COLLIN COUNTY TOLL ROAD AUTHORITY

DESIGN SCHEMATIC
COLLIN COUNTY OUTER LOOP

COUNTY: COLLIN
DATE: JULY 2019

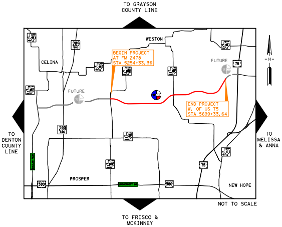
ROLL 6 OF 8

COLLIN COUNTY OUTER LOOP

PHASE III: FUTURE EAST BOUND FRONTAGE ROAD
FM 2478 TO WEST OF US 75

ROADWAY FUNCTIONAL CLASSIFICATION:	URBAN FREEWAY
ROADWAY CONSTRUCTION TYPE:	NEW FACILITY
DESIGN SPEED (MAINLANES):	70 MPH
DESIGN SPEED (OUTER LOOP EBFR):	45 MPH
DESIGN SPEED (RAMPS):	50 MPH
DESIGN SPEED (CR 52,51,53,1117):	40 MPH
NET LENGTH OF PROJECT:	7.97 MILES
SCHEMATIC SCALE:	HORIZ: 1"=100' VERT: 1"=20'
AERIAL PHOTO DATE:	2015

LOCATION MAP


TO GRAYSON
COUNTY LINE
WESTON
CELINA
289
BEGIN PROJECT
AT FM 2478
STA 5254+33.96
FUTURE
75
-N-
FUTURE
END PROJECT
W. OF US 75
STA 5699+33.64
TO
DENTON
COUNTY
LINE
TO
MELISSA
& ANNA
289
75
PROSPER
380
380
NEW HOPE
NOT TO SCALE
TO FRISCO &
MCKINNEY

LEGEND

▨	FUTURE MAINLANES
🟨	PROPOSED FRONTAGE ROAD
▨	FUTURE IMPROVEMENTS (BY OTHERS)
🟩	RAMPS
🟦	CURBED GORE
🟧	BRIDGE
🟦	PROPOSED CROSS STREET (BY OTHERS)
▨	100-YR FEMA FLOODPLAIN
—	PARCEL BOUNDARY
— - -	EXISTING RIGHT-OF-WAY
- - -	EXISTING EASEMENT
— - -	PROPOSED RIGHT-OF-WAY
— - -	FUTURE RIGHT-OF-WAY (BY OTHERS)
— —	PROPOSED DRAINAGE EASEMENT
— —	PROPOSED PERMANENT SLOPE EASEMENT
— —	PROPOSED TEMP CONSTRUCTION EASEMENT
— - -	PROPOSED CENTERLINE OUTER LOOP CORRIDOR
— - -	PROPOSED CENTERLINE ACCES ROAD
— —	PROPOSED CENTERLINE CROSS STREET/TRANSITION
—	PROPOSED RETAINING WALL
—	EXISTING CONTOUR (1FOOT)

NOTES:

1. EXISTING FEATURES WERE NOT FIELD SURVEYED. SCHEMATIC LAYOUTS ARE BASED ON AERIAL SURVEY AND RECORD PLANS ONLY.
2. EXISTING DRIVEWAYS WILL REMAIN UNLESS IT IS DETERMINED DURING DETAILED DESIGN AND COORDINATION WITH THE CITIES OR COUNTY THAT DRIVEWAY WILL BE A SAFETY ISSUE AND/OR VIOLATES ACCESS MANAGEMENT REQUIREMENTS.
3. FINAL DETERMINATION OF CONTROL OF ACCESS WILL BE DETERMINED BY THE COUNTIES OR MUNICIPALITIES AT A FUTURE DATE.
4. ADJACENT DEVELOPMENTS ARE PRELIMINARY,. DESIGNED BY OTHERS AND SUBJECT TO CHANGE.
5. SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION NOVEMBER 1, 2014 SHALL GOVERN ON THIS PROJECT.
6. BASIS OF BEARINGS: TEXAS STATE PLANE COORIDINATE SYSTEM, NAD 83 (1993), NORTH CENTRAL ZONE (4202), ALL DISTANCES AND COORDINATES SHOWN HEREON ARE SCAILED FROM 0,0 USING A TXDOT SURFACE ADJUSTMENT FACTOR OF 1.00015271. COORDINATE VALUES DERIVED USING THE WESTERN DATA SYSTEM VRS NETWORK.
7. FOR RETAINING WALL BEGIN/END STATION & OFFSET. REFER TO RETAINING WALL CHART.

