Roll 13 of 13

Texas Department of Transportation®

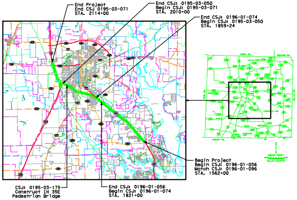
# Dallas District Design Schematic

William L. Hale, P.E., District Engineer

# IH 35E

From: FM 2181 S. in Corinth
To: US 380
Denton County
Functional Class: Interstate
Project Length: 10.45 Miles
CSJ's: 0196-01-056
0196-01-074
0195-03-050
0195-03-071
0195-03-075

Design Speed:
Mainlanes 70 mph
Managed Lanes 70 mph
Ramps 40 mph
IH 35W Connections to IH 35 60 mph
Direct Connecting Ramps PDCNWSE & PDCNESW 40 mph
U-Turns 20 mph
Frontage Roads 40 mph
Cross Streets 30 mph


End Project
End CSJ 0195-03-071
STA. 2114+00
End CSJ: 0195-03-050
Begin CSJ: 0195-03-071
STA. 2010+00
End CSJ: 0196-01-074
Begin CSJ: 0195-03-050
STA. 1859+24
Begin Project
Begin CSJ: 0196-01-056
Match CSJ: 0196-01-096
STA. 1562+00
CSJ: 0195-03-175
Construct IH 35E
Pedestrian Bridge
End CSJ: 0196-01-056
Begin CSJ: 0196-01-074
STA. 1821+00
DENTON COUNTY
DALLAS DISTRICT

Scale:
Horizontal 1"=200'
Vertical 1"=20'

November 2010
Roll 13 of 13

SCHEMATIC PREPARED BY:

HALFF ASSOCIATES, INC.
REGISTRATION NUMBER 312

FOR INTERIM REVIEW ONLY
NOT FOR PERMITTING, BIDDING
OR CONSTRUCTION.

Prepared by or under the
Direct Supervision of:

| NAME | P.E. NUMBER |
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| Chad R. Gardiner | 93793 |
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11-24-2010
DATE

HALFF

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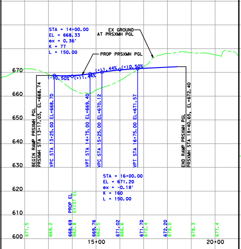
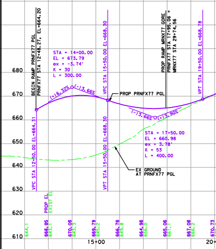
PRELIMINARY
SUBJECT TO CHANGE

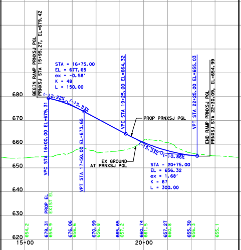
SB EXIT RAMP PRSXMH (40MPH)


STA = 14+00.00
EL = 668.33
ex = 0.36'
K = 77
L = 150.00
EX GROUND AT PRSXMH PGL
PROP PRSXMH PGL
(-)0.50%
(+)1.44%
(+)0.50%
BEGIN RAMP PRSXMH PGL PRSXMH STA 13+17.03, EL=668.74
VPC STA 13+25.00 EL=668.70
VPT STA 14+75.00 EL=669.40
VPC STA 15+25.00 EL=670.12
VPT STA 16+75.00 EL=671.57
END RAMP PRSXMH PGL PRSXMH STA 18+40.65, EL=672.40
STA = 16+00.00
EL = 671.20
ex = -0.18'
K = 160
L = 150.00
PROP EL
EXIST EL
670
660
650
640
630
620
610
600
15+00
20+00

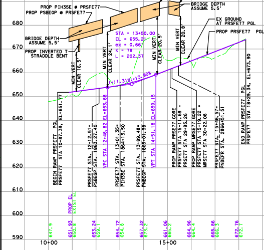
NB CONNECTOR PRNFX77 (30MPH)


BEGIN RAMP PRNFX77 PGL PRNFX77 STA 12+48.27, EL=664.20
STA = 14+00.00
EL = 673.79
ex = -3.74'
K = 30
L = 300.00
VPC STA 15+50.00 EL=668.30
PROP RAMP MRNXT77 GORE PRNFX77 STA 17+95.06 = MRNXT77 STA 29+74.56
VPT STA 19+50.00 EL=668.78
(+)16.32%
(-)3.66%
PROP PRNFX77 PGL
(-)3.66%
(+)3.90%
STA = 17+50.00
EL = 660.98
ex = 3.78'
K = 53
L = 400.00
VPC STA 12+50.00 EL=664.31
VPT STA 15+50.00 EL=668.30
EX GROUND AT PRNFX77 PGL
PROP EL
EXIST EL
680
670
660
650
640
630
620
610
15+00
20+00

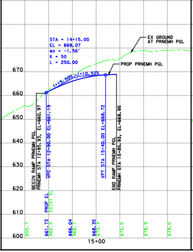
NB EXIT RAMP PRNXSJ (40MPH)


BEGIN RAMP PRNXSJ PGL PRNXSJ STA 15+95.27, EL=679.42
STA = 16+75.00
EL = 677.65
ex = -0.58'
K = 48
L = 150.00
VPC STA 19+25.00 EL=664.32
VPT STA 22+25.00 EL=655.03
END RAMP PRNXSJ PGL PRNXSJ STA 22+50.09, EL=654.99
(-)2.22%
(-)5.33%
PROP PRNXSJ PGL
(-)5.33%
(-)0.86%
VPC STA 16+00.00 EL=679.31
VPT STA 17+50.00 EL=673.65
EX GROUND AT PRNXSJ PGL
STA = 20+75.00
EL = 656.32
ex = 1.68'
K = 67
L = 300.00
PROP EL
EXIST EL
680
670
660
650
640
630
620
15+00
20+00

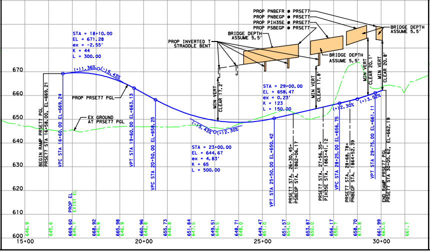
SB CONNECTOR PRSFE77 (30MPH)

