBOYCESBNB
STA 10+54.15
EL 501.71
506.30
502.46
503.72
503.18
10+00

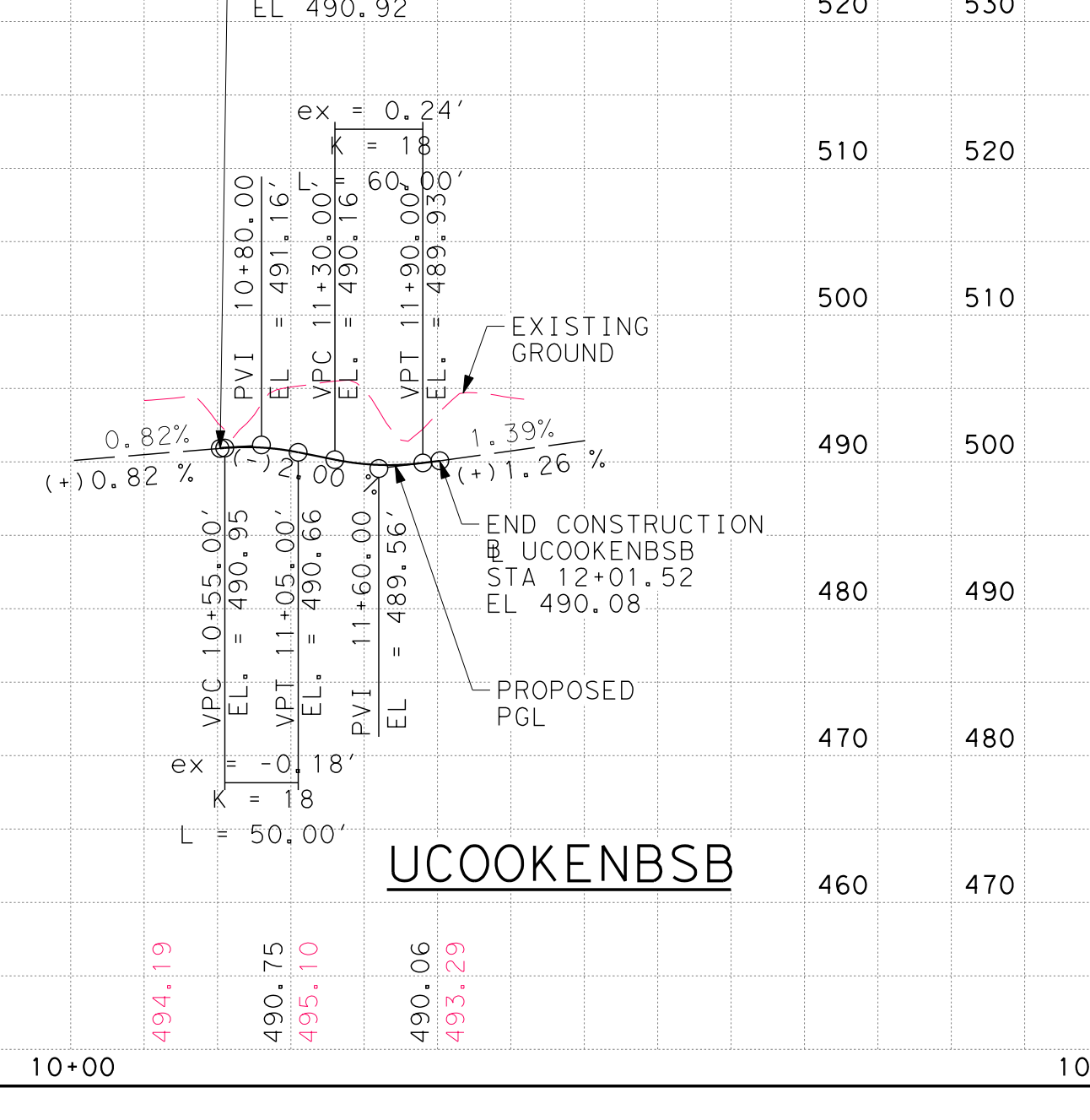
UBOYCESBNB


530
520
510
500
490
480
470
BEGIN CONSTRUCTION
℄ UBOYCENBSB
STA 10+54.24
EL 503.95
EXISTING GROUND
PVI 11+20.00
EL = 503.62′
END CONSTRUCTION
℄ UBOYCENBSB
STA 11+95.97
EL 502.58
(-)0.50 %
0.49%
(-)1.37 %
1.08%
PROPOSED PGL
VPC 10+70.00′
EL. = 503.87
VPT 11+70.00′
EL. = 502.94
ex = -0.11′
K = 115
L = 100.00′
502.85
503.68
507.93
508.06
10+00

