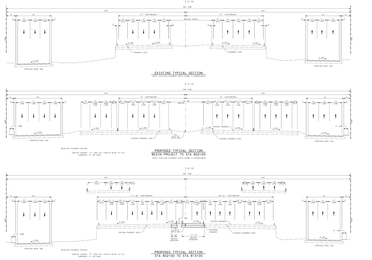
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N / RM 620
TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-03-195, ETC (US 183)
CSJ 3136-01-190, ETC (LOOP 1)
10/3/2019

TYPICAL SECTIONS





FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR
LAKELINE BLVD: URBAN PRINCIPAL ARTERIAL
LAKELINE MALL DR: URBAN LOCAL
PECAN PARK BLVD: URBAN LOCAL

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

SURVEY DATA: TEXAS CENTRAL ZONE #4203 (TRAVIS COUNTY) AND #4204 (WILLIAMSON COUNTY)
SCALE FACTOR 1.00017 - PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, FOR CTRMA 2015 IMPROVEMENT PROJECTS.
UNITS: U.S. SURVEY FEET

EXISTING ADT (2013):
SOUTH OF SH 45: 149,300 (VPD)
NORTH OF MOPAC: 179,100 (VPD)
NORTH OF BRAKER: 190,400 (VPD)

FORECAST ADT (2035):
SOUTH OF SH 45: 199,200 (VPD)
NORTH OF MOPAC: 237,400 (VPD)
NORTH OF BRAKER: 238,300 (VPD)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL, 2014
TXDOT ROADWAY DESIGN MANUAL, 2018
TRB HIGHWAY CAPACITY MANUAL, 2010
AASHTO GREEN BOOK, 6TH EDITION, 2011

SOURCE: CTRMA TRAFFIC ANALYSIS MEMO, SEPTEMBER 2019

SOURCE: CAMPO 2040 ROADWAY NETWORK, TAFFIC FORECASTS (2015)

HOV/ HOT TYPICAL SECTION
US 183 NB TO SB EXTRA

PLAN VIEW LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- 2035 FORECAST YEAR TRAFFIC VOLUME (VPD)

NOT A BIDDING DOCUMENT

PAUL A. SCHNEIDER, P.E. — DATE 10/3/2019
PROJECT MANAGER

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT IT IS NOT APPROVED FOR FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT

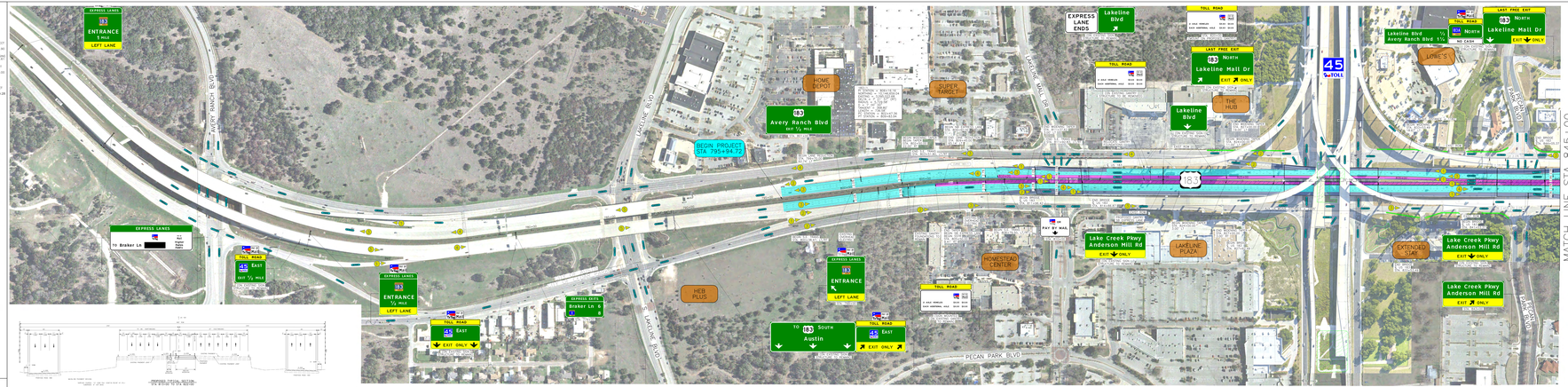
SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

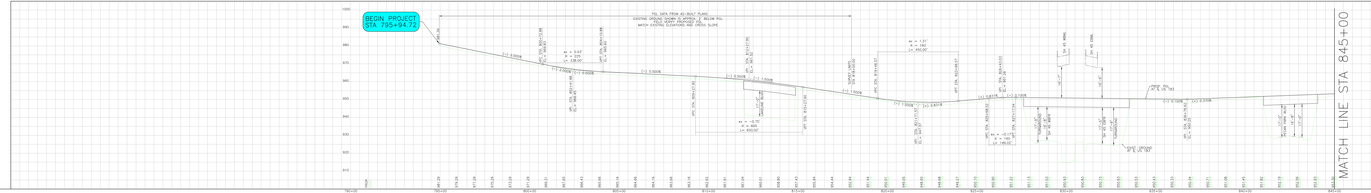
RECOMMENDED BY: 10/25/2019
ADVANCED PROJECT DEVELOPMENT DIRECTOR

RECOMMENDED BY: 11/12/2019
DISTRICT DESIGN ENGINEER

RECOMMENDED BY: 11/12/2019
AREA ENGINEER

APPROVED BY: 11/18/2019
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT




BEGIN PROJECT STA 785+94.72
MATCH LINE STA 845+00
PROFILE GRADE ALONG CENTERLINE
EXISTING GROUND ALONG CENTERLINE
PROFILE GRADE ALONG OUTSIDE SHOULDER
EXISTING GROUND ALONG OUTSIDE SHOULDER
PROFILE GRADE ALONG INSIDE SHOULDER
EXISTING GROUND ALONG INSIDE SHOULDER
TO BE REMOVED
TO BE CONSTRUCTED
TO BE RETAINED
TO BE RELOCATED
TO BE ADJUSTED
TO BE ABANDONED

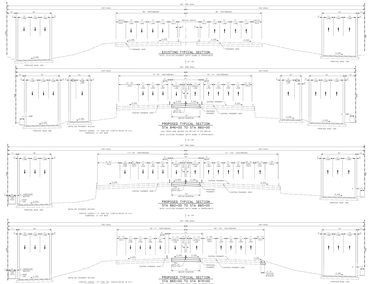
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

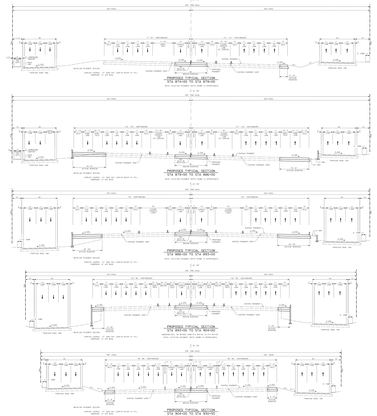
DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT

US 183 FROM SH 45N / RM 620
TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-03-195, ETC. (US 183)
CSJ 3136-01-195, ETC. (LOOP 1)
10/3/2019

TYPICAL SECTIONS





LOCATION MAP



FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR
LAKE CREEK PKWY: URBAN COLLECTOR
ANDERSON MILL RD: URBAN MINOR ARTERIAL

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

SURVEY DATA: TEXAS CENTRAL ZONE #4203 (TRAVIS COUNTY) AND #4204 (WILLIAMSON COUNTY) SCALE FACTOR 1.00011. PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, INC. FOR CTRMA MOBILITY IMPROVEMENT PROJECT. UNITS: U.S. SURVEY FEET

[#] EXISTING ADT (2013):
SOUTH OF SH 45 149,300 (VPD)
NORTH OF MCNEIL 179,100 (VPD)
NORTH OF BRAKER 190,400 (VPD)

