Texas Department of Transportation

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# WACO DISTRICT

STANLEY SWIATEK, P.E.
DISTRICT ENGINEER

# US 281 HAMILTON TRUCK/RELIEF ROUTE DESIGN SCHEMATIC

HAMILTON COUNTY

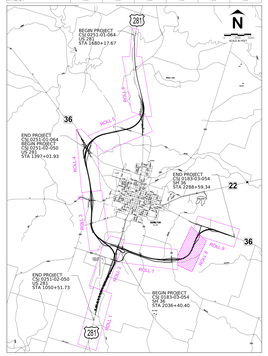
**US 281**
CSJ : 0251-01-064
FROM 1.25 MILES NORTH OF CR 203 (LEON RIVER)
TO 0.25 MILE SOUTH OF FM 218
PROJECT LENGTH: 5.36 MILES

CSJ : 0251-02-050
FROM SH36 TO CR 203A
PROJECT LENGTH: 6.06 MILES

**SH 36**
CSJ : 0183-03-054
FROM US 281 TO SH 36
PROJECT LENGTH: 6.78 MILES

| ROADWAY TYPE | FUNCTIONAL CLASS | DESIGN SPEED |
|---|---|---|
| US 281 RELIEF ROUTE | RURAL FREEWAY | 75 MPH |
| SH 36 RELIEF ROUTE | RURAL FREEWAY | 75 MPH |
| US 281 MAIN LANES, PURPOSE LANES | PRINCIPAL ARTERIAL | 70 MPH |
| SH 36 SPUR | PRINCIPAL ARTERIAL | 70 MPH |
| DIRECT CONNECTORS | PRINCIPAL ARTERIAL | 50 MPH |
| RAMPS | PRINCIPAL ARTERIAL | 50 MPH* |
| "LOOPEXIT" | PRINCIPAL ARTERIAL | 30 MPH |
| "LOOPENT" | PRINCIPAL ARTERIAL | 30 MPH |
| "BUS281SLOOP" | PRINCIPAL ARTERIAL | 30 MPH |
| CR 101 | RURAL MINOR COLLECTOR | 60 MPH |
| CR 102 | RURAL MINOR COLLECTOR | 50 MPH |
| CR 203 | RURAL COLLECTOR | 30 MPH |
| CR 401 | RURAL COLLECTOR | 30 MPH |
| PRIVATE RIDGE LANE | RURAL MINOR COLLECTOR | 30 MPH |
| FRONTAGE ROAD | RURAL COLLECTOR | 40 MPH |
| FM 218 | RURAL MAJOR COLLECTOR | 40 MPH |
| FM 932 | RURAL MAJOR COLLECTOR | 60 MPH |
| FM 1241 | RURAL MINOR COLLECTOR | 45 MPH |
| FM 2005 | RURAL MAJOR COLLECTOR | 30 MPH |
| FM 3302 | RURAL MINOR COLLECTOR | 40 MPH |
| LOCAL ROADS | LOCAL ROAD | 25 MPH |
| BACKING ROADS | LOCAL ROAD | 20 MPH |

| TRAFFIC VOLUMES BASED ON AMPHORA 21 DATA FROM TRANSPORTATION PLANNING DIVISION (TPP) | US 281 FROM 1.25 MILES NORTH OF CR 203 (LEON RIVER) TO 0.25 MILE SOUTH OF FM 218 (BUSINESS NORTH) | US 281 RELIEF ROUTE FROM 0.25 MILE AT CR 401 TO 0.25 MILE AT SH 36 (BUSINESS NORTH) | US 281 RELIEF ROUTE FROM 0.25 MILE AT SH 36 (BUSINESS SOUTH) TO 0.25 MILE AT CR 401 (BUSINESS SOUTH) | US 281 FROM 0.25 MILE SOUTH OF FM 218 (BUSINESS SOUTH) TO 0.25 MILE SOUTH OF SH 36 (PROJECT LIMITS) | SH 36 RELIEF ROUTE FROM 0.25 MILE AT US 281 TO 0.25 MILE AT SH 36 EAST | SH 36 SPUR FROM 0.25 MILE AT SH 36 TO 0.25 MILE AT SH 36 EAST |
|---|---|---|---|---|---|---|
| AADT | 5,800 (7,800) | 3,000 (4,200) | 4,200 (5,700) | 5,800 (7,800) | 2,900 (3,900) | 900 (1,300) |
| AVERAGE DAILY TRAFFIC (ADT) FORECAST YEAR (2042) | N/A | N/A | N/A | N/A | 1,550 (1,400) | N/A |
| DIRECTIONAL DISTRIBUTION | 54% | 54% | 54% | 54% | 57% | 57% |
| PERCENT TRUCKS OF ADT | 19.0% | 33.0% | 42.0% | 19.0% | 19.0% | 19.0% |
| K FACTOR | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 |




