Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, PE, DISTRICT ENGINEER

100% DESIGN SCHEMATIC

US 287 100% DESIGN SCHEMATIC
ELLIS COUNTY

PROJECT LIMITS:

CSJ:	CSJ LIMITS:
0172-13-008	FROM US67 TO MIDLOTHIAN PARKWAY
0172-05-127	FROM MIDLOTHIAN PARKWAY TO BUS287

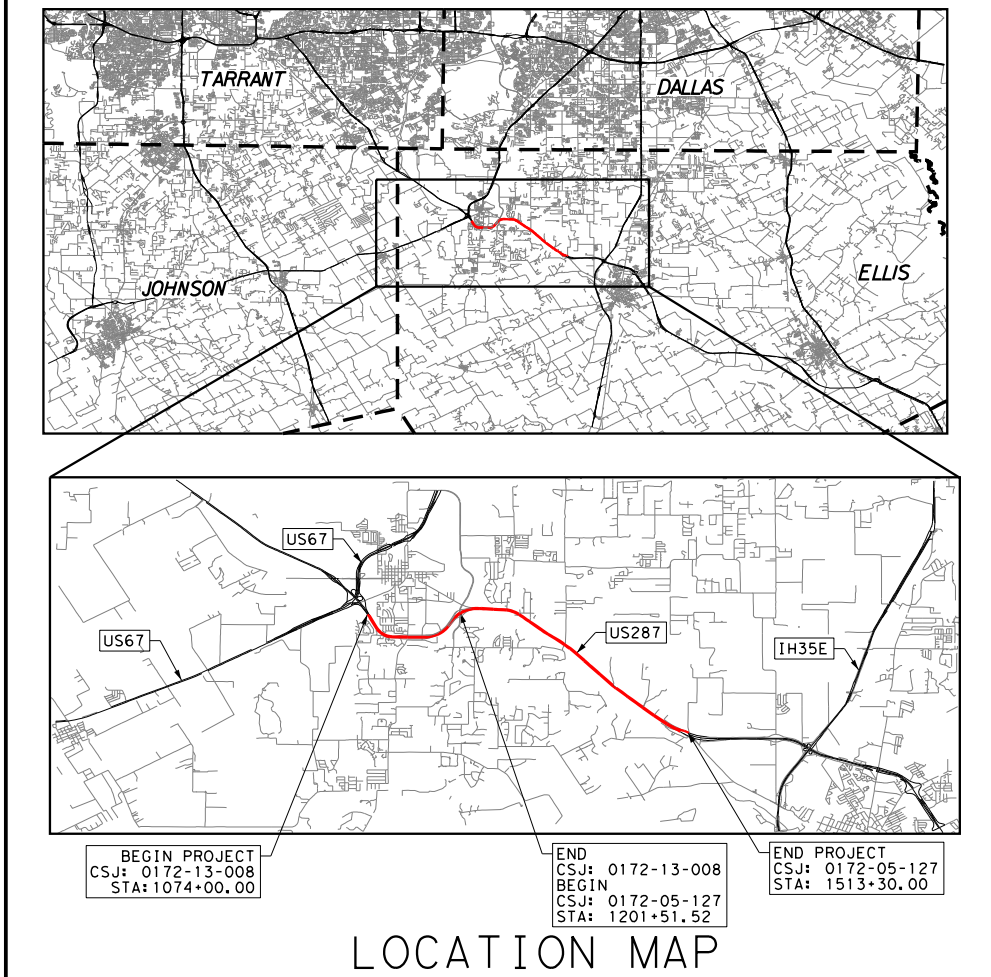
ROADWAY TYPE	DESIGN SPEED
MAINLANES	65 MPH
RAMPS	45 MPH
FRONTAGE ROADS	45 MPH
CROSS STREETS (MINIMUM)	30 MPH
U-TURNS	15 MPH

FUNCTIONAL CLASS: FREEWAY
TERRAIN: LEVEL
PROJECT LENGTH = 8.32 MILES

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 INSURANCE 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
US67
US287
IH35E
BEGIN PROJECT CSJ: 0172-13-008 STA: 1074+00.00
END CSJ: 0172-13-008 BEGIN CSJ: 0172-05-127 STA: 1201+51.52
END PROJECT CSJ: 0172-05-127 STA: 1513+30.00

