TEXAS DEPARTMENT OF TRANSPORTATION

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

STATE HIGHWAY 114
DESIGN SCHEMATIC
FROM FM 156 TO IH 35W
DENTON COUNTY
PROJECT LENGTH: 2.88 MI.

CONTROL : 0353–02–062
PROJECT LIMITS: FROM 0.45 Mi. WEST OF FM 156
TO 0.21 Mi. EAST OF IH35W
STA. 975+00.00 TO STA. 978+00.00
FUNCTIONAL CLASS: RURAL PRINCIPAL ARTERIAL
STA. 978+00.00 TO STA. 1127+50.00
FUNCTIONAL CLASS: URBAN PRINCIPAL ARTERIAL
DESIGN SPEED: 70 mph MAINLANES
DESIGN SPEED: 40 mph FRONTAGE ROADS
DESIGN SPEED: 50 mph RAMPS
DESIGN SPEED: 30 mph CROSS STREETS
ROLL 2 OF 2

SCALE: 1″=100′ H, 1″=10′ V

NOVEMBER, 2005

Halff Associates
ENGINEERS . ARCHITECTS . SCIENTISTS . PLANNERS . SURVEYORS

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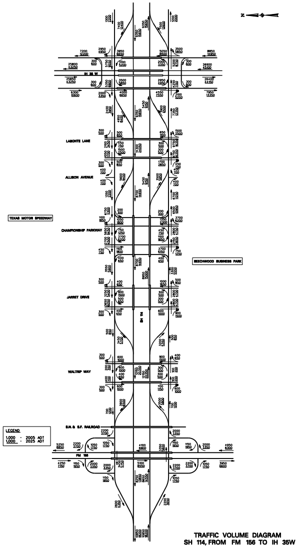
LEGEND

- EXISTING R.OW.
- PROPOSED R.OW.
- DIRECTION OF TRAFFIC
- EXISTING PROPERTY LINE
- EXISTING LOT LINE
- FUTURE LOT LINE
- ROW AQUISITION
- GRADING LIMITS
- SURVEY LINE
- CITY LIMITS
- 100 FLOODPLAIN LIMITS
- 100 YR FLOOD ELEVATION
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING FIBER OPTICS
- EXISTING POWER POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING CONTOURS
- EXISTING PAVEMENT EDGES
- EXISTING UTILITY EASEMENTS
- PROPOSED SH 114 CENTERLINE
- PROPOSED DRAINAGE EASEMENT
- PROPOSED PAVEMENT
- PROPOSED RETAINING WALL
- PROPOSED STORM SEWER

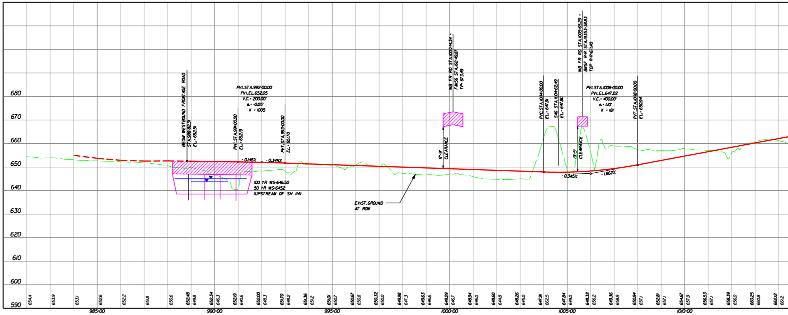

IH 35 W
LABONTE LANE
ALLISON AVENUE
TEXAS MOTOR SPEEDWAY
CHAMPIONSHIP PARKWAY
BEECHWOOD BUSINESS PARK
JARRET DRIVE
SH 114
WALTRIP WAY
B.N. & S.F. RAILROAD
FM 156
N
LEGEND
1,000 - 2005 ADT
1,000 - 2025 ADT

