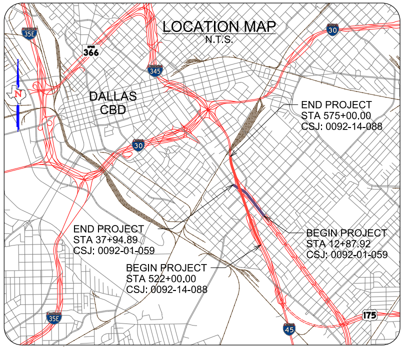
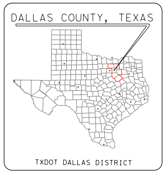
TEXAS DEPARTMENT OF TRANSPORTATION®
DALLAS DISTRICT
JAMES K. SELMAN, P.E., DISTRICT ENGINEER

# SH 310, I-45
# DESIGN SCHEMATIC
# SM WRIGHT PHASE IIB
FROM PENNSYLVANIA AVENUE
TO NORTH OF AL LIPSCOMB WAY
DALLAS COUNTY, TEXAS
CSJ: 0092-01-059, 0092-14-088

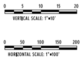
APRIL 2016
ROLL 2 OF 2

PROJECT LENGTH:	1.00 MILE
FUNCTIONAL CLASSIFICATION:	INTERSTATE AND URBAN ARTERIAL
AVERAGE DAILY TRAFFIC:	164,000 (2020) 220,600 (2040)
DESIGN SPEED	
I-45:	60 MPH
RAMPS:	40 MPH
FRONTAGE ROADS:	40 MPH
CROSS STREETS:	35 MPH
LOCAL CONNECTORS:	20 MPH


LOCATION MAP
N.T.S.
35E
366
345
30
DALLAS CBD
END PROJECT
STA 575+00.00
CSJ: 0092-14-088
END PROJECT
STA 37+94.89
CSJ: 0092-01-059
BEGIN PROJECT
STA 12+87.92
CSJ: 0092-01-059
BEGIN PROJECT
STA 522+00.00
CSJ: 0092-14-088
175
45
N


DALLAS COUNTY, TEXAS
TXDOT DALLAS DISTRICT

TEXAS COUNTY MAP
N.T.S.


0 5 10 15 20
VERTICAL SCALE: 1"=10'
0 50 100 150 200
HORIZONTAL SCALE: 1"=100'

PRELIMINARY

FOR INTERIM REVIEW ONLY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT INTENDED FOR REGULATORY APPROVAL, PERMIT, BIDDING OR CONSTRUCTION PURPOSES. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

NAME	P.E. NO.	DATE
JEREMY W. MCGAHAN	103650	06-30-2016
MARIA F. GUERRA	121650	06-30-2016

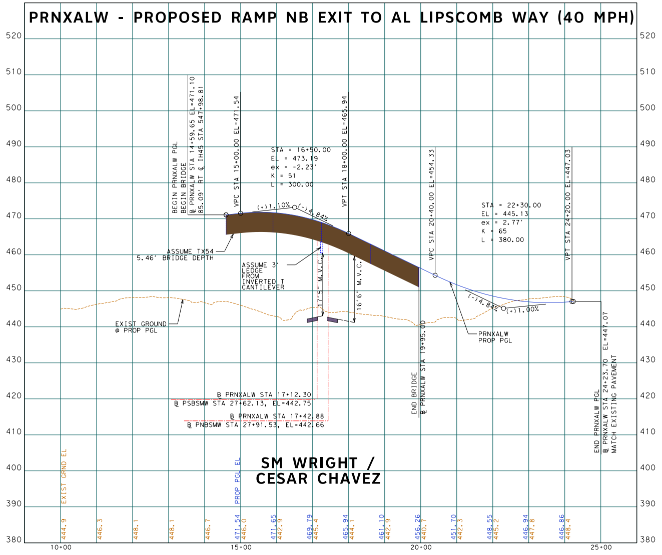
HALFF ASSOCIATES, INC.
TBPE FIRM #F-312

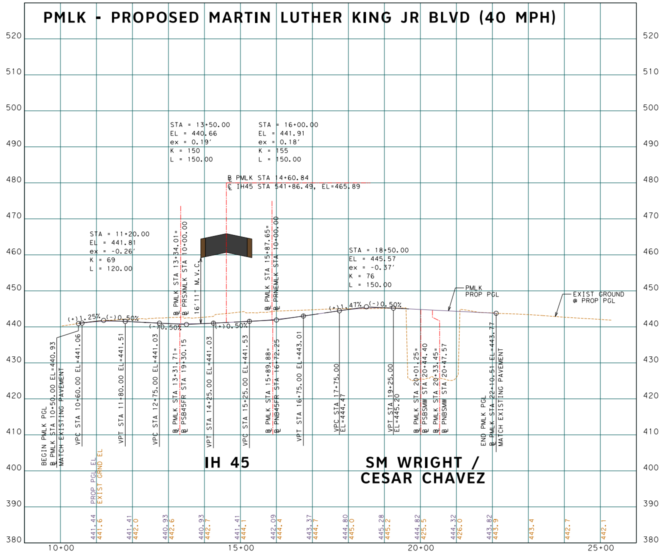
HALFF
1201 NORTH BOWSER ROAD
RICHARDSON, TEXAS 75081-2275
TEL (214) 346-6200
FAX (214) 739-0095

