Texas Department of Transportation

TEXAS DEPARTMENT OF TRANSPORTATION

DALLAS DISTRICT
WILLIAM L. HALE, P.E., DISTRICT ENGINEER

DESIGN SCHEMATIC

US 75

FROM: SPRING CREEK PARKWAY
TO: SH 121 (SAM RAYBURN TOLLWAY)

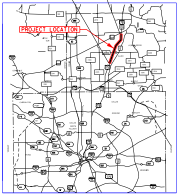
CSJ: 0047-06-139
PROJECT LENGTH: 6.51 MILES

ROADWAY TYPE	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAINLANES	55 MPH	URBAN FREEWAY
RAMPS	40 MPH	URBAN FREEWAY
LOOP RAMPS	20 MPH	URBAN COLLECTOR
FRONTAGE ROADS	40 MPH	URBAN COLLECTOR

COLLIN COUNTY
AUGUST 13, 2012
ROLL 6 OF 7

BEGIN PROJECT
US 75
STA 773+35.49
BEGIN CSJ:0047-06-139

END PROJECT
US 75
STA 1117+04.35
END CSJ:0047-06-139


PROJECT LOCATION

N.T.S.

SHEET INDEX

ROLL 1: US 75 MAINLANES
BEGIN PROJECT TO STA 840+00

ROLL 2: US 75 MAINLANES
STA 840+00 TO STA 920+00

ROLL 3: US 75 MAINLANES
STA 920+00 TO STA 999+00

ROLL 4: US 75 MAINLANES
STA 999+00 TO STA 1065+00

ROLL 5: US 75 MAINLANES
STA 1065+00 TO END PROJECT

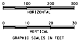
ROLL 6: RAMP PROFILES

ROLL 7: RAMP PROFILES
FRONTAGE ROAD PROFILES

JACOBS

PREPARED BY JACOBS ENGINEERING GROUP, INC.
REGISTRATION F-2966
UNDER THE SUPERVISION OF
SPENTA F. IRANI, P.E.

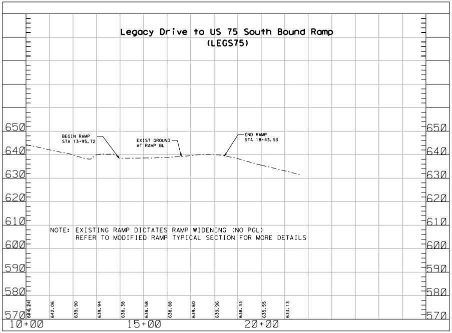
LICENSE NO. 81977


0
100
200
300
HORIZONTAL
0
10
20
30
VERTICAL
GRAPHIC SCALES IN FEET

Copyright © 2012 by Texas Department of Transportation; all rights reserved

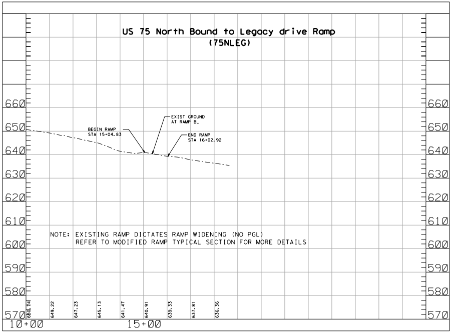
US 75: SPRING CREEK PKWY TO: SH 121 (SAM RAYBURN TOLLWAY) FILE: P:\WFXL5800 - US75\700CADD\720misc\Schematic\US75-SCHM_06.dgn DATE: 8/13/2012 TIME: 4:50:14 PM

Legacy Drive to US 75 South Bound Ramp
(LEGS75)



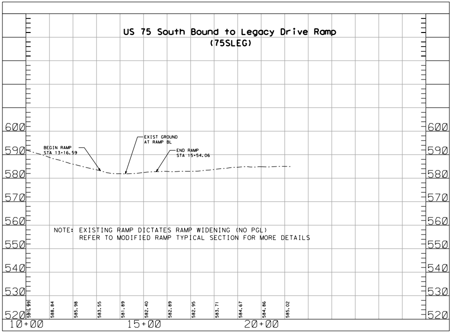
NOTE: EXISTING RAMP DICTATES RAMP WIDENING (NO PGL)
REFER TO MODIFIED RAMP TYPICAL SECTION FOR MORE DETAILS