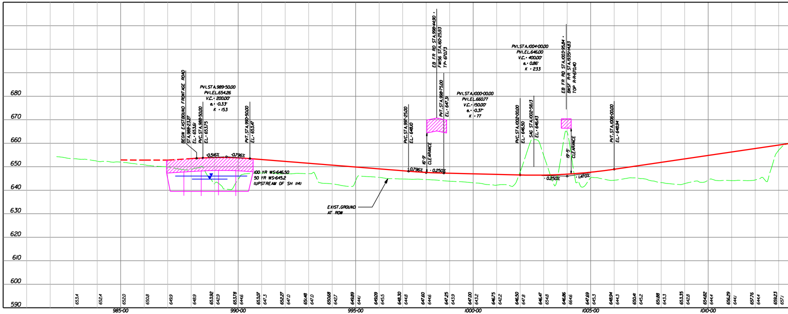
TRAFFIC VOLUME DIAGRAM
SH 114, FROM FM 156 TO IH 35W

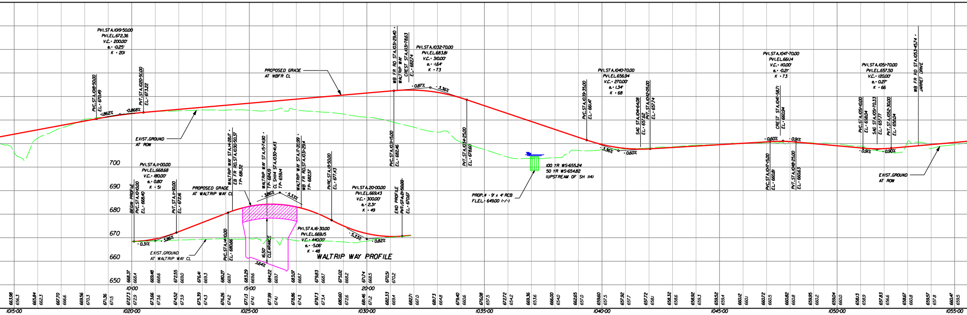
BASED ON DATA OBTAINED FROM
TRANSPORTATION PLANNING AND PROGRAMMING
TXDOT, AUSTIN, TEXAS

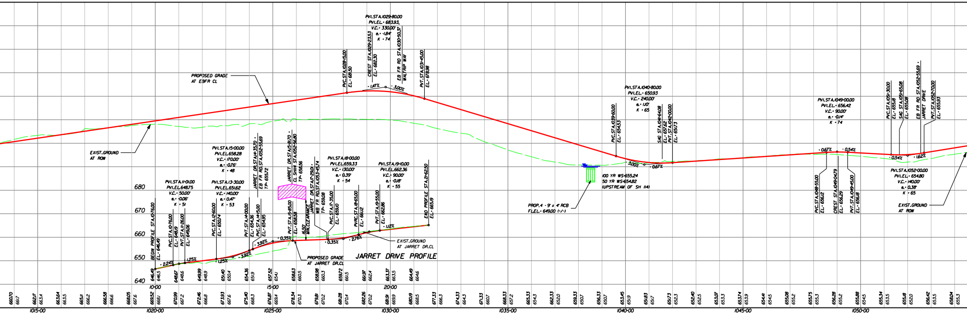
TRAFFIC DIAGRAM

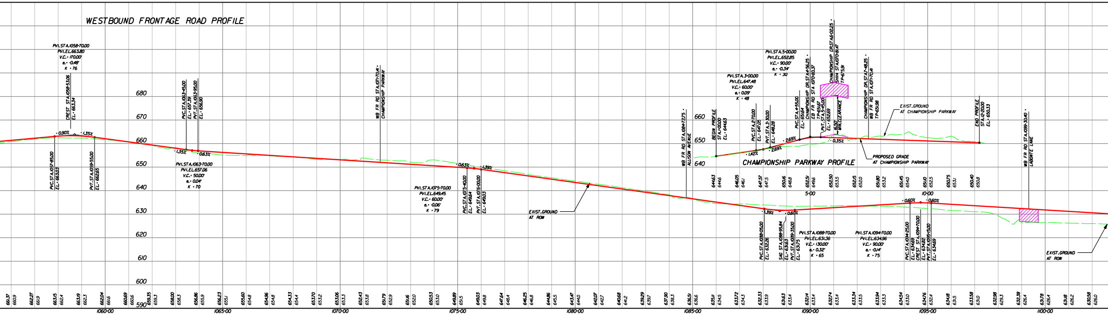
N.T.S.