EXISTING UTILITY LEGEND

—OH-ELEC—	ELECTRIC LINE - OVERHEAD
—UG-ELEC—	ELECTRIC WIRE - UNDERGROUND
—WATER—	WATER LINE
—CABLE—	CABLE LINE
—FOL—	FIBER OPTIC LINE
—SS—	SANITARY LINE
—GP—	GAS LINE
—STM—	STORM DRAIN LINE

SCHEMATIC PREPARED BY:

BGE, INC.
REGISTRATION NUMBER F-1046

FOR INTERIM REVIEW ONLY. NOT FOR PERMITTING, BIDDING OR CONSTRUCTION.

Prepared by or under the
Direct Supervision of:

NAME	P.E. NUMBER
MICHAEL H. GARRISON	79285
STONEY D. SKIDMORE	106316

7/10/2019
DATE

HORIZONTAL SCALE
0 50 100 200 300
VERTICAL SCALE
0 10 20 40 60

BGE, Inc.
2595 Dallas Parkway, Suite 101, Frisco, TX 75034
Tel: 972-464-4800 • www.bgeinc.com
TBPE Registration No. F-1046

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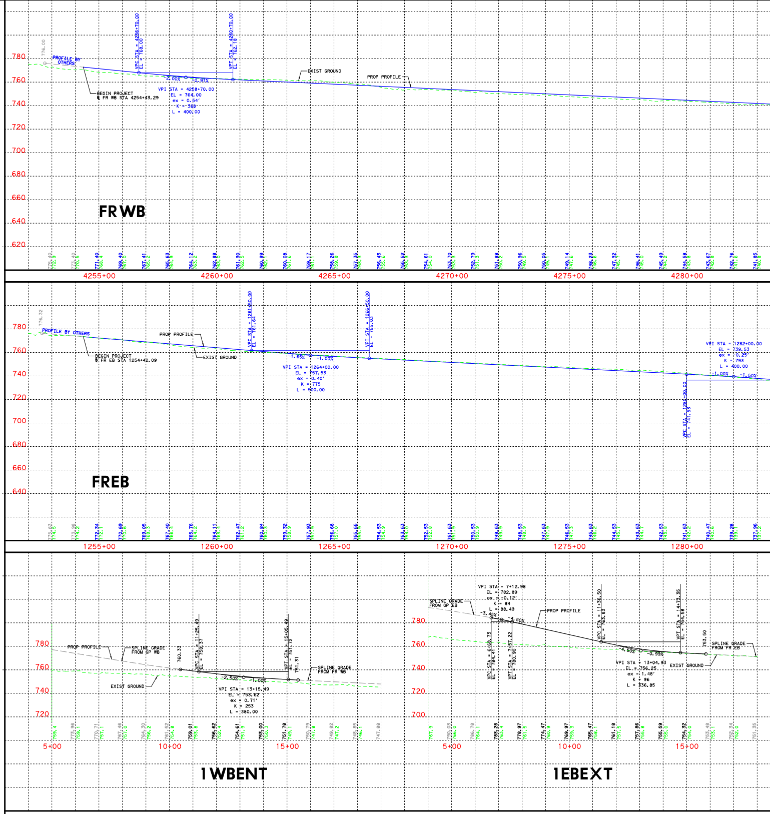
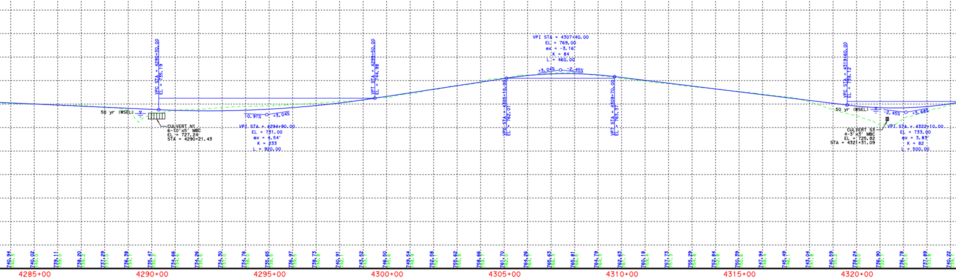
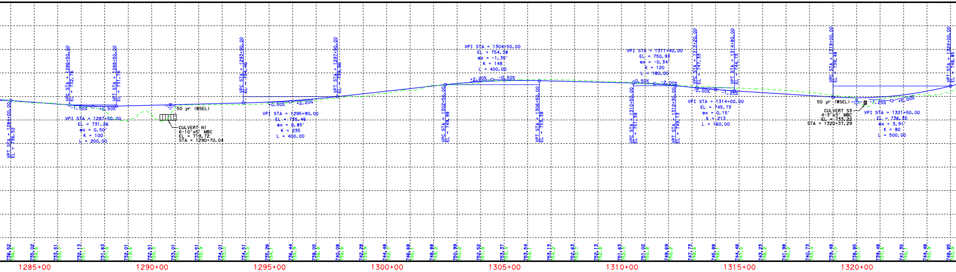
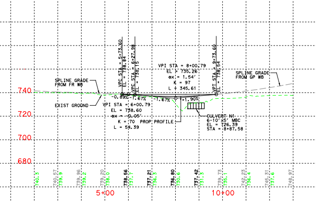
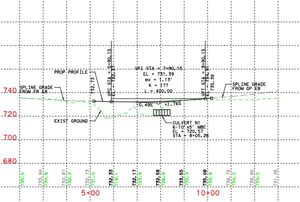

