DENTON COUNTY

PRELIMINARY DESIGN SCHEMATIC

Texas Department of Transportation

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DALLAS DISTRICT
JAMES K. SELMAN P.E.,
DISTRICT ENGINEER

FM 455

FROM WEST OF FM 2450 TO EAST OF MARION ROAD
CSJ NO. 0816-02-072

ROADWAY = 28,951.18 FT = 5.483 MI
BRIDGE = 250 FT = 0.047 MI
NET LENGTH OF PROJECT = 29,201.18 FT = 5.530 MI

FM 455

FUNCTIONAL CLASS:	MINOR ARTERIAL
DESIGN SPEED:	45 MPH (LOW SPEED URBAN)
PROJECTED ADT (2020):	15,400
PROJECTED ADT (2040):	21,400

TRAFFIC SOURCE: TXDOT, TP&P MEMO JUNE 10, 2013

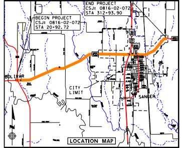
SAM BASS ROAD

DESIGN SPEED: 35 MPH (CITY STREET)

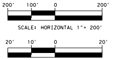
MARION ROAD

DESIGN SPEED: 40 MPH (CITY STREET)

EQUATIONS: NONE
RAILROADS: BNSF RR
EXCEPTIONS: NONE


END PROJECT
CSJ: 0816-02-072
STA 312+93.90
BEGIN PROJECT
CSJ: 0816-02-072
STA 20+92.72
BOLIVAR
CITY LIMIT
SANGER
35
455
LOCATION MAP

SCALE:


200'
100'
0
200'
20'
10'
0
20'

SCALE: HORIZONTAL 1" = 200'

SCALE: VERTICAL 1" = 20'

DANNENBAUM

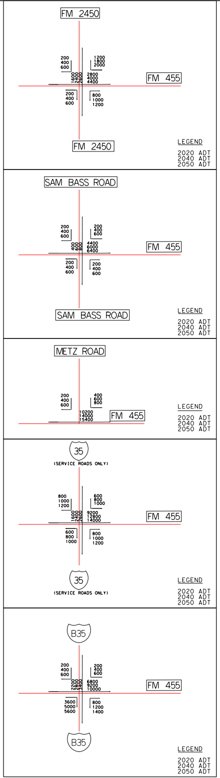
ENGINEERING COMPANY - DALLAS, LLC
T.B.P.E. FIRM REGISTRATION #392
4141 BLUE LAKE CIRCLE, STE 240 DALLAS, TX 75244 (972) 239-2002

PRELIMINARY
SUBJECT TO CHANGE

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF DANIEL W. EVERETT, P.E. 93551. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES. DATE: 5/18/2015

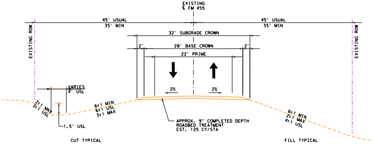
ROLL 1 OF 2

STATUS: $INST$
USER: $USER$
FILE: G:\1220\4527-01\DGN\Schematic\452701 sch01.dgn
DATE: 5/18/2015


FM 2450
200
400
600
1200
1800
2000
1600
2400
2600
2800
4000
4400
FM 455
200
400
600
800
1000
1200
FM 2450
LEGEND
2020 ADT
2040 ADT
2050 ADT
SAM BASS ROAD
200
400
600
200
400
600
400
600
800
4400
6000
6400
FM 455
200
400
600
200
400
600
SAM BASS ROAD
LEGEND
2020 ADT
2040 ADT
2050 ADT
METZ ROAD
200
400
600
400
600
800
10200
14000
15400
FM 455
LEGEND
2020 ADT
2040 ADT
2050 ADT
35
(SERVICE ROADS ONLY)
800
1000
1200
600
800
1000
1600
2400
2600
9200
12800
14000
FM 455
600
800
1000
800
1000
1200
35
(SERVICE ROADS ONLY)
LEGEND
2020 ADT
2040 ADT
2050 ADT
B35
200
400
600
200
400
600
2200
2800
3400
6800
9200
10000
FM 455
3600
5000
5600
800
1200
1400
B35
LEGEND
2020 ADT
2040 ADT
2050 ADT

TRAFFIC DIAGRAMS

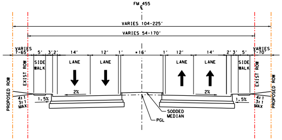
SOURCE OF DATA: TEXAS DEPARTMENT OF TRANSPORTATION;
TRANSPORTATION PROGRAMMING AND PLANNING DIVISION MEMORANDUM
JUNE 10, 2013


EXISTING
℄ FM 455
45' USUAL
35' MIN
45' USUAL
35' MIN
32' SUBGRADE CROWN
2'
28' BASE CROWN
2'
22' PRIME
EXISTING ROW
EXISTING ROW
VARIES
4' USL
2:1 MAX
3:1 USL
6:1 MIN
6:1 USL
3:1 MAX
2%
2%
APPROX. 9" COMPLETED DEPTH ROADBED TREATMENT
EST. 125 CY/STA
6:1 MIN
2:1 MAX
4:1 USL
1.5' USL
CUT TYPICAL
FILL TYPICAL

FM 455 EXISTING TYPICAL SECTION

N.T.S.

STA 20+92.72 TO STA 313+23.50

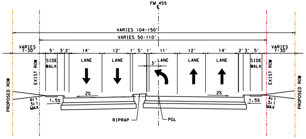

FM 455
℄
VARIES 104-225'
VARIES 54-170'
VARIES 7-65'
5'
3'
2'
14'
12'
1'
*16'
1'
12'
14'
2'
3'
5'
VARIES 7-70'
SIDE WALK
LANE
LANE
LANE
LANE
SIDE WALK
PROPOSED ROW
EXIST ROW
EXIST ROW
PROPOSED ROW
4:1
3:1
MAX
1.5%
2%
2%
1.5%
4:1
3:1
MAX
SODDED MEDIAN
PGL

FM 455 PROPOSED TYPICAL SECTION

N.T.S.