[#] FORECAST ADT (2035):
SOUTH OF SH 45 194,200 (VPD)
NORTH OF MCNEIL 237,400 (VPD)
NORTH OF BRAKER 238,300 (VPD)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL, 2014
TXDOT HIGHWAY CAPACITY MANUAL, 2010
TRB HIGHWAY CAPACITY MANUAL, 2010
AASHTO GREEN BOOK, A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 2011

[#] SOURCE: CAMPO TRAVEL DEMAND MODEL, OUTPUT (2015)

[*] SOURCE: TEXAS STATE HIGHWAY TRAFFIC FORECASTS (2015)

NOT A BIDDING DOCUMENT

10/3/2019
PAUL A. SCHNIDER, P.E. DATE
TEXAS NO. 96401
PROJECT MANAGER

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED FOR FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

RECOMMENDED BY: 10/25/2019
Justin Kelly-Ryan
ASSISTANT PROJECT DEVELOPMENT DIRECTOR

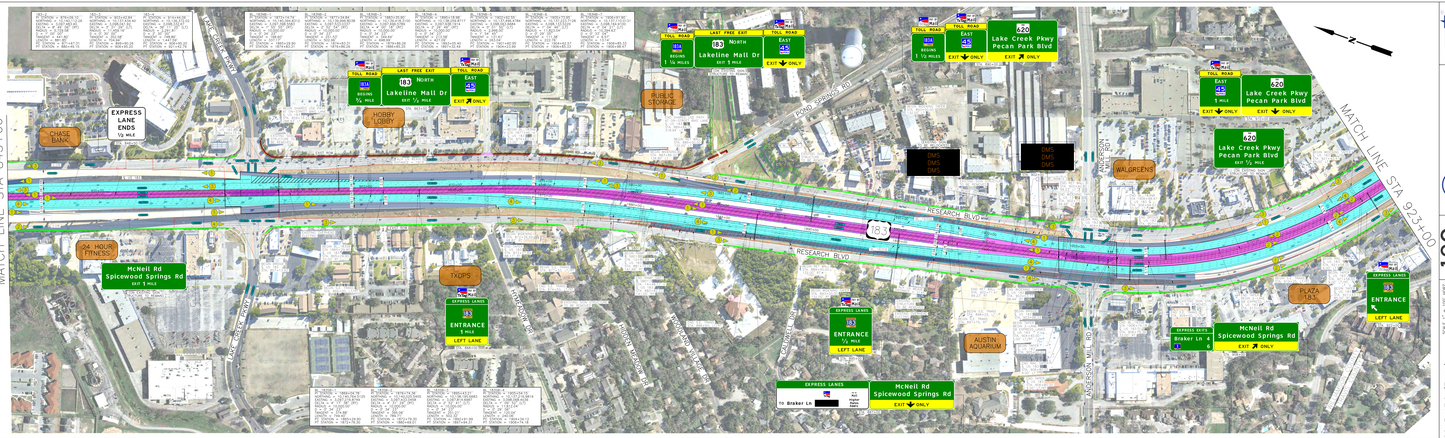
RECOMMENDED BY: 11/12/2019
Jeffrey Walker, P.E.
DISTRICT DESIGN ENGINEER

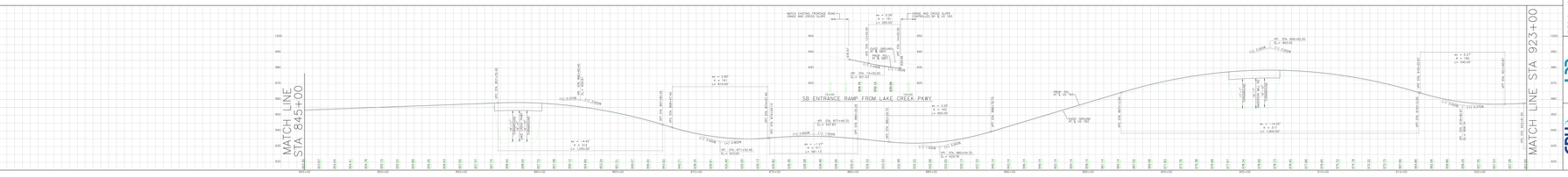
RECOMMENDED BY: 11/12/2019
Thomas Bohuslav, P.E.
AREA ENGINEER

APPROVED BY: 11/18/2019
Steven Pustelnik
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT

PLAN VIEW LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- 2035 FORECAST YEAR TRAFFIC VOLUME (VPD)





CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY
DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N TO LOOP 1
SHEET 1 OF 6

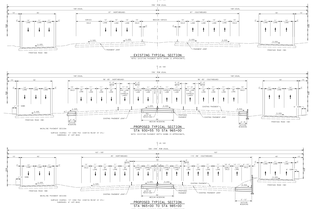
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT

US 183 FROM SH 45N TO RM 620
TO LOOP 1 (MOPAC)

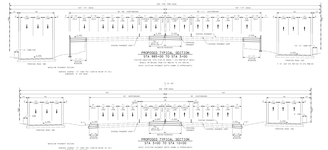
TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-01-190, ETC. (US 183)
CSJ 3136-01-190, ETC. (LOOP 1)
10/3/2019

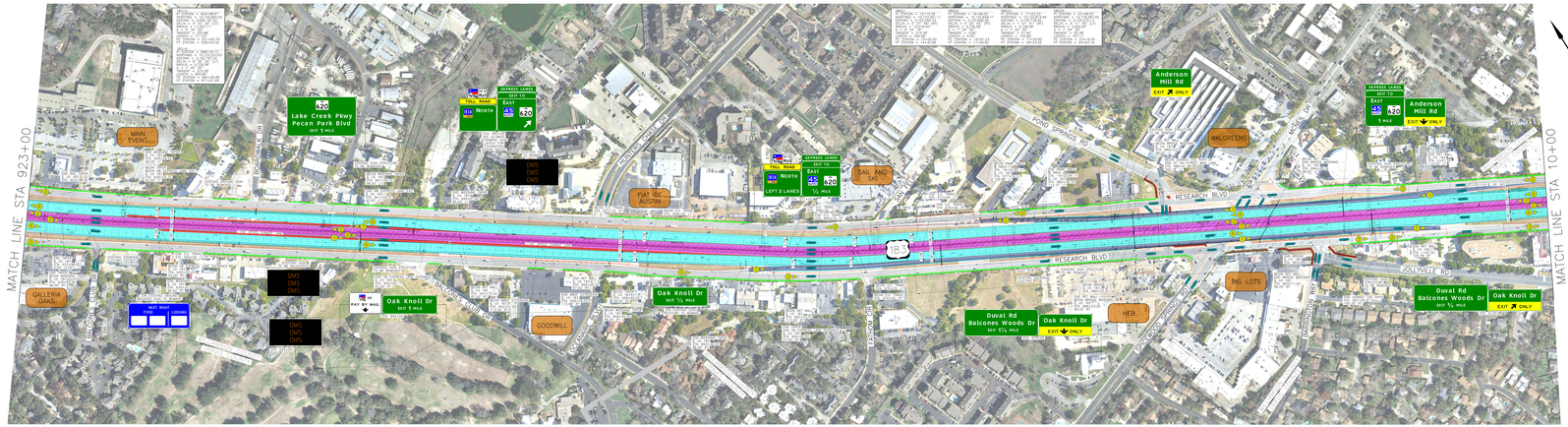
TYPICAL SECTIONS

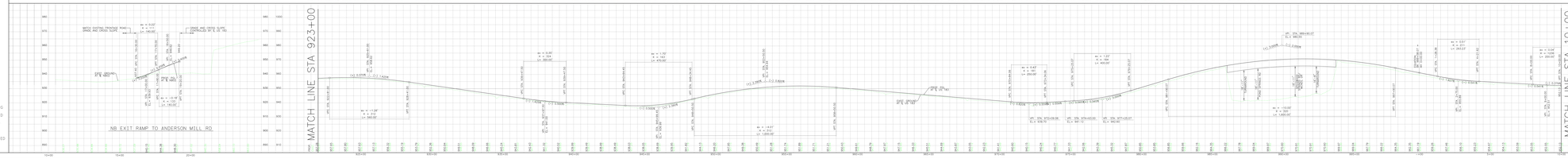




LOCATION MAP







FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR
SPICEWOOD SPRINGS RD: URBAN MINOR ARTERIAL
MCNEIL DR: URBAN MINOR ARTERIAL