DATE SUBMITTED: JUNE 30, 2016

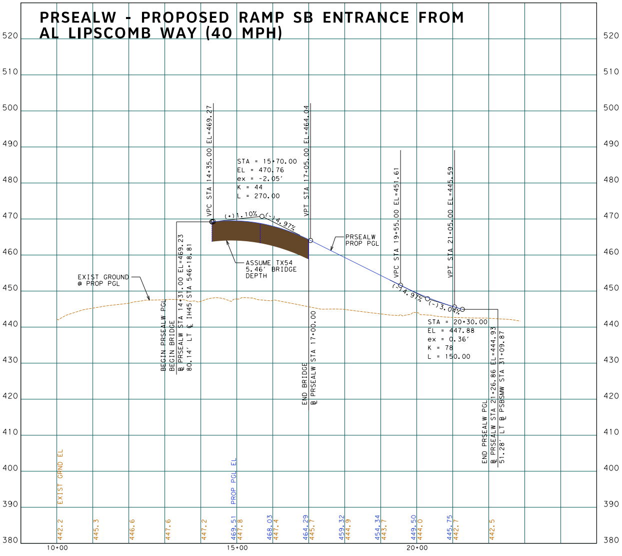
DATE APPROVED:

© 2016 by Texas Department of Transportation all rights reserved

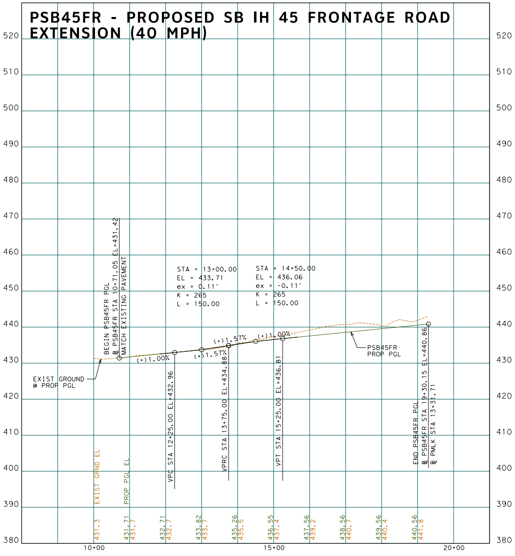

PRNXALW - PROPOSED RAMP NB EXIT TO AL LIPSCOMB WAY (40 MPH)
520
510
500
490
480
470
460
450
440
430
420
410
400
390
380
BEGIN PRNXALW PGL
BEGIN BRIDGE
℄ PRNXALW STA 14+59.65 EL=471.10
85.09' RT ℄ IH45 STA 547+98.81
VPC STA 15+00.00 EL=471.54
STA = 16+50.00
EL = 473.19
ex = -2.23'
K = 51
L = 300.00
(+)1.10%
(-)4.84%
VPT STA 18+00.00 EL=465.94
VPC STA 20+40.00 EL=454.33
STA = 22+30.00
EL = 445.13
ex = 2.77'
K = 65
L = 380.00
VPT STA 24+20.00 EL=447.03
ASSUME TX54
5.46' BRIDGE DEPTH
ASSUME 3' LEDGE FROM INVERTED T CANTILEVER
17'5" M.V.C.
16'6" M.V.C.
(-)4.84%
(+)1.00%
EXIST GROUND
@ PROP PGL
PRNXALW
PROP PGL
END BRIDGE
℄ PRNXALW STA 19+95.00
END PRNXALW PGL
℄ PRNXALW STA 24+23.70 EL=447.07
MATCH EXISTING PAVEMENT
℄ PRNXALW STA 17+12.30
℄ PSBSMW STA 27+62.13, EL=442.75
℄ PRNXALW STA 17+42.88
℄ PNBSMW STA 27+91.53, EL=442.66
SM WRIGHT /
CESAR CHAVEZ
EXIST GRND EL
PROP PGL EL
444.9
446.3
448.1
448.1
446.7
471.54
446.0
471.65
442.9
469.79
445.4
465.94
444.1
461.10
442.9
456.26
440.7
451.70
442.3
448.55
445.2
446.94
447.8
446.86
448.4
10+00
15+00
20+00
25+00