STA 30+00.51 TO STA 36+82.37	STA 183+60.39 TO STA 188+56.34
STA 46+33.26 TO STA 51+15.29	STA 202+45.38 TO STA 203+63.54
STA 55+91.30 TO STA 59+26.13	STA 213+30.95 TO STA 219+63.26
STA 68+76.07 TO STA 107+96.71	* STA 224+44.94 TO STA 231+09.97
STA 117+79.40 TO STA 153+35.40	STA 262+58.40 TO STA 274+24.87
STA 154+85.40 TO STA 156+89.69	STA 292+10.73 TO STA 300+21.15
STA 166+49.34 TO STA 178+85.47	

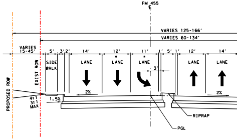
* CENTER MEDIAN TAPERS FROM 16' TO 5' FROM STA 225+18.30 TO STA 230+58.00


FM 455
℄
VARIES 104-150'
VARIES 50-110'
VARIES 7-30'
5'
3'
2'
14'
12'
1'
5'
1'
11'
12'
14'
2'
3'
5'
VARIES 7-30'
SIDE WALK
LANE
LANE
3'
LANE
LANE
LANE
SIDE WALK
PROPOSED ROW
EXIST ROW
EXIST ROW
PROPOSED ROW
4:1
3:1
MAX
1.5%
2%
2%
1.5%
4:1
3:1
MAX
RIPRAP
PGL

FM 455 PROPOSED TYPICAL SECTION

N.T.S.

STA 36+82.36 TO STA 41+56.55	STA 188+56.34 TO STA 193+32.28
STA 51+15.29 TO STA 55+91.30	STA 203+63.54 TO STA 208+59.03
STA 59+26.13 TO STA 64+01.57	STA 219+63.26 TO STA 224+44.94
STA 107+83.87 TO STA 112+85.86	STA 274+24.87 TO STA 279+20.70
STA 156+89.69 TO STA 161+80.63	STA 300+21.15 TO STA 304+95.52
STA 178+85.47 TO STA 183+60.39	


FM 455
℄
VARIES 125-166'
VARIES 60-134'
VARIES 15-45'
5'
3'
2'
14'
12'
11'
1'
5'
1'
12'
14'
SIDE WALK
LANE
LANE
LANE
3'
LANE
LANE
PROPOSED ROW
EXIST ROW
4:1
3:1
MAX
1.5%
2%
2%
RIPRAP
PGL

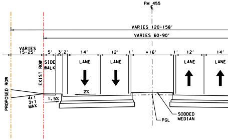
FM 455 PROPOSED TYPICAL SECTION

N.T.S.

*

STA 24+17.19 TO STA 29+00.51
STA 41+56.55 TO STA 46+33.26
STA 64+01.57 TO STA 68+76.07
STA 112+85.86 TO STA 117+79.40
STA 161+80.63 TO STA 166+49.34
STA 193+32.28 TO STA 197+56.47
STA 208+59.03 TO STA 213+30.95
STA 279+20.70 TO STA 283+59.64
STA 287+28.09 TO STA 292+10.73

* SEE
LANE

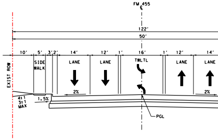

FM 455
℄
VARIES 120-158'
VARIES 60-90'
VARIES 15-25'
5'
3'
2'
14'
12'
1'
*16'
1'
12'
14'
SIDE WALK
LANE
LANE
LANE
LANE
PROPOSED ROW
EXIST ROW
4:1
3:1
MAX
1.5%
2%
SODDED MEDIAN
PGL

FM 455 PROPOSED TYPICAL SECTION

N.T.S.

STA 197+56.47 TO STA 202+45.38
* STA 234+07.03 TO STA 238+36.87
STA 283+59.64 TO STA 287+28.09

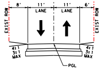
* CENTER MEDIAN TAPERS FROM 5' TO 16' FROM STA 234+63.00 TO STA


FM 455
℄
122'
50'
10'
5'
3'
2'
14'
12'
1'
16'
1'
12'
14'
SIDE WALK
LANE
LANE
TWLTL
LANE
LANE
EXIST ROW
4:1
3:1
MAX
1.5%
2%
2%
PGL

FM 455 PROPOSED DOWNTOWN TYPICAL S

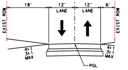
N.T.S.

STA 238+36.87 TO STA 248+04.83


8'
11'
11'
6'
LANE
LANE
EXIST ROW
EXIST ROW
4:1
3:1
MAX
4:1
3:1
MAX
PGL

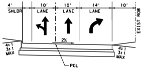
SAM BASS ROAD
EXISTING/PROPOSED TYPICAL SECTION

N.T.S.


18'
12'
12'
6'
LANE
LANE
EXIST ROW
EXIST ROW
4:1
3:1
MAX
4:1
3:1
MAX
PGL

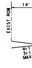
MARION ROAD
EXISTING/PROPOSED TYPICAL SECTION

N.T.S.


4'
10'
10'
14'
10'
SHLDR
LANE
LANE
LANE
EXIST ROW
4:1
3:1
MAX
2%
4:1
3:1
MAX
PGL

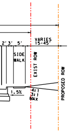
IH35 NORTHBOUND FRONTAGE ROAD
EXISTING/PROPOSED TYPICAL SECTION

N.T.S.

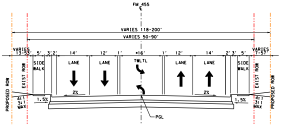

14'
EXIST ROW
4:1
3:1
MAX

IH35
EXISTIN

NOTE: ALL CURBS ARE TYPE II UNLESS OTHERWISE NOTED.


2' 3' 5'
VARIES 15-45'
SIDE WALK
EXIST ROW
PROPOSED ROW
1.5%
4:1
3:1
MAX

PLAN VIEW FOR
CONFIGURATION

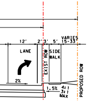

FM 455
℄
VARIES 118-200'
VARIES 50-90'
VARIES 13-53'
VARIES 7-57'
5' 3' 2' 14' 12' 1' *16' 1' 12' 14' 2' 3' 5'
PROPOSED ROW
EXIST ROW
SIDE WALK
LANE
LANE
TWLTL
LANE
LANE
SIDE WALK
EXIST ROW
PROPOSED ROW
2%
2%
1.5%
1.5%
4:1
3:1
MAX
PGL

FM 455 PROPOSED DOWNTOWN TYPICAL SECTION

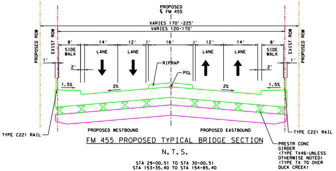
N.T.S.

