COLLIN COUNTY
TEXAS

Interchange Concept Schematic
COLLIN COUNTY OUTER LOOP AT DALLAS NORTH TOLLWAY

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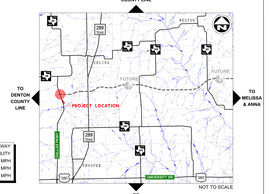
Collin County Director of Engineering

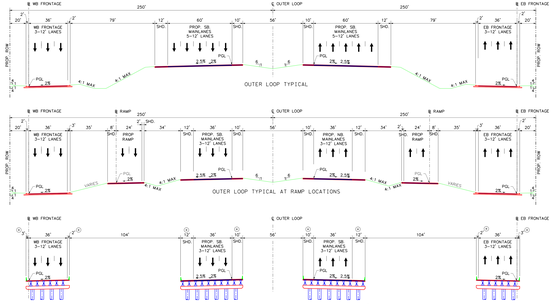
CH2MHILL
1210 MERIT DRIVE, SUITE 1100
DALLAS, TEXAS 75251
TBPE REGISTRATION NO. F-2337

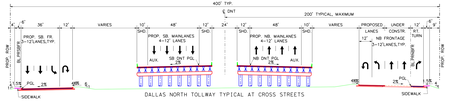
DATE SUBMITTED	INTERIM DESIGN SCHEMATIC NOT FOR CONSTRUCTION, BIDDING OR RECORD PURPOSES
DATE REVISED	NEW PURE P.E. (TX LIC. 124447)
DATE APPROVED	PREPARED UNDER THE SUPERVISION OF: NEIL BARRON P.E. (TX LIC. 24094) JUNE 2015

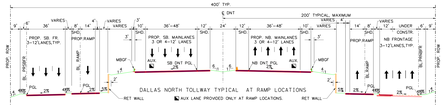
ROADWAY FUNCTIONAL CLASSIFICATION:	URBAN FREEWAY
ROADWAY CONSTRUCTION TYPE:	NEW FACILITY
DESIGN SPEED (MAINLANES):	70 MPH
DESIGN SPEED (RAMPS):	50 MPH
DESIGN SPEED (FRONTAGE ROADS):	45 MPH

