415 EMBASSY OAKS
SUITE 102
SAN ANTONIO, TEXAS 78216

DEC | ENGINEERING EXCELLENCE

PRELIMINARY
SUBJECT TO REVISION
2/9/2023

FM 1423
FROM SH 107 TO BUSINESS 83
60% SCHEMATIC

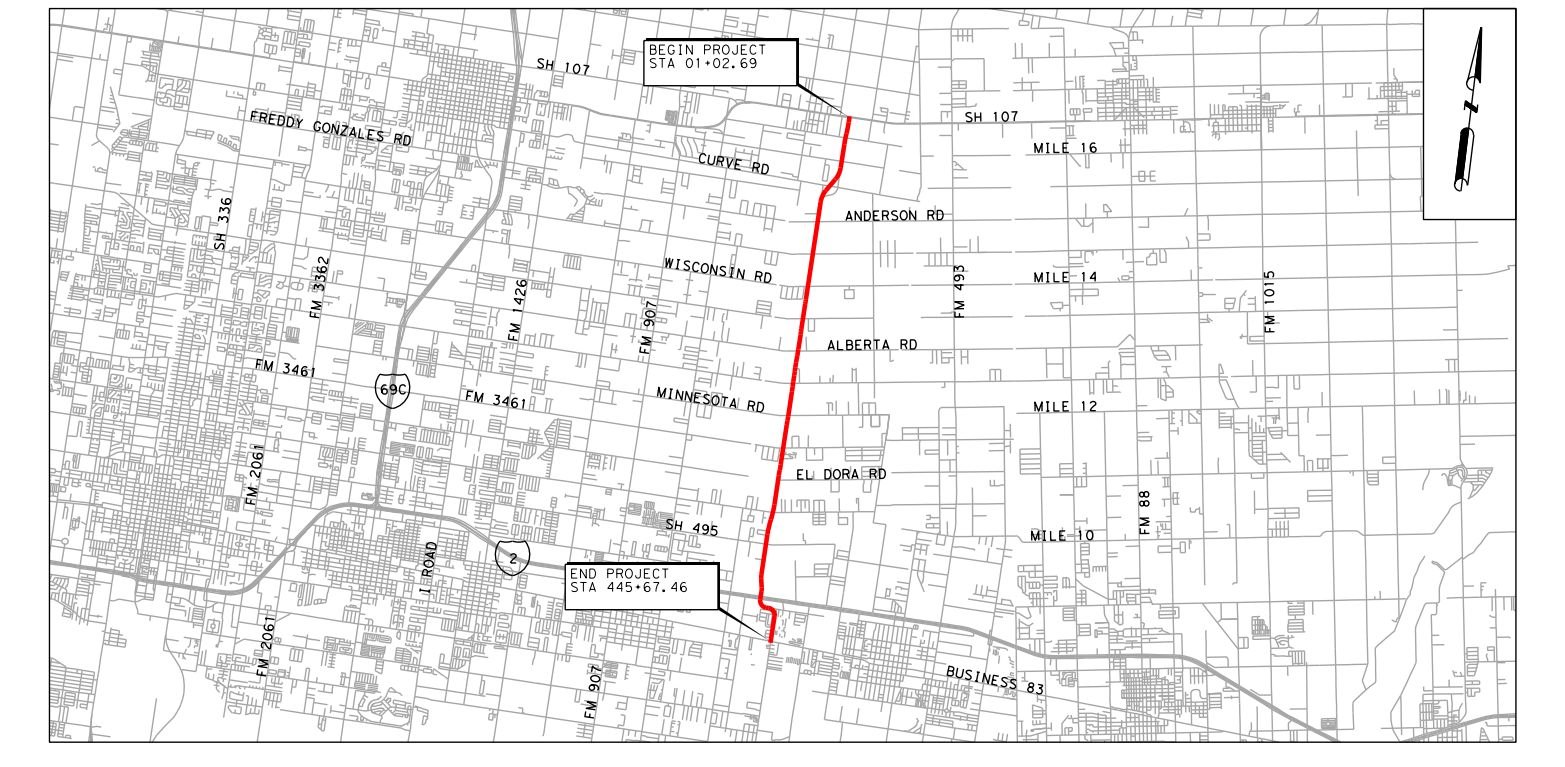
Texas Department of Transportation

2/9/2023 pw:\\dannenbaum-pw.bentley.com:dannenbaum-pw-01\Documents\Transportation\5149-02\00 SCHEMATIC\FM1423_SCHEM_ROLL_2