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

SURVEY DATA: TEXAS CENTRAL ZONE #4203 (TRAVIS COUNTY) AND #4204 (WILLIAMSON COUNTY), SURFACE SCALE FACTOR 1.00011. PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, FOR CTRMA 2015 MOBILITY IMPROVEMENT PROJECT. UNITS: U.S. SURVEY FEET

[1] EXISTING ADT (2013):
SOUTH OF SH 45: 149,300 (VPD)
NORTH OF MCNEIL: 179,100 (VPD)
NORTH OF BRAKER: 190,400 (VPD)

[2] FORECAST ADT (2035):
SOUTH OF SH 45: 194,200 (VPD)
NORTH OF MCNEIL: 237,400 (VPD)
NORTH OF BRAKER: 238,300 (VPD)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 S45+55.61

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL, 2014
TXDOT ACCESS MANAGEMENT MANUAL, 2008
TRB HIGHWAY CAPACITY MANUAL, 2010
AASHTO GREEN BOOK, POLICY ON GEOMETRIC DESIGN, 2011

[1] SOURCE: CTRMA TRAFFIC DEMAND MODEL OUTPUT (2015)
[2] SOURCE: TXDOT TRANSPORTATION PLANNING & MAPPING DIVISION (2015)

NOTE: SOME EXISTING FRONTAGE ROAD LANES ARE NARROWER THAN 12'

PLAN VIEW LEGEND
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- FOR: FORECAST YEAR TRAFFIC VOLUME (VPD)

NOT A BIDDING DOCUMENT

PAUL A. SCHNEIDER, P.E. — DATE 10/3/2019
PROJECT MANAGER

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT ALL COMMENTS WILL BE ADDRESSED FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

RECOMMENDED BY: 10/25/2019
ADVANCED PROJECT DEVELOPMENT DIRECTOR

RECOMMENDED BY: 11/12/2019
DISTRICT DESIGN ENGINEER

RECOMMENDED BY: 11/12/2019
AREA ENGINEER

APPROVED BY: 11/18/2019
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY
DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N TO LOOP 1
SCALE: 1" = 200' (HORZ)
1" = 20' (VERT)
SHEET 1 OF 6
183 NORTH

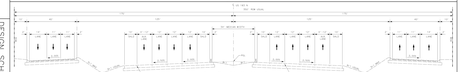
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL) 183 NORTH MOBILITY PROJECT

US 183 FROM SH 45N / RM 620 TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-06-195, ETC. (US 183)
CSJ 3136-01-195, ETC. (LOOP 1)
10/4/2019

TYPICAL SECTIONS





FOR CROSS STREET TYPICAL SECTION SEE RAMP PROFILE 1 OF 2

FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR
OAK KNOLL DRIVE, URBAN LOCAL
DUVAL ROAD: URBAN COLLECTOR

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

SURVEY DATA: TEXAS CENTRAL ZONE #4205 (TRAVIS COUNTY) AND #4203 (WILLIAMSON COUNTY) SCALE FACTOR 1.00011 - PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, INC. FOR CTRMA IMPROVEMENT PROJECT. UNITS: U.S. SURVEY FEET

EXISTING ADT (2013):
SOUTH OF SH 45 149,300 (VPD)
NORTH OF MCNEIL 179,100 (VPD)
NORTH OF BRAKER 190,400 (VPD)

FORECAST ADT (2035):
SOUTH OF SH 45 199,200 (VPD)
NORTH OF MCNEIL 237,400 (VPD)
NORTH OF BRAKER 238,300 (VPD)

SOURCE: CTRMA TRAFFIC ANALYSIS FOR THE FORECAST (2015)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL 2014
TXDOT ACCESS MANAGEMENT MANUAL 2011
TRB HIGHWAY CAPACITY MANUAL 2010
AASHTO GREEN BOOK 6TH EDITION 2011

SOURCE: CTRMA TRAFFIC ANALYSIS FOR THE FORECAST (2015)

NOT A BIDDING DOCUMENT

Registered Professional Engineer — State of Texas — Paul A. Schroeder — 10/9/2019

PAUL A. SCHROEDER, P.E. — DATE
PROJECT MANAGER

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT IT WILL BE FOLLOWED BY FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

RECOMMENDED: 10/25/2019 — Keith Ahlgren — ASSISTANT PROJECT DEVELOPMENT DIRECTOR

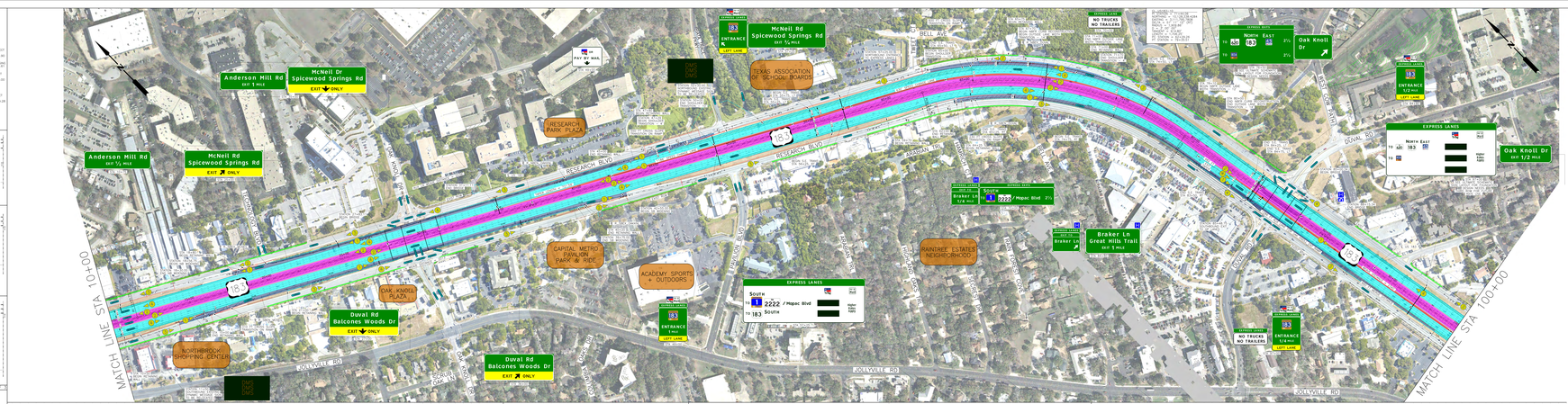
RECOMMENDED: 11/12/2019 — Gregg Frederick, PE — AREA ENGINEER

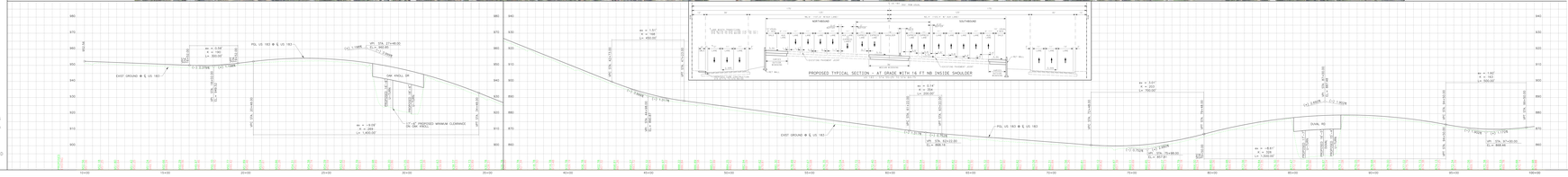
RECOMMENDED BY: 11/12/2019 — Jason Kelley, PE — DISTRICT DESIGN ENGINEER