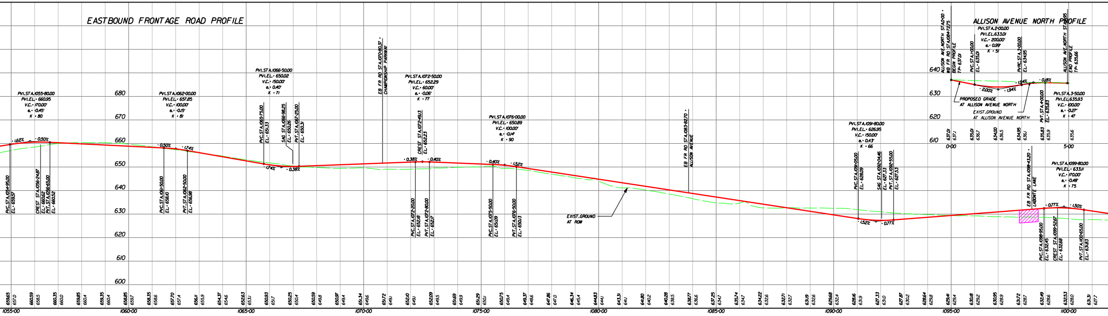

680
670
660
650
640
630
620
610
600
590
BEGIN WESTBOUND FRONTAGE ROAD
STA.988+82.31
EL.= 652.51
PVC.STA.991+00.00
EL.= 652.19
PVI.STA.992+00.00
PVI.EL.652.05
V.C.= 200.00'
e.= -0.05'
K = 1005
PVT.STA.993+00.00
EL.= 651.70
- 0.146%
- 0.345%
100 YR WS=646.50
50 YR WS=645.2
(UPSTREAM OF SH 114)
EXIST.GROUND
AT ROW
WB FR RD STA.1000+14.34 =
FM156 STA.162+49.87
TP= 673.49
17'-9"
CLEARANCE
PVC.STA.1004+00.00
EL.= 647.91
SAG STA.1004+62.49
EL.= 647.80
WB FR RD STA.1005+65.29 =
BNSF R-R STA.1935.3+18.83
TOP R-R=671.40
19'-5"
CLEARANCE
PVI.STA.1006+00.00
PVI.EL.647.22
V.C.= 400.00'
e.= 1.10'
K = 181
PVT.STA.1008+00.00
EL.= 650.94
- 0.345%
+ 1.862%
985+00
990+00
995+00
1000+00
1005+00
1010+00

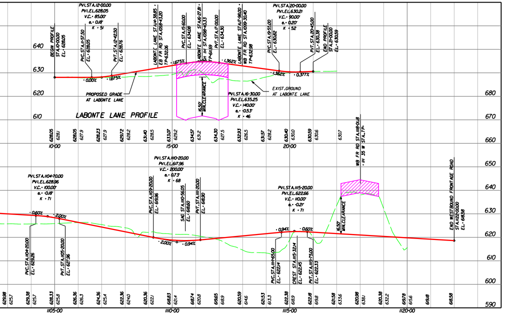

680
670
660
650
640
630
620
610
600
590
BEGIN EASTBOUND FRONTAGE ROAD
STA.989+23.27
EL.= 653.61
PVC.STA.988+50.00
EL.= 653.75
PVI.STA.989+50.00
PVI.EL.654.26
V.C.= 200.00'
e.= -0.33'
K = 153
PVT.STA.990+50.00
EL.= 653.47
-0.516%
-0.796%
100 YR WS=646.50
50 YR WS=645.2
(UPSTREAM OF SH 114)
EXIST.GROUND
AT ROW
PVC.STA.997+25.00
EL.= 648.10
EB FR RD STA.998+44.90 =
FM156 STA.160+25.93
TP= 670.73
16'-9"
CLEARANCE
PVT.STA.998+75.00
EL.= 647.31
PVI.STA.1000+00.00
PVI.EL.660.77
V.C.= 150.00'
e.= -0.37'
K = 77
-0.796%
- 0.250%
PVI.STA.1004+00.00
PVI.EL.646.00
V.C.= 400.00'
e.= 0.86'
K = 233
PVC.STA.1002+00.00
EL.= 646.50
SAG STA.1002+58.13
EL.= 646.43
EB FR RD STA.1003+95.84 =
BNSF R-R STA.1935+14.83
TOP R-R=670.40
19'-5"
CLEARANCE
- 0.250%
+ 1.470%
PVT.STA.1006+00.00
EL.= 648.94
985+00
990+00
995+00
1000+00
1005+00
1010+00

