TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT

COLLIN COUNTY

DESIGN SCHEMATIC

WILLIAM L. HALE, P.E.
DISTRICT ENGINEER

FM 546 (NEW ALIGNMENT)

CSJ: 1013-01-026

FROM: SH 5
TO: WEST OF CR 317

NET LENGTH OF PROJECT: 1.70 MILES
FUNCTIONAL CLASSIFICATION:
TxDOT - MINOR ARTERIAL
CITY OF McKINNEY - URBAN MAJOR ARTERIAL (MAD)
FM 546: 19,810 ADT (2050) SH 5: 51,780 ADT (2050)

DESIGN SPEED:
FM 546 = 45 MPH
SH 5 = 60 MPH *
AIRPORT ROAD = 45 MPH
COOKS ROAD = 35 MPH
U-TURN LANE = 15 MPH
* PER TEXAS HIGHWAY LAW, SECTION 225.058, 1995

LOCATION MAP

ROLL INDEX

ROLL 1: FM 546 NEW ALIGNMENT
BEGIN PROJECT STA 10+44.90 TO STA 55+00

ROLL 2: FM 546 NEW ALIGNMENT
STA 55+00 TO END PROJECT STA 100+04.77

ROLL 3: SH 5 PROPOSED IMPROVEMENTS PLAN AND CROSS STREETS PROFILES

PREPARED BY:
CIVIL ASSOCIATES, INC.
TBPE REGISTRATION NO. F-006981

NASER ABUSAADA, P.E., ATOP
SERIAL NO. 93200
NOVEMBER, 2011

BRAD HERNANDEZ, P.E.
SERIAL NO. 100078
NOVEMBER, 2011

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ROLL 2 OF 3

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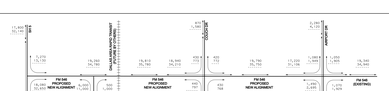
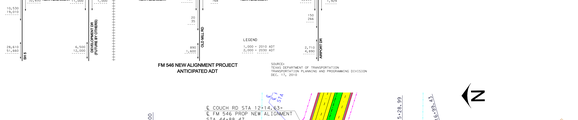
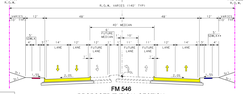


FM 546 NEW ALIGNMENT PROJECT ANTICIPATED ADT



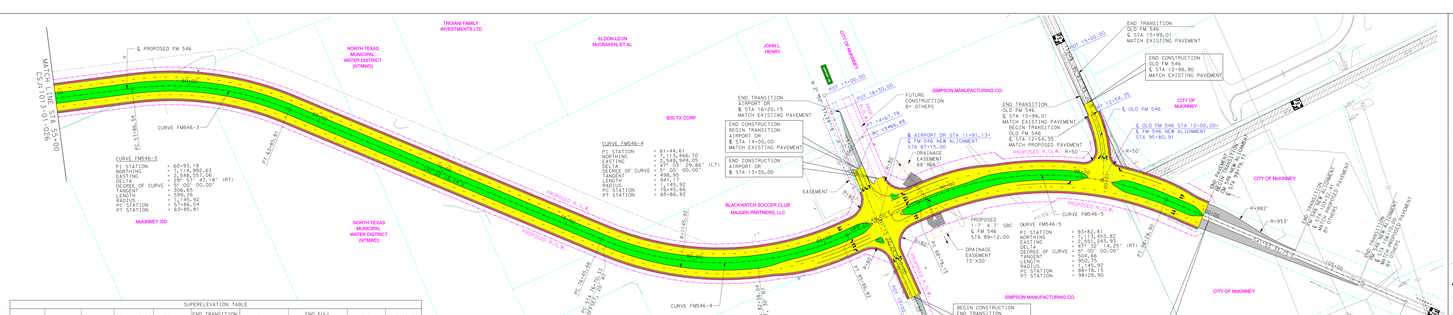
LAYOUT - PROPOSED 3-5'x7' MBC
FM 546 STA 45+03.00
N.T.S.

FM 546
PROPOSED TYPICAL SECTION
WITH FUTURE DUAL LEFT TURN LANES
AND RIGHT TURN LANE
STA 76+72.72 TO STA 99+86.31
N.T.S.



FM 546
PROPOSED TYPICAL SECTION
WITH FUTURE LEFT TURN LANE
STA 54+00.00 TO STA 76+15.25
STA 99+86.31 TO 99+79.77
N.T.S.

(1) PER CITY OF MCKINNEY CRITERIA MANUAL, PROPOSED ROADWAY SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. THE CITY OF MCKINNEY WILL PARTICIPATE IN THE COSTS OF CONSTRUCTION OF 40' ROADWAY (EQUALLY SPLIT). PROPOSED ROADWAY IS ELIGIBLE FOR IMPACT FEE CREDITS.