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:

NHI LUONG 151731 02/27/2024
NAME P.E. NO. DATE

EQUATIONS: NONE
RR CROSSINGS: UPRR

FEBRUARY 27, 2024
ROLL 7 OF 28

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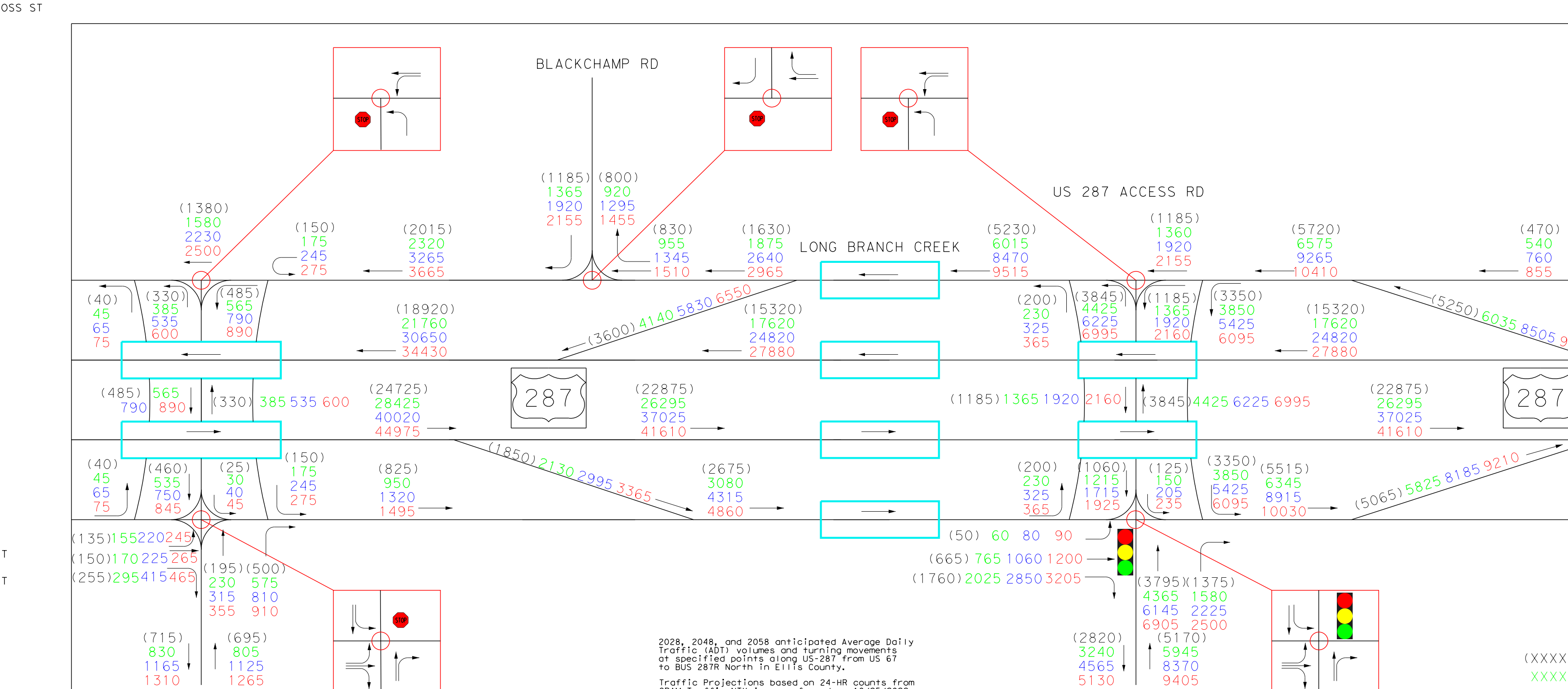
PLAN LEGEND:

🟨	PROPOSED MAIN LANES
🟩	PROPOSED FRONTAGE RD/ CROSS ST
🟧	PROPOSED BRIDGE
🟪	PROPOSED SHARED-USE-PATH
🟥	PROPOSED SIDEWALK
🟦	PROPOSED RAMP
🟦	FEMA FLOODPLAIN
⬜	EXISTING PAVEMENT
▨	BUILDING DISPLACEMENT
▨	PAVEMENT REMOVAL
– – –	PAVEMENT SAWCUT
— · —	EXISTING RIGHT-OF-WAY
– – –	EXISTING PROPERTY LINE
— · —	PROPOSED RIGHT-OF-WAY
——	GUARD RAIL
▭	ATTENUATOR
⊥ ⊥	PROPOSED NOISE WALL
▬	PROPOSED RETAINING WALL
▬	PROPOSED SSTR
▬	PROPOSED SSCB
≡	PROPOSED DRAINAGE CULVERT
≡	EXISTING DRAINAGE CULVERT
XXX	PARCEL ID
→	FLOW DIRECTION
• →	DITCH FLOW LINE



BLACKCHAMP RD
US 287 ACCESS RD
LONG BRANCH CREEK
287
SARDIS ST
BUS 287
(1380) 1580 2230 2500
(150) 175 245 275
(2015) 2320 3265 3665
(1185) 1365 1920 2155
(800) 920 1295 1455
(830) 955 1345 1510
(1630) 1875 2640 2965
(5230) 6015 8470 9515
(1185) 1360 1920 2155
(5720) 6575 9265 10410
(470) 540 760 855
(18920) 21760 30650 34430
(15320) 17620 24820 27880
(24725) 28425 40020 44975
(22875) 26295 37025 41610
(27940) 32120 45210 50820
(20570) 23655 33325 37435

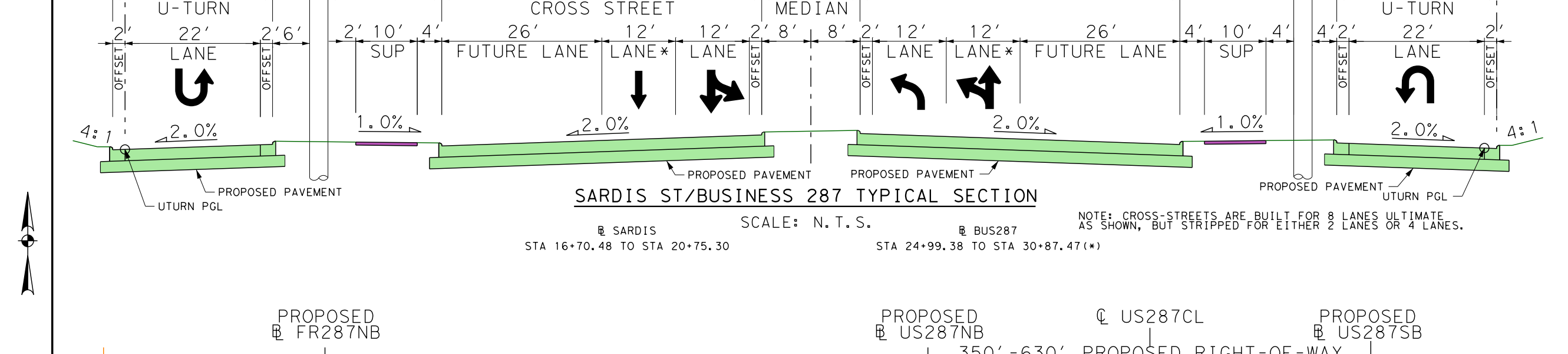
2028, 2048, and 2058 anticipated Average Daily Traffic (ADT) volumes and turning movements at specified points along US-287 from US 67 to BUS 287R North in Ellis County.