US 75 North Bound to Legacy drive Ramp
(75NLEG)



NOTE: EXISTING RAMP DICTATES RAMP WIDENING (NO PGL)
REFER TO MODIFIED RAMP TYPICAL SECTION FOR MORE DETAILS

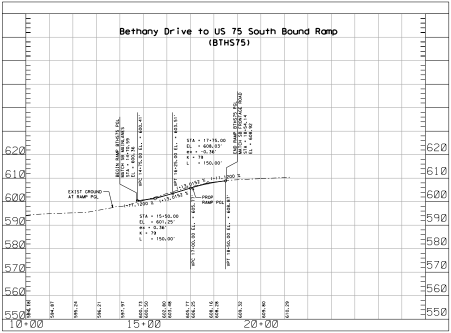
US 75 South Bound to Legacy Drive Ramp
(75SLEG)



BEGIN RAMP
STA 13+16.59
EXIST GROUND
AT RAMP BL
END RAMP
STA 15+54.06
600
590
580
570
560
550
540
530
520
581.99
588.84
585.98
583.55
581.89
582.40
582.89
582.95
583.71
584.67
584.86
585.02
10+00
15+00
20+00

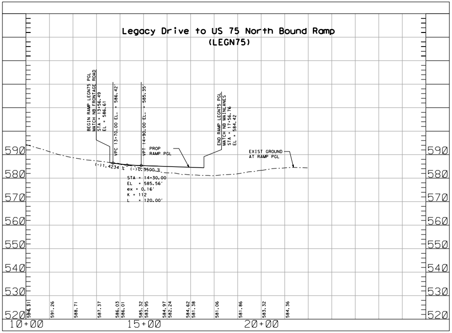
NOTE: EXISTING RAMP DICTATES RAMP WIDENING (NO PGL)
REFER TO MODIFIED RAMP TYPICAL SECTION FOR MORE DETAILS

Bethany Drive to US 75 South Bound Ramp
(BTHS75)



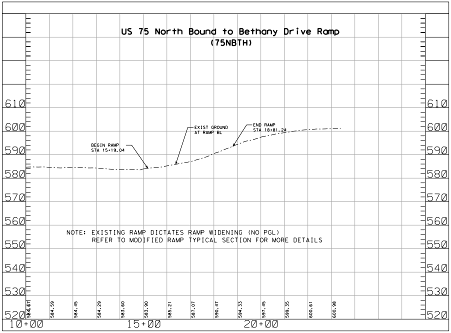
BEGIN RAMP BTHS75 PGL
MATCH SB MAINLANES
STA = 14+70.59
EL = 600.36
VPC 14+75.00 EL. = 600.41'
VPT 16+25.00 EL. = 603.51'
STA = 17+75.00
EL = 608.03'
ex = -0.36'
K = 79
L = 150.00'
END RAMP BTHS75 PGL
MATCH SB FRONTAGE ROAD
STA = 18+54.14
EL = 608.92
EXIST GROUND
AT RAMP PGL
(+)1.1200 %
(+)3.0152 %
(+)3.0152 %
(+)1.1200 %
PROP
RAMP PGL
STA = 15+50.00
EL = 601.25'
ex = 0.36'
K = 79
L = 150.00'
VPC 17+00.00 EL. = 605.77'
VPT 18+50.00 EL. = 608.87'
620
610
600
590
580
570
560
550
594.18
594.87
595.24
596.21
597.97
600.73
600.50
602.80
603.48
605.77
606.25
608.16
608.28
609.32
609.80
610.29
10+00
15+00
20+00

Legacy Drive to US 75 North Bound Ramp
(LEGN75)



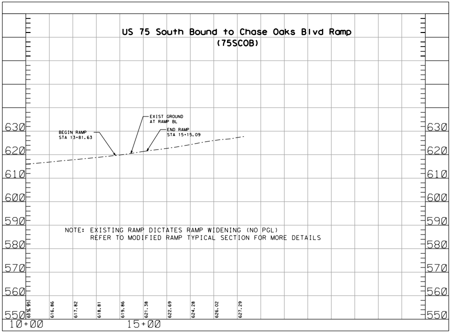
BEGIN RAMP LEGN75 PGL
MATCH NB FRONTAGE ROAD
STA = 13+56.49
EL = 586.61
VPC 13+70.00 EL. = 586.42'
VPT 14+90.00 EL. = 585.35'
PROP
RAMP PGL
END RAMP LEGN75 PGL
MATCH NB MAINLANES
STA = 17+56.76
EL = 584.42
EXIST GROUND
AT RAMP PGL
(-)1.4234 %
(-)0.3500 %
STA = 14+30.00
EL = 585.56'
ex = 0.16'
K = 112
L = 120.00'
590
580
570
560
550
540
530
520
594.31
591.26
588.71
587.37
586.03
586.01
585.32
583.95
584.97
582.24
584.62
581.38
581.06
581.86
583.32
584.36
10+00
15+00
20+00