PMLK - PROPOSED MARTIN LUTHER KING JR BLVD (40 MPH)
520
510
500
490
480
470
460
450
440
430
420
410
400
390
380
STA = 13+50.00
EL = 440.66
ex = 0.19'
K = 150
L = 150.00
STA = 16+00.00
EL = 441.91
ex = 0.18'
K = 155
L = 150.00
℄ PMLK STA 14+60.84
℄ IH45 STA 541+86.49, EL=465.89
STA = 11+20.00
EL = 441.81
ex = -0.26'
K = 69
L = 120.00
STA = 18+50.00
EL = 445.57
ex = -0.37'
K = 76
L = 150.00
℄ PMLK STA 13+34.01=
℄ PRSXMLK STA 10+00.00
16'11" M.V.C.
℄ PMLK STA 15+87.65=
℄ PRNEMLK STA 10+00.00
PMLK
PROP PGL
EXIST GROUND
@ PROP PGL
(+)1.25%
(-)0.50%
(-)0.50%
(+)0.50%
(+)1.47%
(-)0.50%
BEGIN PMLK PGL
℄ PMLK STA 10+50.00 EL=440.93
MATCH EXISTING PAVEMENT
VPC STA 10+60.00 EL=441.06
VPT STA 11+80.00 EL=441.51
VPC STA 12+75.00 EL=441.03
℄ PMLK STA 13+31.71=
℄ PSB45FR STA 19+30.15
VPT STA 14+25.00 EL=441.03
VPC STA 15+25.00 EL=441.53
℄ PMLK STA 15+89.88=
℄ PNB45FR STA 16+72.25
VPT STA 16+75.00 EL=443.01
VPC STA 17+75.00
EL=444.47
VPT STA 19+25.00
EL=445.20
℄ PMLK STA 20+01.25=
℄ PSBSMW STA 20+44.40
℄ PMLK STA 20+33.45=
℄ PNBSMW STA 20+47.57
END PMLK PGL
℄ PMLK STA 22+10.51 EL=443.77
MATCH EXISTING PAVEMENT
IH 45
SM WRIGHT /
CESAR CHAVEZ
PROP PGL EL
EXIST GRND EL
441.44
441.6
441.41
442.0
440.93
442.6
440.93
442.7
441.41
444.1
442.09
444.4
443.37
444.7
444.80
445.0
445.28
445.2
444.82
425.5
444.32
426.0
443.82
443.9
443.4
442.7
442.1
10+00
15+00
20+00
25+00

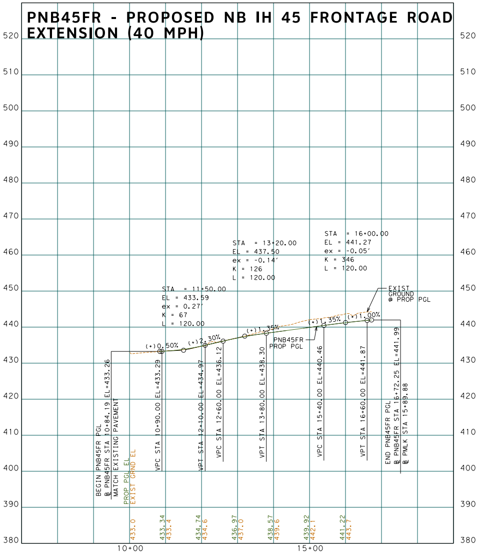
PRSEALW - PROPOSED RAMP SB ENTRANCE FROM AL LIPSCOMB WAY (40 MPH)


VPC STA 14+35.00 EL=469.27
STA = 15+70.00
EL = 470.76
ex = -2.05'
K = 44
L = 270.00
VPT STA 17+05.00 EL=464.04
(+)1.10%
(-)4.97%
PRSEALW PROP PGL
ASSUME TX54 5.46' BRIDGE DEPTH
EXIST GROUND @ PROP PGL
BEGIN PRSEALW PGL
BEGIN BRIDGE
PRSEALW STA 14+31.00 EL=469.23
80.14' LT IH45 STA 546+18.81
END BRIDGE
PRSEALW STA 17+00.00
VPC STA 19+55.00 EL=451.61
VPT STA 21+05.00 EL=445.59
(-)4.97%
(-)3.04%
STA = 20+30.00
EL = 447.88
ex = 0.36'
K = 78
L = 150.00
END PRSEALW PGL
PRSEALW STA 21+26.86 EL=444.93
51.28' LT PSBSMW STA 31+09.87
EXIST GRND EL
PROP PGL EL
442.2
445.3
446.6
447.6
447.2
469.51
447.8
468.03
447.4
464.29
445.7
459.32
444.9
454.34
443.7
449.50
444.0
445.75
442.7
442.5
10+00
15+00
20+00
380
390
400
410
420
430
440
450
460
470
480
490
500
510
520