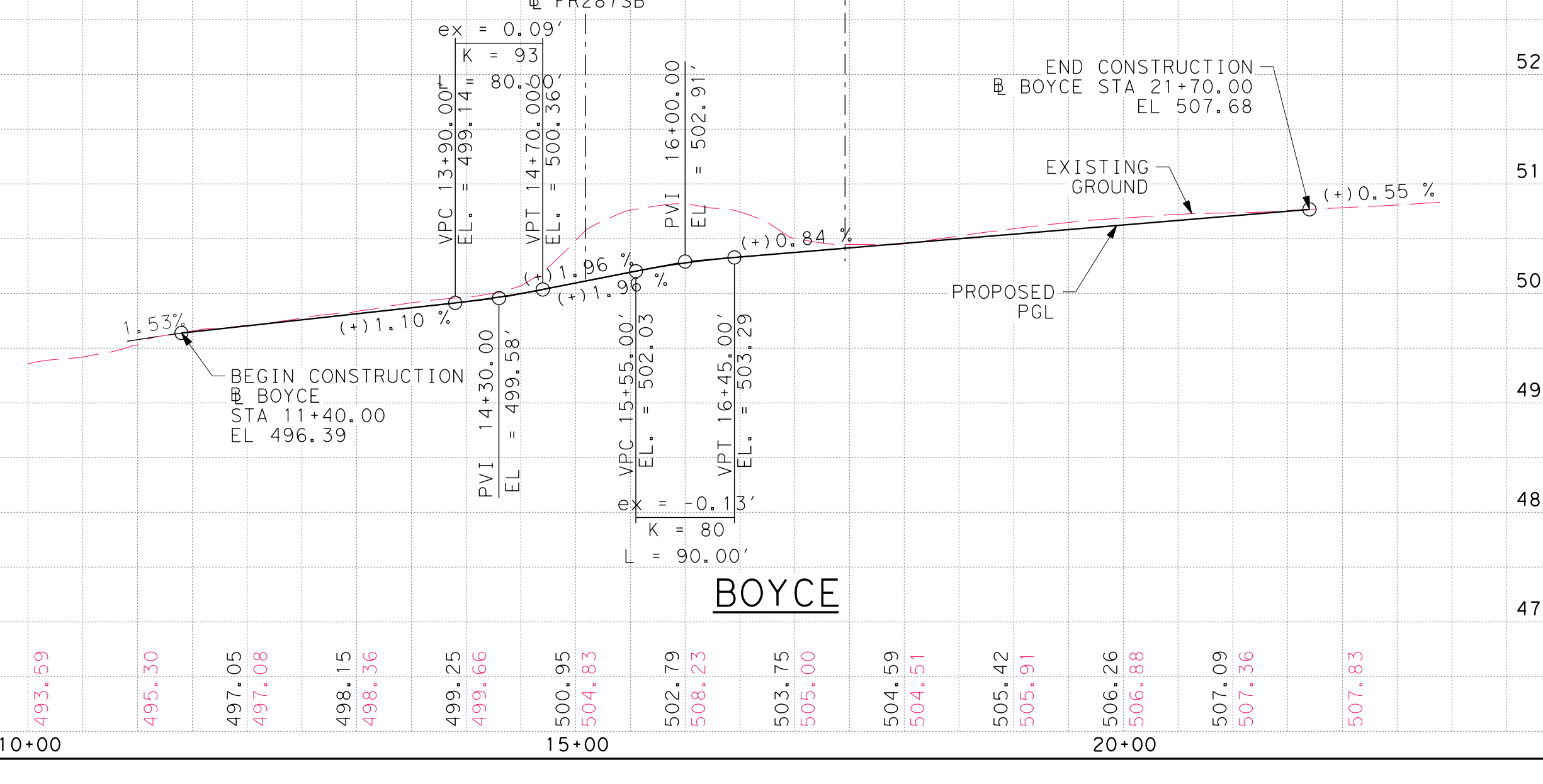
UBOYCENBSB


510
500
490
480
470
460
450
BEGIN CONSTRUCTION
℄ UCOOKESBNB
STA 10+51.96
EL 491.34
PVI 10+90.00
EL = 491.73′
EXISTING GROUND
1.01%
(+)1.04 %
(-)0.50 %
0.48%
END CONSTRUCTION
℄ UCOOKESBNB
STA 12+01.63
EL 491.17
VPC 10+60.00′
EL. = 491.42
VPT 11+20.00′
EL. = 491.58
PROPOSED PGL
ex = -0.12′
K = 39
L = 60.00′
497.82
491.63
495.92
491.18
494.96
10+00