US 75 North Bound to Bethany Drive Ramp
(75NBTH)

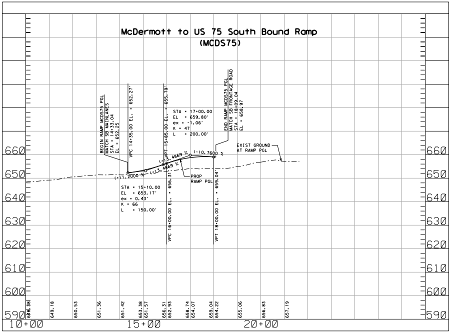


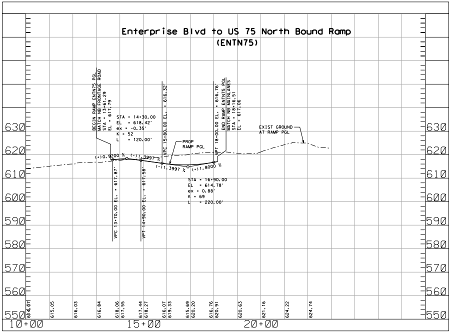
EXIST GROUND
AT RAMP BL
END RAMP
STA 18+81.24
BEGIN RAMP
STA 15+19.04
610
600
590
580
570
560
550
540
530
520
584.67
584.59
584.45
584.29
583.60
583.90
585.21
587.07
590.47
594.33
597.45
599.35
600.61
600.98
10+00
15+00
20+00

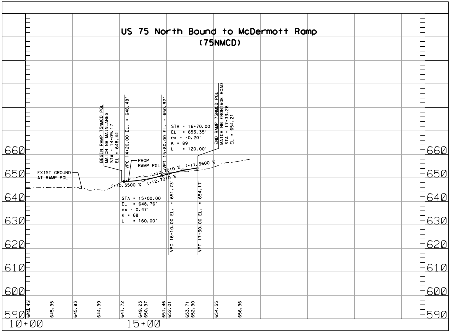
NOTE: EXISTING RAMP DICTATES RAMP WIDENING (NO PGL)
REFER TO MODIFIED RAMP TYPICAL SECTION FOR MORE DETAILS

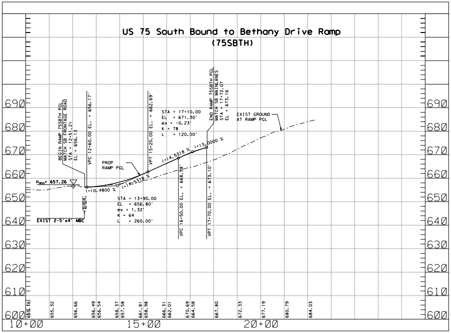

US 75 South Bound to Chase Oaks Blvd Ramp
(75SCOB)
EXIST GROUND
AT RAMP BL
BEGIN RAMP
STA 13+81.63
END RAMP
STA 15+15.09
630
620
610
600
590
580
570
560
550
615.95
616.86
617.82
618.81
619.86
621.38
622.69
624.28
626.02
627.29
10+00
15+00

NOTE: EXISTING RAMP DICTATES RAMP WIDENING (NO PGL)
REFER TO MODIFIED RAMP TYPICAL SECTION FOR MORE DETAILS


McDermott to US 75 South Bound Ramp
(MCDS75)
BEGIN RAMP MCDS75 PGL
MATCH SB MAINLANES
STA = 14+33.04
EL = 652.25
VPC 14+35.00 EL. = 652.27'
VPT 15+85.00 EL. = 655.79'
STA = 17+00.00
EL = 659.80'
ex = -1.06'
K = 47
L = 200.00'
END RAMP MCDS75 PGL
MATCH SB FRONTAGE ROAD
STA = 18+09.04
EL = 658.97
EXIST GROUND
AT RAMP PGL
(+)1.2000 %
(+)3.4869 %
(+)3.4869 %
(-)0.7600 %
PROP
RAMP PGL
STA = 15+10.00
EL = 653.17'
ex = 0.43'
K = 66
L = 150.00'
VPC 16+00.00 EL. = 656.31'
VPT 18+00.00 EL. = 659.04'
660
650
640
630
620
610
600
590
648.38
649.18
650.53
651.36
651.42
653.38
651.57
656.31
652.93
658.74
654.07
659.04
654.22
655.06
656.83
657.19
10+00
15+00
20+00