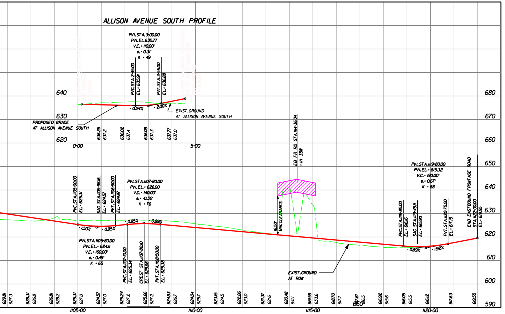

PVI.STA.1019+50.00
PVI.EL.672.36
V.C.= 200.00'
e.= -0.25'
K = 201
PVC.STA.1018+50.00
EL.= 670.49
PVT.STA.1020+50.00
EL.= 673.22
+1.862%
+0.868%
PROPOSED GRADE
AT WBFR CL
WB FR RD STA.1031+29.40 =
WALTRIP WAY
CREST STA.1031+78.63
EL.= 682.74
PVI.STA.1032+70.00
PVI.EL.683.81
V.C.= 310.00'
e.= -1.64'
K = 73
+0.87%
-3.36%
PVC.STA.1031+15.00
EL.= 682.46
PVT.STA.1034+25.00
EL.= 678.50
EXIST.GROUND
AT ROW
100 YR WS=655.24
50 YR WS=654.82
(UPSTREAM OF SH 114)
PROP.4 - 9' x 4' RCB
FL.EL.= 649.00 (+/-)
PVI.STA.1040+70.00
PVI.EL.656.94
V.C.= 270.00'
e.= 1.34'
K = 68
PVC.STA.1039+35.00
EL.= 661.47
SAG STA.1041+64.08
EL.= 657.62
PVT.STA.1042+05.00
EL.= 657.74
-3.36%
+0.60%
PVI.STA.1047+70.00
PVI.EL.661.14
V.C.= 110.00'
e.= -0.21'
K = 73
CREST STA.1047+58.71
EL.= 660.94
PVC.STA.1047+15.00
EL.= 660.81
PVT.STA.1048+25.00
EL.= 660.63
+0.60%
-0.91%
PVI.STA.1051+70.00
PVI.EL.657.50
V.C.= 120.00'
e.= 0.27'
K = 66
PVC.STA.1051+10.00
EL.= 658.04
SAG STA.1051+70.33
EL.= 657.77
PVT.STA.1052+30.00
EL.= 658.04
-0.91%
+0.90%
WB FR RD STA.1053+45.74 =
JARRET DRIVE
EXIST.GROUND
AT ROW
700
690
680
670
660
650
PVI.STA.11+00.00
PVI.EL.668.68
V.C.= 180.00'
e.= 0.80'
K = 51
BEGIN PROFILE
PVC.STA.10+00.00
EL.= 668.40
PVT.STA.11+90.00
EL.= 672.16
PROPOSED GRADE
AT WALTRIP WAY CL
WALTRIP WAY STA.14+28.17 =
EB FR RD.STA.1030+50.37
TP= 681.32
WALTRIP WAY STA.15+74.90 =
TP= 684.19
CL SH114 STA.1030+41.43
TP= 659.14
WALTRIP WAY STA.17+20.99 =
WB FR RD.STA.1031+29.4
TP= 682.57
PVRC.STA.19+50.00
EL.= 671.43
+3.86%
-5.33%
PVI.STA.20+00.00
PVI.EL.669.43
V.C.= 300.00'
e.= 2.31'
K = 49
END PROFILE
PVT.STA.21+50.00
EL.= 670.67
-0.31%
+3.86%
EXIST.GROUND
AT WALTRIP WAY CL
PVC.STA.14+00.00
EL.= 680.66
16.50' CLEARANCE
3.64%
PVI.STA.16+30.00
PVI.EL.669.15
V.C.= 440.00'
e.= -5.06'
K = 48
-5.33%
+0.82%
WALTRIP WAY PROFILE
10+00
15+00
20+00
1015+00
1020+00
1025+00
1030+00
1035+00
1040+00
1045+00
1050+00
1055+00