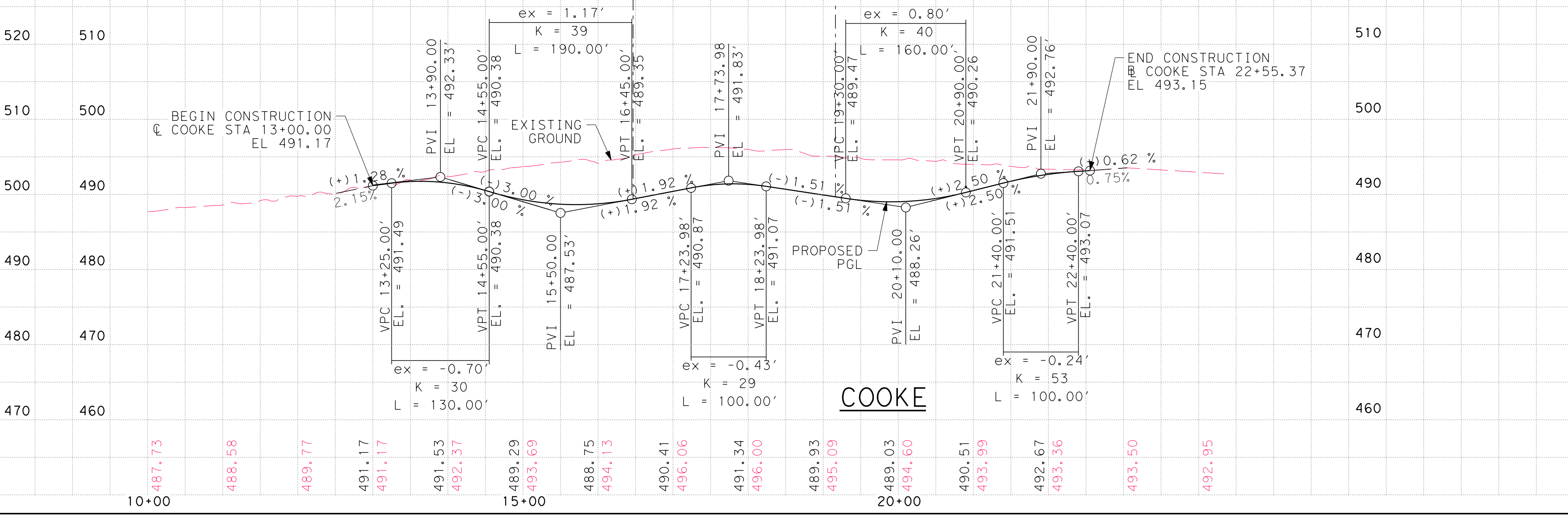
UCOOKESBNB


520
510
500
490
480
470
460
BEGIN CONSTRUCTION
℄ UCOOKENBSB
STA 10+51.86
EL 490.92
ex = 0.24′
K = 18
L = 60.00′
PVI 10+80.00
EL = 491.16′
VPC 11+30.00′
EL. = 490.16
VPT 11+90.00′
EL. = 489.93
EXISTING GROUND
0.82%
(+)0.82 %
(-)2.00 %
1.39%
(+)1.26 %
END CONSTRUCTION
℄ UCOOKENBSB
STA 12+01.52
EL 490.08
PROPOSED PGL
VPC 10+55.00′
EL. = 490.95
VPT 11+05.00′
EL. = 490.66
PVI 11+60.00
EL = 489.56′
ex = -0.18′
K = 18
L = 50.00′
494.19
490.75
495.10
490.06
493.29
10+00