PROJECT LOCATION MAP/KEY MAP

INDEX OF ROLLS


ROLL 1 OF 11 PLAN & PROFILE US 281 - BEGIN OF PROJECT TO STA 1110+00
ROLL 2 OF 11 PLAN & PROFILE US 281 - STA 1110+00 TO STA 1210+00; SH 36 BEGIN OF PROJECT TO STA 2034+00
ROLL 3 OF 11 PLAN & PROFILE US 281 - STA 1210+00 TO STA 1316+00
ROLL 4 OF 11 PLAN & PROFILE US 281 - STA 1316+00 TO STA 1418+00
ROLL 5 OF 11 PLAN & PROFILE US 281 - STA 1418+00 TO STA 1525+00
ROLL 6 OF 11 PLAN & PROFILE US 281 - STA 1525+00 TO END OF PROJECT
ROLL 7 OF 11 PLAN & PROFILE SH 36 - STA 2034+00 TO STA 2150+00
ROLL 8 OF 11 PLAN & PROFILE SH 36 - STA 2150+00 TO STA 2219+00
ROLL 9 OF 11 PLAN & PROFILE SH 36 - STA 2219+00 TO END OF PROJECT
ROLL 10 OF 11 PROPOSED PROFILES
ROLL 11 OF 11 TRAFFIC DIAGRAM


Texas Department of Transportation
1 Texas Stadium Way, Waco, Texas 76711

FEBRUARY 12, 2026

NOT INTENDED FOR CONSTRUCTION, BIDDING, AND/OR PERMIT PURPOSES

CHAD HENDERSON, P.E.
TX PE LICENSE NO. 91723

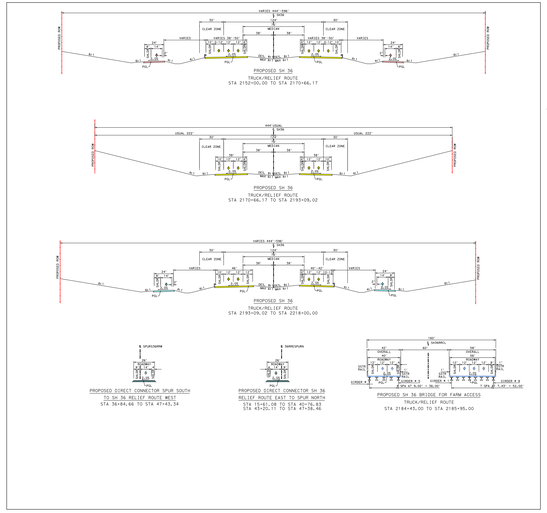
Bartlett & West
TRANS CENTRAL GROUP

PRELIMINARY
FOR REVIEW AND COORDINATION PURPOSES
AVAILABLE INFORMATION ONLY. RECOMMENDED CONCEPTS ARE SUBJECT TO CHANGE.

TIMOTHY M. SPIGHTS, P.E.
TX PE LICENSE NO. 94828

## LEGEND

- PROPERY OWNERSHIP LABELS
- PROPOSED ALIGNMENT
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROADS
- PROPOSED INTERSECTING ROADWAYS
- PROPOSED RAMPS
- PROPOSED DIRECT CONNECTOR ROADWAYS
- PROPOSED SIDEWALKS
- PROPOSED BRIDGE
- EXISTING MAINLANES TO REMAIN
- EXISTING ROADWAYS TO BE REMOVED
- PROPOSED RETAINING WALL
- PROPERTY LINE (APPROXIMATE)
- EXISTING RIGHT-OF-WAY (R.O.W.)
- PROPOSED RIGHT-OF-WAY (R.O.W.)
- PROPOSED DENIAL-OF-ACCESS
- CITY/COUNTY LIMITS
- PROPOSED DRAINAGE EASEMENTS
- EXISTING LANDMARKS
- EXISTING CULVERTS/BRIDGES
- EXISTING DRAINAGE STRUCTURES
- PROPOSED DRAINAGE STRUCTURES
- STREAM FLOW
- PROPOSED RIPRAP
- PROPOSED DIRECTION OF TRAFFIC
- EXISTING/FUTURE DIRECTION OF TRAFFIC
- EXISTING BUILDING OUTLINE
- VEGETATION
- POTENTIAL DISPLACEMENT
- CEMETERY
- AGRICULTURE TRUCK PARKING SITE
- ABANDONED GAS/OIL WELL
- COURTHOUSE/NATIONAL REGISTRY PROPERTY
- PLACE OF WORSHIP
- MUSEUM
- HEALTH CARE
- FIRE STATION
- SCHOOL
- PARK
- POLICE STATION