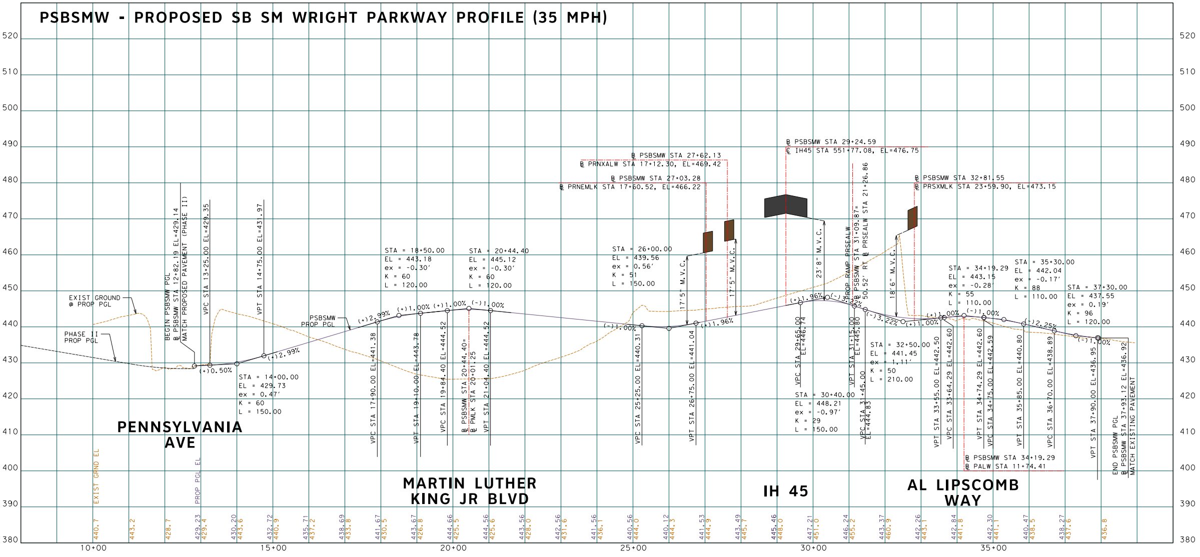
PSB45FR - PROPOSED SB IH 45 FRONTAGE ROAD EXTENSION (40 MPH)


BEGIN PSB45FR PGL
PSB45FR STA 10+71.05 EL=431.42
MATCH EXISTING PAVEMENT
EXIST GROUND @ PROP PGL
STA = 13+00.00
EL = 433.71
ex = 0.11'
K = 265
L = 150.00
STA = 14+50.00
EL = 436.06
ex = -0.11'
K = 265
L = 150.00
(+)1.00%
(+)1.57%
(+)1.57%
(+)1.00%
PSB45FR PROP PGL
VPC STA 12+25.00 EL=432.96
VPRC STA 13+75.00 EL=434.88
VPT STA 15+25.00 EL=436.81
END PSB45FR PGL
PSB45FR STA 19+30.15 EL=440.86
PMLK STA 13+31.71
EXIST GRND EL
PROP PGL EL
431.3
431.71
431.7
432.71
432.7
433.82
433.7
435.26
435.5
436.55
437.4
437.56
439.2
438.56
440.7
439.56
440.4
440.56
441.8
10+00
15+00
20+00

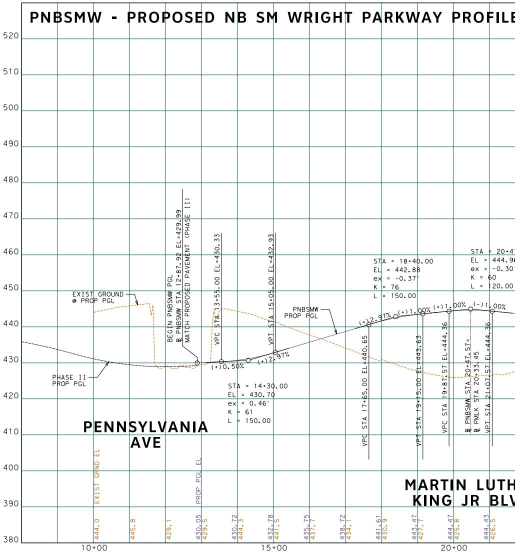
PNB45FR - PROPOSED NB IH 45 FRONTAGE ROAD EXTENSION (40 MPH)

