STATE OF TEXAS
TEXAS DEPARTMENT OF TRANSPORTATION

SCHEMATIC LAYOUT OF PROPOSED STATE HIGHWAY IMPROVEMENT

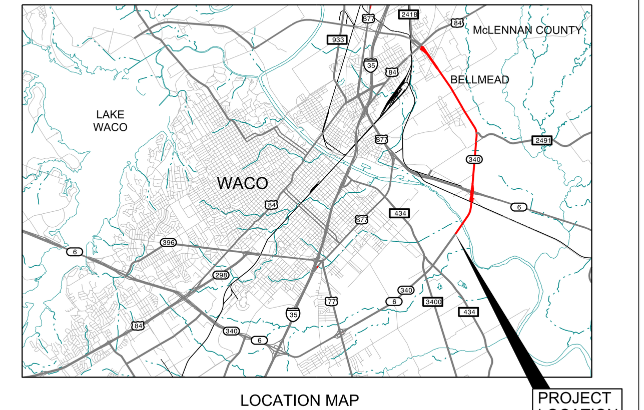
SL 340
McLENNAN COUNTY

CSJ 2362-01-034, 0258-09-143

LIMITS:
FROM THE BRAZOS RIVER
NORTH TO US 84

OFFICE OF DISTRICT ENGINEER
WACO DISTRICT

08/24/2017



LOCATION MAP
NOT TO SCALE

DESIGN SPEEDS:
70 MPH MAINLANES (SL 340)
45 MPH RAMPS
45 MPH FRONTAGE ROADS
40 MPH CROSS STREETS
TRAFFIC PROJECTIONS (AADT):
15,850 (2019)
21,700 (2039)

PUBLIC MEETING
AUG 24, 2017

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF PRELIMINARY REVIEW SUBMITTAL.
IT IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

LEGEND

- EXISTING ROW
- DENIAL OF ACCESS
- RETAINING WALL
- PROPOSED MAINLANE
- PROPOSED FRONTAGE ROAD
- DRIVEWAY / CROSS STREET
- BRIDGE OR BRIDGE CLASS CULVERT
- PROPOSED RAMP
- PROPOSED SIDEWALK
- CURVE # CURVE DATA

UTILITY LEGEND

- OVERHEAD ELECTRIC LINES
- UNDERGROUND FIBER OPTIC LINES
- UNDERGROUND GAS LINE
- PETROLEUM PIPELINE
- SANITARY SEWER LINE
- OVERHEAD TELEPHONE LINE
- OVERHEAD CABLE/TV LINE
- WATERLINE

100 0 100 200
HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1"=10'

ROLL 3 OF 8

IEA
18333 PRESTON ROAD
SUITE 205
DALLAS, TEXAS 75252
(214) 884-4253
FIRM REGISTRATION NO. F-10161

Texas Department of Transportation
Waco District

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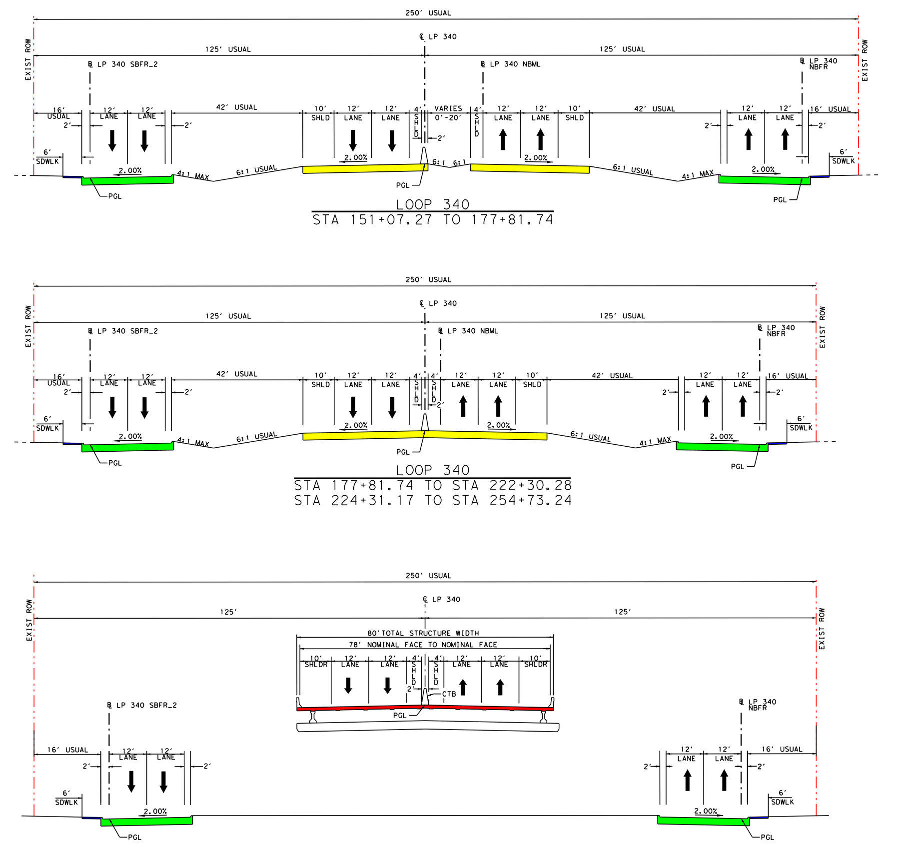
TYPICAL SECTIONS