| PROPERTY OWNERSHIP TABLE | |
|---|---|
| PARCEL NO. | OWNER |
| 2048 | RAMWATER TWW |
| 2049 | BOTTLINGER CHARLIE |
| 2050 | BOTTLINGER CHARLIE |
| 2051 | BOTTLINGER NICOLAS |
| 2052 | NELSON DONALD L & ORAL |
| 2053 | BOTTLINGER CHARLIE |
| 2054 | BOTTLINGER CHARLIE |
| 2055 | BOTTLINGER CHARLIE |
| 2056 | BOTTLINGER CHARLIE |
| 2057 | LAWSON JODY A KIRBY MASSINGILL |
| 2058 | BOTTLINGER CHARLIE |
| 2059 | BOTTLINGER CHARLIE |
| 2060 | BOLES CHARLES A III |

| PROPERTY OWNERSHIP TABLE | |
|---|---|
| PARCEL NO. | OWNER |
| 1061 | WIENZEL ISAAC LUKE |
| 1062 | BOTTLINGER CHARLIE |
| 1063 | BOTTLINGER CHARLIE |
| 1064 | BOTTLINGER CHARLIE |
| 1065 | BOTTLINGER CHARLIE |
| 1066 | BROKSTAD G W |
| 1067 | BOTTLINGER CHARLIE |
| 1068 | BOTTLINGER CHARLIE |
| 1069 | WRIGHT BRADY & BECKY MARCHMAN |
| 1070 | RIVERSIDE RANCH LP |
| 1071 | SAM WATSON LP |
| 1072 | BOTTLINGER CHARLIE |

GENERAL NOTES

1. DEPICTION OF BRIDGE STRUCTURES ARE PRELIMINARY. FINAL CONFIGURATION, STRUCTURE DEPTH AND CLEARANCES TO BE DETERMINED IN FINAL DESIGN DRAWINGS.
2. FINAL RESTORATION/LOCATION OF DRIVEWAYS TO BE DETERMINED IN FINAL DESIGN DRAWINGS.
3. PGL INDICATES PROFILE GRADE LINE.
4. AERIAL SURVEYS PERFORMED MAY 15, 2022 ALONG US 281, FROM HCO TO EVANT, AND MAY 04, 2024 ALONG US 281 RELIEF ROUTE.
5. EX=EXISTING, PROP=PROPOSED

GEOMETRIC DATA TABLE

| CHAIN NAME | CURVE NO. | DELTA | DEGREE | TANGENT | LENGTH | RADIUS MAINLANES | BACK BEARING | AHEAD BEARING | PI STATION | PC STATION | PT STATION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SH36MRCL | 2 | 67°19'11.54" | 02°00'00.00" | 1907.68' | 3365.99' | 2864.79' | N89°04'38.94"E | N21°45'27.40"E | 2171+05.90 | 2151+98.22 | 2185+64.21 |
| | | | | | | RAMPS | | | | | |
| 36RARESPURN | 1 | 04°00'00.00" | 02°00'00.00" | 100.04' | 200.00' | 2864.79' | N21°45'27.40"E | N25°45'27.40"E | 11+02.25 | 10+02.22 | 12+02.21 |
| | 2 | 12°00'03.19" | 02°00'00.00" | 301.97' | 601.72' | 2864.79' | N25°45'27.40"E | N37°47'30.59"E | 20+48.85 | 17+46.88 | 23+48.60 |
| | 3 | 36°00'28.41" | 04°00'24.11" | 466.58' | 902.02' | 1430.00' | N37°47'30.59"E | N51°39'02.18"E | 34+44.15 | 29+77.57 | 38+79.59 |
| SPUR536RRW | 1 | 03°58'51.56" | 02°00'00.00" | 99.61' | 199.13' | 2864.79' | N25°18'11.79"E | N29°17'09.35"E | 14+34.35 | 13+34.75 | 15+33.88 |
| 36RRW932 | 2 | 23°40'38.50" | 03°23'03.42" | 360.48' | 710.57' | 1709.84' | S07°37'19.67"W | N17°48'41.17"E | 26+76.07 | 23+15.59 | 30+26.15 |
| | 3 | 05°18'59.49" | 03°43'41.13" | 70.91' | 141.71' | 1536.86' | N73°48'41.17"E | N68°31'42.68"E | 30+97.06 | 30+26.15 | 31+67.87 |