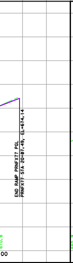

PROP PNBEGP ● PRSFE77
PROP PNBEFR ● PRSFE77
BRIDGE DEPTH ASSUME 5.5'
PROP PIH35E ● PRSFE77
PROP PSBEGP ● PRSFE77
EX GROUND AT PRSFE77 PGL
PROP PRSFE77 PGL
BRIDGE DEPTH ASSUME 5.5'
PROP INVERTED T STRADDLE BENT
STA = 13+50.00
EL = 655.21
ex = 0.66'
K = 78
L = 202.37
MIN VERT CLEAR 16.5'
MIN VERT CLEAR 24.1'
MIN VERT CLEAR 20.5'
MIN VERT CLEAR 20.8'
(+)1.31%
(+)3.90%
BEGIN RAMP PRSFE77 PGL PRSFE77 STA 10+87.39, EL=651.77
PRSFE77 STA. 12+12.51= PSBEGP STA. 1863+27.40
VPC STA 12+48.82 EL=653.88
PRSFE77 STA. 13+01.35= PIH35E STA. 1864+13.50
PRSFE77 STA. 13+89.48= PNBEGP STA. 1865+01.98
VPT STA 14+51.18 EL=659.15
PROP RAMP PRSE77 GORE PRSFE77 STA 15+11.69 = PRSE77 STA 29+65.26
PROP RAMP MRSE77 GORE PRSFE77 STA 15+19.22 = MRSE77 STA 30+22.08
PRSFE77 STA. 15+46.57= PNBEFR STA. 2866+51.51
END RAMP PRSFE77 PGL PRSFE77 STA 18+29.34, EL=673.90
PROP EL
EXIST EL
680
670
660
650
640
630
620
610
600
590
10+00
15+00

NB ENTRANCE RAMP PRNEMH (40MPH)

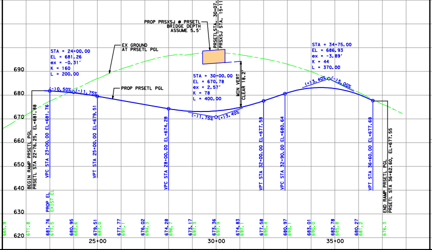

STA = 14+15.00
EL = 668.07
ex = -1.56'
K = 50
L = 250.00
EX GROUND AT PRNEMH PGL
PROP PRNEMH PGL
(+)5.50%
(+)0.52%
BEGIN RAMP PRNEMH PGL PRNEMH STA 12+85.91, EL=660.97
VPC STA 12+90.00 EL=661.19
VPT STA 15+40.00 EL=668.72
END RAMP PRNEMH PGL PRNEMH STA 15+85.93, EL=668.95
PROP EL
EXIST EL
670
660
650
640
630
620
610
600
15+00

SB ENTRANCE RAMP PRSE77 (40MPH)

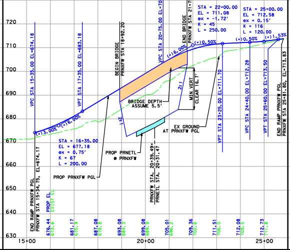

STA = 18+10.00
EL = 671.28
ex = -2.55'
K = 44
L = 300.00
(+)1.36%
(-)5.43%
PROP PRSE77 PGL
EX GROUND AT PRSE77 PGL
PROP PNBEFR ● PRSE77
PROP PNBEGP ● PRSE77
PROP PIH35E ● PRSE77
PROP PSBEGP ● PRSE77
BRIDGE DEPTH ASSUME 5.5'
PROP INVERTED T STRADDLE BENT
BRIDGE DEPTH ASSUME 5.5'
BRIDGE DEPTH ASSUME 5.5'
MIN VERT CLEAR 17.2'
MIN VERT CLEAR 17.8'
MIN VERT CLEAR 20.1'
MIN VERT CLEAR 20.8'
STA = 29+00.00
EL = 658.47
ex = 0.23'
K = 123
L = 150.00
(-)5.43%
(+)2.30%
(+)2.30%
(+)3.52%
STA = 23+00.00
EL = 644.67
ex = 4.83'
K = 65
L = 500.00
BEGIN RAMP PRSE77 PGL PRSE77 STA 16+58.00, EL=669.21
VPC STA 16+60.00 EL=669.24
VPT STA 19+60.00 EL=663.13
VPC STA 20+50.00 EL=658.25
VPT STA 25+50.00 EL=650.42
PRSE77 STA. 26+30.45= PSBEGP STA. 1862+06.17
PRSE77 STA. 27+56.35= PIH35E STA. 1863+41.12
VPC STA 28+25.00 EL=656.75
PRSE77 STA. 28+68.78= PNBEGP STA. 1864+52.39
VPT STA 29+75.00 EL=661.11
END RAMP PRSE77 PGL PRSE77 STA 30+05.62, EL=662.19
PROP EL
EXIST EL
670
660
650
640
630
620
610
600
15+00
20+00
25+00
30+00


END RAMP PRNFX77 PGL
PRNFX77 STA 20+87.49, EL=674.14
670.8
00

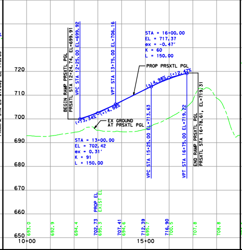
## SB ENTRANCE RAMP PRSETL (40MPH)


PROP PRSXSJ @ PRSETL
BRIDGE DEPTH
ASSUME 5.5'
PRSETL STA. 30+07.98 =
PRSXSJ STA. 15+11.71
EX GROUND
AT PRSETL PGL
STA = 24+00.00
EL = 681.26
ex = -0.31'
K = 160
L = 200.00
PROP PRSETL PGL
STA = 30+00.00
EL = 670.78
ex = 2.57'
K = 78
L = 400.00
MIN VERT CLEAR 18.2'
STA = 34+75.00
EL = 686.93
ex = -3.89'
K = 44
L = 370.00
(-)0.50%
(-)1.75%
(-)1.75%
(+)3.40%
(+)3.40%
(-)5.00%
BEGIN RAMP PRSETL PGL
PRSETL STA 22+76.25, EL=681.98
VPC STA 23+00.00 EL=681.76
VPT STA 25+00.00 EL=679.51
VPC STA 28+00.00 EL=674.28
VPT STA 32+00.00 EL=677.58
VPC STA 32+90.00 EL=680.64
VPT STA 36+60.00 EL=677.68
END RAMP PRSETL PGL
PRSETL STA 36+62.60, EL=677.55
PROP EL
EXIST EL
690
680
670
660
650
640
630
620
25+00
30+00
35+00

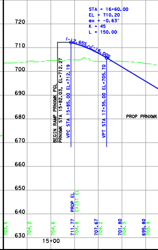
## NB EXIT RAMP PRNXFW (40MPH)