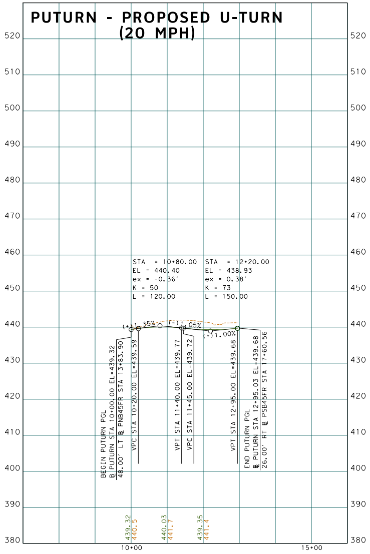

STA = 11+50.00
EL = 433.59
ex = 0.27'
K = 67
L = 120.00
STA = 13+20.00
EL = 437.50
ex = -0.14'
K = 126
L = 120.00
STA = 16+00.00
EL = 441.27
ex = -0.05'
K = 346
L = 120.00
EXIST GROUND @ PROP PGL
(+)0.50%
(+)2.30%
(+)1.35%
(+)1.35%
(+)1.00%
PNB45FR PROP PGL
BEGIN PNB45FR PGL
PNB45FR STA 10+84.19 EL=433.26
MATCH EXISTING PAVEMENT
VPC STA 10+90.00 EL=433.29
VPT STA 12+10.00 EL=434.97
VPC STA 12+60.00 EL=436.12
VPT STA 13+80.00 EL=438.30
VPC STA 15+40.00 EL=440.46
VPT STA 16+60.00 EL=441.87
END PNB45FR PGL
PNB45FR STA 16+72.25 EL=441.99
PMLK STA 15+89.88
PROP PGL EL
EXIST GRND EL
433.0
433.34
433.4
434.74
434.6
436.97
437.0
438.57
439.6
439.92
442.1
441.22
443.7
10+00
15+00

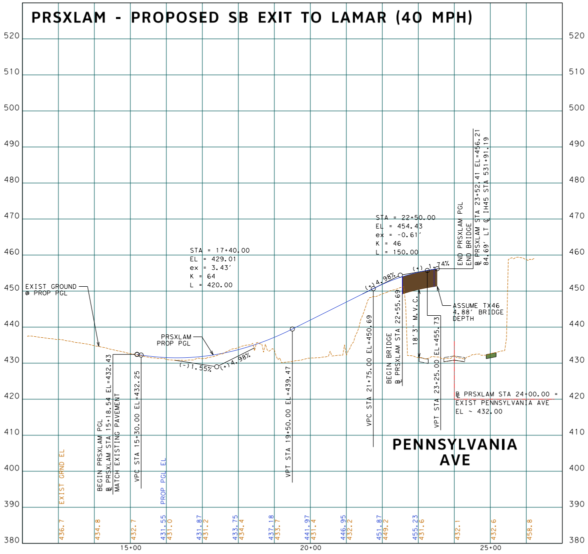
PSBSMW - PROPOSED SB SM WRIGHT PARKWAY PROFILE (35 MPH)