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

PROJECTED TRAFFIC VOLUMES PENDING REVIEW AND APPROVAL BY TP&P

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

PARCEL ID	OWNER	PROPERTY IMPACT	AREA (ACRES)
245	APPLETON RONALD	N / A	N / A
246	NORTH TEXAS BEHAVIORAL CLINIC	ROW ACQUISITION	0.13
247	THOMPSON JOANN G	N / A	N / A
248	SUMEER INC	ROW ACQUISITION	0.39
249	THOMPSON JOANN G	N / A	N / A
250	SCHUSTER LINDA S	ROW ACQUISITION	0.60
251	APRACE INVESTMENTS LLC	N / A	N / A
252	CHAPMAN ERIC	N / A	N / A
253	THOMPSON JOANN G	N / A	N / A
254	LINDSEY MICHAEL S & VIKKI	N / A	N / A
255	ROY LINDA SUE	ROW ACQUISITION	0.15
256	DAVIES CYNTHIA	ROW ACQUISITION	0.06
257	MOSELEY JONI E ETAL	ROW ACQUISITION	0.04
258	LAMA SURYA T & BERENICE VEGA	ROW ACQUISITION	0.06
259	SHEFFIELD PROPERTIES INC	N / A	N / A
260	METTLE INVESTMENTS LP	N / A	N / A
261	WILLIAMS GEORGE W	N / A	N / A
262	MONTCLAIR DEVELOPMENT A SERIES OF EIS DEVELOPMENT II LLC	ROW ACQUISITION	0.20
263	DIAL AUDREY M	N / A	N / A
264	WAXAHACHIE ISD	ROW ACQUISITION	0.34
265	SHELTON TRESSIE MARIE	N / A	N / A
267	SARDIS UNITED METHODIST CHURCH	N / A	N / A
269	TERRY SHIRLEY JEAN	N / A	N / A
271	MC GEE JOE	N / A	N / A
273	MC GEE JOE	N / A	N / A
275-A	HASS JOHNNY R	N / A	N / A
275-B	SARDIS UNITED METHODIST CHURCH	N / A	N / A
277	BITTLE WADE & JUANITA	N / A	N / A
279	AGUILAR PRIMETIVO & ROLANDO	N / A	N / A
281	BATES CALEB	N / A	N / A
283	MANRIQUEZ FELIPE & ELIZABETH	N / A	N / A
285	GRANZIN LOGAN O	N / A	N / A
287	GENERAL CONFERENCE OF THE	N / A	N / A
289	RODRIGUEZ JESSIE D	N / A	N / A
291	TOVAR MARY G & CANDELARIO M	N / A	N / A
293	RIVERA JERRY	N / A	N / A
295	WAXAHACHIE ISD	N / A	N / A