STA 248+04.83 TO STA 262+58.40
*STA 304+95.52 TO STA 309+80.14

*STRIPED FLUSH MEDIAN


12'
2' 3' 5'
VARIES 15-33'
LANE
SIDE WALK
EXIST ROW
PROPOSED ROW
2%
1.5%
4:1
3:1
MAX

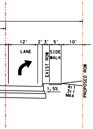
238+17.50


PROPOSED
℄ FM 455
VARIES 170'-225'
VARIES 120-170'
PROPOSED ROW
EXIST ROW
8' 14' 12' 1' 16' 1' 12' 14' 8'
SIDE WALK
LANE
LANE
RIPRAP
PGL
LANE
LANE
SIDE WALK
EXIST ROW
PROPOSED ROW
1'
2'
2'
1'
1.5%
2%
2%
1.5%
TYPE C221 RAIL
PROPOSED WESTBOUND
PROPOSED EASTBOUND
TYPE C221 RAIL
PRESTR CONC GIRDER
(TYPE TX46-UNLESS OTHERWISE NOTED)
(TYPE TX 70 OVER DUCK CREEK)

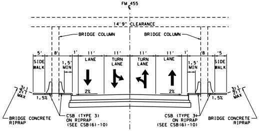
FM 455 PROPOSED TYPICAL BRIDGE SECTION

N.T.S.

STA 29+00.51 TO STA 30+00.51
STA 153+35.40 TO STA 154+85.40


12' 2' 3' 5' 10'
LANE
EXIST ROW
SIDE WALK
PROPOSED ROW
1.5%
4:1
3:1
MAX

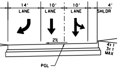
SECTION


FM 455
℄
14' 9" CLEARANCE
BRIDGE COLUMN
BRIDGE COLUMN
5' 8' 1' 11' 11' 11' 11' 1' 8' 5'
SIDE WALK
1.5' MIN
LANE
TURN LANE
TURN LANE
LANE
1.5' MIN
SIDE WALK
2%
2%
1.5%
1.5%
3:1
MAX
BRIDGE CONCRETE RIPRAP
CSB (TYPE 3) ON RIPRAP (SEE CSB(6)-10)
CSB (TYPE 3) ON RIPRAP (SEE CSB(6)-10)
BRIDGE CONCRETE RIPRAP

FM 455 PROPOSED TYPICAL SECTION AT IH 35

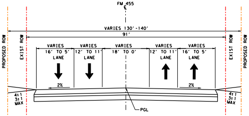
N.T.S.

STA 231+09.97 TO STA 234+07.03


14' 10' 10' 4'
LANE
LANE
LANE
SHLDR
2%
4:1
3:1
MAX
PGL

SOUTHBOUND FRONTAGE ROAD
NG/PROPOSED TYPICAL SECTION

N.T.S.

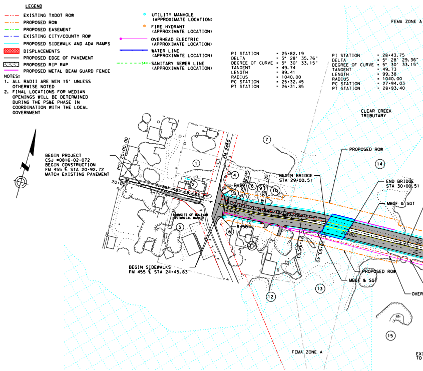

FM 455
℄
VARIES 130'-140'
91'
PROPOSED ROW
EXIST ROW
VARIES 16' TO 5'
VARIES 12' TO 11'
VARIES 18' TO 0'
VARIES 12' TO 11'
VARIES 16' TO 5'
LANE
LANE
LANE
LANE
EXIST ROW
PROPOSED ROW
2%
2%
4:1
3:1
MAX
PGL

FM 455 PROPOSED ASPHALT TRANSITION

N.T.S.