STA = 22+00.00
EL = 711.08
ex = -1.72'
K = 45
L = 250.00
STA = 25+00.00
EL = 712.58
ex = 0.15'
K = 116
L = 120.00
VPC STA 15+35.00 EL=674.18
VPT STA 17+35.00 EL=683.18
BEGIN BRIDGE
PRNXFW STA 18+92.20
VPC STA 20+75.00 EL=703.58
END BRIDGE
PRNXFW STA 21+75.65
(+)6.00%
(+)0.50%
(+)0.50%
(+)1.53%
(+)3.00%
(+)6.00%
BRIDGE DEPTH
ASSUME 5.5'
MIN VERT CLEAR 16.7'
2:1
EX GROUND
AT PRNXFW PGL
STA = 16+35.00
EL = 677.18
ex = 0.75'
K = 67
L = 200.00
PROP PRNETL
@ PRNXFW
PROP PRNXFW PGL
PRNXFW STA. 20+39.49=
PRNETL STA. 20+31.47
VPT STA 23+25.00 EL=711.70
VPC STA 24+40.00 EL=712.28
VPT STA 25+60.00 EL=713.50
END RAMP PRNXFW PGL
PRNXFW STA 25+81.80, EL=713.83
END RAMP PRNXFW PGL
PRNXFW STA 15+34.75, EL=674.17
PROP EL
EXIST EL
720
710
700
690
680
670
660
650
640
630
15+00
20+00
25+00

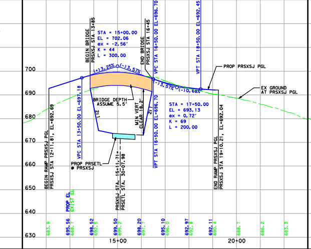
## SB EXIT RAMP PRSXTL (40MPH)


STA = 16+00.00
EL = 717.37
ex = -0.47'
K = 60
L = 150.00
PROP PRSXTL PGL
BEGIN RAMP PRSXTL PGL
PRSXTL STA 12+24.74, EL=699.91
VPC STA 12+25.00 EL=699.92
VPT STA 13+75.00 EL=706.16
(+)3.34%
(+)4.98%
(+)4.98%
(+)2.47%
EX GROUND
AT PRSXTL PGL
STA = 13+00.00
EL = 702.42
ex = 0.31'
K = 91
L = 150.00
VPC STA 15+25.00 EL=713.63
VPT STA 16+75.00 EL=719.22
END RAMP PRSXTL PGL
PRSXTL STA 16+78.61, EL=719.31
PROP EL
EXIST EL
720
710
700
690
680
670
660
650
10+00
15+00

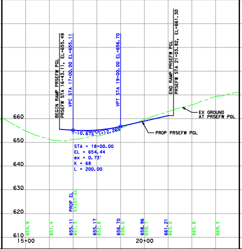
## NB EXIT RAMP PRNXMK (40MPH)


STA = 16+60.00
EL = 710.20
ex = -0.63'
K = 45
L = 150.00
(+)2.65%
(-)6.00%
BEGIN RAMP PRNXMK PGL
PRNXMK STA 15+82.03, EL=712.27
VPC STA 15+85.00 EL=712.19
VPT STA 17+35.00 EL=705.70
PROP PRNXMK
PROP EL
EXIST EL
720
710
700
690
680
670
660
650
640
630
15+00

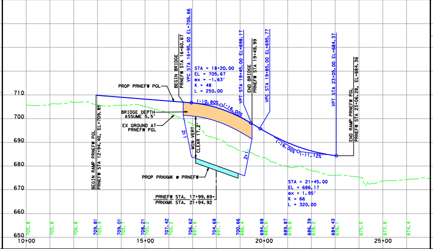
## SB EXIT RAMP PRSXSJ (40MPH)


STA = 15+00.00
EL = 702.06
ex = -2.56'
K = 44
L = 300.00
BEGIN BRIDGE
PRSXSJ STA 13+85
END BRIDGE
PRSXSJ STA 16+45
VPC STA 16+50.00 EL=696.70
VPT STA 18+50.00 EL=692.45
PROP PRSXSJ PGL
(+)3.25%
(-)3.57%
(-)3.57%
(-)0.68%
EX GROUND
AT PRSXSJ PGL
BRIDGE DEPTH
ASSUME 5.5'
MIN VERT CLEAR 18.2'
2:1
STA = 17+50.00
EL = 693.13
ex = 0.72'
K = 69
L = 200.00
VPC STA 13+50.00 EL=697.18
VPT STA 16+50.00 EL=696.70
PROP PRSETL
@ PRSXSJ
PRSXSJ STA. 15+11.71=
PRSETL STA. 30+07.98
BEGIN RAMP PRSXSJ PGL
PRSXSJ STA 12+11.81, EL=692.69
END RAMP PRSXSJ PGL
PRSXSJ STA 19+10.21, EL=692.04
PROP EL
EXIST EL
700
690
680
670
660
650
640
630
15+00
20+00

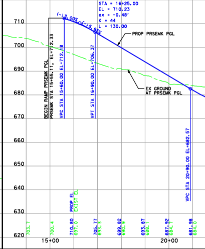
## SB ENTRANCE RAMP PRSEFW (40MPH)


BEGIN RAMP PRSEFW PGL
PRSEFW STA 16+43.11, EL=655.49
VPC STA 17+00.00 EL=655.11
VPT STA 19+00.00 EL=656.70
END RAMP PRSEFW PGL
PRSEFW STA 21+03.82, EL=661.30
(-)0.67%
(+)2.26%
STA = 18+00.00
EL = 654.44
ex = 0.73'
K = 68
L = 200.00
PROP PRSEFW PGL
EX GROUND
AT PRSEFW PGL
PROP EL
EXIST EL
660
650
640
630
620
610
15+00
20+00

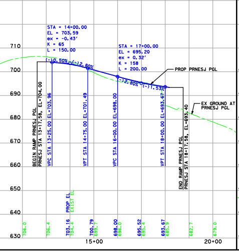
## NB ENTRANCE RAMP PRNEFW (40MPH)


BEGIN BRIDGE
PRNEFW STA 16+60.67
VPC STA 16+95.00 EL=706.66
STA = 18+20.00
EL = 705.67
ex = -1.63'
K = 48
L = 250.00
VPT STA 19+45.00 EL=698.17
END BRIDGE
PRNEFW STA 19+49.99
VPC STA 19+85.00 EL=695.77
VPT STA 23+05.00 EL=684.37
END RAMP PRNEFW PGL
PRNEFW STA 23+06.28, EL=684.36
PROP PRNEFW PGL
(-)0.80%
(-)6.00%
(-)6.00%
(-)1.12%
BRIDGE DEPTH
ASSUME 5.5'
EX GROUND AT
PRNEFW PGL
MIN VERT CLEAR 17.2'
2:1
PROP PRNXMK @ PRNEFW
PRNEFW STA. 17+99.89=
PRNXMK STA. 21+94.92
STA = 21+45.00
EL = 686.17
ex = 1.95'
K = 66
L = 320.00
BEGIN RAMP PRNEFW PGL
PRNEFW STA 12+94.40, EL=709.85
710
700
690
680
670
660
650
10+00
15+00
20+00
25+00

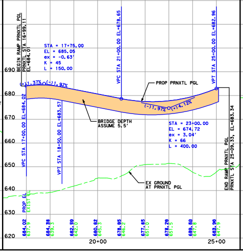
## SB ENTRANCE RAMP PRSEMK (40MPH)