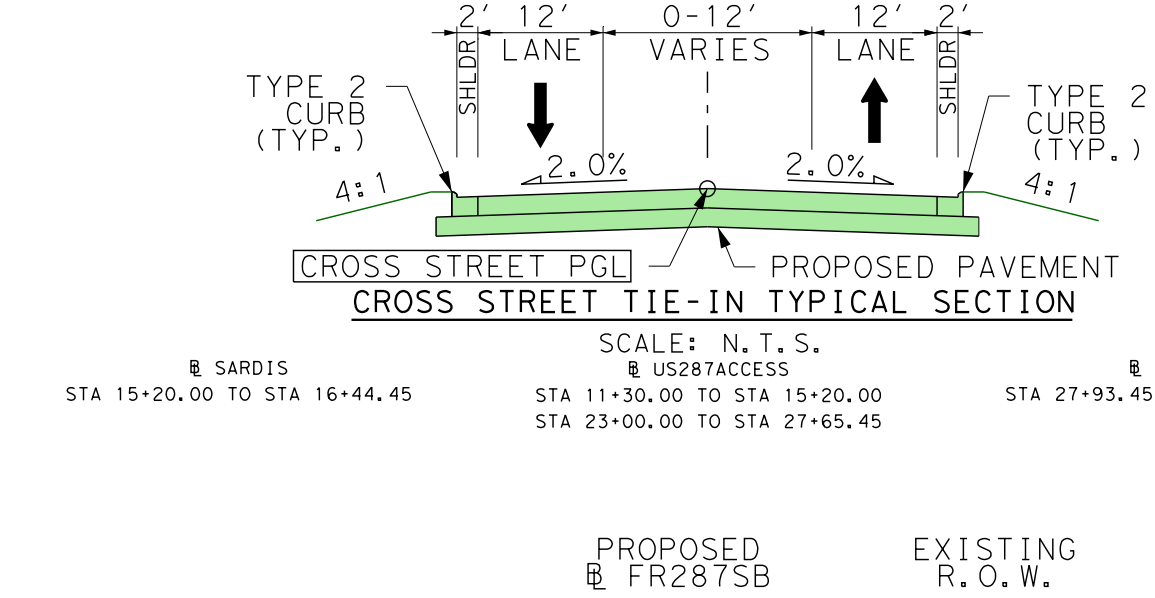


℄ UTURN
℄ CROSS STREET
℄ UTURN
U-TURN
CROSS STREET
MEDIAN
LANE
SUP
FUTURE LANE
OFFSET
2.0%
1.0%
4:1
PROPOSED PAVEMENT
UTURN PGL

SARDIS ST/BUSINESS 287 TYPICAL SECTION
SCALE: N.T.S.

℄ SARDIS STA 16+70.48 TO STA 20+75.30
℄ BUS287 STA 24+99.38 TO STA 30+87.47(*)

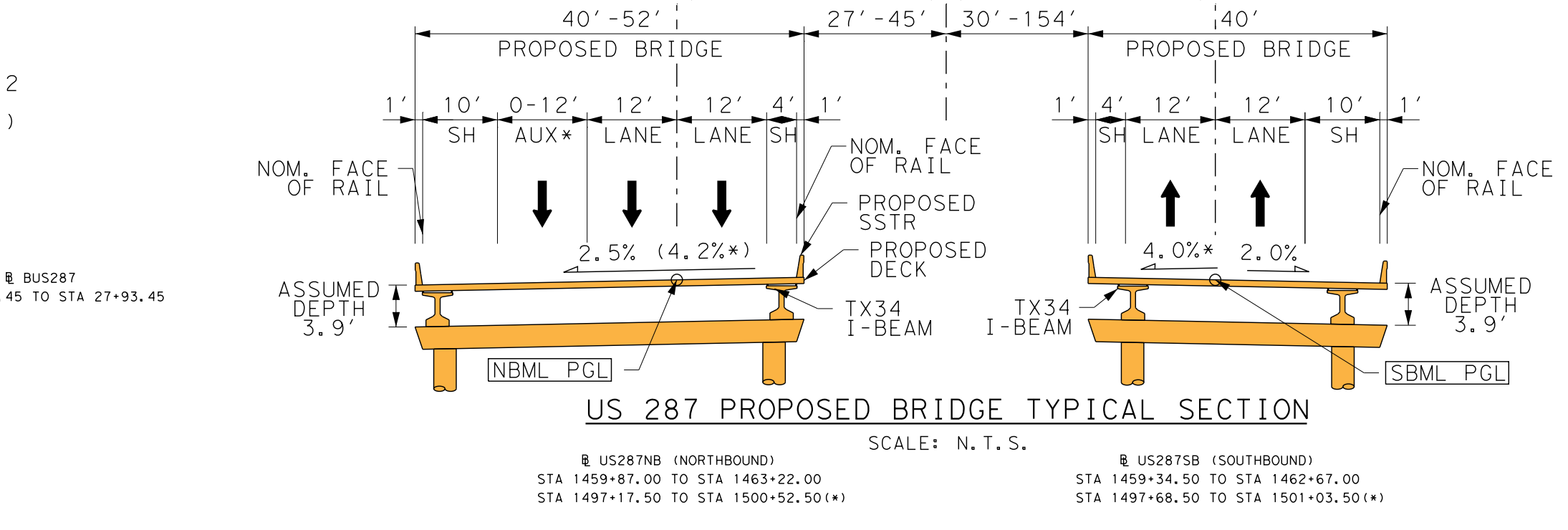
NOTE: CROSS-STREETS ARE BUILT FOR 6 LANES ULTIMATE AS SHOWN, BUT STRIPPED FOR EITHER 2 LANES OR 4 LANES.



℄ CROSS STREET
28′-50′
CROSS STREET
0-12′
VARIES
LANE
SHLDR
TYPE 2 CURB (TYP.)
2.0%
4:1
CROSS STREET PGL
PROPOSED PAVEMENT

CROSS STREET TIE-IN TYPICAL SECTION
SCALE: N.T.S.