STA 309+80.14 TO STA 312+93.90

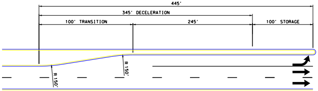
PROPERTY OWNER INFORMATION		
NUMBER	PROPERTY ID NO.	OWNER NAMES
1	59126	RANDY L. BENTLEY
2	59144	STEPHEN L. & GARY L. MARTIN
3	58818	CLEAR CREEK ANIMAL HOSPITAL INC.
4	57964	RANDY L. BENTLEY
5	250374	MARGARET LEROY BENTLEY
6	164480	FD EST CURTSINGER
7	250372	B R JR & MICHELLE A BENTLEY
8	57964	RANDY L. BENTLEY
9	122831	GERALD P. CARSEY
10	117863	GERALD P. CARSEY
11	58796	JOSHUA L & LACEY L SMITH
12	164480	FD EST CURTSINGER
13	58800	PHILLIP C & CHRISTINE L WAGNER
14	188925	SUSAN P. STEWART
15	58828	CALVIN HARBERSON
16	58831	BOLIVAR BAPTIST CHURCH
17	122976	AARON M. & JODI M MARTIN
18	186532	JUSTIN R MAXWELL
19	186533	CALVIN M & AMY R JONES
20	186534	PAUL W & SHARON SPRUIELL
21	56215	JAMES D CURTSINGER
22	111336	CHERI ANNE GRAVES
23	244984	CHERI ANNE GRAVES
24	58833	ROBERT IRWIN ALBRECHT
25	123015	BOLIVAR BAPTIST CHURCH
26	123016	BOLIVAR BAPTIST CHURCH
27	117106	TERRY STOKES
28	117108	JANET L TIPPIT
29	56411	DONNY & VICTORIA BERTEL
30	257967	SUMEER HOMES INC
31	257969	SUMEER HOMES INC
32	258007	SUMEER HOMES INC
33	56269	RENNA L MOSS
34	283703	DAVID C & SARAH MANTSCH
35	56407	MEDIEVAL CASTLE INC
36	247079	B R JR & MICHELLE A BENTLEY
37	56285	JASON W & LAURA M DOWNING
38	56294	RIDIN FOR THE BRAND COWBOY CHURCH
39	56366	MIKE & LINDA THATEN
40	46409	ARTHUR P TRUST BUTHOD
41	134535	PEDRO & ARCELIA CASTOR RIVERA
42	134538	ANTHONY PAX
43	114138	ANTHONY PAX
44	76437	MARTIN BLACK
45	134541	TOMMY & DIANE RHODES
46	134540	TOMMY RHODES
47	149570	JOHNNY MELTON
48	149586	TONY A & BRENDA K BLEDSOE
49	57186	JUDY KNOWES SELPH
50	57193	FLOYD W & JEAN A HALBERT
51	111255	JUDY KNOWES SELPH
52	57224	BILLY ED NANCE
53	57372	NANCE
54	57205	JOHN W III & DELORES COKER
55	57208	PEGGY (AKA BETTY L) PATE
56	57200	ALLEN A & KAREN S SERRANO
57	59752	JO ANN HOLSON
58	59747	JO ANN HOLSON
59	59742	JO ANN HOLSON
60	59761	WILLIAM E NANCE
61	106056	GERALD A KNEZEK
62	106058	WOODARD II & HELEN WEBB
63	106059	GERALD A KNEZEK
64	132566	WOODARD II & HELEN WEBB
65	59751	SANDRA KAY DOBBS
66	75839	SANDRA KAY DOBBS
67	59768	ROBERTA E WALLACE
68	128451	TERRY LEE & NORMA STRAIN JONES
69	283345	DONNY & BRANDY A KNIGHTSTEP
70	300028	WILLIAM J & BELITA G MORRIS
71	300029	BRIAN P & MELISSA A MANN
72	59737	ROBERT G & GAYLETA PUGH
73	208169	DONNY KNIGHTSTEP
74	620422	BOLIVAR WATER SUPPLY CORP
75	225100	KATHY & STOUFFE ROSENTHAL
76	225315	KATHY & STOUFFE ROSENTHAL
77	225313	KATHY & STOUFFE ROSENTHAL
78	59901	JOHN & CAROL BETH KNIGHTSTEP
79	59905	JAMES V SR & DARLENE WATSON
80	59711	CONNIE & STROOPE HOLLSTEIN
81	59734	RANDY R & PATTIE R SLIGER
82	77796	RANDY R & PATTIE R SLIGER
83	77077	RUTH MRS MARSHALL
84	232698	R&R RANCHING AND REAL ESTATE INC
85	232699	R&R RANCHING AND REAL ESTATE INC
86	56536	KENNETH D & SHELLEY L RULAND
87	131208	SANGER ISD
88	56489	PAC GROUP LTD
89	233824	PORTER
90	245453	REED LAND HOLDINGS LLC
91	245454	JJEM PROFESSIONALS LLC
92	245455	SHIELDS FAMILY LLC II
93	245456	KENNETH R HERMES
94	245457	RICHARD J PERRY
95	245458	PAC GROUP LTD
96	56513	S&T RENTALS LLC
97	56518	LINDA DIANE HEWLETT
98	56521	LINDA DIANE HEWLETT
99	56459	O'REILLY AUTOMOTIVE INC
100	243328	PAC GROUP LTD
101	253746	DAVID K & SHERRY A ISBELL
102	243327	CRIMSON TILE MANAGEMENT INC
103	57235	B-29 PROPERTIES LLC
104	238298	FIRST UNITED BANK AND TRUST COMPANY
105	205219	R C FINN INC
106	309668	FUEL MANAGEMENT LLC
107	56431	CHET TR SWITZER
108	56438	CHET TR SWITZER
109	75856	VICTRON STORES LP
110	60333	RICHARD T MUIR
111	59731	SPRINGER FAMILY RENTALS LLC
112	57946	SPRINGER FAMILY RENTALS LLC
113	57919	SPRINGER FAMILY RENTALS LLC
114	199424	SANGER PATE ADDISTION LLC
115	199629	DENTON/NORTH TEXAS SDI PORTFOLIO LLC
116	57927	KLEMENT KARL PROP INC
117	57924	KLEMENT KARL PROP INC
118	58030	DORMAN LEE JOHNSON
119	155832	RUSSEL M CEBALLOS
120	57928	JAMES W CONLEY
121	57932	SHARON S COPELAND
122	58714	LAVERNE SCHERTZ
123	58716	KERRY L & CHERYL CHERTZ
124	77706	OPAL ASHCROFT
125	57643	ALFRED ASHCROFT
126	58447	JOHN D & ELIZABETH SPRINGER
127	58441	JOHN D & ELIZABETH SPRINGER
128	239288	RJ SODHI INC
129	291008	EAGLE FARMS INC ETAL
130	58699	SPRINGER FAMILY RENTALS LLC
131	58704	SPRINGER FAMILY RENTALS LLC
132	58688	ALLAN W & CAROLYN PFAFFLY
133	58678	FRANK SAMDAD LTD P/S ETAL
134	60332	RONALD BEARD
135	58673	DENNIS & PEGGY ARRINGTON
136	58659	RONALD BEARD
137	284004	STUCKY FAMILY LTD PS
138	60307	EAGLE FARMS INC ETAL
139	58738	JESSE L BECK
140	58739	DONNA G SEARLE
141	58585	BILL & DONNA G SEARLE-PARK
142	60305	A RAY STEPHENS
143	60221	JIM & DEBBIE CONLEY
144	60218	BILLIE J PENNINGTON
145	268495	GRANITE INDUSTRIES LLC
146	60322	HUGH Z PRUETT
147	123509	SANGER ISD
148	132465	SANGER ISD


LEGEND
EXISTING TxDOT ROW
PROPOSED ROW
PROPOSED EASEMENT
EXISTING CITY/COUNTY ROW
PROPOSED SIDEWALK AND ADA RAMPS
DISPLACEMENTS
PROPOSED EDGE OF PAVEMENT
PROPOSED RIP RAP
PROPOSED METAL BEAM GUARD FENCE
UTILITY MANHOLE (APPROXIMATE LOCATION)
FIRE HYDRANT (APPROXIMATE LOCATION)
OVERHEAD ELECTRIC (APPROXIMATE LOCATION)
WATER LINE (APPROXIMATE LOCATION)
SAN
SANITARY SEWER LINE (APPROXIMATE LOCATION)
FEMA ZONE A
CLEAR CREEK TRIBUTARY
BEGIN PROJECT
CSJ #0816-02-072
BEGIN CONSTRUCTION
FM 455 ℄ STA 20+92.72
MATCH EXISTING PAVEMENT
FM 2450
BEGIN SIDEWALKS
FM 455 ℄ STA 24+45.83
TOWNSITE OF BOLIVAR HISTORICAL MARKER
BEGIN BRIDGE
STA 29+00.51
END BRIDGE
STA 30+00.51
PROPOSED ROW
PROPOSED ROW
MBGF & SGT
MBGF & SGT
OVER
R=50
R=50
FEMA ZONE A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