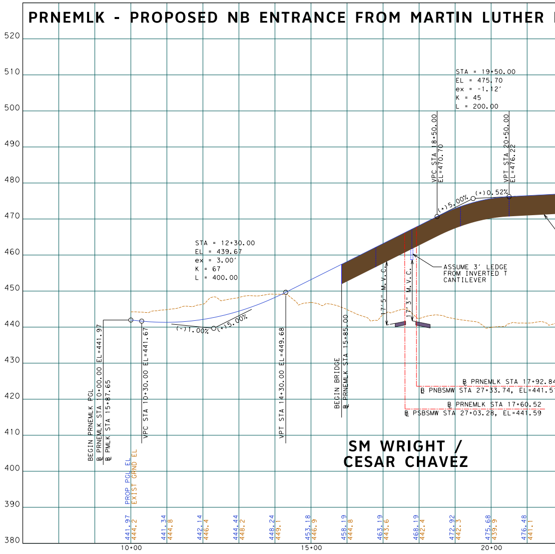

EXIST GROUND @ PROP PGL
PHASE II PROP PGL
BEGIN PSBSMW PGL
PSBSMW STA 12+82.19 EL=429.14
MATCH PROPOSED PAVEMENT (PHASE II)
VPC STA 13+25.00 EL=429.35
VPT STA 14+75.00 EL=431.97
(+)0.50%
(+)2.99%
STA = 14+00.00
EL = 429.73
ex = 0.47'
K = 60
L = 150.00
PSBSMW PROP PGL
(+)2.99%
(+)1.00%
(+)1.00%
(-)1.00%
STA = 18+50.00
EL = 443.18
ex = -0.30'
K = 60
L = 120.00
STA = 20+44.40
EL = 445.12
ex = -0.30'
K = 60
L = 120.00
VPC STA 17+90.00 EL=441.38
VPT STA 19+10.00 EL=443.78
VPC STA 19+84.40 EL=444.52
PSBSMW STA 20+44.40=
PMLK STA 20+01.25
VPT STA 21+04.40 EL=444.52
PENNSYLVANIA AVE
MARTIN LUTHER KING JR BLVD
PSBSMW STA 27+62.13
PRNXALW STA 17+12.30, EL=469.42
PSBSMW STA 27+03.28
PRNEMLK STA 17+60.52, EL=466.22
STA = 26+00.00
EL = 439.56
ex = 0.56'
K = 51
L = 150.00
(-)1.00%
(+)1.96%
17'5" M.V.C.
17'5" M.V.C.
VPC STA 25+25.00 EL=440.31
VPT STA 26+75.00 EL=441.04
PSBSMW STA 29+24.59
IH45 STA 551+77.08, EL=476.75
23'8" M.V.C.
(+)1.96%
(-)3.22%
PROP RAMP PRSEALW
PSBSMW STA 31+09.87=
50.52' RT PRSEALW STA 21+26.86
VPC STA 29+65.00 EL=446.74
VPT STA 31+15.00 EL=445.80
STA = 30+40.00
EL = 448.21
ex = -0.97'
K = 29
L = 150.00
VPC STA 31+45.00 EL=444.83
18'6" M.V.C.
(-)3.22%
(+)1.00%
STA = 32+50.00
EL = 441.45
ex = 1.11'
K = 50
L = 210.00
IH 45
PSBSMW STA 32+81.55
PRSXMLK STA 23+59.90, EL=473.15
(+)1.00%
(-)1.00%
(-)2.25%
(-)1.00%
STA = 34+19.29
EL = 443.15
ex = -0.28'
K = 55
L = 110.00
STA = 35+30.00
EL = 442.04
ex = -0.17'
K = 88
L = 110.00
STA = 37+30.00
EL = 437.55
ex = 0.19'
K = 96
L = 120.00
VPT STA 33+55.00 EL=442.50
VPC STA 33+64.29 EL=442.60
VPT STA 34+74.29 EL=442.60
VPC STA 34+75.00 EL=442.59
VPT STA 35+85.00 EL=440.80
VPC STA 36+70.00 EL=438.89
VPT STA 37+90.00 EL=436.95
END PSBSMW PGL
PSBSMW STA 37+93.12 EL=436.92
MATCH EXISTING PAVEMENT
PSBSMW STA 34+19.29
PALW STA 11+74.41
AL LIPSCOMB WAY
EXIST GRND EL
PROP PGL EL
440.7
443.2
428.7
429.23
429.4
430.20
443.6
432.72
440.9
435.71
437.2
438.69
433.8
441.67
430.5
443.67
426.8
444.66
425.5
444.56
425.6
443.56
428.0
442.56
431.6
441.56
436.1
440.56
444.0
440.12
444.3
441.53
444.9
443.49
445.7
445.46
448.0
447.21
451.0
446.24
455.2
443.37
460.9
442.26
443.1
442.84
441.8
442.30
441.1
440.47
438.5
438.27
437.6
436.8
10+00
15+00
20+00
25+00
30+00
35+00

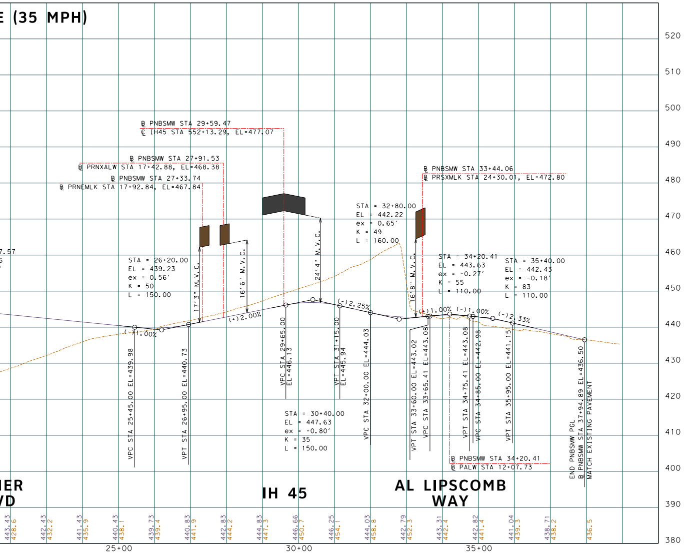
PNBSMW - PROPOSED NB SM WRIGHT PARKWAY PROFILE