LOOP 340
STA 151+07.27 TO 177+81.74

LOOP 340
STA 177+81.74 TO STA 222+30.28
STA 224+31.17 TO STA 254+73.24

LOOP 340
STA 222+30.28 TO STA 224+31.17 (ORCHARD LN.)

℄ SBX ORCHARD

SBX ORCHARD-1

PC	5+79.42	10,553,710.74	3,311,967.03
PI	7+31.02	10,553,841.35	3,311,890.06
CC		10,555,165.24	3,314,435.12
PRC	8+82.34	10,553,979.35	3,311,827.31
Radius:	2864.79		
Delta:	6°03'30.0"	Right	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	302.92		
Tangent:	151.6		
Tangent Direction:	N 24°27'12.1" W		

SBX ORCHARD-2

PRC	8+82.34	10,553,979.35	3,311,827.31
PI	10+33.94	10,554,117.35	3,311,764.55
CC		10,552,793.47	3,309,219.50
PT	11+85.25	10,554,247.96	3,311,687.58
Radius:	2864.79		
Delta:	6°03'30.0"	Left	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	302.92		
Tangent:	151.6		
Bearing:	N 30°30'42.1" W		

SBX ORCHARD-3

PC	13+04.16	10,554,350.40	3,311,627.21
PI	15+02.64	10,554,521.40	3,311,526.44
CC		10,556,289.73	3,314,918.00
PRC	17+00.77	10,554,701.92	3,311,443.94
Radius:	3819.72		
Delta:	5°56'56.7"	Right	
Degree of Curvature (Arc):	1°30'00.0"		
Length:	396.6		
Tangent:	198.48		
Tangent Direction:	N 24°33'45.4" W		

SBX ORCHARD-4

PRC	17+00.77	10,554,701.92	3,311,443.94
PI	18+49.63	10,554,837.31	3,311,382.06
CC		10,553,511.06	3,308,838.39
PT	19+98.22	10,554,965.55	3,311,306.48
Radius:	2864.79		
Delta:	5°56'56.7"	Left	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	297.45		
Tangent:	148.86		
Tangent Direction:	N 30°30'42.1" W		

℄ NBX ORCHARD

NBX ORCHARD-1

PC	3+73.71	10,555,839.84	3,310,848.41
PI	4+94.44	10,555,941.70	3,310,783.61
CC		10,557,377.68	3,313,265.45
PRC	6+15.03	10,556,048.65	3,310,727.60
Radius:	2864.79		
Delta:	4°49'34.8"	Right	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	241.32		
Tangent:	120.73		
Tangent Direction:	N 27°38'24.4" W		

NBX ORCHARD-2

PRC	6+15.03	10,556,048.65	3,310,727.60
PI	8+46.44	10,556,253.66	3,310,620.24
CC		10,554,276.63	3,307,343.79
PT	10+77.29	10,556,444.21	3,310,488.92
Radius:	3819.72		
Delta:	6°56'02.3"	Left	
Degree of Curvature (Arc):	1°30'00.0"		
Length:	462.27		
Tangent:	231.42		
Bearing:	N 34°34'26.7" W		

NBX ORCHARD-3

PC	11+84.35	10,556,532.36	3,310,428.16
PI	13+30.02	10,556,652.30	3,310,345.50
CC		10,558,158.05	3,312,787.01
PRC	14+75.43	10,556,780.00	3,310,275.44
Radius:	2864.79		
Delta:	5°49'17.6"	Right	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	291.08		
Tangent:	145.66		
Tangent Direction:	N 28°45'09.1" W		