STA = 16+25.00
EL = 710.23
ex = -0.48'
K = 44
L = 130.00
(-)3.00%
(-)5.95%
PROP PRSEMK PGL
BEGIN RAMP PRSEMK PGL
PRSEMK STA 15+55.11, EL=712.33
VPC STA 15+60.00 EL=712.18
VPT STA 16+90.00 EL=706.37
EX GROUND
AT PRSEMK PGL
VPC STA 20+90.00 EL=682.57
PROP EL
EXIST EL
710
700
690
680
670
660
650
640
630
620
15+00
20+00

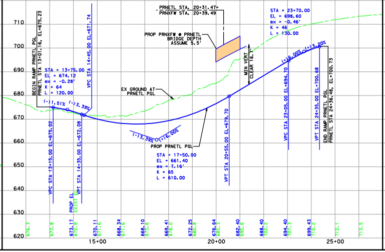
## NB ENTRANCE RAMP PRNESJ (40MPH)


STA = 14+00.00
EL = 703.59
ex = -0.43'
K = 65
L = 150.00
STA = 17+00.00
EL = 695.20
ex = 0.32'
K = 158
L = 200.00
PROP PRNESJ PGL
(-)0.50%
(-)2.80%
(-)2.80%
(-)1.53%
EX GROUND AT
PRNESJ PGL
BEGIN RAMP PRNESJ PGL
PRNESJ STA 13+17.58, EL=704.00
VPC STA 13+25.00 EL=703.96
VPT STA 14+75.00 EL=701.49
VPC STA 16+00.00 EL=698.00
VPT STA 18+00.00 EL=693.67
END RAMP PRNESJ PGL
PRNESJ STA 18+17.58, EL=693.40
PROP EL
EXIST EL
710
700
690
680
670
660
650
640
630
15+00
20+00

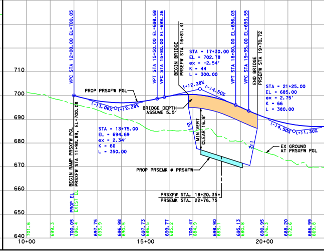
## NB EXIT RAMP PRNXTL (40MPH)

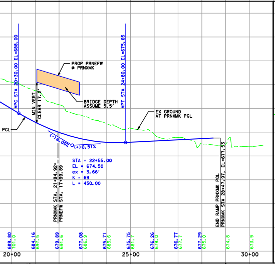

BEGIN RAMP PRNXTL PGL
PRNXTL STA 16+99.11
EL=684.01
STA = 17+75.00
EL = 685.05
ex = -0.63'
K = 45
L = 150.00
VPC STA 21+00.00 EL=678.65
VPT STA 25+00.00 EL=682.96
PROP PRNXTL PGL
(+)1.37%
(-)1.97%
(-)1.97%
(+)4.12%
BRIDGE DEPTH
ASSUME 5.5'
STA = 23+00.00
EL = 674.72
ex = 3.04'
K = 66
L = 400.00
VPC STA 17+00.00 EL=684.02
VPT STA 18+50.00 EL=683.57
EX GROUND
AT PRNXTL PGL
END RAMP PRNXTL PGL
PRNXTL STA 25+09.33, EL=683.34
PROP EL
EXIST EL
690
680
670
660
650
640
630
620
20+00
25+00

## NB ENTRANCE RAMP PRNETL (40MPH)

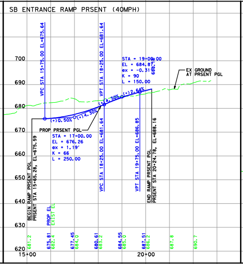

PRNETL STA. 20+31.47=
PRNXFW STA. 20+39.49
PROP PRNXFW @ PRNETL
BRIDGE DEPTH
ASSUME 5.5'
MIN VERT CLEAR 16.7'
STA = 23+70.00
EL = 698.60
ex = -0.46'
K = 46
L = 130.00
BEGIN RAMP PRNETL PGL
PRNETL STA 13+01.16, EL=675.23
STA = 13+75.00
EL = 674.12
ex = -0.28'
K = 64
L = 120.00
VPC STA 14+45.00 EL=671.74
(-)1.51%
(-)3.39%
(-)3.39%
(+)6.00%
(+)6.00%
(+)3.20%
EX GROUND AT
PRNETL PGL
PROP PRNETL PGL
STA = 17+50.00
EL = 661.40
ex = 7.16'
K = 65
L = 610.00
VPC STA 13+15.00 EL=675.02
VPT STA 14+35.00 EL=672.08
VPT STA 20+55.00 EL=679.70
VPC STA 23+05.00 EL=694.70
VPT STA 24+35.00 EL=700.68
END RAMP PRNETL PGL
PRNETL STA 24+36.48, EL=700.73
PROP EL
EXIST EL
710
700
690
680
670
660
650
640
630
620
15+00
20+00
25+00

## SB EXIT RAMP PRSXFW (40MPH)

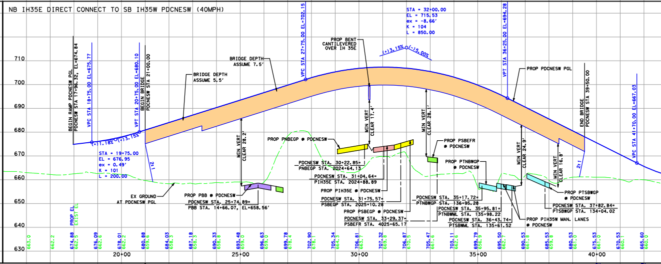

VPC STA 12+00.00 EL=700.05
VPT STA 15+50.00 EL=698.68
VPC STA 15+80.00 EL=699.36
BEGIN BRIDGE
PRSXFW STA 16+81.41
STA = 17+30.00
EL = 702.78
ex = -2.54'
K = 44
L = 300.00
VPT STA 18+80.00 EL=696.03
VPC STA 19+35.00 EL=693.55
END BRIDGE
PRSXFW STA 19+70.72
STA = 21+25.00
EL = 685.00
ex = 2.75'
K = 66
L = 380.00
PROP PRSXFW PGL
(-)3.06%
(+)2.28%
(+)2.28%
(-)4.50%
(-)4.50%
(+)1.30%
BRIDGE DEPTH
ASSUME 5.5'
MIN VERT CLEAR 16.8'
2:1
STA = 13+75.00
EL = 694.69
ex = 2.34'
K = 66
L = 350.00
EX GROUND
AT PRSXFW PGL
PROP PRSEMK @ PRSXFW
PRSXFW STA. 18+20.35=
PRSEMK STA. 22+76.75
BEGIN RAMP PRSXFW PGL
PRSXFW STA 11+98.89, EL=700.08
PROP EL
EXIST EL
710
700
690
680
670
660
650
640
10+00
15+00
20+00