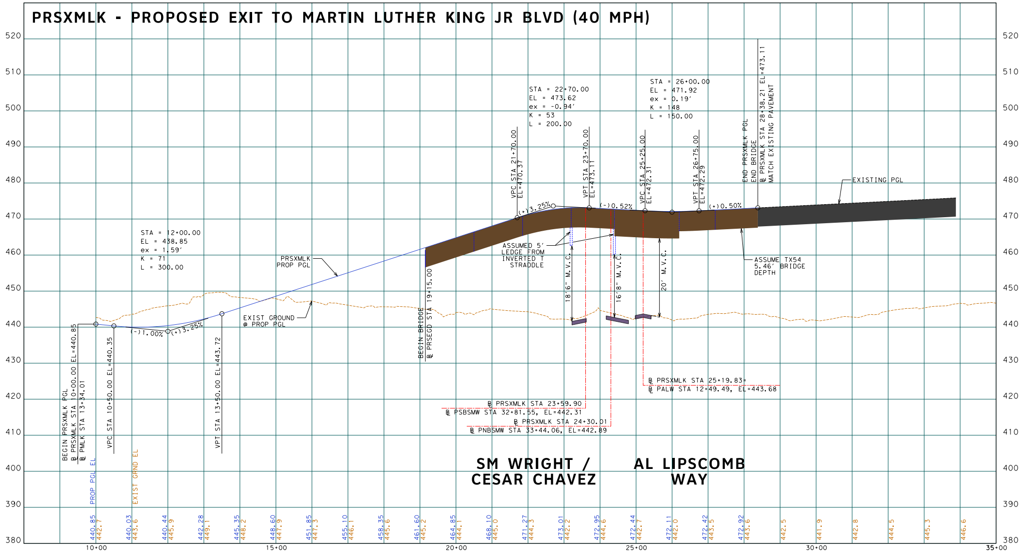

EXIST GROUND @ PROP PGL
PHASE II PROP PGL
BEGIN PNBSMW PGL
PNBSMW STA 12+87.92 EL=429.99
MATCH PROPOSED PAVEMENT (PHASE II)
VPC STA 13+55.00 EL=430.33
VPT STA 15+05.00 EL=432.93
(+)0.50%
(+)2.97%
STA = 14+30.00
EL = 430.70
ex = 0.46'
K = 61
L = 150.00
PNBSMW PROP PGL
(+)2.97%
(+)1.00%
(+)1.00%
(-)1.00%
STA = 18+40.00
EL = 442.88
ex = -0.37'
K = 76
L = 150.00
STA = 20+4
EL = 444.9
ex = -0.30
K = 60
L = 120.00
VPC STA 17+65.00 EL=440.65
VPT STA 19+15.00 EL=443.63
VPC STA 19+87.57 EL=444.36
PNBSMW STA 20+47.57=
PMLK STA 20+33.45
VPT STA 21+07.57 EL=444.36
PENNSYLVANIA AVE
MARTIN LUTH
KING JR BLV
EXIST GRND EL
PROP PGL EL
444.0
445.8
429.1
430.05
429.5
430.72
444.3
432.78
441.5
435.75
437.7
438.72
434.1
441.61
430.9
443.47
427.7
444.47
425.8
444.43
426.5
10+00
15+00
20+00

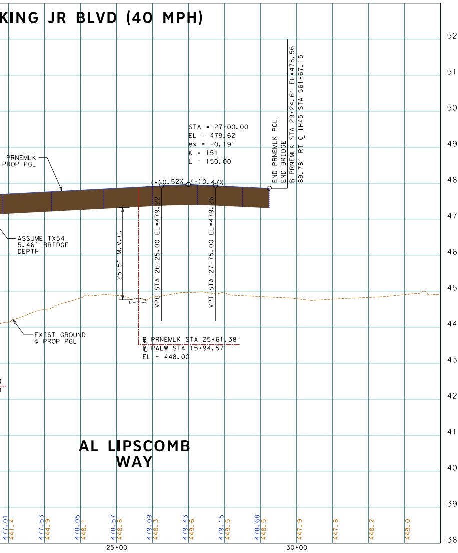

PUTURN - PROPOSED U-TURN (20 MPH)

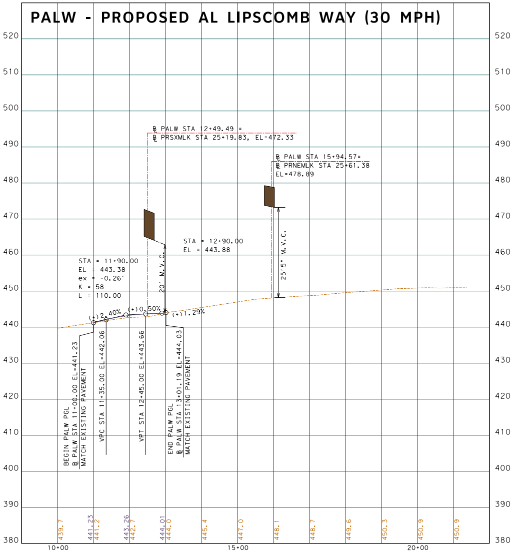

PRSXLAM - PROPOSED SB EXIT TO LAMAR (40 MPH)


PRNEMLK - PROPOSED NB ENTRANCE FROM MARTIN LUTHER


E (35 MPH)


PRSXMLK - PROPOSED EXIT TO MARTIN LUTHER KING JR BLVD (40 MPH)