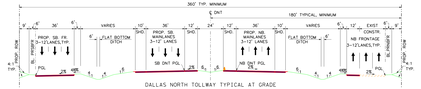
LOCATION MAP

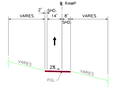


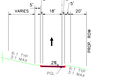






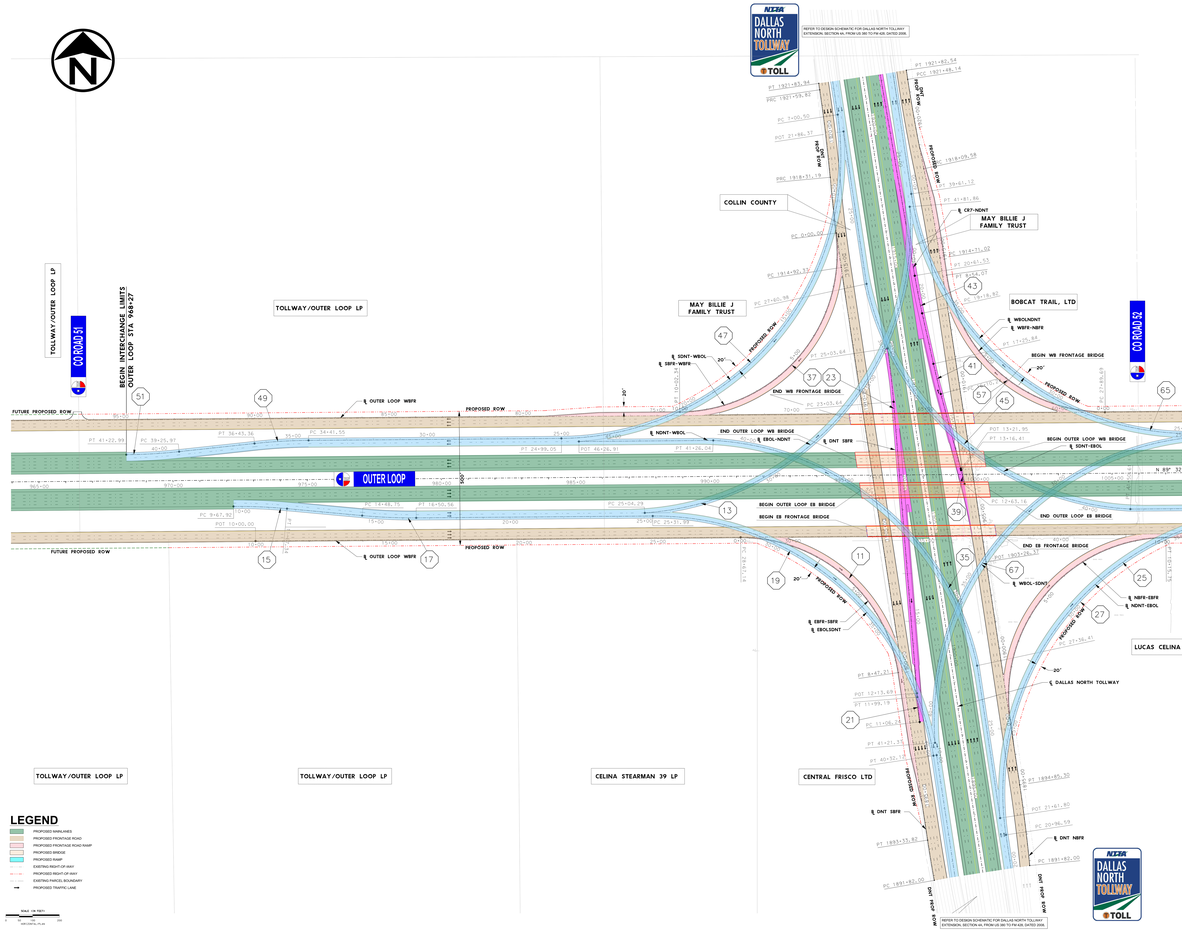






NOTE:
DALLAS NORTH TOLLWAY TYPICAL SECTIONS SHOWN BASED ON DESIGN SCHEMATIC FOR DALLAS NORTH TOLLWAY EXTENSION, SECTION 4A, FROM US 380 TO FM 428, DATED 2006. REFER TO DESIGN SCHEMATIC FOR INFORMATION NOT SHOWN.

ALL DIMENSIONS SHOWN ARE TO FACE OF CURB, EDGE OF SHOULDER, OR NOMINAL FACE OF RAIL UNLESS OTHERWISE NOTED.