TEXAS DEPARTMENT OF TRANSPORTATION

PRELIMINARY SCHEMATIC LAYOUT
FM 1423 - HIDALGO COUNTY, TEXAS
OFFICE OF THE DISTRICT ENGINEER
PHARR, TEXAS

C-S-J: 1427-01-032, 1427-01-033 & 1427-01-037
(FROM SH 107 TO BUSINESS 83 ~ LENGTH 8.4 MILES)



VICINITY MAP
HIDALGO COUNTY
(N.T.S.)

FUNCTIONAL CLASSIFICATION:

FM 1423 - URBAN MAJOR COLLECTOR

DESIGN SPEED:

FM 1423:
SH 107 TO MINNESOTA RD - 60 MPH
MINNESOTA RD TO IH 2 - 45 MPH
IH 2 TO BUSINESS 83 - 35 MPH

DESIGN CRITERIA:

PROPOSED DESIGN STANDARDS FOR ROADWAY: TxDOT RDM JULY 2020 CH. 2 & 3 SECT. 2
PROPOSED DESIGN STANDARDS FOR TRAFFIC: TxMUTCD REV. 2, OCTOBER 2014
PROPOSED DESIGN STANDARDS FOR DRAINAGE: TxDOT HYDRAULIC DESIGN MANUAL 2019

TRAFFIC DATA:

CSJ: 1427-01-032 SH 107 TO W. ROOSEVELT ROAD
ADT (2029) - 13,500
(2049) - 19,200
(2059) - 20,900
CSJ: 1427-01-032 W. ROOSEVELT ROAD TO MINNESOTA ROAD
ADT (2029) - 16,200
(2049) - 23,200
(2059) - 25,300
CSJ: 1427-01-037 MINNESOTA ROAD TO IH 2
ADT (2029) - 21,700
(2049) - 30,400
(2059) - 32,900
CSJ: 1427-01-033 IH 2 TO BUSINESS 83
ADT (2029) - 12,300
(2049) - 17,200
(2059) - 18,400

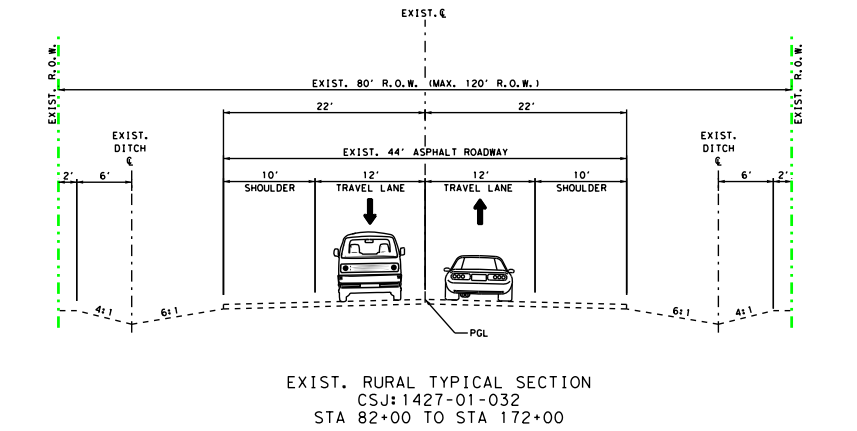
60% SUBMITTAL
ROLL 2 OF 6

HORZ SCALE: 1"=50' 0 25 50 100
VERT SCALE: 1"=5' 0 2.5 5 10

PRELIMINARY
FOR REVIEW ONLY
THESE DOCUMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE. THEY ARE NOT INTENDED FOR CONSTRUCTION OR PERMIT PURPOSES. THEY WERE PREPARED BY, OR UNDER THE SUPERVISION OF:

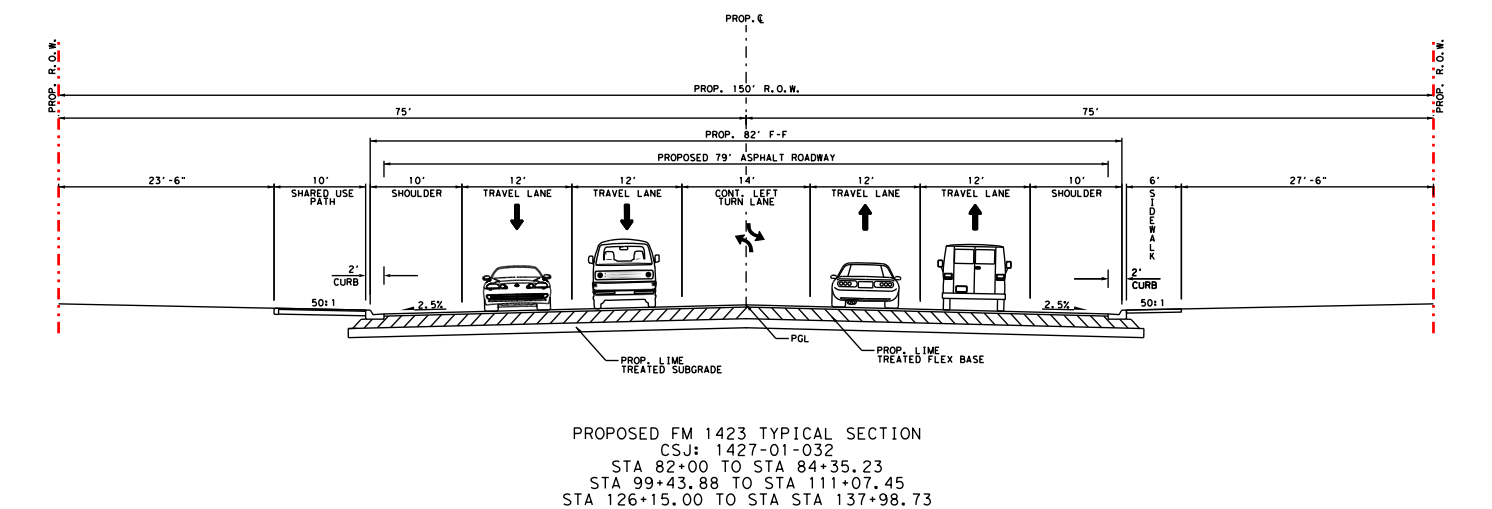
RICHARD P. IBARRA, P.E., PTOE 89331 2/9/2023
NAME P.E. # DATE

EXISTING TYPICAL SECTIONS - (FM 1423)