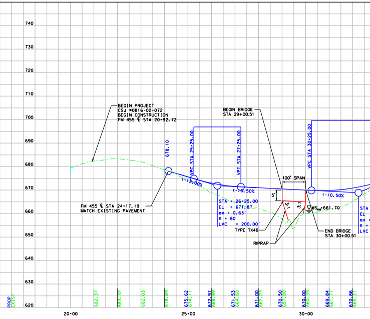
PI STATION = 25+82.19
DELTA = 5° 28' 35.76"
DEGREE OF CURVE = 5° 30' 33.15"
TANGENT = 49.74
LENGTH = 99.41
RADIUS = 1040.00
PC STATION = 25+32.45
PT STATION = 26+31.85

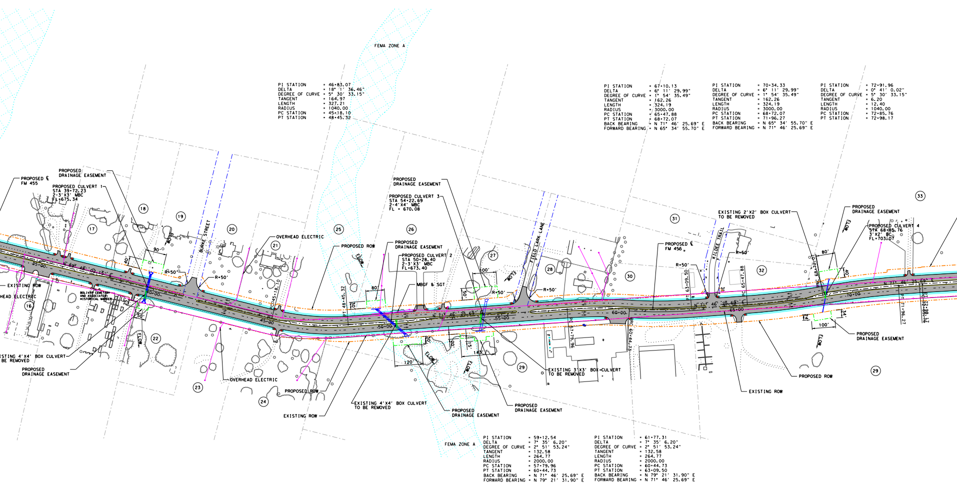
PI STATION = 28+43.75
DELTA = 5° 28' 29.36"
DEGREE OF CURVE = 5° 30' 33.15"
TANGENT = 49.73
LENGTH = 99.38
RADIUS = 1040.00
PC STATION = 27+94.03
PT STATION = 28+93.40

NOTES:
1. ALL RADII ARE MIN 15' UNLESS OTHERWISE NOTED
2. FINAL LOCATIONS FOR MEDIAN OPENINGS WILL BE DETERMINED DURING THE PS&E PHASE IN COORDINATION WITH THE LOCAL GOVERNMENT


445'
345' DECELERATION
100' TRANSITION
245'
100' STORAGE
R 150'
R 150'

FM 455 PROPOSED LEFT TURN BAY TYPICAL DETAIL




FEMA ZONE A
PROPOSED ℄ FM 455
PROPOSED DRAINAGE EASEMENT
PROPOSED CULVERT 1
STA 39+72.23
2-3'X3' MBC
FL=675.34
EXISTING ROW
OVERHEAD ELECTRIC
BOLIVAR CEMETARY AND ASSOCIATED HISTORICAL MARKER
EXISTING 4'X4' BOX CULVERT TO BE REMOVED
PROPOSED DRAINAGE EASEMENT
BURKE STREET
R=50'
90'
40'
50'
35+00
40+00
45+00
50+00
55+00
60+00
65+00
70+00
OVERHEAD ELECTRIC
PROPOSED ROW
PROPOSED ROW
EXISTING ROW
PROPOSED DRAINAGE EASEMENT
PROPOSED CULVERT 3
STA 54+22.69
2-4'X4' MBC
FL = 670.08
PROPOSED DRAINAGE EASEMENT
PROPOSED CULVERT 2
STA 50+28.40
2-3'X3' MBC
FL=673.40
MBGF & SGT
EXISTING 4'X4' BOX CULVERT TO BE REMOVED
PROPOSED DRAINAGE EASEMENT
PROPOSED DRAINAGE EASEMENT
FIELD LARK LANE
EXISTING 3'X3' BOX CULVERT TO BE REMOVED
PC 48+45.32
PC 45+18.10
PC 57+79.96
PRC 60+44.73
PT 63+09.50
PC 65+47.88
PC 68+72.07
PT 71+96.27
PT 72+98.17
N 71° 46' 25.69" E
N 79° 21' 31.90" E
N 65° 34' 55.70" E
PROPOSED ℄ FM 456
KILDEE TRAIL
EXISTING 2'X2' BOX CULVERT TO BE REMOVED
PROPOSED DRAINAGE EASEMENT
PROPOSED CULVERT 4
STA 68+85.76
3'X2' BC
FL=703.07
PROPOSED ROW
EXISTING ROW
PROPOSED DRAINAGE EASEMENT
FLOW
80'
100'
120'
143'
15'
20'
30'
34'
24'
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

PI STATION = 46+83.07
DELTA = 18° 1' 36.46"
DEGREE OF CURVE = 5° 30' 33.15"
TANGENT = 164.97
LENGTH = 327.21
RADIUS = 1040.00
PC STATION = 45+18.10
PT STATION = 48+45.32

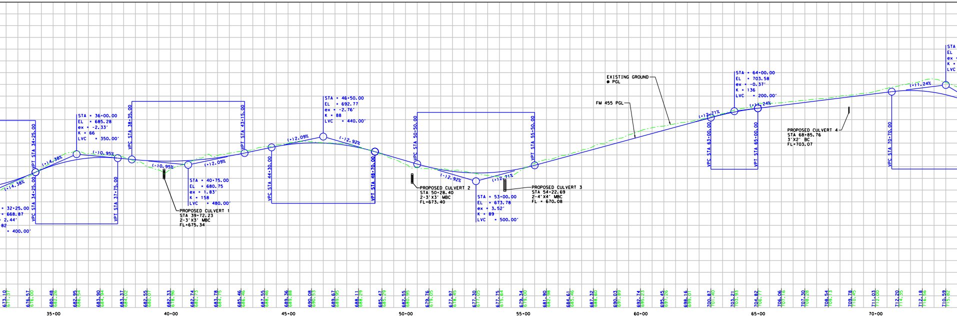
PI STATION = 67+10.13
DELTA = 6° 11' 29.99"
DEGREE OF CURVE = 1° 54' 35.49"
TANGENT = 162.26
LENGTH = 324.19
RADIUS = 3000.00
PC STATION = 65+47.88
PT STATION = 68+72.07
BACK BEARING = N 71° 46' 25.69" E
FORWARD BEARING = N 65° 34' 55.70" E

