DRAFT - SUBJECT TO CHANGE

DRAFT - SUBJECT TO CHANGE

PRELIMINARY DESIGN SCHEMATIC
183A ADDED CAPACITY PROJECT

CSJ 0914-05-238

FROM HERO WAY TO SH 45N

WILLIAMSON COUNTY

FOR THE CONSTRUCTION OF FREEWAY WIDENING

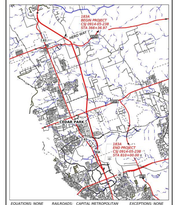
NET LENGTH OF ROADWAY = 7.09 MI
NET LENGTH OF RAMP = 0.00 MI
NET LENGTH OF PROJECT = 8.68 MI

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
183A MAINLANES	URBAN FREEWAY	65 MPH
FRONTAGE ROADS	URBAN COLLECTOR	50 MPH
RAMP	URBAN FREEWAY	50 MPH

MAXIMUM SUPERELEVATION RATE (emax) - 6.0%

CURRENT ADT: (2022) -
HERO WAY to SH 45: 75,500

PROJECTED ADT: (2048) -
HERO WAY to SH 45: 142,200


183A
HERO WAY
SH 45N
CR 137
CR 137
CR 137

DRAFT - SUBJECT TO CHANGE

DRAFT - SUBJECT TO CHANGE

PRELIMINARY DESIGN SCHEMATIC
183A ADDED CAPACITY PROJECT

CSJ 0914-05-238

FROM HERO WAY TO SH 45N

WILLIAMSON COUNTY

FOR THE CONSTRUCTION OF FREEWAY WIDENING

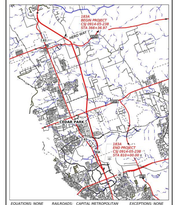
NET LENGTH OF ROADWAY = 7.09 MI
NET LENGTH OF RAMP = 0.00 MI
NET LENGTH OF PROJECT = 8.68 MI

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
183A MAINLANES	URBAN FREEWAY	65 MPH
FRONTAGE ROADS	URBAN COLLECTOR	50 MPH
RAMP	URBAN FREEWAY	50 MPH

MAXIMUM SUPERELEVATION RATE (emax) - 0.0%

CURRENT ADT: (2022) -
HERO WAY to SH 45: 75,500

PROJECTED ADT: (2048) -
HERO WAY to SH 45: 142,200



DRAFT - SUBJECT TO CHANGE

PRELIMINARY DESIGN SCHEMATIC
183A ADDED CAPACITY PROJECT

CSJ 0914-05-238

FROM HERO WAY TO SH 45N

WILLIAMSON COUNTY

FOR THE CONSTRUCTION OF FREEWAY WIDENING

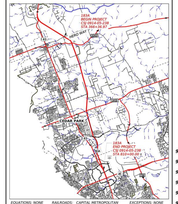
NET LENGTH OF ROADWAY = 7.09 MI
NET LENGTH OF RAMPS = 0.00 MI
NET LENGTH OF PROJECT = 6.88 MI

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
183A MAINLANES	URBAN FREEWAY	65 MPH
FRONTAGE ROADS	URBAN COLLECTOR	50 MPH
RAMP	URBAN FREEWAY	30 MPH

MAXIMUM SUPERELEVATION RATE (emax) - 0.0%

CURRENT ADT: (2022) -
HERO WAY to SH 45: 75,500

PROJECTED ADT: (2048) -
HERO WAY to SH 45: 142,200



DRAFT - SUBJECT TO CHANGE

PRELIMINARY DESIGN SCHEMATIC
183A ADDED CAPACITY PROJECT

CSJ 0914-05-228

FROM HERO WAY TO SH 45N

WILLIAMSON COUNTY

FOR THE CONSTRUCTION OF FREEWAY WIDENING

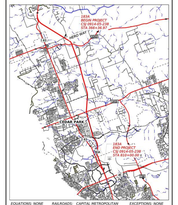
NET LENGTH OF ROADWAY = 7.09 MI
NET LENGTH OF RAMPS = 0.00 MI
NET LENGTH OF PROJECT = 8.48 MI