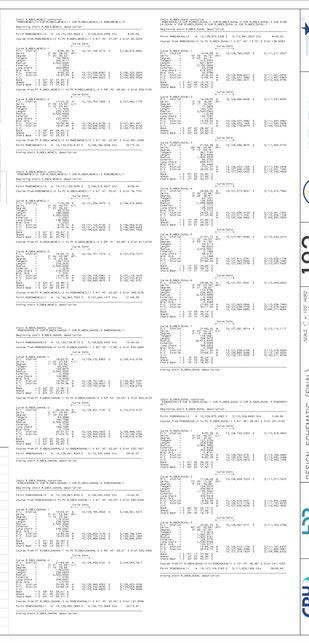
APPROVED BY: 11/18/2019 — Steve Pustelnik — DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT

PLAN VIEW LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- 2035 FORECAST YEAR TRAFFIC VOLUME (VPD)







CENTRAL TEXAS Regional Mobility Authority

183 NORTH

DESIGN SCHEMATIC (FINAL) 183 NORTH MOBILITY PROJECT US 183 FROM SH 45N TO LOOP 1

SCALE: 1" = 200' (HORZ) 1" = 40' (VERT)

ROLL 4 OF 8

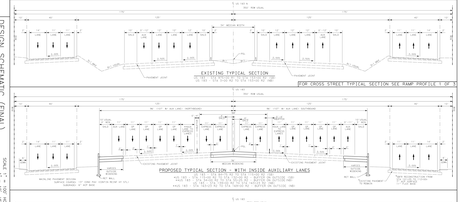
CP&Y — Project Engineer — Phone: (512) 328-2008 — Fax: (512) 328-2409 — 221 West 6th Street, Suite 600, Austin, Texas 78701

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N / RM 620 TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-06-183, ETC. (NHP-183)
CSJ 3136-01-184, ETC. (LOOP 1)
10/4/2019

TYPICAL SECTIONS





FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR
BALCONES WOODS DRIVE: URBAN COLLECTOR
BRAKER LANE: URBAN PRINCIPAL ARTERIAL
GREAT HILLS TRAIL: URBAN PRINCIPAL ARTERIAL

DESIGN SPEED
US 183 MAINLANES: 60 MPH (4max=0.06)
LOOP 1 MAINLANES: 50 MPH (4max=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

SURVEY DATA: TEXAS CENTRAL ZONE #4203 (TRAVIS COUNTY) AND #4204 (WILLIAMSON COUNTY) SCALE FACTOR 1.00011. PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, INC. FOR THE 183 NORTH IMPROVEMENT PROJECT. UNITS: U.S. SURVEY FEET

[1] EXISTING ADT (2013):
SOUTH OF SH 45: 149,300 (VPD)
NORTH OF MOPAC: 179,100 (VPD)
NORTH OF BRAKER: 190,400 (VPD)

[2] FORECAST ADT (2035):
SOUTH OF SH 45: 199,200 (VPD)
NORTH OF MOPAC: 237,400 (VPD)
NORTH OF BRAKER: 238,300 (VPD)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

[1] SOURCE: TXDOT ROADWAY DIVISION 2013 HIGHWAY TRAFFIC MANUAL

[2] SOURCE: CTRMA TRAVEL DEMAND MODEL OUTPUT (2035)

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL 2014
TXDOT ROADWAY DESIGN MANUAL 2018
TRB HIGHWAY CAPACITY MANUAL 2010
AASHTO GREEN BOOK 6TH EDITION 2011

HORIZ SCALE: 1"=200'
VERT SCALE: 1"=20'

PLAN VIEW LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- 2035 FORECAST YEAR TRAFFIC VOLUME (VPD)

NOT A BIDDING DOCUMENT

PAUL A. SCHNEIDER, P.E. — 10/3/2019 — DATE
PROJECT MANAGER

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED FOR FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

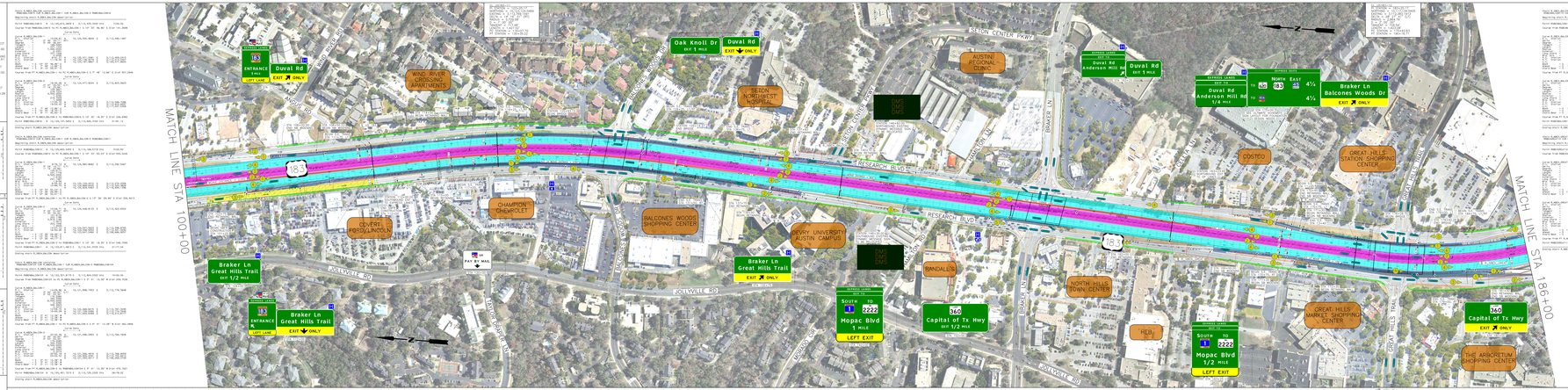
SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

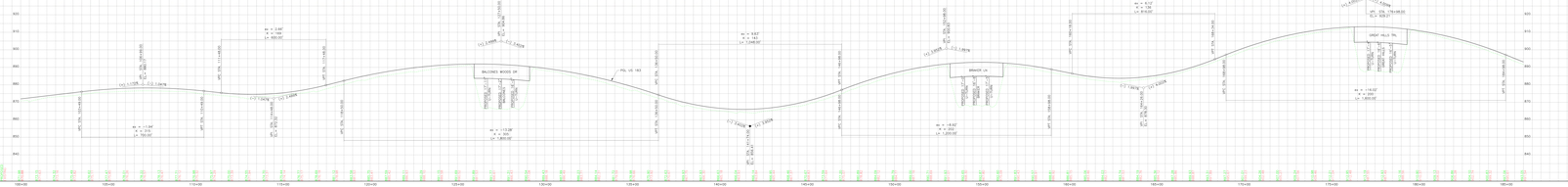
RECOMMENDED BY: 10/25/2019
ADVANCED PROJECT DEVELOPMENT DIRECTOR

RECOMMENDED BY: 11/12/2019
DISTRICT DESIGN ENGINEER

RECOMMENDED BY: 11/12/2019
AREA ENGINEER

APPROVED BY: 11/18/2019
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT





CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT

US 183 FROM SH 45N / RM 620
TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 3136-01-126, ETC. (US 183)
CSJ 3136-01-130, ETC. (LOOP 1)
10/4/2019

TYPICAL SECTIONS

EXISTING TYPICAL SECTION

PROPOSED TYPICAL SECTION

PROPOSED TYPICAL SECTION

LOCATION MAP

FOR PROPOSED TYPICAL SECTION US 183 STA 236+73 TO STA 240+56 SEE RAMP PROFILE 1 OF 3

FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR
LOOP 360: URBAN PRINCIPAL ARTERIAL

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 45 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

SURVEY DATA: TEXAS CENTRAL ZONE #4203 (TRAVIS COUNTY) AND #4204 (WILLIAMSON COUNTY) SURFACE SCALE FACTOR 1.00011. PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, INC. FOR THE MOBILITY IMPROVEMENT PROJECT. UNITS: U.S. SURVEY FEET.