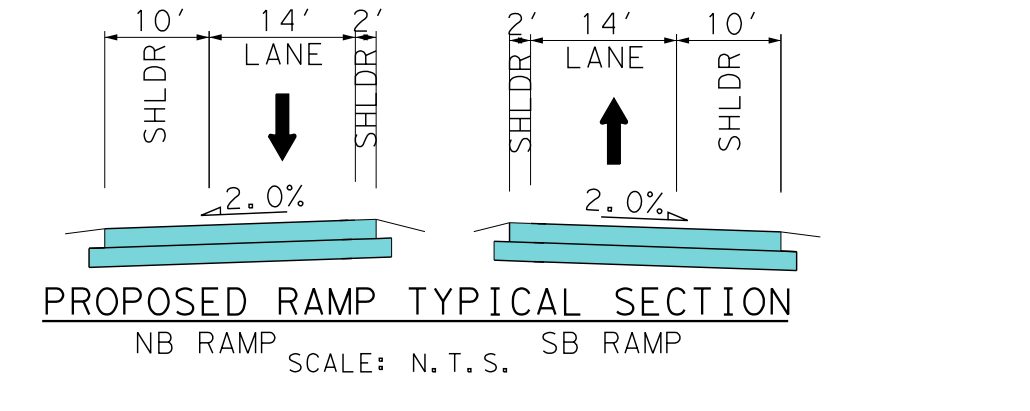
℄ SARDIS STA 15+20.00 TO STA 16+44.45
℄ US287ACCESS STA 11+30.00 TO STA 15+20.00; STA 23+00.00 TO STA 27+65.45
℄ BUS287 STA 27+93.45 TO STA 27+93.45



PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED BRIDGE
SH
AUX*
LANE
NOM. FACE OF RAIL
PROPOSED SSTR
PROPOSED DECK
ASSUMED DEPTH 3.9′
TX34 I-BEAM
NBML PGL
SBML PGL
2.5% (4.2%*)
4.0%*
2.0%

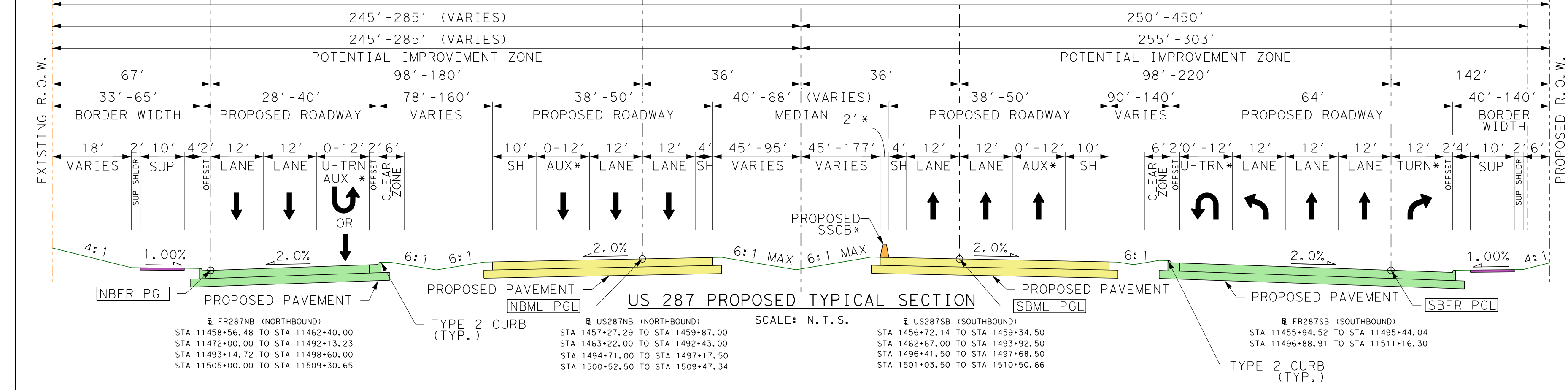
US 287 PROPOSED BRIDGE TYPICAL SECTION
SCALE: N.T.S.

