COLLIN COUNTY
TEXAS

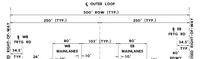
Interchange Concept Schematic
COLLIN COUNTY OUTER LOOP AT PRESTON ROAD (SH 289)

Clarence Daugherty, P.E.
Collin County Director of Engineering

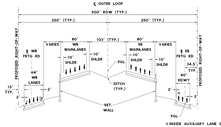
LOCATION MAP

	OUTER LOOP	PRESTON RD (SH 289)
ROADWAY FUNCTIONAL CLASSIFICATION:	URBAN FREEWAY	PRINCIPAL ARTERIAL
ROADWAY CONSTRUCTION TYPE:	NEW FACILITY	RECONSTRUCTION
DESIGN SPEED (MAINLANES):	70 MPH	45 MPH *
DESIGN SPEED (RAMPS):	50 MPH	45 MPH *
DESIGN SPEED (FRONTAGE ROADS):	45 MPH *	45 MPH *

* DESIGN SPEED URBAN CRITERIA FOLLOWED FOR HORIZONTAL ALIGNMENT
FOR SH: TEXAS DEPARTMENT OF TRANSPORTATION, ROADWAY DESIGN MANUAL, CHAPTER 2, SECTION 4, TABLE 2-5 (2014)



PROPOSED OUTER LOOP TYPICAL CORRIDOR SECTION



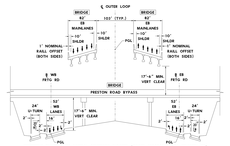
OUTER LOOP STA 1095+25 TO STA 1096+75
OUTER LOOP STA 1099+75 TO STA 1099+22

PROPOSED OUTER LOOP TYPICAL CORRIDOR SECTION (APPROACH TO PRESTON RD)

CH2MHILL
12700 PARK CENTRAL, SUITE 1100
DALLAS, TEXAS 75251
TBPE REGISTRATION NO. F-3199

DATE SUBMITTED:
DATE REVISED:
DATE APPROVED:

SYSTEM DESIGN SCHEMATIC
COLLIN COUNTY OUTER LOOP
AT PRESTON ROAD (SH 289)
NECH STUDY NO. 17-CN, 18NNC
PROJECT NO. 0918-36-001, 0918-36-002
CSJ: 0918-00-174, 0918-00-176, 0918-00-177
JUNE 2015



PROPOSED OUTER LOOP TYPICAL CORRIDOR SECTION (GRADE SEPARATION AT PRESTON RD)

OUTER LOOP STA 1094+75 TO STA 1095+75

NOTES:
1. RAILLANES NOT DEPICTED.
2. FUTURE INNER LANES SHOWN.

EXISTING PRESTON ROAD (SH 289) TYPICAL CORRIDOR SECTION

TYPICAL CORRIDOR (INCLUDES SH 289 STA 297+52 TO STA 434+91)

PROPOSED PRESTON ROAD (SH 289) TYPICAL CORRIDOR SECTION

SH 289 STA 299+52 TO STA 408+86
SH 289 STA 420+16 TO STA 434+91

PROPOSED PRESTON ROAD (SH 289) TYPICAL CORRIDOR SECTION

SH 289 STA 408+86 TO STA 420+16
SH 289 STA 434+91 TO STA 439+18

PROPOSED PRESTON ROAD (SH 289) TYPICAL CORRIDOR SECTION

SH 289 STA 414+47 TO STA 418+79

TYPICAL SECTION NOTES:
1. ALL LANES 12' WIDE UNLESS OTHERWISE NOTED.
2. ALL TYPICAL CROSS SLOPES ARE 2.0% UNLESS OTHERWISE NOTED.
3. ALL DITCHES ARE 4:1 SLOPE UNLESS OTHERWISE NOTED.
4. PROPOSED ENTRANCE AND EXIT RAMPS TO BE DETERMINED AT A LATER DATE DURING DESIGN AND WILL BE DETERMINED AT A FUTURE DATE.

NOTE: CORRIDOR PRESENTATION SHOWN EAST OF PRESTON RD - SH 289 ONLY. NECK PRESENTATION SUPPLIES WEST OF PRESTON RD - SH 289.