PVI.STA.1029+80.00
PVI.EL.683.93
V.C.= 330.00'
e.= -1.84'
K = 74
PVC.STA.1028+15.00
EL.= 681.50
CREST STA.1029+23.53
EL.= 682.30
EB FR RD STA.1030+50.37 =
WALTRIP WAY
PVT.STA.1031+45.00
EL.= 678.98
+1.47%
-3.00%
PROPOSED GRADE
AT EBFR CL
EXIST.GROUND
AT ROW
PVI.STA.1040+80.00
PVI.EL.650.93
V.C.= 240.00'
e.= 1.10'
K = 65
PVC.STA.1039+60.00
EL.= 654.53
SAG STA.1041+64.08
EL.= 651.62
PVT.STA.1042+00.00
EL.= 651.73
-3.00%
+0.67%
100 YR WS=655.24
50 YR WS=654.82
(UPSTREAM OF SH 114)
PROP.4 - 9' x 4' RCB
FL.EL.= 649.00 (+/-)
PVI.STA.1049+00.00
PVI.EL.= 656.42
V.C.= 90.00'
e.= -0.14'
K = 74
+0.67%
-0.54%
PVC.STA.1048+55.00
EL.= 656.12
CREST STA.1049+04.79
EL.= 656.29
PVT.STA.1049+45.00
EL.= 656.18
PVC.STA.1051+30.00
EL.= 655.18
SAG STA.1051+65.08
EL.= 655.08
EB FR RD STA.1052+55.69 =
JARRET DRIVE
PVT.STA.1052+70.00
EL.= 655.93
-0.54%
+1.62%
PVI.STA.1052+00.00
PVI.EL.= 654.80
V.C.= 140.00'
e.= 0.38'
K = 65
EXIST.GROUND
AT ROW
680
670
660
650
640
PVI.STA.11+01.00
PVI.EL.648.75
V.C.= 50.00'
e.= -0.06'
K = 51
BEGIN PROFILE STA.10+76.00
EL.= 646.49
PVC.STA.10+76.00
EL.= 648.9
PVT.STA.11+26.00
EL.= 649.06
PVI.STA.15+00.00
PVI.EL.658.28
V.C.= 170.00'
e.= -0.76'
K = 48
PVI.STA.13+30.00
PVI.EL.651.62
V.C.= 140.00'
e.= 0.47'
K = 53
PVC.STA.12+60.00
EL.= 650.74
PVT.STA.14+00.00
EL.= 654.36
PVC.STA.14+15.00
EL.= 654.95
JARRET DR.STA.14+35.70 =
EB FR RD.STA.1052+55.69
TP= 655.72
JARRET DR.STA.15+87.0 =
CL SH114 STA.1052+56.80
TP= 658.56
JARRET DR.STA.17+29.01 =
WB FR RD.STA.1053+45.74
TP= 659.08
PVT.STA.15+85.00
EL.= 658.58
16.50' MIN.CLEARANCE
PVC.STA.17+35.00
EL.= 659.0
PVI.STA.18+00.00
PVI.EL.659.33
V.C.= 130.00'
e.= 0.39'
K = 54
PVRC.STA.18+65.00
EL.= 661.2
PVT.STA.19+55.00
EL.= 662.86
PVI.STA.19+10.00
PVI.EL.662.36
V.C.= 90.00'
e.= -0.18'
K = 55
END PROFILE STA.21+62.50
EL.= 665.19
+2.24%
+1.25%
+1.25%
+3.92%
+3.92%
+0.35%
+0.35%
+2.76%
+1.12%
EXIST.GROUND
AT JARRET DR.CL
PROPOSED GRADE
AT JARRET DR.CL
JARRET DRIVE PROFILE
10+00
15+00
20+00
1015+00
1020+00
1025+00
1030+00
1035+00
1040+00
1045+00
1050+00