NBX ORCHARD-4

PRC	14+75.43	10,556,780.00	3,310,275.44
PI	16+22.37	10,556,908.83	3,310,204.75
CC		10,555,401.96	3,307,763.86
PT	17+69.06	10,557,029.75	3,310,121.26
Radius:	2864.79		
Delta:	5°52'21.4"	Left	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	293.63		
Tangent:	146.94		
Tangent Direction:	N 34°37'30.5" W		

℄ SBE ORCHARD

SBE ORCAHRD-1

PC	4+28.46	10,556,542.95	3,310,291.18
PI	6+29.70	10,556,708.65	3,310,176.98
CC		10,553,291.58	3,305,573.48
PRC	8+30.77	10,556,865.92	3,310,051.44
Radius:	5729.58		
Delta:	4°01'23.2"	Left	
Degree of Curvature (Arc):	1°00'00.0"		
Length:	402.31		
Tangent:	201.24		
Tangent Direction:	N 38°35'49.9" W		

SBE ORCAHRD-2

PRC	8+30.77	10,556,865.92	3,310,051.44
PI	9+15.41	10,556,932.08	3,309,998.64
CC		10,558,653.10	3,312,290.42
PT	10+00.00	10,557,001.23	3,309,949.83
Radius:	2864.79		
Delta:	3°23'04.7"	Right	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	169.23		
Tangent:	84.64		
Bearing:	N 35°12'45.2" W		

SBE ORCAHRD-3

PC	11+77.32	10,557,146.10	3,309,847.59
PI	13+37.09	10,557,276.63	3,309,755.46
CC		10,555,494.23	3,307,507.01
PRC	14+96.53	10,557,396.12	3,309,649.39
Radius:	2864.79		
Delta:	6°23'03.3"	Left	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	319.21		
Tangent:	159.77		
Tangent Direction:	N 41°35'48.5" W		

SBE ORCAHRD-4

PRC	14+96.53	10,557,396.12	3,309,649.39
PI	15+79.47	10,557,458.14	3,309,594.33
CC		10,558,287.31	3,310,653.28
PT	16+62.20	10,557,526.48	3,309,547.32
Radius:	1342.39		
Delta:	7°04'16.3"	Right	
Degree of Curvature (Arc):	4°16'05.4"		
Length:	165.67		
Tangent:	82.94		
Tangent Direction:	N 34°31'32.2" W		

HORIZONTAL GEOMETRY

℄ LP 340

Bearing: N 4°45'17.9" E

CL LP 340-2

PC	156+80.57	10,549,643.76	3,314,096.59
PI	164+74.02	10,550,434.48	3,314,162.36
CC		10,549,834.41	3,311,804.50
PT	172+08.67	10,551,097.56	3,313,726.60
Radius:	2300		
Delta:	38°04'00.0"	Left	
Degree of Curvature (Arc):	2°29'28.0"		
Length:	1528.09		
Tangent:	793.45		
Bearing:	N 33°18'42.1" W		

CL LP 340-3

PC	187+28.70	10,552,367.84	3,312,891.81
PI	190+95.29	10,552,674.20	3,312,690.48
CC		10,560,605.74	3,325,427.24
PT	194+61.74	10,552,990.03	3,312,504.36
Radius:	15000		
Delta:	2°48'00.0"	Right	
Degree of Curvature (Arc):	0°22'55.1"		
Length:	733.04		
Tangent:	366.59		
Bearing:	N 30°30'42.1" W		

CL LP 340-4

PC	222+45.03	10,555,387.91	3,311,091.24
PI	227+77.02	10,555,846.23	3,310,821.14
CC		10,547,772.20	3,298,168.35
PT	233+08.56	10,556,284.27	3,310,519.25
Radius:	15000		
Delta:	4°03'44.6"	Left	
Degree of Curvature (Arc):	0°22'55.1"		
Length:	1063.53		
Tangent:	531.99		
Bearing:	N 34°34'26.7" W		

℄ LP 340 NBML

NBML-3

PRC	155+75.18	10,549,527.69	3,314,109.18
PI	165+07.90	10,550,452.26	3,314,232.23
CC		10,549,834.41	3,311,804.50
PRC	173+49.22	10,551,205.52	3,313,682.18
Radius:	2325		
Delta:	43°43'05.1"	Left	
Degree of Curvature (Arc):	2°27'51.6"		
Length:	1774.03		
Tangent:	932.71		
Tangent Direction:	N 36°08'14.6" W		