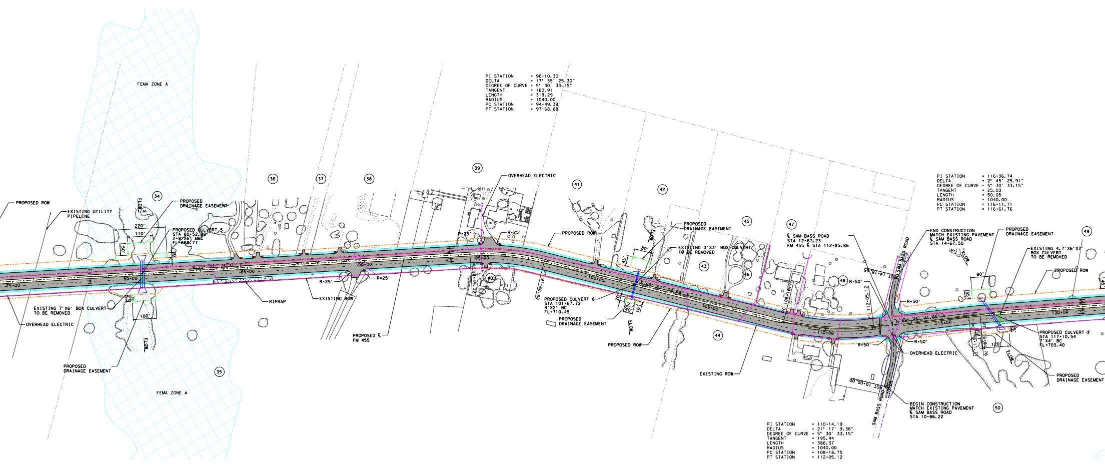
PI STATION = 70+34.33
DELTA = 6° 11' 29.99"
DEGREE OF CURVE = 1° 54' 35.49"
TANGENT = 162.26
LENGTH = 324.19
RADIUS = 3000.00
PC STATION = 68+72.07
PT STATION = 71+96.27
BACK BEARING = N 65° 34' 55.70" E
FORWARD BEARING = N 71° 46' 25.69" E

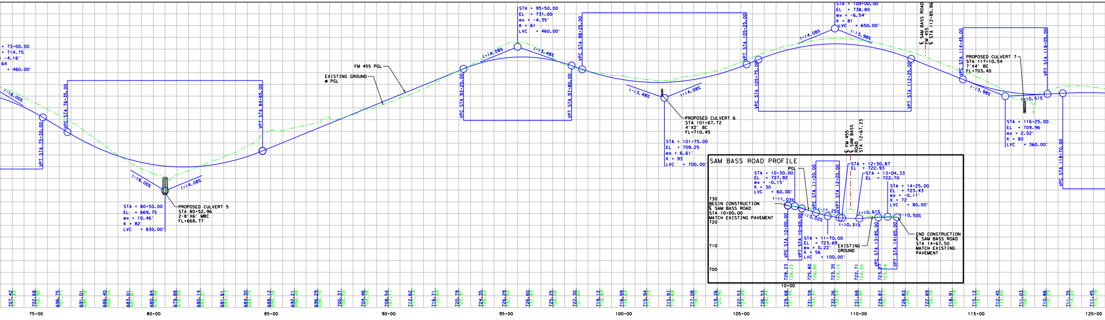
PI STATION = 72+91.96
DELTA = 0° 41' 0.02"
DEGREE OF CURVE = 5° 30' 33.15"
TANGENT = 6.20
LENGTH = 12.40
RADIUS = 1040.00
PC STATION = 72+85.76
PT STATION = 72+98.17

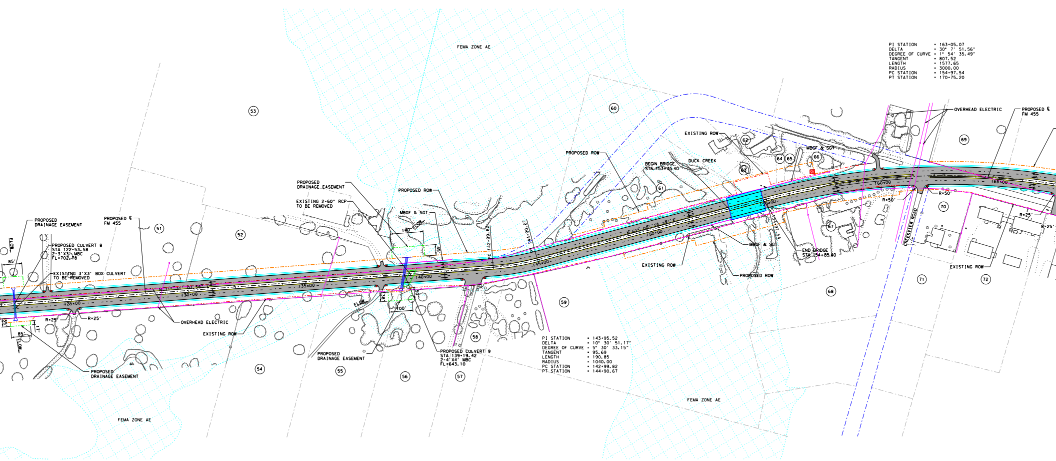
PI STATION = 59+12.54
DELTA = 7° 35' 6.20"
DEGREE OF CURVE = 2° 51' 53.24"
TANGENT = 132.58
LENGTH = 264.77
RADIUS = 2000.00
PC STATION = 57+79.96
PT STATION = 60+44.73
BACK BEARING = N 71° 46' 25.69" E
FORWARD BEARING = N 79° 21' 31.90" E