FRWB
780
760
740
720
700
680
660
640
620
776.00
PROFILE BY OTHERS
BEGIN PROJECT
℄ FR WB STA 4254+43.29
VPC STA = 4256+70.00
EL = 768.00
VPT STA = 4260+70.00
EL = 762.18
-2.00%
-0.91%
VPI STA = 4258+70.00
EL = 764.00
ex = 0.54'
K = 368
L = 400.00
EXIST GROUND
PROP PROFILE
4255+00
4260+00
4265+00
4270+00
4275+00
4280+00
FREB
776.32
PROFILE BY OTHERS
BEGIN PROJECT
℄ FR EB STA 1254+42.09
PROP PROFILE
EXIST GROUND
VPC STA = 1261+50.00
EL = 761.64
VPT STA = 1266+50.00
EL = 755.03
-1.65%
-1.00%
VPI STA = 1264+00.00
EL = 757.53
ex = 0.40'
K = 775
L = 500.00
VPI STA = 1282+00.00
EL = 739.53
ex = -0.25'
K = 793
L = 400.00
-1.00%
-1.50%
VPC STA = 1280+00.00
EL = 741.53
1255+00
1260+00
1265+00
1270+00
1275+00
1280+00
1WBENT
PROP PROFILE
SPLINE GRADE FROM GP WB
760.33
VPC STA = 11+25.49
EL = 758.37
VPI STA = 15+05.49
EL = 751.72
751.31
-2.50%
-1.00%
SPLINE GRADE FROM FR WB
EXIST GROUND
VPI STA = 13+15.49
EL = 753.62
ex = 0.71'
K = 253
L = 380.00
5+00
10+00
15+00
1EBEXT
VPI STA = 7+12.98
EL = 782.89
ex = -0.12'
K = 84
L = 88.49
SPLINE GRADE FROM GP EB
-3.45%
-4.50%
PROP PROFILE
VPC STA = 6+68.73
EL = 784.41
VPT STA = 7+57.22
EL = 780.90
VPC STA = 11+36.50
EL = 763.83
VPT STA = 14+73.35
EL = 754.58
753.50
-4.50%
-0.99%
SPLINE GRADE FROM FR EB
VPI STA = 13+04.93
EL = 756.25
ex = 1.48'
K = 96
L = 336.85
EXIST GROUND
5+00
10+00
15+00