NBML-4

PRC	173+49.22	10,551,205.52	3,313,682.18
PI	176+97.57	10,551,486.85	3,313,476.75
CC		10,559,534.78	3,325,088.80
PT	180+45.78	10,551,777.97	3,313,285.44
Radius:	14124		
Delta:	2°49'32.5"	Right	
Degree of Curvature (Arc):	0°24'20.4"		
Length:	696.57		
Tangent:	348.35		
Bearing:	N 33°18'42.1" W		

℄ LP 340 NBFR

Bearing: N 33°18'42.1" W

NBFR-8

PC	188+13.97	10,552,557.17	3,312,895.42
PI	190+21.71	10,552,730.78	3,312,781.34
CC		10,557,225.32	3,319,998.83
PT	192+29.36	10,552,909.75	3,312,675.87
Radius:	8500		
Delta:	2°48'00.0"	Right	
Degree of Curvature (Arc):	0°40'26.6"		
Length:	415.39		
Tangent:	207.74		
Bearing:	N 30°30'42.1" W		

NBFR-9

PC	214+54.35	10,554,826.64	3,311,546.20
PI	215+99.28	10,554,951.49	3,311,472.62
CC		10,548,734.07	3,301,207.90
PRC	217+44.19	10,555,074.53	3,311,396.05
Radius:	12000		
Delta:	1°23'01.9"	Left	
Degree of Curvature (Arc):	0°28'38.9"		
Length:	289.83		
Tangent:	144.92		
Tangent Direction:	N 31°53'44.0" W		

NBFR-10

PRC	217+44.19	10,555,074.53	3,311,396.05
PI	218+89.11	10,555,197.58	3,311,319.48
CC		10,561,415.00	3,321,584.20
PT	220+34.02	10,555,322.43	3,311,245.90
Radius:	12000		
Delta:	1°23'01.9"	Right	
Degree of Curvature (Arc):	0°28'38.9"		
Length:	289.83		
Tangent:	144.92		
Bearing:	N 30°30'42.1" W		

NBFR-11

PC	223+64.99	10,555,607.57	3,311,077.86
PI	227+95.93	10,555,978.84	3,310,859.06
CC		10,549,515.00	3,300,739.55
PT	232+26.51	10,556,333.46	3,310,614.20
Radius:	12000		
Delta:	4°06'48.4"	Left	
Degree of Curvature (Arc):	0°28'38.9"		
Length:	861.52		
Tangent:	430.94		
Bearing:	N 34°37'30.5" W		

NBFR-12

PC	244+94.86	10,557,377.17	3,309,893.51
PI	245+70.27	10,557,439.22	3,309,850.67
CC		10,554,365.69	3,305,532.21
PT	246+45.66	10,557,500.03	3,309,806.07
Radius:	5300		
Delta:	1°37'48.9"	Left	
Degree of Curvature (Arc):	1°04'51.8"		
Length:	150.8		
Tangent:	75.41		
Bearing:	N 36°15'19.4" W		

NBFR-13

PC	248+51.82	10,557,666.27	3,309,684.16
PI	249+07.58	10,557,711.23	3,309,651.18
CC		10,559,913.53	3,312,748.43
PT	249+63.33	10,557,757.14	3,309,619.54
Radius:	3800		
Delta:	1°40'52.7"	Right	
Degree of Curvature (Arc):	1°30'28.0"		
Length:	111.51		
Tangent:	55.76		
Bearing:	N 34°34'26.7" W		

℄ NBE ORCHARD

NBE ORCHARD-1

PC	6+60.50	10,553,322.60	3,312,420.96
PI	7+48.07	10,553,398.04	3,312,376.50
CC		10,552,595.35	3,311,186.91
PRC	8+35.42	10,553,467.50	3,312,323.18
Radius:	1432.39		
Delta:	6°59'48.0"	Left	
Degree of Curvature (Arc):	4°00'00.0"		
Length:	174.92		
Tangent:	87.57		
Tangent Direction:	N 37°30'30.0" W		

NBE ORCHARD-2

PRC	8+35.42	10,553,467.50	3,312,323.18
PI	10+10.55	10,553,606.43	3,312,216.55
CC		10,555,211.80	3,314,595.72
PT	11+85.25	10,553,757.31	3,312,127.63
Radius:	2864.79		
Delta:	6°59'48.0"	Right	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	349.83		
Tangent:	175.13		
Bearing:	N 30°30'42.1" W		