UCOOKENBSB


530
520
510
500
490
480
470
℄ FR287SB
℄ FR287NB
ex = 0.09′
K = 93
L = 80.00′
VPC 13+90.00′
EL. = 499.14
VPT 14+70.00′
EL. = 500.36
PVI 16+00.00
EL = 502.91′
END CONSTRUCTION
℄ BOYCE STA 21+70.00
EL 507.68
EXISTING GROUND
(+)0.84 %
(+)0.55 %
1.53%
(+)1.10 %
(+)1.96 %
(-)1.96 %
PROPOSED PGL
BEGIN CONSTRUCTION
℄ BOYCE
STA 11+40.00
EL 496.39
PVI 14+30.00
EL = 499.58
VPC 15+55.00′
EL. = 502.03
VPT 16+45.00′
EL. = 503.29
ex = -0.13′
K = 80
L = 90.00′
493.59
495.30
497.05
497.08
498.15
498.36
499.25
499.66
500.95
504.83
502.79
508.23
503.75
505.00
504.59
504.51
505.42
505.91
506.26
506.88
507.09
507.36
507.83
10+00
15+00
20+00

BOYCE


520
510
500
490
480
470
460
℄ FR287SB
℄ FR287NB
ex = 1.17′
K = 39
L = 190.00′
ex = 0.80′
K = 40
L = 160.00′
PVI 13+90.00
EL = 492.33′
VPC 14+55.00′
EL. = 490.38
VPT 16+45.00′
EL. = 489.35
PVI 17+73.98
EL = 491.83′
VPC 19+30.00′
EL. = 489.47
VPT 20+90.00′
EL. = 490.26
PVI 21+90.00
EL = 492.76′
END CONSTRUCTION
℄ COOKE STA 22+55.37
EL 493.15
BEGIN CONSTRUCTION
℄ COOKE STA 13+00.00
EL 491.17
EXISTING GROUND
(+)1.28 %
2.15%
(-)3.00 %
(-)3.00 %
(+)1.92 %
(+)1.92 %
(-)1.51 %
(-)1.51 %
(+)2.50 %
(-)2.50 %
(+)0.62 %
0.75%
PROPOSED PGL
VPC 13+25.00′
EL. = 491.49
VPT 14+55.00′
EL. = 490.38
PVI 15+50.00
EL = 487.53′
VPC 17+23.98′
EL. = 490.87
VPT 18+23.98′
EL. = 491.07
PVI 20+10.00
EL = 488.26′
VPC 21+40.00′
EL. = 491.51
VPT 22+40.00′
EL. = 493.07
ex = -0.70′
K = 30
L = 130.00′
ex = -0.43′
K = 29
L = 100.00′
ex = -0.24′
K = 53
L = 100.00′
487.73
488.58
489.77
491.17
491.17
491.53
492.37
489.29
493.69
488.75
494.13
490.41
496.06
491.34
496.00
489.93
495.09
489.03
494.60
490.51
493.99
492.67
493.36
493.50
492.95
10+00
15+00
20+00