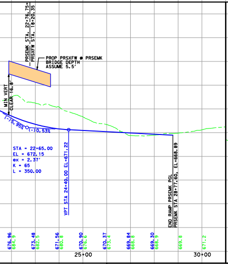

VPC STA 20+30.00 EL=688.00
VPT STA 24+80.00 EL=675.65
PROP PRNEFW ● PRNXMK
MIN VERT CLEAR 17.2'
BRIDGE DEPTH ASSUME 5.5'
EX GROUND AT PRNXMK PGL
PGL
(-)6.00%
(+)0.51%
STA = 22+55.00
EL = 674.50
ex = 3.66'
K = 69
L = 450.00
PRNXMK STA. 21+94.92=
PRNEFW STA. 17+99.89
END RAMP PRNXMK PGL
PRNXMK STA 28+47.97, EL=677.53
20+00
25+00
30+00

## SB ENTRANCE RAMP PRSENT (40MPH)

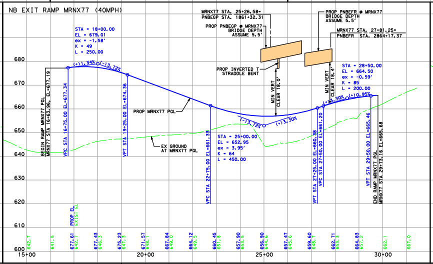

700
690
680
670
660
650
640
630
620
VPC STA 15+75.00 EL=675.64
VPT STA 18+25.00 EL=681.64
STA = 19+00.00
EL = 684.87
ex = -0.31'
K = 90
L = 150.00
EX GROUND AT PRSENT PGL
(+)0.50%
(+)4.30%
(+)2.64%
PROP PRSENT PGL
STA = 17+00.00
EL = 676.26
ex = 1.19'
K = 66
L = 250.00
BEGIN RAMP PRSENT PGL
PRSENT STA 15+65.28, EL=675.59
VPC STA 18+25.00 EL=681.64
VPT STA 19+75.00 EL=686.85
END RAMP PRSENT PGL
PRSENT STA 20+24.78, EL=688.16
PROP EL
EXIST EL
15+00
20+00

## NB IH35E DIRECT CONNECT TO SB IH35W PDCNESW (40MPH)

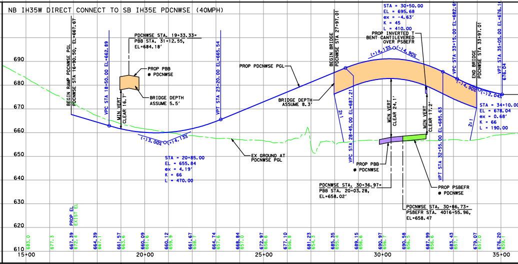

710
700
690
680
670
660
650
640
630
BEGIN RAMP PDCNESW PGL
PDCNESW STA 17+96.32, EL=674.84
VPC STA 18+75.00 EL=675.77
VPT STA 20+75.00 EL=680.10
BEGIN BRIDGE
PDCNESW STA 21+00.00
(+)1.18%
(+)3.15%
STA = 19+75.00
EL = 676.95
ex = 0.49'
K = 101
L = 200.00
2:1
BRIDGE DEPTH ASSUME 5.5'
BRIDGE DEPTH ASSUME 7.5'
VPC STA 27+75.00 EL=702.15
PROP BENT CANTILEVERED OVER IH 35E
STA = 32+00.00
EL = 715.53
ex = -8.66'
K = 104
L = 850.00
(+)3.15%
(-)5.00%
VPT STA 36+25.00 EL=694.28
PROP PDCNESW PGL
END BRIDGE
PDCNESW STA 39+50.00
VPC STA 41+70.00 EL=667.03
MIN VERT CLEAR 28.2'
MIN VERT CLEAR 17.4'
MIN VERT CLEAR 28.1'
MIN VERT CLEAR 24.9'
MIN VERT CLEAR 16.8'
PROP PNBEGP ● PDCNESW
PROP PSBEFR ● PDCNESW
PROP PTNBWGP ● PDCNESW
PROP PTSBWGP ● PDCNESW
PROP PIH35W MAN. LANES ● PDCNESW
EX GROUND AT PDCNESW PGL
PROP PBB ● PDCNESW
PDCNESW STA. 25+74.89=
PBB STA. 14+66.07, EL=658.56'
PDCNESW STA. 30+22.85=
PNBEGP STA. 2024+64.13
PDCNESW STA. 31+04.64=
PIH35E STA. 2024+88.89
PROP PIH35E ● PDCNESW
PDCNESW STA. 31+75.57=
PSBEGP STA. 2025+10.28
PROP PSBEGP ● PDCNESW
PDCNESW STA. 33+29.37=
PSBEFR STA. 4025+65.17
PDCNESW STA. 35+17.72=
PTNBWGP STA. 136+95.28
PDCNESW STA. 35+95.81=
PTNBWML STA. 135+98.22
PDCNESW STA. 36+43.74=
PTSBWML STA. 135+61.52
PDCNESW STA. 37+82.84=
PTSBWGP STA. 134+04.02
2:1
PROP EL
EXIST EL
20+00
25+00
30+00
35+00
40+00

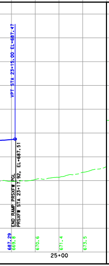

PRSEMK STA. 22+76.75=
PRSXFW STA. 18+20.35
PROP PRSXFW ● PRSEMK
BRIDGE DEPTH ASSUME 5.5'
MIN VERT CLEAR 16.8'
(-)5.95%
(-)0.53%
STA = 22+65.00
EL = 672.15
ex = 2.37'
K = 65
L = 350.00
VPT STA 24+40.00 EL=671.22
END RAMP PRSEMK PGL
PRSEMK STA 28+77.60, EL=668.89
25+00
30+00

## NB EXIT RAMP MRNX77 (40MPH)

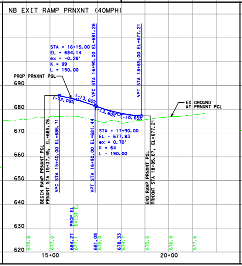

680
670
660
650
640
630
620
610
600
STA = 18+00.00
EL = 679.01
ex = -1.58'
K = 49
L = 250.00
(+)1.34%
(-)3.72%
BEGIN RAMP MRNX77 PGL
MRNX77 STA 16+63.96, EL=677.19
VPC STA 16+75.00 EL=677.34
VPT STA 19+25.00 EL=674.36
PROP MRNX77 PGL
EX GROUND AT MRNX77 PGL
MRNX77 STA. 25+26.58=
PNBEGP STA. 1861+32.31
PROP PNBEGP ● MRNX77
BRIDGE DEPTH ASSUME 5.5'
PROP PNBEFR ● MRNX77
BRIDGE DEPTH ASSUME 5.5'
MRNX77 STA. 27+81.25=
PNBEFR STA. 2864+17.37
PROP INVERTED T STRADDLE BENT
MIN VERT CLEAR 18.0'
MIN VERT CLEAR 18.4'
(-)3.72%
(+)3.30%
(+)3.30%
(+)0.95%
STA = 25+00.00
EL = 652.95
ex = 3.95'
K = 64
L = 450.00
STA = 28+50.00
EL = 664.50
ex = -0.59'
K = 85
L = 200.00
VPC STA 22+75.00 EL=661.35
VPT STA 27+25.00 EL=660.38
VPC STA 27+50.00 EL=661.20
VPT STA 29+50.00 EL=665.46
END RAMP MRNX77 PGL
MRNX77 STA 29+73.16 EL=665.68
PROP EL
EXIST EL
15+00
20+00
25+00
30+00