#EXISTING ADT (2013):
SOUTH OF SH 45: 149,300 (VPD)
NORTH OF MCNEIL: 179,100 (VPD)
NORTH OF BRAKER: 190,400 (VPD)

#FORECAST ADT (2035):
SOUTH OF SH 45: 199,200 (VPD)
NORTH OF MCNEIL: 237,400 (VPD)
NORTH OF BRAKER: 238,300 (VPD)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

#SOURCE: CAMPO 2040 ROADWAY NETWORK (2015)

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL, 2014
TXDOT ACCESS MANAGEMENT MANUAL, 2008
TRB HIGHWAY CAPACITY MANUAL, 2010
AASHTO GREEN BOOK, 6TH EDITION, 2011

HOR. SCALE: 1"=100'
VERT. SCALE: 1"=10'

NOT A BIDDING DOCUMENT

Preliminary
Not for Construction
Not for Bidding
Not for Permit

PAUL A. SCHNEIDER, P.E. — DATE: 10/3/2019
PROJECT MANAGER

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT ALL ITEMS WILL BE ADDRESSED DURING FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

RECOMMENDED BY: 10/25/2019
ADVANCED PROJECT DEVELOPMENT DIRECTOR

RECOMMENDED BY: 11/12/2019
DISTRICT DESIGN ENGINEER

RECOMMENDED BY: 11/12/2019
AREA ENGINEER

APPROVED BY: 11/18/2019
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT

PLAN VIEW LEGEND
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- 2035 FORECAST YEAR TRAFFIC VOLUME (VPD)

MATCH LINE STA 1864+00

BEGIN PROJECT LOOP 1 STA 197+39.90

END PROJECT STA 289+00.00

EXPRESS LANES
North East
To 45 183
Lanes 2 1
Width 12 12
Shldr 10 10

Broker Ln
Balcones Woods Dr
EXIT 1/2 MILE

183 NORTH
Research Blvd

360 Capital of Tx Hwy
Great Hills Trail

GATEWAY SQUARE SHOPPING CENTER

THE ARBORETUM OF GREAT HILLS

183 NORTH
Lampasas

360 Capital of Tx Hwy
Great Hills Trail
EXIT ONLY

360 Capital of Tx Hwy
Great Hills Trail
EXIT ½ MILE

NO TRUCKS
NO TRAILERS

360 Capital of Tx Hwy
Great Hills Trail ¾
Broker Ln
Balcones Woods Dr ⅝

Mopac Blvd
EXIT ONLY

Duval Rd
to Anderson Mill Rd
Lanes 2 2
Width 12 12
Shldr 10 10

183 ENTRANCE 1/2 MI
LEFT LANE

EXPRESS LANES
Duval Rd
to Anderson Mill Rd
Lanes 2 2
Width 12 12
Shldr 10 10

183 ENTRANCE 1 MILE
LEFT LANE

PUBLIC STORAGE

BSC BIOLOGICAL SCIENCE CENTER

AUSTIN TELCO FEDERAL CREDIT UNION

PAYTON GILLETT

THE ECHELON

HOLIDAY INN

Burnet Rd
EXIT ONLY

183 Research Blvd
NORTH SOUTH

Capital of Tx Hwy
Braker Ln
EXIT ¼ MILE

SOUTH 183 Research Blvd
TO 1 MOPAC
LEFT EXIT

EXPRESS LANES
SOUTH
183 Research Blvd
EXIT ½ MILE

Mopac Blvd
EXIT ONLY

EXPRESS LANE
SOUTH
1/2 MILE

EXPRESS LANES ENDS

EXIST CRNS @ S. US 183

PROPOSED PROFILE ON BURNET/GRACY FARMS INTERSECTION DESIGN TO BE DEVELOPED

CENTRAL TEXAS Regional Mobility Authority

CP&Y
Prepared by: CP&Y, Inc.
Date Prepared: 10/3/2019
Contact: Paul Schneider, P.E.
Email: pschneider@cpyi.com
Phone: (512) 328-2892

H2R
Prepared by: H2R
Date Prepared: 10/3/2019
Contact: Jeff Hall, P.E.
Email: jeff.hall@h2rinc.com
Phone: (512) 328-2892

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N TO LOOP 1

SCALE: 1" = 100'
HOR.
VERT.

ROLL 6 OF 6

183 NORTH

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT

US 183 FROM SH 45N / FM 620
TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-06-185, ETC (LOOP 1)
CSJ 3136-01-185, ETC (US 183)
10/4/2019

TYPICAL SECTIONS



FOR PROPOSED TYPICAL SECTION = LOOP 1 STA 238+20 TO STA 277+00 (NB)/STA 238+20 TO STA 300+00 (SB) SEE RAMP PROFILE SHEET 1 OF 3



FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR
STOCK AVENUE: URBAN MINOR ARTERIAL
W. ANDERSON LANE: URBAN PRINCIPAL ARTERIAL

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

SURVEY DATA: TEXAS CENTRAL ZONE #4203 (TRAVIS COUNTY) AND #4204 (WILLIAMSON COUNTY)
SCALE FACTOR 1.00011 - PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, INC. FOR MOPAC IMPROVEMENT PROJECT
UNITS: U.S. SURVEY FEET

EXISTING ADT (2013):
SOUTH OF SH 45 149,300 (VPD)
NORTH OF MCNEIL 179,100 (VPD)
NORTH OF BRAKER 190,400 (VPD)

FORECAST ADT (2035):
SOUTH OF SH 45 199,200 (VPD)
NORTH OF MCNEIL 237,400 (VPD)
NORTH OF BRAKER 238,300 (VPD)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL, 2014
TXDOT ROADWAY DESIGN MANUAL, 2001
TRB HIGHWAY CAPACITY MANUAL, 2010
AASHTO GREEN BOOK, 6TH EDITION, 2011

SOURCE: CTRMA SMITH TRAVEL DEMAND MODEL OUTPUT (2015)

SOURCE: TRAFFIC ANALYSIS SUMMARY MEMO TO TXDOT (2016)

PLAN VIEW LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- 2035 FORECAST ('24) TRAFFIC VOLUME (VPD)

HOR. SCALE: 1"=400'
VERT. SCALE: 1"=40'

NOT A BIDDING DOCUMENT

PAUL A. SCHNEIDER, P.E. — 10/9/2019
PROJECT MANAGER — DATE

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT IT WILL BE REVISED DURING FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

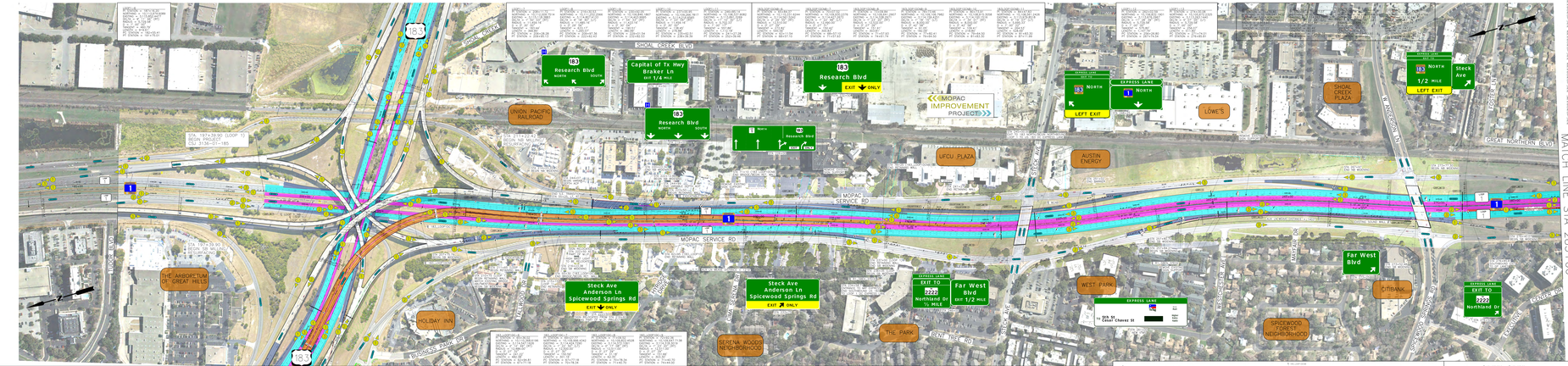
SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