PROPOSED CURVE DATA

ALIGNMENT CURVE DATA										
CURVE NO.	CURVE	P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH	CHORD BEARING	CHORD LENGTH	P.C. STATION	P.T. STATION
1	C-10-1	1070+62.67	8°26'36.01"	4000.00	295.59	590.14	S 85°29'48.90"	589.51	1074+66.28	1080+56.42
2	C-10-2	1037+88.19	9°26'44.81"	4000.00	265.55	466.16	N 85°29'48.90"	465.69	1035+48.28	1040+14.45
3	C-10-3	1009+25.97	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1006+30.38	1012+20.52
4	C-8-1	1014+31.41	24°36'27.21"	1500.00	327.47	643.87	S 81°18'32.00"	638.92	1010+84.18	1016+28.05
5	C-8-2	1011+03.12	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1007+55.89	1013+99.76
6	C-8-3	1007+75.83	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1004+27.60	1010+71.47
7	C-9-1	1029+50.67	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1026+54.78	1032+44.92
8	C-9-2	1000+87.09	9°26'44.81"	4000.00	265.55	466.16	N 85°29'48.90"	465.69	1000+21.54	1004+87.70
9	C-9-3	972+23.51	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	973+25.64	979+15.78
10	C-7-1	1021+21.24	3°26'44.01"	1500.00	45.00	90.00	S 89°32'06.13" E	89.99	1020+76.24	1021+66.24
11	C-7-2	1018+09.58	3°26'44.01"	1500.00	45.00	90.00	S 89°32'06.13" E	89.99	1017+64.58	1018+54.58
12	C-7-3	1014+81.86	3°26'44.01"	1500.00	45.00	90.00	S 89°32'06.13" E	89.99	1014+36.86	1015+26.86
13	C-5-1	1014+71.09	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1011+43.62	1017+87.49
14	C-5-2	1011+42.80	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1008+15.33	1014+59.20
15	C-5-3	1008+14.52	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1004+87.04	1011+30.91
16	C-6-1	1034+81.86	3°26'44.01"	1500.00	45.00	90.00	S 89°32'06.13" E	89.99	1033+36.86	1034+26.86
17	C-6-2	1031+53.57	3°26'44.01"	1500.00	45.00	90.00	S 89°32'06.13" E	89.99	1030+08.57	1031+98.57
18	C-6-3	1028+25.29	3°26'44.01"	1500.00	45.00	90.00	S 89°32'06.13" E	89.99	1026+80.29	1027+70.29
19	C-4-1	1043+43.02	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1040+15.55	1046+59.42
20	C-4-2	1040+14.73	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1036+87.26	1043+31.13
21	C-4-3	1036+46.45	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1033+58.97	1040+02.84
22	C-3-1	1063+62.67	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1060+66.78	1066+56.92
23	C-3-2	1035+19.09	9°26'44.81"	4000.00	265.55	466.16	N 85°29'48.90"	465.69	1032+33.54	1036+99.70
24	C-3-3	1006+35.51	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1003+37.64	1009+27.78
25	C-2-1	1057+31.41	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1054+84.18	1061+28.05
26	C-2-2	1053+53.12	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1051+05.89	1057+49.76
27	C-2-3	1049+74.83	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1047+27.60	1053+71.47
28	C-1-1	1076+62.67	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1075+66.78	1081+56.92
29	C-1-2	1048+19.09	9°26'44.81"	4000.00	265.55	466.16	N 85°29'48.90"	465.69	1047+33.54	1051+99.70
30	C-1-3	1019+35.51	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1018+37.64	1024+27.78
31	C-11-1	1050+31.41	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1047+84.18	1054+28.05
32	C-11-2	1046+53.12	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1044+05.89	1050+49.76
33	C-11-3	1042+74.83	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1040+27.60	1046+71.47
34	C-12-1	1069+62.67	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1068+66.78	1074+56.92
35	C-12-2	1041+19.09	9°26'44.81"	4000.00	265.55	466.16	N 85°29'48.90"	465.69	1040+33.54	1044+99.70
36	C-12-3	1012+35.51	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1011+37.64	1017+27.78
37	C-13-1	1064+31.41	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1061+84.18	1068+28.05
38	C-13-2	1060+53.12	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1058+05.89	1064+49.76
39	C-13-3	1056+74.83	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1054+27.60	1060+71.47
40	C-14-1	1083+62.67	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1082+66.78	1088+56.92
41	C-14-2	1055+19.09	9°26'44.81"	4000.00	265.55	466.16	N 85°29'48.90"	465.69	1054+33.54	1058+99.70
42	C-14-3	1026+35.51	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1025+37.64	1031+27.78
43	C-15-1	1078+31.41	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1075+84.18	1082+28.05
44	C-15-2	1074+53.12	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1072+05.89	1078+49.76
45	C-15-3	1070+74.83	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1068+27.60	1074+71.47
46	C-16-1	1097+62.67	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1096+66.78	1102+56.92
47	C-16-2	1069+19.09	9°26'44.81"	4000.00	265.55	466.16	N 85°29'48.90"	465.69	1068+33.54	1072+99.70
48	C-16-3	1040+35.51	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1039+37.64	1045+27.78
49	C-17-1	1092+31.41	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1089+84.18	1096+28.05
50	C-17-2	1088+53.12	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1086+05.89	1092+49.76
51	C-17-3	1084+74.83	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1082+27.60	1088+71.47
52	C-18-1	1111+62.67	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1110+66.78	1116+56.92
53	C-18-2	1083+19.09	9°26'44.81"	4000.00	265.55	466.16	N 85°29'48.90"	465.69	1082+33.54	1086+99.70
54	C-18-3	1054+35.51	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1053+37.64	1059+27.78
55	C-19-1	1106+31.41	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1103+84.18	1110+28.05
56	C-19-2	1102+53.12	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1100+05.89	1106+49.76
57	C-19-3	1098+74.83	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1096+27.60	1102+71.47
58	C-20-1	1125+62.67	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1124+66.78	1130+56.92
59	C-20-2	1097+19.09	9°26'44.81"	4000.00	265.55	466.16	N 85°29'48.90"	465.69	1096+33.54	1100+99.70
60	C-20-3	1068+35.51	8°26'36.01"	4000.00	295.59	590.14	N 85°29'48.90"	589.51	1067+37.64	1073+27.78
61	C-21-1	1120+31.41	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1117+84.18	1124+28.05
62	C-21-2	1116+53.12	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1114+05.89	1120+49.76
63	C-21-3	1112+74.83	24°36'27.21"	1500.00	327.47	643.87	N 81°18'32.00"	638.92	1110+27.60	1116+71.47

NOTES:
1. EXISTING FEATURES WERE NOT FIELD SURVEYED. SCHEMATIC LAYOUTS ARE BASED ON AERIAL SURVEY AND RECORD PLANS ONLY.
2. EXISTING DRAINAGE'S WILL REMAIN UNLESS IT IS DETERMINED DURING DETAILED DESIGN AND COORDINATION WITH THE OTHER ENTITIES THAT THE DRAINAGE WILL BE ADVERSELY AFFECTED AND/OR VIOLATES ACCESS MANAGEMENT REQUIREMENTS.
3. FINAL DETERMINATION OF CONTROL OF ACCESS WILL BE DETERMINED BY THE COUNTIES, NTTA OR MUNICIPALITIES AT A FUTURE DATE.
4. DALLAS NORTH TOLLWAY GEOMETRY SHOWN BASED ON DESIGN SCHEMATIC FOR DALLAS NORTH TOLLWAY EXTENSION, SECTION 4A, FROM US 380 TO FM 428, DATED 2006. REFER TO DESIGN SCHEMATIC FOR INFORMATION NOT SHOWN.