WESTBOUND FRONTAGE ROAD PROFILE
PVI.STA.1058+70.00
PVI.EL.663.80
V.C. = 170.00'
e. = -0.48'
K = 76
CREST STA.1059+53.06
EL. = 663.34
+0.90%
-1.35%
PVC.STA.1057+85.00
EL. = 663.03
PVT.STA.1059+55.00
EL. = 662.65
PVC.STA.1063+45.00
EL. = 657.39
PVT.STA.1063+95.00
EL. = 656.90
-1.35%
-0.63%
PVI.STA.1063+70.00
PVI.EL.657.06
V.C. = 50.00'
e. = 0.04'
K = 70
WB FR RD STA.1071+70.41 =
CHAMPIONSHIP PARKWAY
PVI.STA.1075+70.00
PVI.EL.649.45
V.C. = 60.00'
e. = -0.06'
K = 79
PVC.STA.1075+40.00
EL. = 649.64
PVT.STA.1076+00.00
EL. = 649.03
-0.63%
-1.39%
EXIST.GROUND
AT ROW
WB FR RD STA.1084+72.75 =
ALLISON AVENUE
-1.39%
+0.60%
PVC.STA.1088+05.00
EL. = 632.26
SAG STA.1088+95.84
EL. = 631.63
PVT.STA.1089+35.00
EL. = 631.75
PVI.STA.1088+70.00
PVI.EL.631.36
V.C. = 130.00'
e. = 0.32'
K = 65
PVI.STA.1094+70.00
PVI.EL.634.96
V.C. = 90.00'
e. = -0.14'
K = 75
+0.60%
-0.60%
PVC.STA.1094+25.00
EL. = 634.69
CREST STA.1094+70.00
EL. = 634.82
PVT.STA.1095+15.00
EL. = 634.69
WB FR RD STA.1099+30.40 =
LABONTE LANE
EXIST.GROUND
AT ROW
CHAMPIONSHIP PARKWAY PROFILE
PVI.STA.3+00.00
PVI.EL.647.48
V.C. = 60.00'
e. = 0.09'
K = 48
PVI.STA.5+00.00
PVI.EL.652.85
V.C. = 90.00'
e. = -0.34'
K = 30
BEGIN PROFILE
STA.0+00.00
EL. = 644.63
PVC.STA.2+70.00
EL. = 647.05
PVT.STA.3+30.00
EL. = 648.28
PVC.STA.4+55.00
EL. = 651.64
CHAMPIONSHIP DR.STA.4+56.25 =
EB FR RD STA.1070+60.37
TP=651.67
PVT.STA.5+45.00
EL. = 652.69
CHAMPIONSHIP DR.STA.6+02.25 =
SHIW STA.1070+81.47
TP=657.91
MIN.CLEARANCE
16.50'
CHAMPIONSHIP DR.STA.7+48.25 =
WB FR RD STA.1071+70.41
TP=651.98
EXIST.GROUND
AT CHAMPIONSHIP PARKWAY
PROPOSED GRADE
AT CHAMPIONSHIP PARKWAY
END PROFILE
STA.12+20.00
EL. = 650.33
+1.42%
+2.69%
-0.35%
5+00
10+00
680
670
660
650
640
630
620
610
600
590
1060+00
1065+00
1070+00
1075+00
1080+00
1085+00
1090+00
1095+00
1100+00