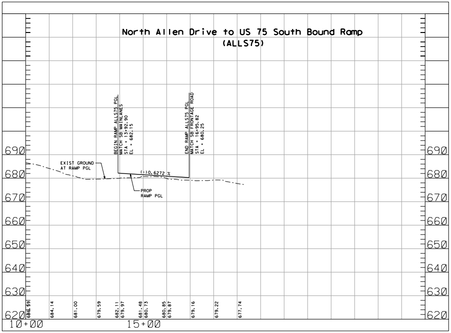

Enterprise Blvd to US 75 North Bound Ramp
(ENTN75)
BEGIN RAMP ENTN75 PGL
MATCH NB FRONTAGE ROAD
STA = 13+61.29
EL = 617.79
STA = 14+30.00
EL = 618.42'
ex = -0.35'
K = 52
L = 120.00'
VPC 15+80.00 EL. = 616.32'
VPT 18+00.00 EL. = 616.76'
END RAMP ENTN75 PGL
MATCH NB MAINLANES
STA = 18+16.51
EL = 617.06
EXIST GROUND
AT RAMP PGL
PROP
RAMP PGL
(+)0.9200 %
(-)1.3997 %
(-)1.3997 %
(+)1.8000 %
STA = 16+90.00
EL = 614.78'
ex = 0.88'
K = 69
L = 220.00'
VPC 13+70.00 EL. = 617.87'
VPT 14+90.00 EL. = 617.58'
630
620
610
600
590
580
570
560
550
614.07
615.05
616.03
616.84
618.06
617.55
617.44
618.27
616.07
619.33
615.69
620.20
616.76
620.91
620.63
621.16
624.22
624.74
10+00
15+00
20+00


US 75 North Bound to McDermott Ramp
(75NMCD)
BEGIN RAMP 75NMCD PGL
MATCH NB MAINLANES
STA = 14+09.17
EL = 648.44
VPC 14+20.00 EL. = 648.48'
PROP
RAMP PGL
VPT 15+80.00 EL. = 650.92'
STA = 16+70.00
EL = 653.35'
ex = -0.20'
K = 89
L = 120.00'
END RAMP 75NMCD PGL
MATCH NB FRONTAGE ROAD
STA = 17+33.26
EL = 654.21
EXIST GROUND
AT RAMP PGL
(+)0.3500 %
(+)2.7010 %
(+)2.7010 %
(+)1.3600 %
STA = 15+00.00
EL = 648.76'
ex = 0.47'
K = 68
L = 160.00'
VPC 16+10.00 EL. = 651.73'
VPT 17+30.00 EL. = 654.17'
660
650
640
630
620
610
600
590
645.45
645.95
645.83
644.99
647.72
649.23
650.97
651.46
652.01
653.71
652.90
654.55
656.96
10+00
15+00



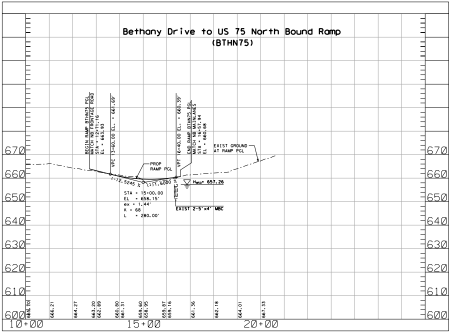
US 75 South Bound to Bethany Drive Ramp
(75SBTH)