COOKE

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

CSJ: 0172-08-103
CSJ LIMITS:
FROM: WEST OF BOYCE RD
TO: EAST OF COOKE RD

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL (OTHER)
TERRAIN: LEVEL

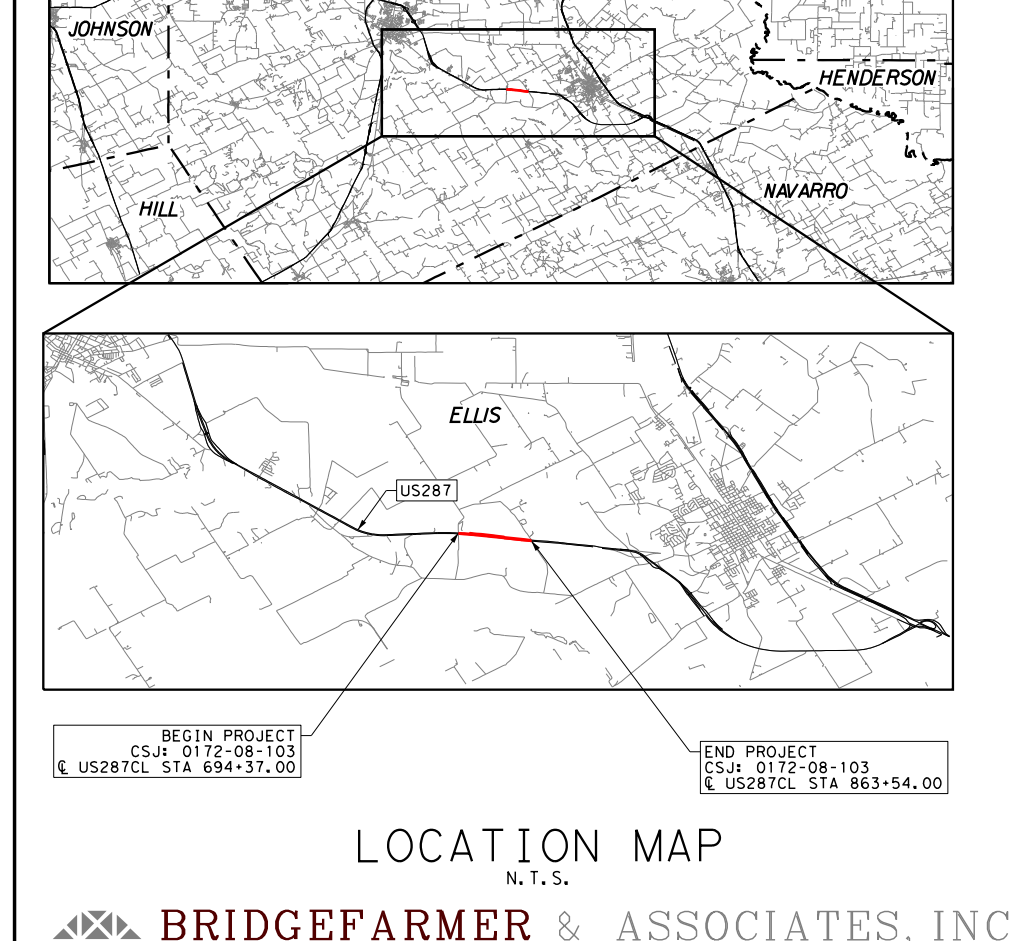
ROADWAY TYPE | DESIGN SPEED
MAINLANES | 65 MPH
RAMPS | 45 MPH
FRONTAGE ROADS | 45 MPH
CROSS STREETS (MINIMUM) | 30 MPH
U-TURNS | 15 MPH

PROJECT LENGTH = 3.20 MILES
100% DESIGN SCHEMATIC

NOTES:
1. TYPICAL SECTIONS ARE NOT TO SCALE.
2. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OF NOMINAL FACE OF CURB, RAIL BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
4. CURBS ON FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
5. ALL CROSS STREET RADII ARE 50′ AND DRIVEWAY RADII ARE 20′ (UNLESS NOTED OTHERWISE).
6. HORIZONTAL CURVE DATA IS SHOWN ON THE HORIZONTAL CURVE DATA SHEET. HORIZONTAL BASE LINE ALIGNMENTS BY OTHERS ARE SHOWN FOR REFERENCE. CURVE DATA IS NOT INCLUDED
7. CONTROL OF ACCESS TO BE DETERMINED AND FINALIZED THROUGH PERMIT PROCESS.
8. 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 IMPLIMENTED IN FINAL DESIGN.
9. SURVEY AND SUE PROVIDED BY THE FEASIBILITY STUDY (10/22/2020)
10. OWNERSHIP INFORMATION SHOWN ON THE SCHEMATIC WERE OBTAINED FROM TXDOT BOUNDARY SURVEY (10/31/2022).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INDURANCE RATE MAPS 48139C0135F, 48139C0155F, AND 48139C0175F. WATER SURFACE ELEVATIONS SHOWN ARE 100 YEAR ELEVATIONS FROM FEMA MAPS AND FEASIBILITY STUDY.
12. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
13. 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.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
15. CONVENTIONAL ROADWAY SIGNAGES (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. NOISE ANALYSIS TO BE PERFORMED TO VALIDATE PROPOSED NOISE WALL LOCATIONS FROM THE FEASIBILITY STUDY.

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
ELLIS
JOHNSON
KAUFMAN
HENDERSON
HILL
NAVARRO
ELLIS
US287
BEGIN PROJECT
CSJ: 0172-08-103
℄ US287CL STA 694+37.00
END PROJECT
CSJ: 0172-08-103
℄ US287CL STA 863+54.00

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:

JOHN NGUYEN | 86489 | 10/20/23
NAME | P.E. NO. | DATE

EQUATIONS: NONE
RR CROSSINGS: NONE

OCTOBER 20, 2023
ROLL 8 OF 8

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