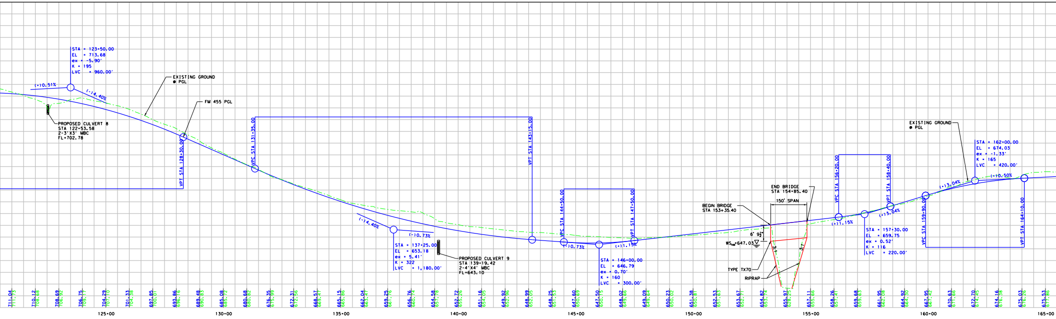
PI STATION = 61+77.31
DELTA = 7° 35' 6.20"
DEGREE OF CURVE = 2° 51' 53.24"
TANGENT = 132.58
LENGTH = 264.77
RADIUS = 2000.00
PC STATION = 60+44.73
PT STATION = 63+09.50
BACK BEARING = N 79° 21' 31.90" E
FORWARD BEARING = N 71° 46' 25.69" E




PI STATION = 96+10.30
DELTA = 17° 35′ 25.30″
DEGREE OF CURVE = 5° 30′ 33.15″
TANGENT = 160.91
LENGTH = 319.29
RADIUS = 1040.00
PC STATION = 94+49.39
PT STATION = 97+68.68
PI STATION = 116+36.74
DELTA = 2° 45′ 25.91″
DEGREE OF CURVE = 5° 30′ 33.15″
TANGENT = 25.03
LENGTH = 50.05
RADIUS = 1040.00
PC STATION = 116+11.71
PT STATION = 116+61.76
PI STATION = 110+14.19
DELTA = 21° 17′ 9.36″
DEGREE OF CURVE = 5° 30′ 33.15″
TANGENT = 195.44
LENGTH = 386.37
RADIUS = 1040.00
PC STATION = 108+18.75
PT STATION = 112+05.12
FEMA ZONE A
FEMA ZONE A
PROPOSED ROW
EXISTING UTILITY PIPELINE
FLOW
34
PROPOSED DRAINAGE EASEMENT
220′
110′
50′
20′
PROPOSED CULVERT 5
STA 80+52.96
2-8′X6′ MBC
FL=668.77
N 72° 21′ 25.71″ E
75+00
80+00
85+00
90+00
95+00
100+00
105+00
110+00
115+00
120+00
27′
100′
EXISTING 7′X6′ BOX CULVERT TO BE REMOVED
OVERHEAD ELECTRIC
PROPOSED DRAINAGE EASEMENT
FLOW
35
36
37
38
RIPRAP
EXISTING ROW
R=25′
R=25′
PROPOSED ℄ FM 455
39
OVERHEAD ELECTRIC
R=25′
R=25′
40
PC 94+49.39
PT 97+68.68
41
PROPOSED ROW
42
PROPOSED DRAINAGE EASEMENT
FLOW
80′
45′
EXISTING 3′X3′ BOX CULVERT TO BE REMOVED
S 89° 57′ 08.89″ E
PROPOSED CULVERT 6
STA 101+67.72
4′X2′ BC
FL=710.45
20′
40′
16′
PROPOSED DRAINAGE EASEMENT
FLOW
PROPOSED ROW
43
44
45
46
EXISTING ROW
47
℄ SAM BASS ROAD
STA 12+67.23
FM 455 ℄ STA 112+85.86
48
R=50′
PC 108+18.75
PT 112+05.12
POT 14+78.65
SAM BASS ROAD
END CONSTRUCTION
MATCH EXISTING PAVEMENT
℄ SAM BASS ROAD
STA 14+67.50
R=50′
R=50′
R=50′
N 68° 45′ 41.65″ E
OVERHEAD ELECTRIC
POT 10+00.00
SAM BASS ROAD
10+00
BEGIN CONSTRUCTION
MATCH EXISTING PAVEMENT
℄ SAM BASS ROAD
STA 10+86.22
50
FLOW
PROPOSED DRAINAGE EASEMENT
80′
35′
EXISTING 4.7′X6′X7′ BOX CULVERT TO BE REMOVED
PROPOSED ROW
49
PROPOSED CULVERT 7
STA 117+10.54
7′X4′ BC
FL=703.40
PC 116+11.71
PT 116+61.76
120
23′
45′
FLOW
PROPOSED DRAINAGE EASEMENT



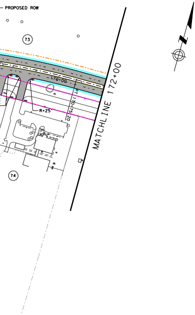

FEMA ZONE AE
PI STATION = 163+05.07
DELTA = 30° 7′ 51.56″
DEGREE OF CURVE = 1° 54′ 35.49″
TANGENT = 807.52
LENGTH = 1577.65
RADIUS = 3000.00
PC STATION = 154+97.54
PT STATION = 170+75.20
OVERHEAD ELECTRIC
PROPOSED ℄ FM 455
53
60
62
63
64
65
66
69
EXISTING ROW
PROPOSED ROW
BEGIN BRIDGE STA 153+35.40
DUCK CREEK
MBGF & SGT
61
PROPOSED DRAINAGE EASEMENT
EXISTING 2-60″ RCP TO BE REMOVED
PROPOSED ROW
MBGF & SGT
140′
FLOW
45′
PC 142+99.82
144+90.67
N 61° 00′ 18.36″ E
150+00
PC 154+97.54
155+00
160+00
165+00
R=50′
R=50′
CREEKVIEW ROAD
70
R=25′
R=25′
PROPOSED ℄ FM 455
51
52
FLOW
85′
PROPOSED DRAINAGE EASEMENT
PROPOSED CULVERT 8
STA 122+53.58
2-3′X3′ MBC
FL=702.78
EXISTING 3′X3′ BOX CULVERT TO BE REMOVED
N 71° 31′ 07.56″ E
130+00
135+00
140+00
145+00
125+00
R=25′
R=25′
35′
17′
85′
FLOW
OVERHEAD ELECTRIC
EXISTING ROW
38′
50′
100′
FLOW
MBGF & SGT
EXISTING ROW
PROPOSED ROW
END BRIDGE STA 154+85.40
67
68
EXISTING ROW
71
72
59
58
PI STATION = 143+95.52
DELTA = 10° 30′ 51.17″
DEGREE OF CURVE = 5° 30′ 33.15″
TANGENT = 95.69
LENGTH = 190.85
RADIUS = 1040.00
PC STATION = 142+99.82
PT STATION = 144+90.67
PROPOSED DRAINAGE EASEMENT
PROPOSED CULVERT 9
STA 139+19.42
2-4′X4′ MBC
FL=643.10
54
55
56
57
PROPOSED DRAINAGE EASEMENT
FEMA ZONE AE
FEMA ZONE AE