BEGIN RAMP 75SBTH PGL
MATCH SB FRONTAGE ROAD
STA = 12+51.21
EL = 656.13
VPC 12+60.00 EL. = 656.17'
VPT 15+20.00 EL. = 662.69'
STA = 17+10.00
EL = 671.30'
ex = -0.23'
K = 78
L = 120.00'
END RAMP 75SBTH PGL
MATCH SB MAINLANES
STA = 17+72.07
EL = 673.16
EXIST GROUND
AT RAMP PGL
PROP
RAMP PGL
(+)4.5318 %
(+)3.0000 %
(+)4.5318 %
(+)0.4800 %
H_{050}= 657.26
EXIST 2-5'x4' MBC
STA = 13+90.00
EL = 656.80'
ex = 1.32'
K = 64
L = 260.00'
VPC 16+50.00 EL. = 668.98'
VPT 17+70.00 EL. = 673.10'
690
680
670
660
650
640
630
620
610
600
655.16
655.32
656.66
656.49
656.54
658.37
657.58
661.81
658.98
666.31
662.01
670.69
664.58
667.80
672.33
677.19
680.79
684.03
10+00
15+00
20+00



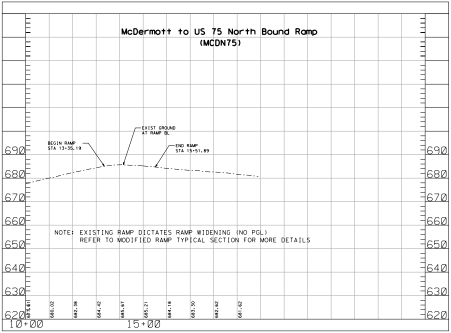
North Allen Drive to US 75 South Bound Ramp
(ALLS75)

BEGIN RAMP ALLS75 PGL
MATCH SB MAINLANES
STA = 13+92.90
EL = 682.15
END RAMP ALLS75 PGL
MATCH SB FRONTAGE ROAD
STA = 16+95.82
EL = 680.25
EXIST GROUND
AT RAMP PGL
(-)0.6272 %
PROP
RAMP PGL
690
680
670
660
650
640
630
620
686.59
684.14
681.00
679.59
682.11
679.97
681.48
680.73
680.85
679.87
679.16
679.22
677.74
10+00
15+00



Bethany Drive to US 75 North Bound Ramp
(BTHN75)

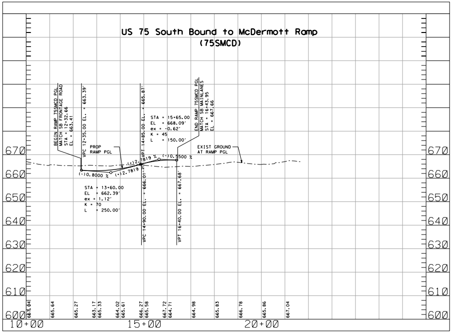
BEGIN RAMP BTHN75 PGL
MATCH NB FRONTAGE ROAD
STA = 12+71.16
EL = 663.93
VPC 13+60.00 EL. = 661.69'
VPT 16+40.00 EL. = 660.39'
END RAMP BTHN75 PGL
MATCH NB MAINLANES
STA = 16+57.94
EL = 660.68
EXIST GROUND
AT RAMP PGL
PROP
RAMP PGL
(-)2.5245 %
(+)1.6000 %
H_{050}= 657.26
EXIST 2-5'x4' MBC
STA = 15+00.00
EL = 658.15'
ex = 1.44'
K = 68
L = 280.00'
670
660
650
640
630
620
610
600
665.70
666.21
664.27
663.20
662.89
660.80
661.31
659.60
658.95
659.87
659.16
661.36
662.18
664.01
667.33
10+00
15+00
20+00



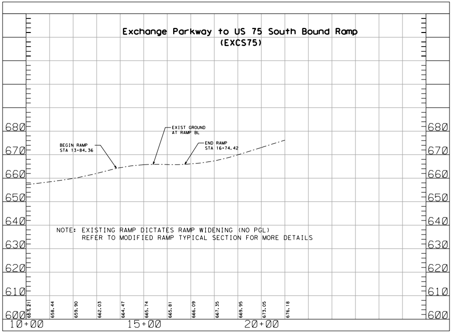
McDermott to US 75 North Bound Ramp
(MCDN75)

NOTE: EXISTING RAMP DICTATES RAMP WIDENING (NO PGL)
REFER TO MODIFIED RAMP TYPICAL SECTION FOR MORE DETAILS

BEGIN RAMP
STA 13+35.19
EXIST GROUND
AT RAMP BL
END RAMP
STA 15+51.89
690
680
670
660
650
640
630
620
677.61
680.02
682.38
684.42
685.67
685.21
684.18
683.30
682.62
681.62
10+00
15+00