SUPERELEVATION TABLE

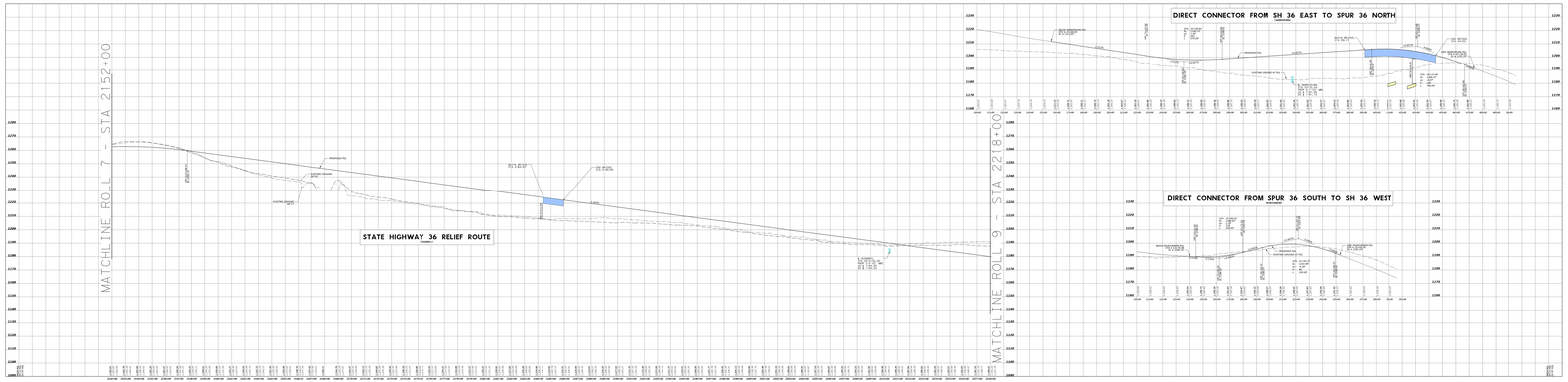
| CHAIN NAME | STATION | LEFT/RIGHT CROSS SLOPE | LT/RT CROSS SLOPE | STATION | LEFT/RIGHT CROSS SLOPE | LT/RT CROSS SLOPE |
|---|---|---|---|---|---|---|
| SH36MRCL | 2152+55.00 | -2.00% | 2.00% | 2148+75.00 | -2.00% | -2.00% |
| | 2152+55.00 | -6.00% | 6.00% | 2152+00.00 | -6.00% | 6.00% |
| | 2183+55.00 | -6.00% | 6.00% | 2184+75.00 | -6.00% | 6.00% |
| | 2187+55.00 | -2.00% | 2.00% | 2187+55.00 | -2.00% | -2.00% |
| | 2202+05.00 | -2.00% | 2.00% | 2200+55.00 | -2.00% | -2.00% |
| | 2207+85.00 | -2.00% | 2.00% | 2207+25.00 | -6.00% | -6.00% |

SUPERELEVATION TABLE

| CHAIN NAME | STATION | CROSS SLOPE LT | CROSS SLOPE RT |
|---|---|---|---|
| 36RRESPURN | 17+05.00 | -2.00% | -2.00% |
| | 17+05.00 | -6.00% | 6.00% |
| | 23+05.00 | -6.00% | 6.00% |
| | 23+80.00 | -2.00% | -2.00% |
| | 30+55.00 | -5.20% | 5.20% |
| | 37+30.00 | -2.00% | -2.00% |
| | 41+25.00 | -2.00% | -2.00% |
| SPUR536RRW | 13+84.52 | -6.00% | -6.00% |
| | 13+84.52 | -6.00% | 6.00% |
| | 17+25.24 | -2.00% | 2.00% |
| 36RRW932 | 23+30.00 | -4.80% | 4.80% |
| | 26+70.00 | -2.00% | -2.00% |
| | 26+77.25 | -6.00% | 6.00% |

SUPERELEVATION SIGN CONVENTION

| LT | RT |
|---|---|
| (+) | (+) |
| (-) | (-) |





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