RECOMMENDED BY: 10/25/2019
ADVANCED PROJECT DEVELOPMENT DIRECTOR

RECOMMENDED BY: 11/12/2019
DISTRICT DESIGN ENGINEER

RECOMMENDED BY: 11/12/2019
AREA ENGINEER

APPROVED BY: 11/18/2019
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT



CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N TO LOOP 1

183 NORTH

SCALE: 1" = 400' (HOR)
1" = 40' (VERT)
ROLL 1 OF 6

Prepared for: CTRMA
Prepared by: CP&Y, Inc.
Date Prepared: 10/4/2019

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N / RM 620 TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-13-195, ETC. (US 183)
CSJ 3136-03-135, ETC. (LOOP 1)
10/4/2019

TYPICAL SECTIONS



LOCATION MAP


EXISTING TYPICAL SECTION
FROM MOPAC IMPROVEMENT PROJECT (MOP)


PROPOSED TYPICAL SECTION

FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR
FAR WEST BOULEVARD: URBAN COLLECTOR
RM 2222: URBAN PRINCIPAL ARTERIAL

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

SURVEY DATA: TEXAS CENTRAL ZONE #4205 (TRAVIS COUNTY) AND #4203 (WILLIAMSON COUNTY), SURFACE SCALE FACTOR 1.00011. PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, MOPAC IMPROVEMENT PROJECT. UNITS: U.S. SURVEY FEET.

EXISTING ADT (2013):
SOUTH OF SH 45 149,300 (VPD)
NORTH OF MCNEIL 179,100 (VPD)
NORTH OF BRAKER 190,400 (VPD)

FORECAST ADT (2035):
SOUTH OF SH 45 194,200 (VPD)
NORTH OF MCNEIL 237,400 (VPD)
NORTH OF BRAKER 238,300 (VPD)

SOURCE: CTRMA TRAVEL DEMAND MODEL OUTPUT (2015)
SOURCE: TEXAS TRANSPORTATION INSTITUTE (2015)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL, 2014
TXDOT ROADWAY DESIGN MANUAL, 2018
TRB HIGHWAY CAPACITY MANUAL, 2010
AASHTO GREEN BOOK, 6TH EDITION, 2011

HORIZ SCALE: 1"=200'
VERT SCALE: 1"=20'

PLAN VIEW LEGEND
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- FOR FORECAST YEAR TRAFFIC VOLUME (VPD)

NOT A BIDDING DOCUMENT

PAUL A. SCHNIDER, P.E. — DATE 10/3/2019
PROJECT MANAGER

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT IT WILL BE REVISED DURING FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

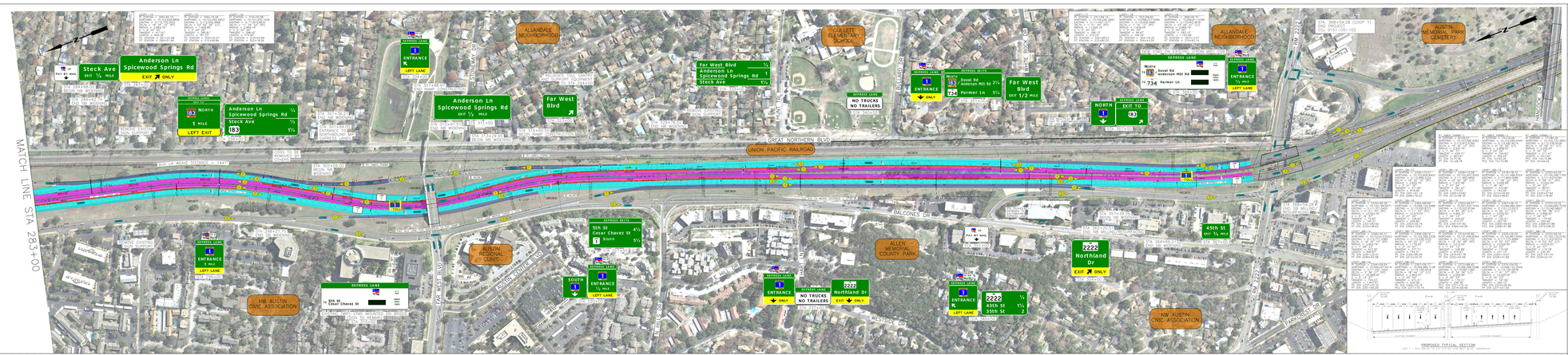
SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

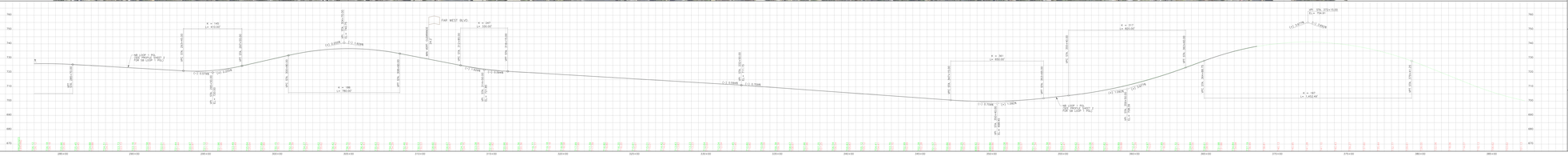
RECOMMENDED BY: 10/25/2019
ADVANCED PROJECT DEVELOPMENT DIRECTOR

RECOMMENDED BY: 11/12/2019
DISTRICT DESIGN ENGINEER

RECOMMENDED BY: 11/12/2019
AREA ENGINEER

APPROVED BY: 11/18/2019
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT





CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY
183 NORTH
DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N TO LOOP 1
ROLL 6 OF 6
SCALE: 1" = 200'
VERT 1" = 20'

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT

US 183 FROM SH 45N / RM 620
TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-03-190, ETC (US 183)
CSJ 3136-01-190, ETC (LOOP 1)
10/1/2019

TYPICAL SECTIONS



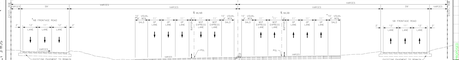
LOCATION MAP



PROPOSED TYPICAL SECTION



PROPOSED TYPICAL SECTION



PROPOSED CROSS STREET TYPICAL SECTION

FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

EXISTING ADT (2013):
SOUTH OF SH 45 149,300 (VPD)
NORTH OF MCNEIL 179,100 (VPD)
NORTH OF BRAKER 190,400 (VPD)

FORECAST ADT (2035):
SOUTH OF SH 45 194,200 (VPD)
NORTH OF MCNEIL 237,400 (VPD)
NORTH OF BRAKER 238,300 (VPD)

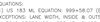
EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

SURVEY DATA: TEXAS CENTRAL ZONE #4203 (TRAVIS & WILLIAMSON COUNTIES) NAD83 (2011) EPOCH 2010 SCALE FACTOR 1.00011. PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DKI, HARRIS, SMITH & EARLEY FOR IMPROVEMENT PROJECT. UNITS: U.S. SURVEY FEET.