TROIANI FAMILY INVESTMENTS LTD
NORTH TEXAS MUNICIPAL WATER DISTRICT (NTMWD)
ELDON LEON McGRAGEN, ET AL
JOHN L. HENRY
CITY OF McKINNEY
SIMPSON MANUFACTURING CO.
IESI TX CORP
CITY OF McKINNEY
℄ FM 546
℄ OLD FM 546
STA 10+00.00 (OLD FM 546)
STA 14+00.00 (NEW ALIGNMENT)
STA 15+99.01 (OLD FM 546)
STA 16+98.90 (NEW ALIGNMENT)
℄ AIRPORT DR STA 11+91.13+
℄ FM 546 NEW ALIGNMENT
STA 81+16.00
PC = N 14°54'39" E
PT = N 14°54'39" E
CURVE FM546-3
PI STATION = 60+93.19
NORTHING = 7,114,592.63
EASTING = 2,504,158.78
DELTA = 29°15'47.5" (RT)
DEGREE OF CURVE = 5° 00' 00.00"
RADIUS = 1,145.92
LENGTH = 585.24
TANGENT = 299.26
PC STATION = 55+94.19
PT STATION = 61+79.43
CURVE FM546-4
PI STATION = 81+44.61
NORTHING = 7,113,466.70
EASTING = 2,504,158.78
DELTA = 29°15'47.5" (LT)
DEGREE OF CURVE = 5° 00' 00.00"
RADIUS = 1,145.92
LENGTH = 585.24
TANGENT = 299.26
PC STATION = 76+15.25
PT STATION = 82+00.49
CURVE FM546-5
PI STATION = 93+82.81
NORTHING = 7,112,493.85
EASTING = 2,503,243.93
DELTA = 90° 00' 00.00" (RT)
DEGREE OF CURVE = 5° 00' 00.00"
RADIUS = 1,145.92
LENGTH = 1,795.90
TANGENT = 1,145.92
PC STATION = 87+36.89
PT STATION = 105+32.79
CURVE FM546-6
PI STATION = 93+82.81
NORTHING = 7,112,493.85
EASTING = 2,503,243.93
DELTA = 90° 00' 00.00" (RT)
DEGREE OF CURVE = 5° 00' 00.00"
RADIUS = 1,145.92
LENGTH = 1,795.90
TANGENT = 1,145.92
PC STATION = 87+36.89
PT STATION = 105+32.79
END CONSTRUCTION AIRPORT DR STA 13+35.00
BEGIN TRANSITION AIRPORT DR STA 14+00.00
END CONSTRUCTION AIRPORT DR STA 15+99.01
BEGIN TRANSITION AIRPORT DR STA 15+99.01
END CONSTRUCTION AIRPORT DR STA 16+98.90
BEGIN CONSTRUCTION AIRPORT DR STA 8+80.00
END CONSTRUCTION AIRPORT DR STA 4+00.00
BEGIN TRANSITION AIRPORT DR STA 4+00.00
FUTURE CONSTRUCTION BY OTHERS
PROPOSED R.O.W. 8+50'
DRAINAGE EASEMENT 68' WIDE
PROPOSED FM 546 NEW ALIGNMENT
PROPOSED R.O.W.
PROPOSED DRAINAGE EASEMENT
EASEMENT
PROPOSED N.B.L.
PROPOSED S.B.L.
PROPOSED RETAINING WALL
TRAFFIC FLOW
PROPOSED CROSS DRAINAGE STRUCTURE
EXISTING R.O.W./PROPERTY LINE ACCESS BY PERMIT
R=982'
R=953'
R=50'
CURVE FM546-3
CURVE FM546-4
CURVE FM546-5
CURVE FM546-6
MCKINNEY ISD
NORTH TEXAS MUNICIPAL WATER DISTRICT (NTMWD)
BLACKWATCH SOCCER CLUB
MAJOR PANTHERS, LLC
CAROL ANNE MATTHEWS
CAROL MATTHEWS MOODY
CITY OF McKINNEY
SIMPSON MANUFACTURING CO.
CITY OF McKINNEY
END PROJECT FM 546 NEW ALIGNMENT STA 100+04.77
℄ FM 546 STA 100+00.00
CSJ#1013-01-024
BEGIN CONSTRUCTION AIRPORT DR STA 8+80.00
BEGIN TRANSITION AIRPORT DR STA 4+00.00
END TRANSITION OLD FM 546 STA 15+99.01
MATCH EXISTING PAVEMENT
END CONSTRUCTION ℄ STA 17+98.90
MATCH EXISTING PAVEMENT
END TRANSITION OLD FM 546 STA 15+99.01
MATCH EXISTING PAVEMENT
BEGIN TRANSITION AIRPORT DR STA 15+99.01
MATCH EXISTING PAVEMENT
END TRANSITION AIRPORT DR STA 13+35.00
MATCH EXISTING PAVEMENT
BEGIN TRANSITION AIRPORT DR STA 14+00.00
MATCH EXISTING PAVEMENT
END TRANSITION OLD FM 546 STA 15+99.01
MATCH EXISTING PAVEMENT
BEGIN TRANSITION OLD FM 546 STA 10+00.00
MATCH EXISTING PAVEMENT
PROPOSED FM 546 STA 89+12.00
DRAINAGE EASEMENT 75'X30'
PROPOSED FM 546 STA 89+12.00
SBC
DRAINAGE EASEMENT 68' WIDE
PROPOSED R.O.W. 8+50'
PROPOSED FM 546 NEW ALIGNMENT
PROPOSED R.O.W.
PROPOSED DRAINAGE EASEMENT
EASEMENT
PROPOSED N.B.L.
PROPOSED S.B.L.
PROPOSED RETAINING WALL
TRAFFIC FLOW
PROPOSED CROSS DRAINAGE STRUCTURE
EXISTING R.O.W./PROPERTY LINE ACCESS BY PERMIT
R=982'
R=953'
R=50'
CURVE FM546-5
CURVE FM546-6
CURVE FM546-4
CURVE FM546-3