℄ US287NB (NORTHBOUND) STA 1459+87.00 TO STA 1463+22.00; STA 1497+17.50 TO STA 1500+52.50(*)
℄ US287SB (SOUTHBOUND) STA 1459+34.50 TO STA 1462+67.00; STA 1497+68.50 TO STA 1501+03.50(*)



SHLDR
LANE
10′
14′
2′
2.0%

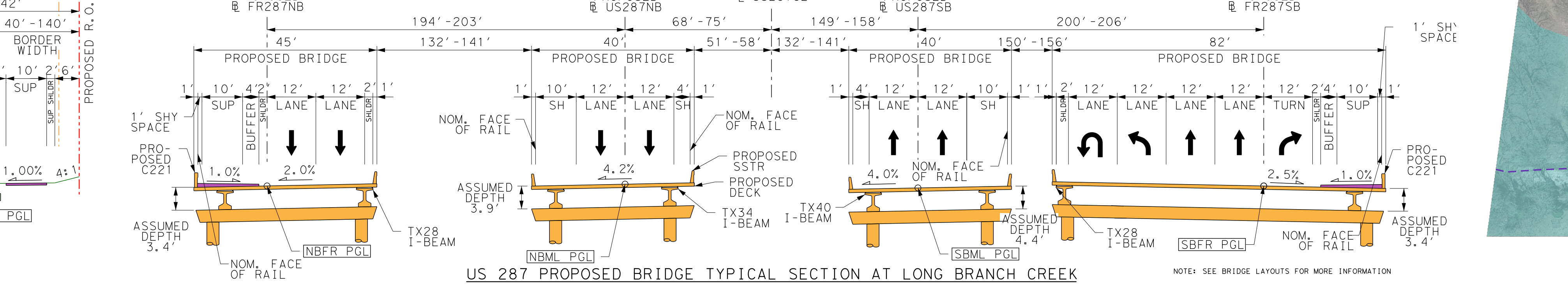
PROPOSED RAMP TYPICAL SECTION
NB RAMP SB RAMP
SCALE: N.T.S.



PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED ℄ FR287SB
EXISTING R.O.W.
350′-630′ PROPOSED RIGHT-OF-WAY
245′-285′ (VARIES)
250′-450′
255′-303′
POTENTIAL IMPROVEMENT ZONE
BORDER WIDTH
PROPOSED ROADWAY
MEDIAN
VARIES
SUP
LANE
U-TRN AUX*
SH
AUX*
TURN*
CLEAR ZONE
PROPOSED SSCB*
NBFR PGL
NBML PGL
SBML PGL
SBFR PGL
PROPOSED PAVEMENT
TYPE 2 CURB (TYP.)

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

℄ FR287NB (NORTHBOUND) STA 11458+56.48 TO STA 11462+40.00; STA 11472+00.00 TO STA 11492+13.23; STA 11493+14.72 TO STA 11498+60.00; STA 11505+00.00 TO STA 11509+30.65
℄ US287NB (NORTHBOUND) STA 1457+27.29 TO STA 1459+87.00; STA 1463+22.00 TO STA 1492+43.00; STA 1494+71.00 TO STA 1497+17.50; STA 1500+52.50 TO STA 1509+47.34
℄ US287SB (SOUTHBOUND) STA 1456+72.14 TO STA 1459+34.50; STA 1462+67.00 TO STA 1493+92.50; STA 1496+41.50 TO STA 1497+68.50; STA 1501+03.50 TO STA 1510+50.66
℄ FR287SB (SOUTHBOUND) STA 11455+94.52 TO STA 11495+44.04; STA 11496+88.91 TO STA 11511+16.30



PROPOSED ℄ FR287NB
PROPOSED ℄ US287NB
℄ US287CL
PROPOSED ℄ US287SB
PROPOSED ℄ FR287SB
PROPOSED BRIDGE
1′ SHY SPACE
PROPOSED C221
BUFFER
SUP
LANE
SH
TURN
NOM. FACE OF RAIL
PROPOSED SSTR
PROPOSED DECK
ASSUMED DEPTH 3.4′
ASSUMED DEPTH 3.9′
ASSUMED DEPTH 4.4′
TX28 I-BEAM
TX34 I-BEAM
TX40 I-BEAM
NBFR PGL
NBML PGL
SBML PGL
SBFR PGL

US 287 PROPOSED BRIDGE TYPICAL SECTION AT LONG BRANCH CREEK
SCALE: N.T.S.