EASTBOUND FRONTAGE ROAD PROFILE
PVI.STA.1055+80.00
PVI.EL.660.95
V.C. = 170.00'
e. = -0.45'
K = 80
+1.62%
-0.50%
PVC.STA.1054+95.00
EL. = 659.57
CREST STA.1056+24.87
EL. = 661.06
PVT.STA.1056+65.00
EL. = 660.52
PVI.STA.1062+00.00
PVI.EL. = 657.85
V.C. = 100.00'
e. = -0.15'
K = 81
-0.50%
-1.74%
PVC.STA.1061+50.00
EL. = 658.10
PVT.STA.1062+50.00
EL. = 656.98
PVI.STA.1066+50.00
PVI.EL. = 650.02
V.C. = 150.00'
e. = 0.40'
K = 71
PVC.STA.1065+75.00
EL. = 651.33
SAG STA.1066+98.25
EL. = 650.26
PVT.STA.1067+25.00
EL. = 650.31
-1.74%
+0.38%
EB FR RD STA.1070+60.37 =
CHAMPIONSHIP PARKWAY
PVI.STA.1072+50.00
PVI.EL. = 652.29
V.C. = 60.00'
e. = -0.06'
K = 77
CREST STA.1072+49.13
EL. = 652.23
+0.38%
-0.40%
PVC.STA.1072+20.00
EL. = 652.18
PVT.STA.1072+80.00
EL. = 652.17
PVI.STA.1076+00.00
PVI.EL. = 650.89
V.C. = 100.00'
e. = -0.14'
K = 90
-0.40%
-1.52%
PVC.STA.1075+50.00
EL. = 651.09
PVT.STA.1076+50.00
EL. = 650.13
EXIST.GROUND
AT ROW
EB FR RD STA.1083+82.70 =
ALLISON AVENUE
PVI.STA.1091+80.00
PVI.EL. = 626.95
V.C. = 150.00'
e. = 0.43'
K = 66
PVC.STA.1091+05.00
EL. = 628.09
SAG STA.1092+04.46
EL. = 627.33
PVT.STA.1092+55.00
EL. = 627.53
-1.52%
+0.77%
EB FR RD STA.1098+43.20 =
LABONTE LANE
PVI.STA.1099+80.00
PVI.EL. = 633.11
V.C. = 170.00'
e. = 0.48'
K = 75
+0.77%
-1.50%
PVC.STA.1098+95.00
EL. = 632.45
CREST STA.1099+52.67
EL. = 632.68
PVT.STA.1100+65.00
EL. = 631.83
ALLISON AVENUE NORTH PROFILE
ALLISON AVE.NORTH STA.0+00 =
WB FR RD STA.1084+72.75
BEGIN PROFILE
TP=637.01
PVC.STA.1+00.00
EL. = 635.01
PVI.STA.2+00.00
PVI.EL.633.01
V.C. = 200.00'
e. = 0.99'
K = 51
PVRC.STA.3+00.00
EL. = 634.95
ALLISON AVE.NORTH STA.5+95 =
END PROFILE
TP=635.66
-2.00%
+1.94%
+0.18%
PVT.STA.4+00.00
EL. = 635.83
PVI.STA.3+50.00
PVI.EL.635.93
V.C. = 100.00'
e. = -0.27'
K = 47
PROPOSED GRADE
AT ALLISON AVENUE NORTH
EXIST.GROUND
AT ALLISON AVENUE NORTH
0+00
5+00
680
670
660
650
640
630
620
610
600
1055+00
1060+00
1065+00
1070+00
1075+00
1080+00
1085+00
1090+00
1095+00
1100+00


LABONTE LANE PROFILE
PROPOSED GRADE AT LABONTE LANE
EXIST. GROUND AT LABONTE LANE
BEGIN PROFILE
END PROFILE
END WESTBOUND FRONTAGE ROAD
WB FR RD STA.1118+01.18 = IH 35 W STA. TP
16.50' MIN. CLEARANCE
10+00
15+00
20+00
1105+00
1110+00
1115+00
1120+00


ALLISON AVENUE SOUTH PROFILE
PROPOSED GRADE AT ALLISON AVENUE SOUTH
EXIST. GROUND AT ALLISON AVENUE SOUTH
EXIST. GROUND AT ROW
EB FR RD STA.1114+36.04 = IH 35W
16.50' MIN. CLEARANCE
END EASTBOUND FRONTAGE ROAD
0+00
5+00
1105+00
1110+00
1115+00
1120+00

TEXAS DEPARTMENT OF TRANSPORTATION

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

STATE HIGHWAY 114
DESIGN SCHEMATIC
FROM FM 156 TO IH 35W
DENTON COUNTY
PROJECT LENGTH: 2.88 MI.

CONTROL : 0353–02–062
PROJECT LIMITS: FROM 0.45 Mi. WEST OF FM 156
TO 0.21 Mi. EAST OF IH35W
STA. 975+00.00 TO STA. 978+00.00
FUNCTIONAL CLASS: RURAL PRINCIPAL ARTERIAL
STA. 978+00.00 TO STA. 1127+50.00
FUNCTIONAL CLASS: URBAN PRINCIPAL ARTERIAL
DESIGN SPEED: 70 mph MAINLANES
DESIGN SPEED: 40 mph FRONTAGE ROADS
DESIGN SPEED: 50 mph RAMPS
DESIGN SPEED: 30 mph CROSS STREETS
ROLL 2 OF 2

SCALE: 1″=100′ H, 1″=10′ V

NOVEMBER, 2005

Halff Associates
ENGINEERS . ARCHITECTS . SCIENTISTS . PLANNERS . SURVEYORS

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