NBE ORCHARD-3

PC	14+44.43	10,553,980.61	3,311,996.04
PI	15+51.56	10,554,072.89	3,311,941.65
CC		10,552,526.11	3,309,527.95
PRC	16+58.58	10,554,160.86	3,311,880.52
Radius:	2864.79		
Delta:	4°16'58.4"	Left	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	214.14		
Tangent:	107.12		
Tangent Direction:	N 34°47'40.5" W		

NBE ORCHARD-4

PRC	16+58.58	10,554,160.86	3,311,880.52
PI	18+72.82	10,554,336.80	3,311,758.27
CC		10,557,430.37	3,316,585.67
PT	20+86.87	10,554,521.38	3,311,649.49
Radius:	5729.58		
Delta:	4°16'58.4"	Right	
Degree of Curvature (Arc):	1°00'00.0"		
Length:	428.29		
Tangent:	214.24		
Tangent Direction:	N 30°30'42.1" W		

℄ LP 340 SBFR_2

SBFR_2-9

PC	83+31.73 R1	10,549,744.26	3,314,004.60
PI	90+08.08 R1	10,550,418.28	3,314,060.67
CC		10,549,904.25	3,312,081.24
PT	96+32.81 R1	10,550,979.86	3,313,683.73
Radius:	1930		
Delta:	38°37'30.7"	Left	
Degree of Curvature (Arc):	2°58'07.3"		
Length:	1301.08		
Tangent:	676.35		
Bearing:	N 33°52'12.8" W		

SBFR_2-10

PC	102+29.68 R1	10,551,475.44	3,313,351.08
PI	103+02.79 R1	10,551,536.15	3,313,310.34
CC		10,559,835.15	3,325,805.61
PT	103+75.90 R1	10,551,597.25	3,313,270.18
Radius:	15000		
Delta:	0°33'30.7"	Right	
Degree of Curvature (Arc):	0°22'55.1"		
Length:	146.22		
Tangent:	73.11		
Bearing:	N 33°18'42.1" W		

SBFR_2-11

PC	112+30.30 R1	10,552,311.26	3,312,800.95
PI	115+96.89 R1	10,552,617.62	3,312,599.62
CC		10,560,549.16	3,325,336.38
PT	119+63.34 R1	10,552,933.45	3,312,413.50
Radius:	15000		
Delta:	2°48'00.0"	Right	
Degree of Curvature (Arc):	0°22'55.1"		
Length:	733.04		
Tangent:	366.59		
Bearing:	N 30°30'42.1" W		

SBFR_2-12

PC	137+01.50 R1	10,554,430.92	3,311,531.01
PI	138+91.26 R1	10,554,594.40	3,311,434.67
CC		10,560,523.49	3,321,869.32
PRC	140+80.99 R1	10,554,760.85	3,311,343.54
Radius:	12000		
Delta:	1°48'42.9"	Right	
Degree of Curvature (Arc):	0°28'38.9"		
Length:	379.49		
Tangent:	189.76		
Tangent Direction:	N 28°41'59.1" W		

SBFR_2-13

PRC	140+80.99 R1	10,554,760.85	3,311,343.54
PI	142+70.75 R1	10,554,927.30	3,311,252.41
CC		10,548,998.21	3,300,817.76
PT	144+60.47 R1	10,555,090.78	3,311,156.07
Radius:	12000		
Delta:	1°48'42.9"	Left	
Degree of Curvature (Arc):	0°28'38.9"		
Length:	379.49		
Tangent:	189.76		
Bearing:	N 30°30'42.1" W		

SBFR_2-14

PC	148+65.57 R1	10,555,439.78	3,310,950.40
PI	151+04.56 R1	10,555,645.68	3,310,829.06
CC		10,551,977.17	3,305,074.79
PT	153+43.36 R1	10,555,842.58	3,310,693.61
Radius:	6820		
Delta:	4°00'50.1"	Left	
Degree of Curvature (Arc):	0°50'24.4"		
Length:	477.78		
Tangent:	238.99		
Bearing:	N 34°31'32.2" W		

℄ NBX FM2491

POB	4+65.42	10,551,018.48	3,313,833.24
Bearing:	N 30°16'11.3" W		

NBX FM2491-1

PC	8+40.95	10,551,342.81	3,313,643.95
PI	9+42.37	10,551,430.40	3,313,592.82
CC		10,549,417.39	3,310,345.00
PT	10+43.74	10,551,515.16	3,313,537.13
Radius:	3819.72		
Delta:	3°02'30.8"	Left	
Degree of Curvature (Arc):	1°30'00.0"		
Length:	202.79		
Tangent:	101.42		
Bearing:	N 33°18'42.1" W		