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL, 2014
TXDOT ROADWAY DESIGN MANUAL, 2018
TRB HIGHWAY CAPACITY MANUAL, 2010
AASHTO A POLICY ON GEOMETRIC DESIGN, 2011

SOURCE: CDM SMITH TRAVEL DEMAND MODEL OUTPUT (2015)

SOURCE: TRANSPORTATION PLANNING & PROGRAMMING (2015)



NOT A BIDDING DOCUMENT

PAUL A. SCHNEIDER, P.E. — DATE 10/3/2019
PROJECT MANAGER

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED FOR FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

RECOMMENDED BY: 10/25/2019
Heather Kelly Boyer
ASSISTANT PROJECT DEVELOPMENT DIRECTOR

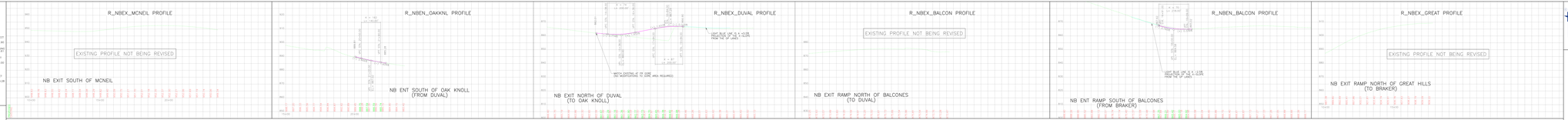
RECOMMENDED BY: 11/12/2019
Jason A. Walker, P.E.
DISTRICT DESIGN ENGINEER

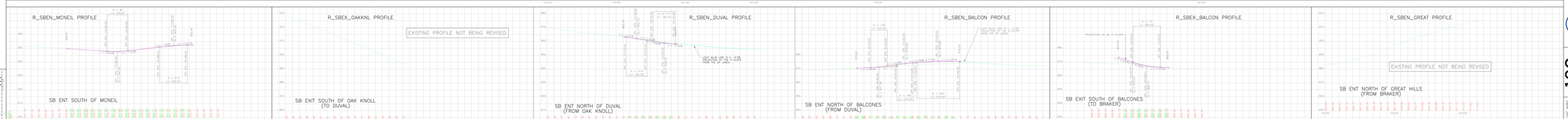
RECOMMENDED BY: 11/12/2019
Tommy Phillips, PE
AREA ENGINEER

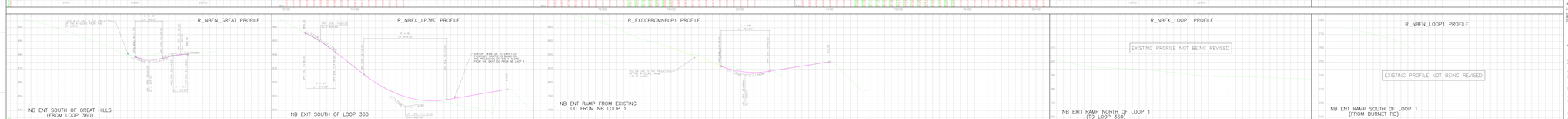
APPROVED BY: 11/18/2019
Steven Pustelnik
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT

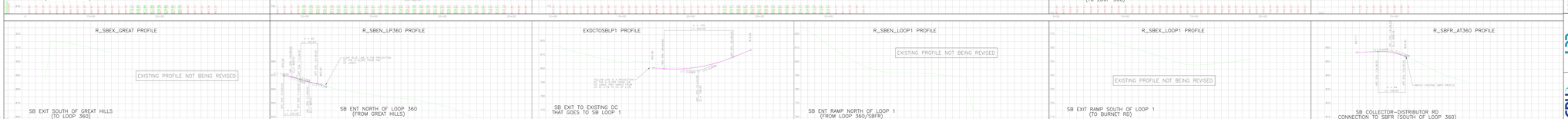
PLAN VIEW LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- 2035 FORECAST YEAR TRAFFIC VOLUME (VPD)









DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N TO LOOP 1
PROFILE OF 3
SCALE: 1" = 100' HORZ
1" = 10' VERT
CENTRAL TEXAS Regional Mobility Authority
183 NORTH
CP&Y
HDR

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N / RM 620
TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-01-190, ETC (US 183)
CSJ 3136-01-110, ETC (LOOP 1)
10/1/2019



LOCATION MAP

FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

[1] EXISTING ADT (2013):
SOUTH OF SH 45 149,300 (VPD)
NORTH OF MOPAC 179,100 (VPD)
NORTH OF BRAKER 190,400 (VPD)

[2] FORECAST ADT (2035):
SOUTH OF SH 45 199,200 (VPD)
NORTH OF MOPAC 237,400 (VPD)
NORTH OF BRAKER 238,300 (VPD)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL, 2014
TXDOT ACCESS MANAGEMENT MANUAL, 2008
TRB HIGHWAY CAPACITY MANUAL, 2010
AASHTO GREEN BOOK, 6TH EDITION (COVERS: 2011)

[1] SOURCE: CTRMA TRAFFIC MODEL
[2] SOURCE: CAM (WITH TRAVEL DEMAND MODEL OUTPUT DATA)
* SOURCE: TRANSPORTATION STRATEGY GROUP (TXDOT)

SURVEY DATA: TEXAS CENTRAL ZONE #4205 (TRAVIS & WILLIAMSON COUNTIES) NAD83 (2011) EPOCH 2010.00; SCALE FACTOR 1.00017; PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, FOR THE 183 NORTH MOBILITY IMPROVEMENT PROJECT; UNITS: U.S. SURVEY FEET

HORZ. SCALE - CHAINS
0 100 200 400
VERT. SCALE - FEET
0 10 20 40

NOT A BIDDING DOCUMENT

PAUL A. SCHNEIDER, P.E. — DATE 10/3/2019
PROJECT MANAGER

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT IT IS NOT APPROVED FOR FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

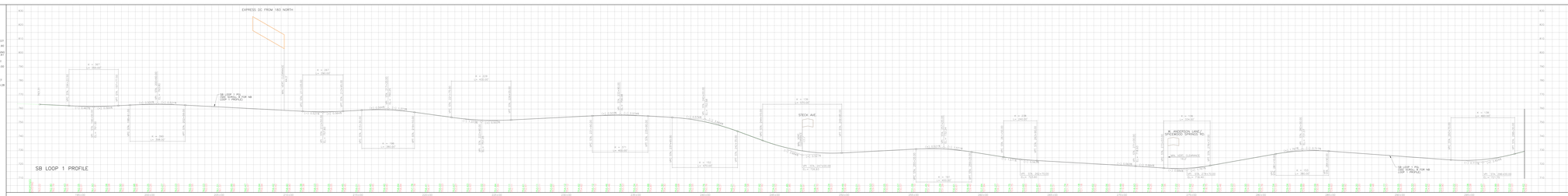
RECOMMENDED BY: 10/25/2019
Name: Justin Kelly-Ryan
ADVANCED PROJECT DEVELOPMENT DIRECTOR

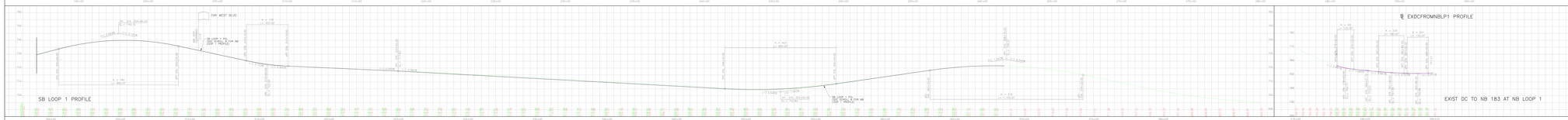
RECOMMENDED BY: 11/12/2019
Name: Sidney K. Wallace, PE
AREA ENGINEER