KING JR BLVD (40 MPH)
STA = 27+00.00
EL = 479.62
ex = -0.19'
K = 151
L = 150.00
PRNEMLK
PROP PGL
(+)0.52%
(-)0.47%
END PRNEMLK PGL
END BRIDGE
℄ PRNEMLK STA 29+24.61 EL=478.56
89.78' RT ℄ IH45 STA 561+67.15
ASSUME TX54
5.46' BRIDGE
DEPTH
25'5" M.V.C.
VPC STA 26+25.00 EL=479.22
VPT STA 27+75.00 EL=479.26
EXIST GROUND
@ PROP PGL
℄ PRNEMLK STA 25+61.38=
℄ PALW STA 15+94.57
EL ~ 448.00
AL LIPSCOMB
WAY
25+00
30+00
520
510
500
490
480
470
460
450
440
430
420
410
400
390
380

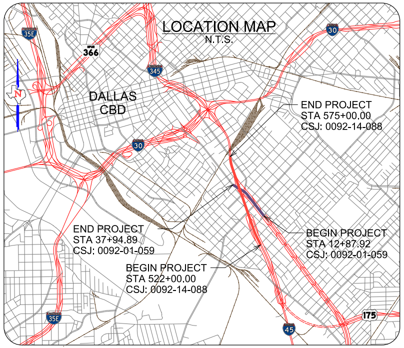

PALW - PROPOSED AL LIPSCOMB WAY (30 MPH)
℄ PALW STA 12+49.49 =
℄ PRSXMLK STA 25+19.83, EL=472.33
℄ PALW STA 15+94.57=
℄ PRNEMLK STA 25+61.38
EL=478.89
STA = 12+90.00
EL = 443.88
STA = 11+90.00
EL = 443.38
ex = -0.26'
K = 58
L = 110.00
20' M.V.C.
25'5" M.V.C.
(+)2.40%
(+)0.50%
(+)1.29%
BEGIN PALW PGL
℄ PALW STA 11+00.00 EL=441.23
MATCH EXISTING PAVEMENT
VPC STA 11+35.00 EL=442.06
VPT STA 12+45.00 EL=443.66
END PALW PGL
℄ PALW STA 13+01.19 EL=444.03
MATCH EXISTING PAVEMENT
439.7
441.23
441.2
443.26
442.7
444.01
444.0
445.4
447.0
448.1
448.7
449.6
450.3
450.9
450.9
10+00
15+00
20+00
520
510
500
490
480
470
460
450
440
430
420
410
400
390
380

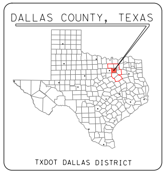
TEXAS DEPARTMENT OF TRANSPORTATION®
DALLAS DISTRICT
JAMES K. SELMAN, P.E., DISTRICT ENGINEER

# SH 310, I-45
# DESIGN SCHEMATIC
# SM WRIGHT PHASE IIB
FROM PENNSYLVANIA AVENUE
TO NORTH OF AL LIPSCOMB WAY
DALLAS COUNTY, TEXAS
CSJ: 0092-01-059, 0092-14-088

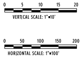
APRIL 2016
ROLL 2 OF 2

PROJECT LENGTH:	1.00 MILE
FUNCTIONAL CLASSIFICATION:	INTERSTATE AND URBAN ARTERIAL
AVERAGE DAILY TRAFFIC:	164,000 (2020) 220,600 (2040)
DESIGN SPEED	
I-45:	60 MPH
RAMPS:	40 MPH
FRONTAGE ROADS:	40 MPH
CROSS STREETS:	35 MPH
LOCAL CONNECTORS:	20 MPH


LOCATION MAP
N.T.S.
35E
366
345
30
DALLAS
CBD
N
END PROJECT
STA 575+00.00
CSJ: 0092-14-088
END PROJECT
STA 37+94.89
CSJ: 0092-01-059
BEGIN PROJECT
STA 12+87.92
CSJ: 0092-01-059
BEGIN PROJECT
STA 522+00.00
CSJ: 0092-14-088
175
45


DALLAS COUNTY, TEXAS
TXDOT DALLAS DISTRICT

TEXAS COUNTY MAP
N.T.S.


0 5 10 15 20
VERTICAL SCALE: 1"=10'
0 50 100 150 200
HORIZONTAL SCALE: 1"=100'

PRELIMINARY
FOR INTERIM REVIEW ONLY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT INTENDED FOR REGULATORY APPROVAL, PERMIT, BIDDING OR CONSTRUCTION PURPOSES. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

NAME	P.E. NO.	DATE
JEREMY W. MCGAHAN	103650	06-30-2016
MARIA F. GUERRA	121650	06-30-2016

HALFF ASSOCIATES, INC.
TBPE FIRM #F-312

HALFF
1201 NORTH BOWSER ROAD
RICHARDSON, TEXAS 75081-2275
TEL (214) 346-6200
FAX (214) 739-0095

DATE SUBMITTED: JUNE 30, 2016

DATE APPROVED:

© 2016 by Texas Department of Transportation all rights reserved