## NB IH35W DIRECT CONNECT TO SB IH35E PDCNWSE (40MPH)

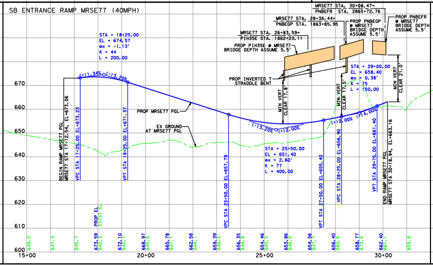

690
680
670
660
650
640
630
620
610
BEGIN RAMP PDCNWSE PGL
PDCNWSE STA 16+90.50, EL=667.67
VPC STA 18+50.00 EL=662.89
PDCNWSE STA. 19+33.33=
PBB STA. 31+12.55,
EL=684.18'
PROP PBB ● PDCNWSE
BRIDGE DEPTH ASSUME 5.5'
MIN VERT CLEAR 16.7'
VPT STA 23+20.00 EL=665.54
(-)3.00%
(+)4.13%
STA = 20+85.00
EL = 655.84
ex = 4.19'
K = 66
L = 470.00
EX GROUND AT PDCNWSE PGL
PROP PDCNWSE PGL
BRIDGE DEPTH ASSUME 8.3'
BEGIN BRIDGE
PDCNWSE STA 27+97.01
STA = 30+50.00
EL = 695.68
ex = -4.63'
K = 45
L = 410.00
PROP INVERTED T BENT CANTILEVERED OVER PSBEFR
(+)4.13%
(-)4.90%
(-)4.90%
(-)2.04%
VPC STA 28+45.00 EL=687.21
MIN VERT CLEAR 24.1'
MIN VERT CLEAR 17.2'
VPT STA 32+55.00 EL=685.63
VPC STA 33+15.00 EL=682.61
END BRIDGE
PDCNWSE STA 33+97.01
VPT STA 35+05.00 EL=676.11
STA = 34+10.00
EL = 678.04
ex = 0.68'
K = 66
L = 190.00
2:1
2:1
PROP PBB ● PDCNWSE
PROP PSBEFR ● PDCNWSE
PDCNWSE STA. 30+36.97=
PBB STA. 20+03.28,
EL=658.02'
PDCNWSE STA. 30+86.73=
PSBEFR STA. 4016+55.96,
EL=658.47
PROP EL
EXIST EL
15+00
20+00
25+00
30+00
35+00


VPT STA 23+15.00 EL=687.47
END RAMP PRSXFW PGL
PRSXFW STA 23+17.92, EL=687.51
25+00

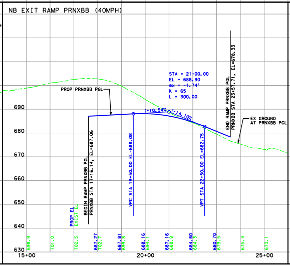
## NB EXIT RAMP PRNXNT (40MPH)


690
680
670
660
650
640
630
620
STA = 16+15.00
EL = 684.14
ex = -0.28'
K = 99
L = 150.00
PROP PRNXNT PGL
(-)2.09%
(-)3.60%
(-)3.60%
(-)0.65%
EX GROUND AT PRNXNT PGL
VPC STA 16+95.00 EL=681.26
VPT STA 18+85.00 EL=677.21
STA = 17+90.00
EL = 677.83
ex = 0.70'
K = 64
L = 190.00
BEGIN RAMP PRNXNT PGL
PRNXNT STA 15+37.45, EL=685.76
VPC STA 15+40.00 EL=685.71
VPT STA 16+90.00 EL=681.44
END RAMP PRNXNT PGL
PRNXNT STA 18+85.67, EL=677.21
PROP EL
EXIST EL
15+00
20+00

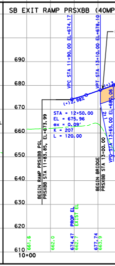
## SB ENTRANCE RAMP MRSE77 (40MPH)