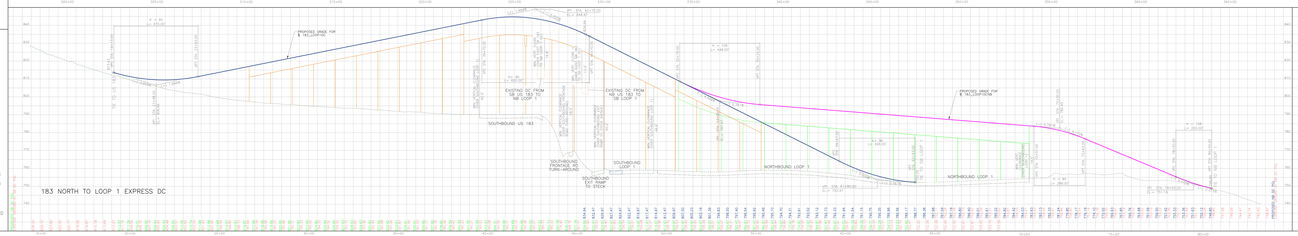
RECOMMENDED BY: 11/12/2019
Name: Charles Heath
DISTRICT DESIGN ENGINEER

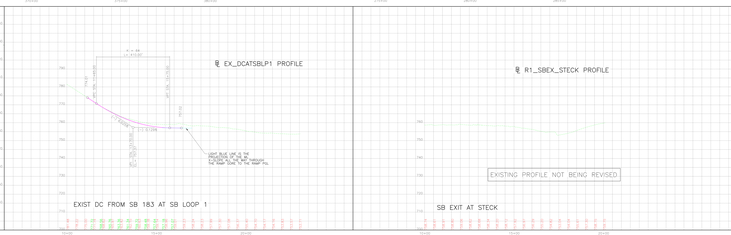
APPROVED BY: 11/18/2019
Name: Mark A. Tyler
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT

PLAN VIEW LEGEND
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
- EXPRESS LANES
- DIRECT CONNECTOR LANES
- EXPRESS AUXILIARY LANES
- ENTRANCE / EXIT RAMP
- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- 2035 FORECAST YEAR TRAFFIC VOLUME (VPD)









183 NORTH TO LOOP 1 EXPRESS DC

EXIST DC FROM SB 183 AT SB LOOP 1

SB EXIT AT STECK

CENTRAL TEXAS Regional Mobility Authority

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N TO LOOP 1
SCALE: 1" = 100' (HORZ) 1" = 10' (VERT)
PROFILE 2 of 3

183 NORTH

CP&Y — Texas Registered Engineering Firm F-2165 — 2711 N. Haskell Ave., Suite 2600, Dallas, TX 75204 — 972.488.3500 — www.cpy.com

H2R — Texas Registered Engineering Firm F-2165 — 2711 N. Haskell Ave., Suite 2600, Dallas, TX 75204 — 972.488.3500 — www.h2r.com

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N / RM 620
TO LOOP 1 (MOPAC)

TRAVIS & WILLIAMSON COUNTIES
CSJ 0151-03-190, ETC (US 183)
CSJ 3136-03-100, ETC (LOOP 1)
10/1/2019



LOCATION MAP

FUNCTIONAL CLASS
MAINLANES: URBAN FREEWAY
FRONTAGE ROADS: URBAN COLLECTOR

DESIGN SPEED
US 183 MAINLANES: 60 MPH (emax=0.06)
LOOP 1 MAINLANES: 50 MPH (emax=0.06)
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECT CONNECTORS: 40 MPH
CROSS STREETS: 30 MPH

[1] EXISTING ADT (2013):
SOUTH OF SH 45 149,300 (VPD)
NORTH OF MOPAC 179,100 (VPD)
NORTH OF BRAKER 190,400 (VPD)

[2] FORECAST ADT (2030):
SOUTH OF SH 45 199,200 (VPD)
NORTH OF MOPAC 237,400 (VPD)
NORTH OF BRAKER 238,300 (VPD)

EQUATIONS:
(1) US 183 ML EQUATION: 999+58.07 (BK) = 0+00.00 (AH)
EXCEPTIONS: LANE WIDTH, INSIDE & OUTSIDE SHOULDER WIDTHS
RAILROAD CROSSINGS: UPRR AT US 183 STA 245+55.61

DESIGN STANDARDS USED
TXDOT ROADWAY DESIGN MANUAL 2014
TXDOT ACCESS MANAGEMENT MANUAL 2013
TRB HIGHWAY CAPACITY MANUAL 2010
AASHTO GREEN BOOK, 6TH EDITION, DATED: 2011

[3] SOURCE: CTRMA TRAVEL DEMAND MODEL OUTPUT (2015)

* SOURCE: TXDOT TRAFFIC MAP (2013)

SURVEY DATA: TEXAS CENTRAL ZONE #4205 (TRAVIS & WILLIAMSON COUNTIES) NAD83 (2011) EPOCH 2010 SCALE FACTOR 1.00017 - PROJECT CONTROL DERIVED FROM AREA CONTROL ESTABLISHED BY DMJ HARRIS, INC. FOR THE 183 NORTH IMPROVEMENT PROJECT. UNITS: U.S. SURVEY FEET

HORZ SCALE - CLASP
1" = 20' (1:240)
VERT SCALE - CLASP
1" = 2' (1:24)

PLAN VIEW LEGEND
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- CONTROL OF ACCESS
- RETAINING WALL
- NUMBER OF LANES
- GENERAL PURPOSE LANES
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- FRONTAGE ROAD
- SIDEWALK
- SHARED USE PATH
- PAVEMENT / BRIDGE WIDENING
- EXISTING POND TO BE MODIFIED
- POTENTIAL PROPOSED POND
- BRIDGE LIMITS
- EXISTING SIGN TO BE RELOCATED
- 2030 FORECAST YEAR TRAFFIC VOLUME (VPD)

NOT A BIDDING DOCUMENT

PAUL A. SCHNEIDER, P.E. — 10/9/2019
PROJECT MANAGER — DATE

THIS SCHEMATIC IS SUBMITTED FOR APPROVAL WITH THE UNDERSTANDING THAT IT WILL BE DEVELOPED FOR FURTHER PROJECT DEVELOPMENT AS NOTED IN THE ATTACHED DOCUMENT.

SUBMITTED FOR APPROVAL FOR FURTHER PROJECT DEVELOPMENT

RECOMMENDED BY: 10/25/2019
ADVANCED PROJECT DEVELOPMENT DIRECTOR

RECOMMENDED BY: 11/12/2019
DISTRICT DESIGN ENGINEER

RECOMMENDED BY: 11/12/2019
AREA ENGINEER

APPROVED BY: 11/18/2019
DIRECTOR, TRANSPORTATION PLANNING & DEVELOPMENT

EXISTING PROFILE NOT BEING REVISED.
NB EXIT NORTH OF ANDERSON LANE (TO STECK)

EXISTING PROFILE NOT BEING REVISED.
NB EXIT SOUTH OF ANDERSON LANE

R1_NBEN_FARWS PROFILE
NB ENT NORTH OF FAR WEST

R1_NBEX_FARWS PROFILE
NB EXIT SOUTH OF FAR WEST

R1_SBEN_STECK PROFILE
SB ENT SOUTH OF STECK

EXISTING PROFILE NOT BEING REVISED
SB EXIT AT ANDERSON LN/ SPICEWOOD SPRINGS RD (TO FAR WEST)

EXISTING PROFILE NOT BEING REVISED
SB ENT AT FAR WEST (FROM ANDERSON LN/SPICEWOOD SPRINGS)

EXISTING PROFILE NOT BEING REVISED
SB ENT SOUTH OF FAR WEST

EXISTING PROFILE NOT BEING REVISED
SB EXIT NORTH OF RM 2222

US 183 SOUTHBOUND

PROPOSED PROFILE OF ML BEING PRESENTED FOR SCHEMATIC PURPOSES ONLY.

DESIGN SCHEMATIC (FINAL)
183 NORTH MOBILITY PROJECT
US 183 FROM SH 45N TO LOOP 1
SCALE: 1" = 20' (HORZ) 1" = 2' (VERT)
PROFILE 2 OF 3

CENTRAL TEXAS Regional Mobility Authority
183 NORTH