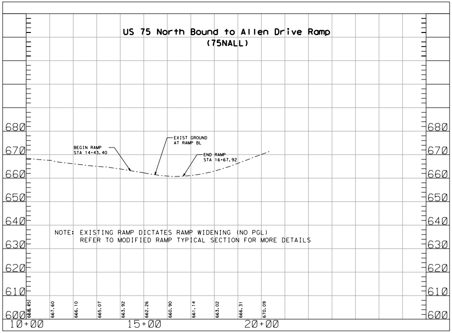


US 75 South Bound to McDermott Ramp
(75SMCD)



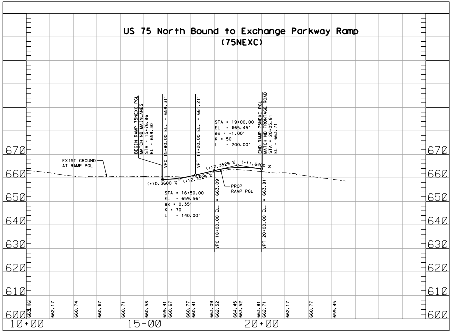
Exchange Parkway to US 75 South Bound Ramp
(EXCS75)

NOTE: EXISTING RAMP DICTATES RAMP WIDENING (NO PGL)
REFER TO MODIFIED RAMP TYPICAL SECTION FOR MORE DETAILS



US 75 North Bound to Allen Drive Ramp
(75NALL)

NOTE: EXISTING RAMP DICTATES RAMP WIDENING (NO PGL)
REFER TO MODIFIED RAMP TYPICAL SECTION FOR MORE DETAILS



US 75 North Bound to Exchange Parkway Ramp
(75NEXC)

TEXAS DEPARTMENT OF TRANSPORTATION

DALLAS DISTRICT
WILLIAM L. HALE, P.E., DISTRICT ENGINEER

DESIGN SCHEMATIC

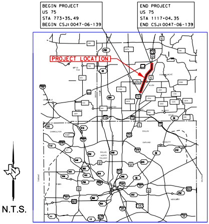
US 75

FROM: SPRING CREEK PARKWAY
TO: SH 121 (SAM RAYBURN TOLLWAY)

CSJ: 0047-06-139
PROJECT LENGTH: 6.51 MILES

ROADWAY TYPE	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAINLANES	55 MPH	URBAN FREEWAY
RAMPS	40 MPH	URBAN FREEWAY
LOOP RAMPS	20 MPH	URBAN COLLECTOR
FRONTAGE ROADS	40 MPH	URBAN COLLECTOR

COLLIN COUNTY
AUGUST 13, 2012
ROLL 6 OF 7


BEGIN PROJECT
US 75
STA 773+35.49
BEGIN CSJ:0047-06-139
END PROJECT
US 75
STA 1117+04.35
END CSJ:0047-06-139
PROJECT LOCATION
N.T.S.

SHEET INDEX

ROLL 1: US 75 MAINLANES
BEGIN PROJECT TO STA 840+00

ROLL 2: US 75 MAINLANES
STA 840+00 TO STA 920+00

ROLL 3: US 75 MAINLANES
STA 920+00 TO STA 999+00

ROLL 4: US 75 MAINLANES
STA 999+00 TO STA 1065+00

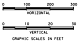
ROLL 5: US 75 MAINLANES
STA 1065+00 TO END PROJECT

ROLL 6: RAMP PROFILES

ROLL 7: RAMP PROFILES
FRONTAGE ROAD PROFILES

JACOBS

PREPARED BY JACOBS ENGINEERING GROUP, INC.
REGISTRATION F-2966
UNDER THE SUPERVISION OF
SPENTA F. IRANI, P.E.


0
100
200
300
HORIZONTAL
0
10
20
30
VERTICAL
GRAPHIC SCALES IN FEET

LICENSE NO. 81977

Copyright © 2012 by Texas Department of Transportation; all rights reserved

US 75: SPRING CREEK PKWY TO: SH 121 (SAM RAYBURN TOLLWAY) FILE: P:\WFXL5800 - US75\700CADD\720misc\Schematic\US75-SCHM_06.dgn DATE: 8/13/2012 TIME: 4:50:14 PM