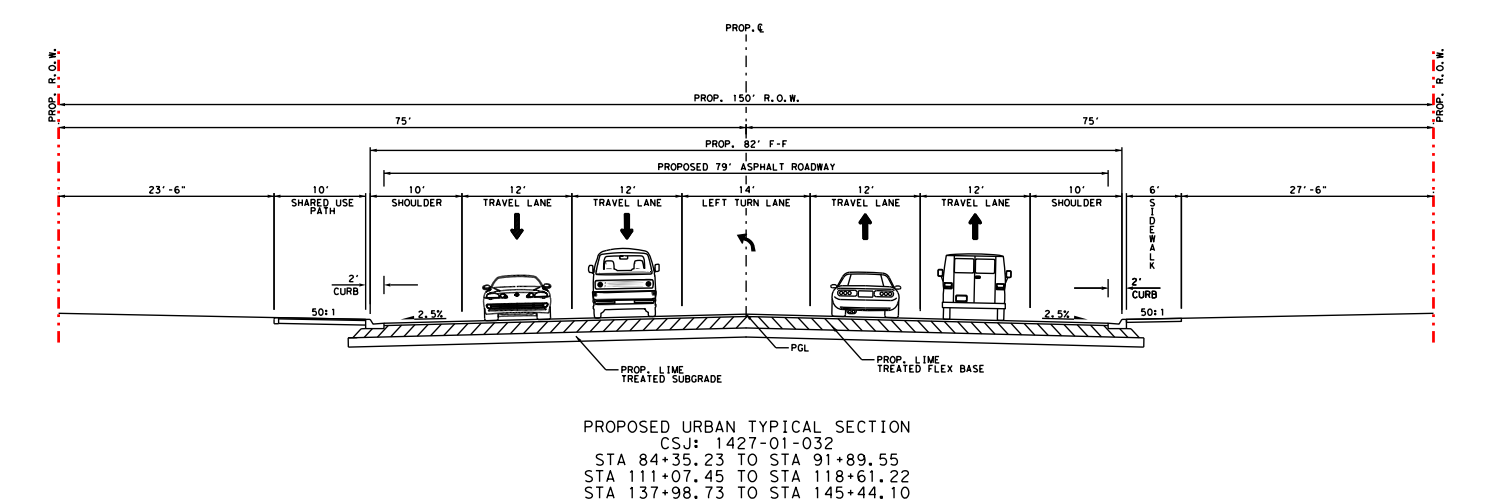


EXIST. RURAL TYPICAL SECTION
CSJ:1427-01-032
STA 82+00 TO STA 172+00

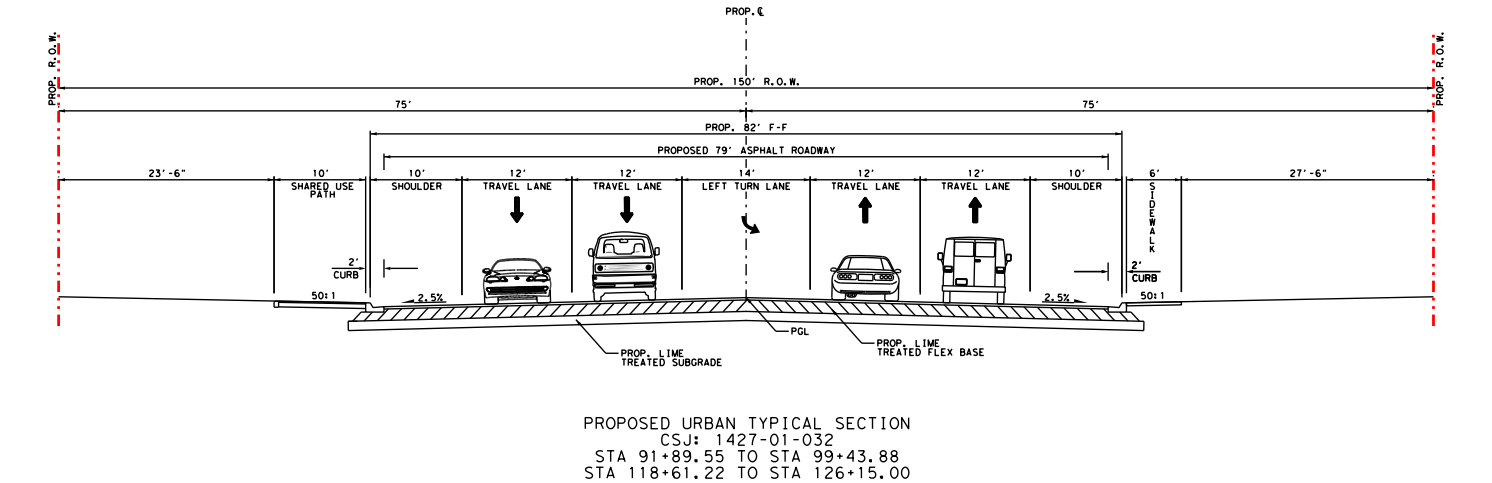
PROPOSED TYPICAL SECTIONS - (FM 1423)



PROPOSED FM 1423 TYPICAL SECTION
CSJ: 1427-01-032
STA 82+00 TO STA 84+35.23
STA 99+43.88 TO STA 111+07.45
STA 126+15.00 TO STA STA 137+98.73
STA 152+89.46 TO STA 164+77.93



PROPOSED URBAN TYPICAL SECTION
CSJ: 1427-01-032
STA 84+35.23 TO STA 91+89.55
STA 111+07.45 TO STA 118+61.22
STA 137+98.73 TO STA 145+44.10
STA 164+77.93 TO STA 172+00



PROPOSED URBAN TYPICAL SECTION
CSJ: 1427-01-032
STA 91+89.55 TO STA 99+43.88
STA 118+61.22 TO STA 126+15.00
STA 145+44.10 TO STA 152+89.46