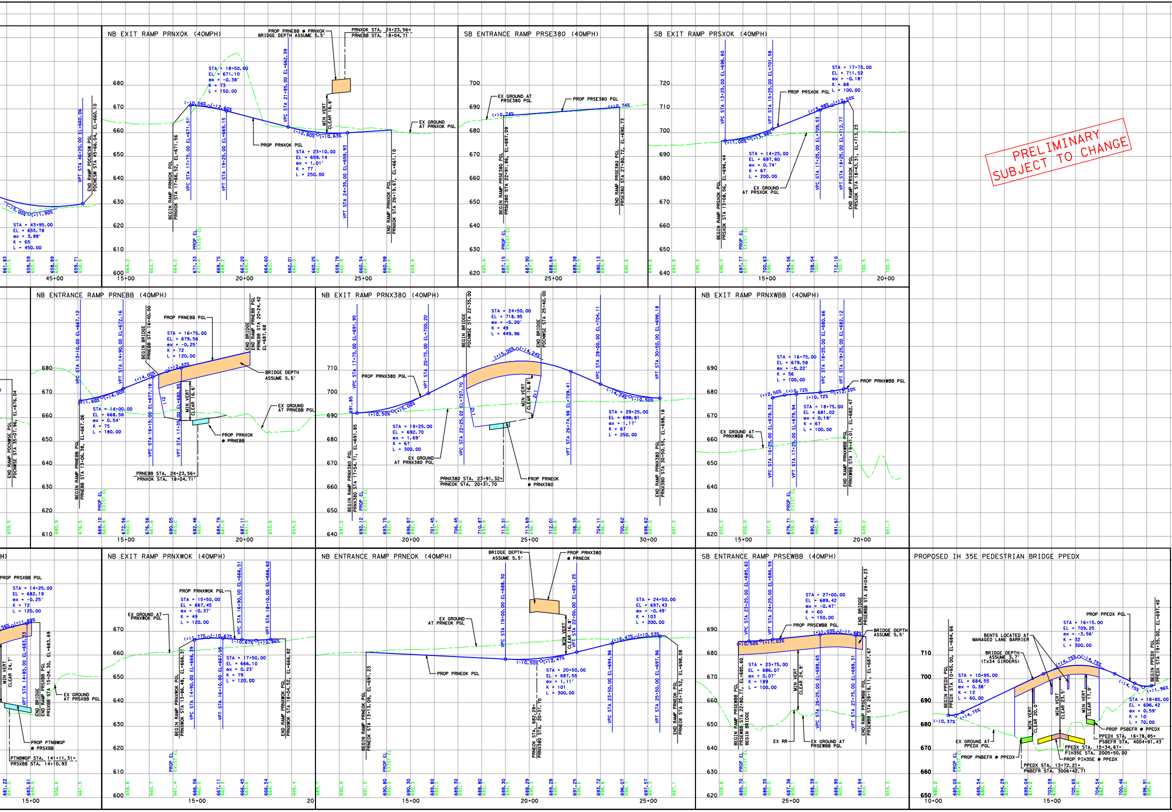

670
660
650
640
630
620
610
600
STA = 18+25.00
EL = 674.57
ex = -1.13'
K = 44
L = 200.00
(+)1.34%
(-)3.20%
BEGIN RAMP MRSE77 PGL
MRSE77 STA 17+12.54, EL=673.06
VPC STA 17+25.00 EL=673.23
VPT STA 19+25.00 EL=671.37
PROP MRSE77 PGL
EX GROUND AT MRSE77 PGL
VPC STA 23+50.00 EL=657.79
MRSE77 STA. 26+83.59=
PIH35E STA. 1862+23.11
PROP PIH35E ● MRSE77
BRIDGE DEPTH ASSUME 5.5'
MRSE77 STA. 28+36.44=
PNBEGP STA. 1863+85.95
PROP PNBEGP ● MRSE77
BRIDGE DEPTH ASSUME 5.5'
MRSE77 STA. 30+08.47=
PNBEFR STA. 2865+72.76
PROP PNBEFR ● MRSE77
BRIDGE DEPTH ASSUME 5.5'
PROP INVERTED T STRADDLE BENT
MIN VERT CLEAR 17.8'
MIN VERT CLEAR 17.5'
MIN VERT CLEAR 21.0'
(-)3.20%
(+)2.00%
(+)2.00%
(+)4.00%
STA = 25+50.00
EL = 651.40
ex = 2.60'
K = 77
L = 400.00
STA = 29+00.00
EL = 658.40
ex = 0.38'
K = 75
L = 150.00
VPT STA 27+50.00 EL=655.40
VPC STA 28+25.00 EL=656.90
VPT STA 29+75.00 EL=661.40
END RAMP MRSE77 PGL
MRSE77 STA 30+18.94, EL=663.16
PROP EL
EXIST EL
15+00
20+00
25+00
30+00

## NB EXIT RAMP PRNXBB (40MPH)


690
680
670
660
650
640
630
PROP PRNXBB PGL
STA = 21+00.00
EL = 688.90
ex = -1.74'
K = 65
L = 300.00
(+)0.54%
(-)4.10%
EX GROUND AT PRNXBB PGL
BEGIN RAMP PRNXBB PGL
PRNXBB STA 17+16.14, EL=687.06
VPC STA 19+50.00 EL=688.08
VPT STA 22+50.00 EL=682.75
END RAMP PRNXBB PGL
PRNXBB STA 23+57.71, EL=678.33
PROP EL
EXIST EL
15+00
20+00
25+00

## SB EXIT RAMP PRSXBB (40M


690
680
670
660
650
640
630
620
610
VPC STA 11+90.00 EL=674.17
VPT STA 13+10.00 EL=678.10
(+)2.98%
STA = 12+50.00
EL = 675.96
ex = 0.09'
K = 207
L = 120.00
BEGIN RAMP PRSXBB PGL
PRSXBB STA 11+83.85, EL=673.99
BEGIN BRIDGE
PRSXBB STA 13+00.00
PROP EL
EXIST EL
10+00