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
183A MAINLANES	URBAN FREEWAY	65 MPH
FRONTAGE ROADS	URBAN COLLECTOR	30 MPH
RAMP	URBAN FREEWAY	50 MPH

MAXIMUM SUPERELEVATION RATE (emax) = 8.0%

CURRENT ADT: (2022) =
HERO WAY to SH 45: 71,500

PROJECTED ADT: (2048) =
HERO WAY to SH 45: 142,200


183A
183A
183A

DRAFT - SUBJECT TO CHANGE

DRAFT - SUBJECT TO CHANGE

PRELIMINARY DESIGN SCHEMATIC
183A ADDED CAPACITY PROJECT

CSJ 0914-05-238

FROM HERO WAY TO SH 45N

WILLIAMSON COUNTY

FOR THE CONSTRUCTION OF FREEWAY WIDENING

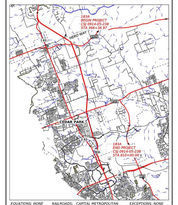
NET LENGTH OF ROADWAY = 7.09 MI
NET LENGTH OF FRONTAGE = 0.00 MI
NET LENGTH OF PROJECT = 8.66 MI

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
183A MAINLANES	URBAN FREEWAY	65 MPH
FRONTAGE ROADS	URBAN COLLECTOR	50 MPH
RAMP	URBAN FREEWAY	30 MPH

MAXIMUM SUPERELEVATION RATE (emax) - 6.0%

CURRENT ADT: (2022) -
HERO WAY to SH 45: 71,500

PROJECTED ADT: (2048) -
HERO WAY to SH 45: 142,200



EQUATIONS: NONE RAILROADS: CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY EXCEPTIONS: NONE
183A @ STA 745+00
183A @ STA 845+00
CSJ 0914-05-238

PROJECT LOCATION MAP

N. T. S.

LEGEND

- *PROPOSED MAINLANES*
- *PROPOSED SHOULDER*
- *PROPOSED BRIDGES*
- *100-Year Floodplain*
- *500-Year Floodplain*
- *FUTURE ROADWAY BY OTHERS*
- *FUTURE GRASSY MEDIAN BY OTHERS*
- *EXISTING ROW*
- *EXISTING LANE*
- *PROPOSED LANE*
- *SSCB*

NOT FOR CONSTRUCTION OR BIDDING PURPOSES
PREPARED UNDER THE SUPERVISION OF
ZANE REID
P.E. #120854
6/28/2024

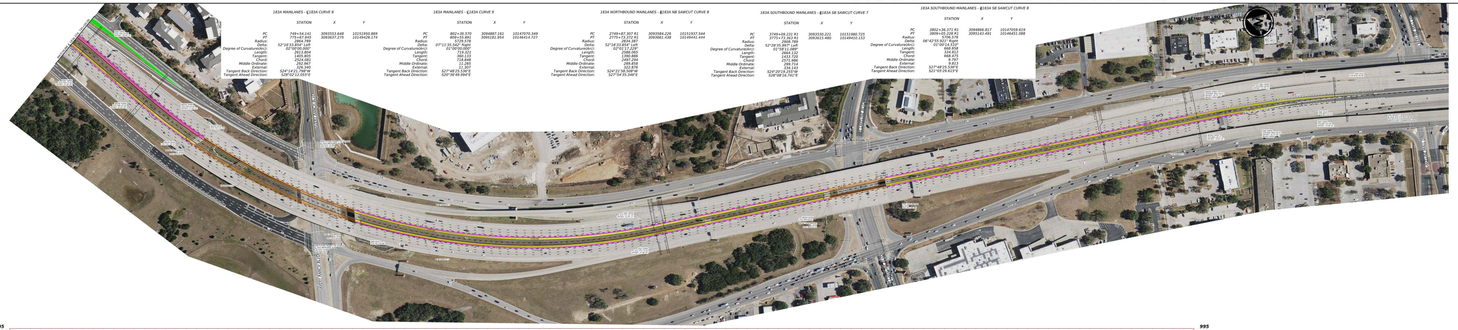
H: 0" 50' 100'
V: 0' 5' 10'