PLAN LEGEND

- CITY LIMITS
- PROPOSED R.O.W.
- EXISTING R.O.W.
- PARCEL LINE
- PROPOSED CULVERT CROSSING
- EXISTING CULVERT CROSSING
- EXISTING IRRIGATION CROSSING
- 🟦 PROPOSED PAVEMENT
- 🟦 PROPOSED MEDIAN
- 🟪 PROPOSED BRIDGE (CONCRETE)
- ⬜ PROPOSED SIDEWALK
- 🟧 PROPOSED SHARED USE PATH
- ▨ TO BE OBLITERATED
- ▨ POTENTIAL BUILDING DISPLACEMENT
- 🟦 FEMA FLOOD ZONE
- RIO VALLEY SWITCHING RAILROAD
- →/◆ TRAFFIC FLOW/BICYCLE LANE
- ●●● SIGNALIZED INTERSECTION
- # PARCEL NUMBERS

UTILITY LEGEND

ELECTRIC

OHE-1 OHE-2 OHET-1	OWNER VARIES
E1-1-D E1-1	TXDOT
E2-1-D E2-1	AMERICAN ELECTRIC POWER
E3-1-D E3-1	MAGIC VALLEY ELECTRIC

COMMUNICATION

OHT-1	OWNER VARIES-TELECOM
T1-2-D T1-2	AT&T COPPER
T1-1-D T1-1	AT&T FIBER
T1-3-D	AT&T-ABANDONED
T1-5-D	AT&T-TOLL FIBER
T2-2-D T2-2	SPECTRUM COPPER
T2-1-D T2-1	SPECTRUM FIBER
T3-1-D T3-1	FIBERLIGHT FIBER
T3-1-D	SMARTCOM FIBER
T5-1	VALLEY TELEPHONE COOP. - FIBER

WATER, WASTEWATER, & STORM SEWER

W1-2-D W1-3-D W1-4-D W1-6-D W1-8-D W1-8-D W1-12-D W1-2 W1-3 W1-6 W1-UNK	NAWSC
	NAWSC - SERVICE
WW1-10-D WW1-UNK-D	NAWSC WASTEWATER

GAS/GAS NATURAL/PIPELINES

G1-1-D	TEXAS GAS SERVICE
	TGS - SERVICE (QLD)
G1-1	TGS - UNK
	TGS - SERVICE (QLB)
G2-6-D G2-6	TEXAS EASTERN
G3-10-D	PETROLEUM FUELS

TRAFFIC

E4-1-D E4-1	OWNER VARIES

GENERAL NOTES:

1. ALL PROJECT COORDINATES ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS SOUTH ZONE, NAD 83/NAVD 88. ALL COORDINATES SHOWN ARE SURFACE AND CAN BE CONVERTED TO GRID BY DIVIDING A SCALE FACTOR OF 1.00004. UNIT OF MEASURE IS U.S. SURVEY FOOT.
2. PARCEL LINE BOUNDARIES ARE APPROXIMATE LOCATIONS AND ARE FOR ILLUSTRATION PURPOSES ONLY.
3. TRAFFIC PROJECTION NUMBERS ILLUSTRATED ARE PRELIMINARY AND UNDER FINAL REVIEW.
4. ALL DRIVEWAYS IMPACTED BY CONSTRUCTION TO BE RECONSTRUCTED.
5. ROADWAY GEOMETRY AND ELEMENTS TO BE REFINED DURING SCHEMATIC DEVELOPMENT.

CONTROL POINTS

POINT NO.	NORTHING	EASTING	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION/REMARKS

FM 1423 CURVE CL-05	
PI STATION	= 157+34.04
DELTA	= 0° 53' 18.80" (RT)
DEGREE OF CURVE	= 0° 30' 58.24"
TANGENT	= 86.07
LENGTH	= 172.14
RADIUS	= 11,100.00
PC STATION	= 156+47.97
PT STATION	= 158+20.11

FM 1423 CURVE CL-06	
PI STATION	= 159+11.03
DELTA	= 0° 56' 18.78" (LT)
DEGREE OF CURVE	= 0° 30' 58.24"
TANGENT	= 90.92
LENGTH	= 181.83
RADIUS	= 11,100.00
PC STATION	= 158+20.11
PT STATION	= 160+01.94