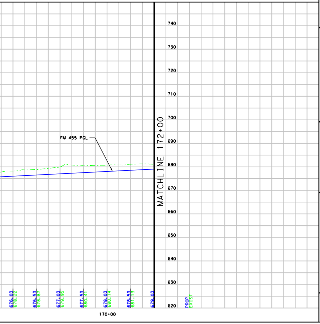

STA = 123+50.00
EL = 713.68
ex = -5.90′
K = 195
LVC = 960.00′
(+)0.51%
(-)4.40%
EXISTING GROUND @ PGL
FM 455 PGL
PROPOSED CULVERT 8
STA 122+53.58
2-3′X3′ MBC
FL=702.78
VPT STA 128+30.00
VPC STA 131+35.00
VPT STA 143+15.00
(-)4.40%
(-)0.73%
STA = 137+25.00
EL = 653.18
ex = 5.41′
K = 322
LVC = 1,180.00′
PROPOSED CULVERT 9
STA 139+19.42
2-4′X4′ MBC
FL=643.10
VPC STA 144+50.00
VPT STA 147+50.00
(-)0.73%
(+)1.15%
STA = 146+00.00
EL = 646.79
ex = 0.70′
K = 160
LVC = 300.00′
BEGIN BRIDGE
STA 153+35.40
END BRIDGE
STA 154+85.40
150′ SPAN
6′ 9½″
WS100=647.03
3:1
3:1
TYPE TX70
RIPRAP
VPC STA 156+20.00
VPT STA 158+40.00
(+)1.15%
(+)3.04%
STA = 157+30.00
EL = 659.75
ex = 0.52′
K = 116
LVC = 220.00′
VPC STA 159+90.00
VPT STA 164+10.00
(+)3.04%
(+)0.50%
EXISTING GROUND @ PGL
STA = 162+00.00
EL = 674.03
ex = -1.33′
K = 165
LVC = 420.00′
711.04 711.73
710.12 708.68
708.69 706.92
706.75 709.17
704.29 707.10
701.33 704.38
697.85 700.01
693.86 696.16
689.48 690.83
685.08 685.72
680.68 680.82
676.35 675.99
672.31 672.56
668.57 669.47
665.15 665.86
662.04 663.47
659.25 661.76
656.76 660.74
654.58 657.78
652.72 655.26
651.16 654.05
649.92 652.96
648.99 652.05
648.25 651.53
647.60 650.69
647.50 650.15
648.02 649.66
649.09 649.64
650.23 650.02
651.38 650.81
652.53 651.63
653.67 652.71
654.82 653.74
655.97 628.25
657.11 655.66
658.26 657.41
659.68 659.63
661.95 662.08
664.92 664.30
667.95 667.42
670.63 671.66
672.70 674.45
674.16 676.38
675.03 676.26
675.53 677.86
125+00
130+00
135+00
140+00
145+00
150+00
155+00
160+00
165+00

LEGEND

- EXISTING TXDOT ROW
- PROPOSED ROW
- PROPOSED EASEMENT
- EXISTING CITY/COUNTY ROW
- PROPOSED SIDEWALK AND ADA RAMPS
- ▨ DISPLACEMENTS
- PROPOSED EDGE OF PAVEMENT
- ▨ PROPOSED RIP RAP
- PROPOSED METAL BEAM GUARD FENCE
- ○ UTILITY MANHOLE (APPROXIMATE LOCATION)
- FIRE HYDRANT (APPROXIMATE LOCATION)
- OVERHEAD ELECTRIC (APPROXIMATE LOCATION)
- WATER LINE (APPROXIMATE LOCATION)
- SAN SANITARY SEWER LINE (APPROXIMATE LOCATION)

NOTES:
1. ALL RADII ARE MIN 15' UNLESS OTHERWISE NOTED
2. FINAL LOCATIONS FOR MEDIAN OPENINGS WILL BE DETERMINED DURING THE PS&E PHASE IN COORDINATION WITH THE LOCAL GOVERNMENT


PROPOSED ROW
73
170+00
PT 170+75.20
R=25'
74
MATCHLINE 172+00



DENTON COUNTY

PRELIMINARY DESIGN SCHEMATIC

Texas Department of Transportation

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DALLAS DISTRICT
JAMES K. SELMAN P.E.,
DISTRICT ENGINEER

FM 455

FROM WEST OF FM 2450 TO EAST OF MARION ROAD
CSJ NO. 0816-02-072

ROADWAY = 28,951.18 FT = 5.483 MI
BRIDGE = 250 FT = 0.047 MI
NET LENGTH OF PROJECT = 29,201.18 FT = 5.530 MI

FM 455

FUNCTIONAL CLASS: MINOR ARTERIAL

DESIGN SPEED: 45 MPH (LOW SPEED URBAN)

PROJECTED ADT (2020): 15,400
PROJECTED ADT (2040): 21,400
TRAFFIC SOURCE: TXDOT, TP&P MEMO JUNE 10, 2013

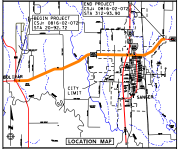
SAM BASS ROAD

DESIGN SPEED: 35 MPH (CITY STREET)

MARION ROAD

DESIGN SPEED: 40 MPH (CITY STREET)

EQUATIONS: NONE
RAILROADS: BNSF RR
EXCEPTIONS: NONE


END PROJECT
CSJ: 0816-02-072
STA 312+93.90
BEGIN PROJECT
CSJ: 0816-02-072
STA 20+92.72
BOLIVAR
CITY LIMIT
SANGER
455
35
LOCATION MAP

SCALE:

200' 100' 0 200'

SCALE: HORIZONTAL 1"= 200'

20' 10' 0 20'

SCALE: VERTICAL 1"= 20'

DANNENBAUM
ENGINEERING COMPANY - DALLAS, LLC
T.B.P.E. FIRM REGISTRATION #392
4141 BLUE LAKE CIRCLE, STE 240 DALLAS, TX 75244 (972) 239-2002

PRELIMINARY
SUBJECT TO CHANGE

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF DANIEL W. EVERETT, P.E. 93551. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES. DATE: 5/18/2015

ROLL 1 OF 2