AtkinsRéalis
TBPELS REG. # F-474

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

ROADWAY SCHEMATIC

STA 745+00.00 TO END PROJECT
ROLL 5 OF 5



183A MAINLANES - @183A CURVE 6

	STATION	X	Y
PC	749+54.041	3093553.448	10133350.899
PI	753+54.041	3093657.275	10134029.374
PT	758+54.041		
Radius	2866.789		
Delta	52°30'00.000"		
Degree of Curvature(deg)	2°00'00.000"		
Length	2513.868		
Chord	2427.000		
Middle Ordinate	214.450		
External	192.340		
Tangent Back Direction	52°45'12.000"N		
Tangent Ahead Direction	52°45'12.000"N		

183A MAINLANES - @183A CURVE 8

	STATION	X	Y
PC	802+39.970	3094867.182	10134070.249
PI	805+39.970	3095392.904	10134414.727
PT	808+39.970		
Radius	2866.789		
Delta	37°12'39.000"		
Degree of Curvature(deg)	2°00'00.000"		
Length	1719.921		
Chord	1689.000		
Middle Ordinate	112.868		
External	111.207		
Tangent Back Direction	52°45'12.000"N		
Tangent Ahead Direction	52°30'48.000"N		

183A NORTHBOUND MAINLANES - @183A NB SAWCUT CURVE 8

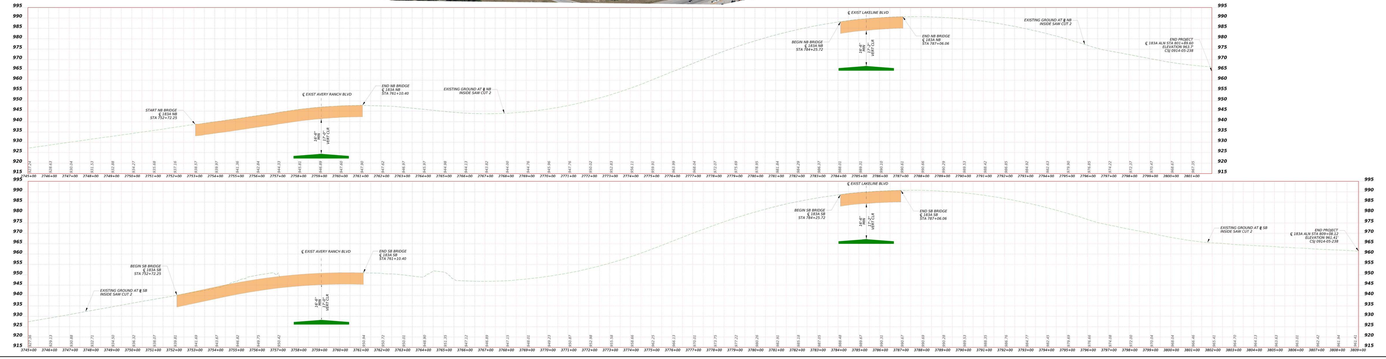
	STATION	X	Y
PC	2749+87.907 R1	3093384.228	10133937.844
PI	2749+87.907 R2	3093862.408	10134462.444
PT	2754+87.907		
Radius	2866.789		
Delta	52°30'00.000"		
Degree of Curvature(deg)	2°00'00.000"		
Length	2748.395		
Chord	2652.000		
Middle Ordinate	245.194		
External	241.664		
Tangent Back Direction	52°45'12.000"N		
Tangent Ahead Direction	52°15'48.000"N		