HORIZONTAL CURVE DATA

C-OL21 PI STATION = 1+97.00 DELTA = 0°00'00" (LT) DEGREE OF CURVE = 0°00'00" (RT) RADIUS = INFINITE LENGTH = 0.00 (MI) PT STATION = 1+97.00	C-NB01 PI STATION = 10+99.79 DELTA = 0°00'00" (LT) DEGREE OF CURVE = 0°00'00" (RT) RADIUS = INFINITE LENGTH = 0.00 (MI) PT STATION = 10+99.79	C-SB01 PI STATION = 10+99.79 DELTA = 0°00'00" (LT) DEGREE OF CURVE = 0°00'00" (RT) RADIUS = INFINITE LENGTH = 0.00 (MI) PT STATION = 10+99.79
C-OL22 PI STATION = 1+97.00 DELTA = 0°00'00" (LT) DEGREE OF CURVE = 0°00'00" (RT) RADIUS = INFINITE LENGTH = 0.00 (MI) PT STATION = 1+97.00	C-NB02 PI STATION = 11+64.79 DELTA = 0°00'00" (LT) DEGREE OF CURVE = 0°00'00" (RT) RADIUS = INFINITE LENGTH = 0.00 (MI) PT STATION = 11+64.79	C-SB02 PI STATION = 11+64.79 DELTA = 0°00'00" (LT) DEGREE OF CURVE = 0°00'00" (RT) RADIUS = INFINITE LENGTH = 0.00 (MI) PT STATION = 11+64.79
C-WB01 PI STATION = 1+97.00 DELTA = 0°00'00" (LT) DEGREE OF CURVE = 0°00'00" (RT) RADIUS = INFINITE LENGTH = 0.00 (MI) PT STATION = 1+97.00	C-NB03 PI STATION = 12+21.79 DELTA = 0°00'00" (LT) DEGREE OF CURVE = 0°00'00" (RT) RADIUS = INFINITE LENGTH = 0.00 (MI) PT STATION = 12+21.79	C-SB03 PI STATION = 12+21.79 DELTA = 0°00'00" (LT) DEGREE OF CURVE = 0°00'00" (RT) RADIUS = INFINITE LENGTH = 0.00 (MI) PT STATION = 12+21.79
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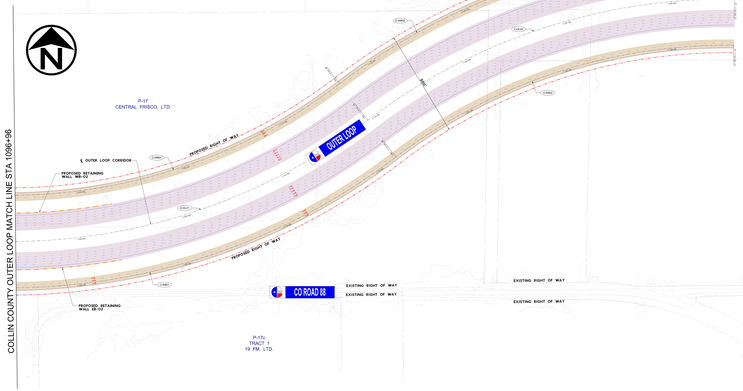

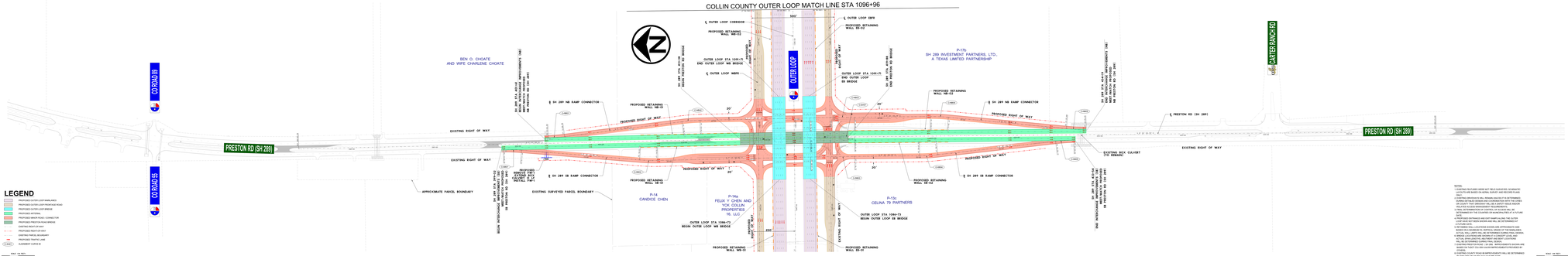

LEGEND

- PROPOSED OUTER LOOP MAINLANES
- PROPOSED OUTER LOOP FRONTAGE ROAD
- PROPOSED OUTER LOOP BRIDGE
- PROPOSED RAMPS
- PROPOSED NEW PRESTON CONNECTOR
- PROPOSED PRESTON ROAD BRIDGE
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- EXISTING PARCEL BOUNDARY
- PROPOSED TRAFFIC LANE
- ALIGNMENT LINE IN ℄

SCALE: 1" = 200'
0 100 200 400 FEET

NOTES:
1. EXISTING FEATURES HERE NOT FIELD SURVEYED. SCHEMATIC LOCATIONS ARE BASED ON AERIAL SURVEY AND FIELD PLANS AND ESTIMATES.
2. EXISTING ORIGINATORS WILL REMAIN UNLESS IT IS DETERMINED DURING DESIGN THAT ADJUSTMENTS ARE NECESSARY TO ACCOMMODATE THAT ORIGINATOR WILL BE A SAFETY ISSUE AND/OR THE ORIGINATOR WILL BE DEEMED TO BE OBSOLETE.
3. FINAL DETERMINATION OF CONTROL OF ACCESS WILL BE DETERMINED DURING DESIGN AND WILL BE DEPENDENT ON FUTURE DATA.
4. PROPOSED EXTENDED DECELERATION LANES ON THE OUTER LOOP ARE NOT BEING SHOWN BEYOND AN AREA WHERE THEY ARE DEEMED TO BE NECESSARY.
5. BETWEEN WALL LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON A MINIMUM 10' VERTICAL GRADE OF THE MAINLANES. THE ACTUAL WALL LOCATIONS WILL BE DETERMINED DURING DESIGN & WILL VARY DEPENDING ON THE DEPTH OF CUT OR FILL. THE ACTUAL WALL LOCATIONS WILL BE DETERMINED DURING DESIGN. WALL WILL BE DETERMINED DURING FINAL DESIGN.
6. PRESTON ROAD (SH 289) IS SCHEDULED FOR RECONSTRUCTION AND CONVERSION TO A FOUR LANE DIVIDED ARTERIAL BY THE CITY OF PLANO.
7. EXISTING COUNTY ROAD 88 IMPROVEMENTS WILL BE DETERMINED BY THE CITY OF CELINA AT A FUTURE DATE.

SCALE: 1" = 200'
0 100 200 400 FEET