NBX FM2491-2

PC	15+21.27	10,551,914.22	3,313,274.87
PI	16+57.88	10,552,028.39	3,313,199.84
CC		10,553,487.55	3,315,668.96
PRC	17+94.29	10,552,149.18	3,313,136.02
Radius:	2864.79		
Delta:	5°27'37.6"	Right	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	273.02		
Tangent:	136.61		
Tangent Direction:	N 27°51'04.5" W		

NBX FM2491-3

PRC	17+94.29	10,552,149.18	3,313,136.02
PI	19+30.90	10,552,269.97	3,313,072.20
CC		10,550,810.82	3,310,603.08
PT	20+67.31	10,552,384.14	3,312,997.17
Radius:	2864.79		
Delta:	5°27'37.6"	Left	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	273.02		
Tangent:	136.61		
Tangent Direction:	N 33°18'42.1" W		

℄ SBE FM2491

SBE FM2491-1

PC	3+57.57	10,551,471.98	3,313,431.48
PI	5+71.81	10,551,651.02	3,313,313.82
CC		10,548,325.33	3,308,643.30
PRC	7+85.86	10,551,820.78	3,313,183.12
Radius:	5729.58		
Delta:	4°16'58.4"	Left	
Degree of Curvature (Arc):	1°00'00.0"		
Length:	428.29		
Tangent:	214.24		
Tangent Direction:	N 37°35'40.5" W		

SBE FM2491-2

PRC	7+85.86	10,551,820.78	3,313,183.12
PI	8+92.98	10,551,905.66	3,313,117.76
CC		10,553,568.50	3,315,453.02
PT	10+00.00	10,551,995.18	3,313,058.93
Radius:	2864.79		
Delta:	4°16'58.4"	Right	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	214.14		
Tangent:	107.12		
Bearing:	N 33°18'42.1" W		

SBE FM2491-3

PC	11+72.41	10,552,139.26	3,312,964.25
PI	13+40.12	10,552,279.41	3,312,872.15
CC		10,550,565.94	3,310,570.16
PRC	15+07.44	10,552,407.85	3,312,764.32
Radius:	2864.79		
Delta:	6°42'01.8"	Left	
Degree of Curvature (Arc):	2°00'00.0"		
Length:	335.03		
Tangent:	167.7		
Tangent Direction:	N 40°00'43.9" W		

SBE FM2491-4

PRC	15+07.44	10,552,407.85	3,312,764.32
PI	16+05.51	10,552,482.96	3,312,701.27
CC		10,553,328.81	3,313,861.40
PT	17+03.27	10,552,565.97	3,312,649.04
Radius:	1432.39		
Delta:	7°49'59.0"	Right	
Degree of Curvature (Arc):	4°00'00.0"		
Length:	195.83		
Tangent:	98.07		
Tangent Direction:	N 32°10'44.9" W		

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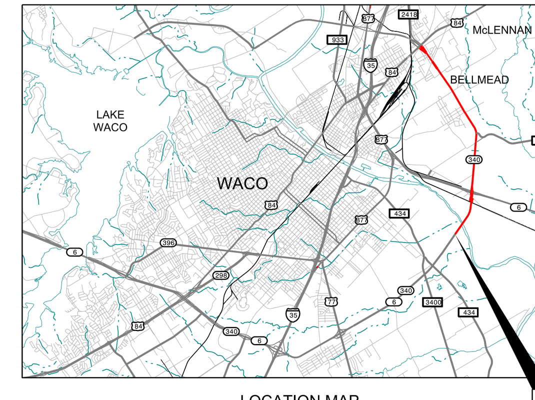
POB	0+00.00	10,555,231.63	3,310,701.08
POE	7+76.86	10,555,661.04	3,311,348.48
Bearing:	N 56°26'39.0" E		

STATE OF TEXAS
TEXAS DEPARTMENT OF TRANSPORTATION
SCHEMATIC LAYOUT OF PROPOSED STATE HIGHWAY IMPROVEMENT
SL 340
McLENNAN COUNTY
CSJ 2362-01-034, 0258-09-143
LIMITS:
FROM THE BRAZOS RIVER
NORTH TO US 84
OFFICE OF DISTRICT ENGINEER
WACO DISTRICT
08/24/2017



LOCATION MAP
NOT TO SCALE
PUBLIC MEETING
AUG 24, 2017
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ROLL 3 OF 8
Texas Department of Transportation
Waco District