℄ FR287NB (NORTHBOUND) STA 11492+13.23 TO STA 11493+14.72
℄ US287NB (NORTHBOUND) STA 1492+43.00 TO STA 1494+71.00
℄ US287SB (SOUTHBOUND) STA 1493+92.50 TO STA 1496+41.50
℄ FR287SB (SOUTHBOUND) STA 11495+44.04 TO STA 11496+88.91

NOTE: SEE BRIDGE LAYOUTS FOR MORE INFORMATION

MATCH LINE STA 1457+00
BLACKCHAMP RD
SARDIS ST
SARALVO RD
U.S. 287 ACCESS RD
BUSINESS 287
287
Rex Odom Dr Stout Rd EXIT ½ MILE
SIGN #49 ℄ US287NB STA 1478+20
Rex Odom Dr Stout Rd EXIT 1 MILE
SIGN #50 ℄ US287NB STA 1505+60
EXIT
SIGN #48 ℄ US287SB STA 1474+60
287 BUSINESS
SIGN #47 ℄ US287SB STA 1472+40
PROPOSED ROW
EXISTING ROW
BEGIN BRIDGE ℄ US287NB STA 1459+94.77
END BRIDGE ℄ US287NB STA 1463+29.78
BEGIN BRIDGE ℄ US287SB STA 1459+34.50
END BRIDGE ℄ US287SB STA 1462+67.00
PROPOSED CULVERT 20 1-4′X4′ RCB US EL 615.23 FT ℄ FR287NB STA 11465+01.54
EXISTING CULVERT 20 TO BE REMOVED
PROPOSED CULVERT 21 2- 36″ CRP US EL 612.61 FT ℄ FR287NB STA 11478+54.85
PROPOSED CULVERT 20 1-5′ X 3′ RCB DS EL 610.41 FT ℄ FR287SB STA 11463+49.34
PROPOSED CULVERT 21 2- 36″ CRP DS EL 600.95 FT ℄ FR287SB STA 11477+64.44
EXISTING CULVERT 21 TO BE REMOVED 2- 36″ CRP
℄ US287CL
℄ FR287NB
℄ US287NB
℄ US287SB
℄ FR287SB
℄ BLKCHMP
℄ USARDISSBNB
℄ USARDISNBSB
℄ SARDIS
℄ UBUS287NBSB
℄ UBUS287SBNB
℄ BUS287
BEGIN BRIDGE ℄ FR287NB STA 11491+47.99
END BRIDGE ℄ FR287NB STA 11492+67.96
BEGIN BRIDGE ℄ US287NB STA 1492+50.77
END BRIDGE ℄ US287NB STA 1494+71.00
BEGIN BRIDGE ℄ US287NB STA 1497+25.27
END BRIDGE ℄ US287NB STA 1500+60.28
BEGIN BRIDGE ℄ US287SB STA 1493+92.50
END BRIDGE ℄ US287SB STA 1496+41.50
BEGIN BRIDGE ℄ US287SB STA 1497+68.50
END BRIDGE ℄ US287SB STA 1501+03.50
BEGIN BRIDGE ℄ FR287SB STA 11495+77.42
END BRIDGE ℄ FR287SB STA 11497+19.88
END CONSTRUCTION ℄ FR287NB STA 11508+00.00 MATCH EXISTING PAVEMENT
END PROJECT CSJ: 0172-05-127 STA 1513+30.00
END CONSTRUCTION ℄ US287NB STA 1511+07.78 MATCH EXISTING PAVEMENT
END CONSTRUCTION ℄ US287SB STA 1515+00.00 MATCH EXISTING PAVEMENT
END CONSTRUCTION ℄ FR287SB STA 11509+80.00 MATCH EXISTING PAVEMENT
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275-A
275-B
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LOCATION MAP
BRIDGEFARMER & ASSOCIATES, INC.
FEBRUARY 27, 2024
ROLL 7 OF 28
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