NB EXIT RAMP PRNXOK (40MPH)
PROP PRNEBB @ PRNXOK BRIDGE DEPTH ASSUME 5.5'
PRNXOK STA. 24+23.56= PRNEBB STA. 18+04.71
STA = 18+50.00 EL = 671.10 ex = -0.38' K = 73 L = 150.00
STA = 23+10.00 EL = 659.14 ex = 1.01' K = 77 L = 250.00
MIN VERT CLEAR 16.6'
EX GROUND AT PRNXOK PGL
PROP PRNXOK PGL
BEGIN RAMP PRNXOK PGL PRNXOK STA 17+66.52, EL=671.56
END RAMP PRNXOK PGL PRNXOK STA 26+19.67, EL=661.10
STA = 43+95.00 EL = 655.78 ex = 3.88' K = 65 L = 450.00
END RAMP PDCNESW PGL PDCNESW STA 45+66.04, EL=660.10
SB ENTRANCE RAMP PRSE380 (40MPH)
EX GROUND AT PRSE380 PGL
PROP PRSE380 PGL
BEGIN RAMP PRSE380 PGL PRSE380 STA 22+91.86, EL=687.09
END RAMP PRSE380 PGL PRSE380 STA 27+80.72, EL=690.73
SB EXIT RAMP PRSXOK (40MPH)
STA = 17+75.00 EL = 711.52 ex = -0.18' K = 68 L = 100.00
PROP PRSXOK PGL
STA = 14+25.00 EL = 697.60 ex = 0.74' K = 67 L = 200.00
EX GROUND AT PRSXOK PGL
BEGIN RAMP PRSXOK PGL PRSXOK STA 13+08.56, EL=696.44
END RAMP PRSXOK PGL PRSXOK STA 18+43.31, EL=713.23
NB ENTRANCE RAMP PRNEBB (40MPH)
PROP PRNEBB PGL
STA = 16+75.00 EL = 679.56 ex = -0.25' K = 72 L = 120.00
BEGIN BRIDGE PRNEBB STA 16+40.00
END BRIDGE END RAMP PRNEBB PGL PRNEBB STA 20+24.42 EL=687.68
BRIDGE DEPTH ASSUME 5.5'
STA = 14+00.00 EL = 668.56 ex = 0.54' K = 75 L = 180.00
EX GROUND AT PRNEBB PGL
PROP PRNXOK @ PRNEBB
PRNEBB STA. 24+23.56= PRNXOK STA. 18+04.71'
BEGIN RAMP PRNEBB PGL PRNEBB STA 13+06.38, EL=667.06
END RAMP PDCNWSE PGL PDCNWSE STA 35+07.96, EL=676.04
NB EXIT RAMP PRNX380 (40MPH)
PROP PRNX380 PGL
BEGIN BRIDGE PDCNWSE STA 22+35.00
END BRIDGE PDCNWSE STA 25+40.00
STA = 24+50.00 EL = 718.95 ex = -5.20' K = 49 L = 449.96
STA = 19+25.00 EL = 692.70 ex = 1.69' K = 67 L = 300.00
EX GROUND AT PRNX380 PGL
STA = 29+25.00 EL = 698.81 ex = 1.17' K = 67 L = 250.00
MIN VERT CLEAR 16.8'
PRNX380 STA. 23+91.32= PRNEOK STA. 20+31.70
PROP PRNEOK @ PRNX380
BEGIN RAMP PRNX380 PGL PRNX380 STA 17+54.71, EL=691.85
END RAMP PRNX380 PGL PRNX380 STA 30+50.55, EL=698.18
NB EXIT RAMP PRNXWBB (40MPH)
STA = 16+75.00 EL = 679.58 ex = -0.22' K = 56 L = 100.00
PROP PRNXWBB PGL
STA = 18+75.00 EL = 681.02 ex = 0.19' K = 67 L = 100.00
EX GROUND AT PRNXWBB PGL
END RAMP PRNXWBB PGL PRNXWBB STA 19+41.01, EL=682.47
PROP PRSXBB PGL
STA = 14+25.00 EL = 682.19 ex = -0.25' K = 72 L = 120.00
MIN VERT CLEAR 24.7'
EX GROUND AT PRSXBB PGL
END BRIDGE END RAMP PRSXBB PGL PRSXBB STA 15+04.30, EL=683.69
PROP PTNBWGP @ PRSXBB
PTNBWGP STA. 141+11.31= PRSXBB STA. 14+10.93
NB EXIT RAMP PRNXWOK (40MPH)
PROP PRNXWOK PGL
STA = 15+50.00 EL = 667.45 ex = -0.37' K = 49 L = 120.00
EX GROUND AT PRNXWOK PGL
STA = 17+50.00 EL = 666.10 ex = 0.23' K = 79 L = 120.00
BEGIN RAMP PRNXWOK PGL PRNXWOK STA 13+86.48, EL=666.31
END RAMP PRNXWOK PGL PRNXWOK STA 18+04.52, EL=666.82
NB ENTRANCE RAMP PRNEOK (40MPH)
BRIDGE DEPTH ASSUME 5.5'
PROP PRNX380 @ PRNEOK
EX GROUND AT PRNEOK PGL
PROP PRNEOK PGL
MIN VERT CLEAR 16.8'
STA = 20+50.00 EL = 687.55 ex = 1.11' K = 101 L = 300.00
STA = 24+50.00 EL = 697.43 ex = -0.49' K = 103 L = 200.00
BEGIN RAMP PRNEOK PGL PRNEOK STA 13+15.09, EL=691.23
PRNEOK STA. 682.28= PRNX380 STA. 20+31.70
END RAMP PRNEOK PGL PRNEOK STA 25+73.52, EL=698.08
SB ENTRANCE RAMP PRSEWBB (40MPH)
STA = 27+00.00 EL = 689.42 ex = -0.47' K = 60 L = 150.00
PROP PRSEWBB PGL
END BRIDGE PRSEWBB STA 28+04.23
BRIDGE DEPTH ASSUME 5.5'
STA = 23+75.00 EL = 686.07 ex = 0.07' K = 189 L = 100.00
MIN VERT CLEAR 24.9'
EX RR
EX GROUND AT PRSEWBB PGL
BEGIN RAMP PRSEWBB PGL PRSEWBB STA 22+80.77, EL=685.60 BEGIN BRIDGE
END RAMP PRSEWBB PGL PRSEWBB STA 28+18.11, EL=687.67
PROPOSED IH 35E PEDESTRIAN BRIDGE PPEDX
PROP PPEDX PGL
STA = 16+15.00 EL = 709.25 ex = -3.56' K = 32 L = 300.00
BENTS LOCATED AT MANAGED LANE BARRIER
BRIDGE DEPTH ASSUME 3.7' (Tx34 GIRDERS)
STA = 10+95.00 EL = 684.55 ex = 0.38' K = 12 L = 60.00
STA = 18+85.00 EL = 696.42 ex = 0.59' K = 10 L = 70.00
MIN VERT CLEAR 20.0'
MIN VERT CLEAR 23.5'
MIN VERT CLEAR 17.9'
PROP PSBEFR @ PPEDX
PPEDX STA. 16+78.85= PSBEFR STA. 4004+91.43
PPEDX STA. 15+34.67= PIH35E STA. 2005+50.00
PROP PIH35E @ PPEDX
PROP PNBEFR @ PPEDX
PPEDX STA. 13+72.21= PNBEFR STA. 3006+42.71
EX GROUND AT PPEDX PGL
BEGIN PPEDX PGL PPEDX STA 10+65.00, EL=684.66
BEGIN PPEDX PGL PPEDX STA 19+35.00, EL=697.40
PROP EL
EXIST EL

PRELIMINARY SUBJECT TO CHANGE

*Texas Department of Transportation*

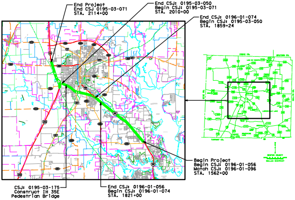
# Dallas District Design Schematic

William L. Hale, P.E., District Engineer

## IH 35E

From: FM 2181 S. in Corinth
To: US 380
Denton County
Functional Class: Interstate
Project Length: 10.45 Miles
CSJ's: 0196-01-056
0196-01-074
0195-03-050
0195-03-071
0195-03-075

Design Speed:
Mainlanes 70 mph
Managed Lanes 70 mph
Ramps 40 mph
IH 35W Connections to IH 35 60 mph
Direct Connecting Ramps PDCNWSE & PDCNESW 40 mph
U-Turns 20 mph
Frontage Roads 40 mph
Cross Streets 30 mph


End Project
End CSJ 0195-03-071
STA. 2114+00
End CSJ: 0195-03-050
Begin CSJ: 0195-03-071
STA. 2010+00
End CSJ: 0196-01-074
Begin CSJ: 0195-03-050
STA. 1859+24
Begin Project
Begin CSJ: 0196-01-056
Match CSJ: 0196-01-096
STA. 1562+00
CSJ: 0195-03-175
Construct IH 35E
Pedestrian Bridge
End CSJ: 0196-01-056
Begin CSJ: 0196-01-074
STA. 1821+00

Scale:
Horizontal 1"=200'
Vertical 1"=20'

November 2010
Roll 13 of 13

Roll 13 of 13

SCHEMATIC PREPARED BY:

HALFF ASSOCIATES, INC.
REGISTRATION NUMBER 312

FOR INTERIM REVIEW ONLY
NOT FOR PERMITTING, BIDDING
OR CONSTRUCTION.

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11-24-2010
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