183A SOUTHBOUND MAINLANES - @183A SB SAWCUT CURVE 7

	STATION	X	Y
PC	2749+48.231 R1	3093539.201	10133980.725
PI	2751+23.267 R2	3093613.480	10134043.253
PT	2752+98.303		
Radius	2866.789		
Delta	12°58'37.140"		
Degree of Curvature(deg)	2°00'00.000"		
Length	2944.132		
Chord	2937.000		
Middle Ordinate	152.584		
External	151.143		
Tangent Back Direction	52°45'12.000"N		
Tangent Ahead Direction	39°46'18.742"N		

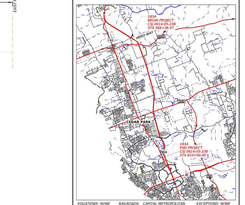
183A SOUTHBOUND MAINLANES - @183A SB SAWCUT CURVE 8

	STATION	X	Y
PC	2802+36.272 R1	3094866.457	10134709.610
PI	2809+05.224 R2	3095135.091	10134833.080
PT	2815+74.176		
Radius	2866.789		
Delta	06°42'19.921" Right		
Degree of Curvature(deg)	2°00'00.000"		
Length	668.850		
Chord	668.850		
Middle Ordinate	116.812		
External	116.812		
Tangent Back Direction	52°45'12.000"N		
Tangent Ahead Direction	45°57'52.079"N		



183A FL EXISTING PROFILE DATA					
	NB/SB 1	NB/SB 2	NB/SB 3	NB/SB 4	NB/SB 5
SIN. Stations	737+20.00	757+45.00	785+45.00	797+45.00	799+54.00
SIN. Elevations	786.00	866.76	875.39	876.01	884.84
SIN Station	700+20.00	750+45.00	780+45.00	796+45.00	801+13.00
SIN Elevation	786.00	866.76	875.39	876.01	884.84
VPI Stations	701+50.00	756+15.00	782+45.00	797+45.00	801+13.00
VPI Elevations	786.00	866.76	875.39	876.01	884.84
VPI Elevation	500.00	96.75	570.72	615.71	36.63
Grade 1	1.60%	4.00%	-0.90%	-2.68%	2.68%
Grade 2	-1.80%	0.90%	-1.10%	-3.80%	-0.58%
K	278	120	122	71	137
L	500.00	480.00	134.00	270.00	370.00
	183A NB	183A NB	183A NB	183A SB	183A SB

183A EXISTING SUPERELEVATION TRANSITIONS DATA			
STATION LEFT	CROSS SLOPE LEFT	STATION RIGHT	CROSS SLOPE RIGHT
747+10.00	2.00%	747+10.00	2.00%
756+60.00	2.30%	756+60.00	-5.30%
757+60.00	2.30%	757+60.00	-2.00%
761+95.00	2.30%	762+79.00	0.90%
766+07.62	2.50%	766+07.62	-2.50%
795+67.62	-2.50%	795+67.62	2.50%
803+60.00	-5.20%	803+60.00	5.30%
805+00.00	-5.20%	807+40.00	2.00%
810+00.00	-5.20%	812+00.00	-2.00%



EQUATIONS: NONE RAILROADS: CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY EXCEPTIONS: NONE
183A @ STA 745+00
183A @ STA 845+00
CSJ 0914-05-238

PROJECT LOCATION MAP
N. T. S.
LEGEND
PROPOSED MAINLANES
PROPOSED SHOULDER
PROPOSED BRIDGES
100-Year Floodplain
500-Year Floodplain
FUTURE ROADWAY BY OTHERS
FUTURE GRASSY MEDIAN BY OTHERS
EXISTING ROW
EXISTING LANE
PROPOSED LANE
SSCB

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6/28/2024

H: 0" 50' 100'
V: 0' 5' 10'

AtkinsRéalis
TBPELS REG. # F-474

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

ROADWAY SCHEMATIC

STA 745+00.00 TO END PROJECT
ROLL 5 OF 5