VPC STA = 4290+30.00
EL = 735.19
50 yr (WSEL)
CULVERT N1
6-10'x5' MBC
EL = 727.24
STA = 4290+21.43
-0.91%
+3.04%
VPI STA = 4294+90.00
EL = 751.00
ex = 4.54'
K = 233
L = 920.00
VPT STA = 4299+50.00
EL = 744.98
VPC STA = 4305+10.00
EL = 762.01
VPI STA = 4307+40.00
EL = 769.00
ex = -3.16'
K = 84
L = 460.00
+3.04%
-2.45%
VPT STA = 4309+70.00
EL = 763.37
VPC STA = 4319+60.00
EL = 739.12
50 yr (WSEL)
-2.45%
+3.68%
CULVERT S3
4-3'x3' MBC
EL = 725.82
STA = 4321+31.09
VPI STA = 4322+10.00
EL = 733.00
ex = 3.83'
K = 82
L = 500.00
4285+00
4290+00
4295+00
4300+00
4305+00
4310+00
4315+00
4320+00

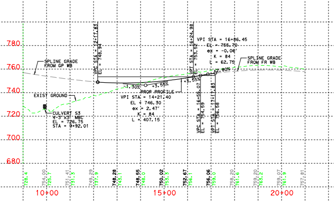

VPT STA = 1284+00.00
EL = 736.52
VPC STA = 1286+50.00
EL = 732.76
VPT STA = 1288+50.00
EL = 731.76
-1.50%
+0.50%
VPI STA = 1287+50.00
EL = 731.26
ex = 0.50'
K = 100
L = 200.00
50 yr (WSEL)
CULVERT N1
6-10'x5' MBC
EL = 719.72
STA = 1290+70.04
VPC STA = 1293+90.00
EL = 734.46
VPT STA = 1297+90.00
EL = 739.86
+0.50%
+2.20%
VPI STA = 1295+90.00
EL = 735.46
ex = 0.85'
K = 235
L = 400.00
VPC STA = 1302+50.00
EL = 749.98
VPI STA = 1304+50.00
EL = 754.38
ex = -1.35'
K = 148
L = 400.00
+2.20%
-0.50%
VPT STA = 1306+50.00
EL = 753.38
VPI STA = 1311+40.00
EL = 750.93
ex = -0.34'
K = 120
L = 180.00
-0.50%
-2.00%
VPC STA = 1310+50.00
EL = 751.38
VPT STA = 1312+30.00
EL = 749.13
VPC STA = 1313+20.00
EL = 747.33
VPT STA = 1314+80.00
EL = 744.73
-2.00%
-1.25%
VPI STA = 1314+00.00
EL = 745.73
ex = 0.15'
K = 213
L = 160.00
VPC STA = 1319+00.00
EL = 739.48
50 yr (WSEL)
-1.25%
+5.00%
CULVERT S3
4-3'x3' MBC
EL = 733.22
STA = 1320+37.29
VPI STA = 1321+50.00
EL = 736.35
ex = 3.91'
K = 80
L = 500.00
VPT STA = 1324+00.00
EL = 748.85
1285+00
1290+00
1295+00
1300+00
1305+00
1310+00
1315+00
1320+00


VPC STA = 5+73.60
EL = 738.84
VPC STA = 6+27.98
EL = 738.15
VPI STA = 8+00.79
EL = 735.26
ex = 1.54'
K = 97
L = 345.61
VPT STA = 9+73.60
EL = 738.54
SPLINE GRADE FROM FR WB
SPLINE GRADE FROM GP WB
EXIST GROUND
-0.89%
-1.67%
-1.67%
+1.90%
VPI STA = 6+00.79
EL = 738.60
ex = -0.05'
K = 70
L = 54.39
PROP PROFILE
CULVERT N1
6-10'x5' MBC
EL = 726.39
STA = 8+87.58
740
720
700
680
5+00
10+00

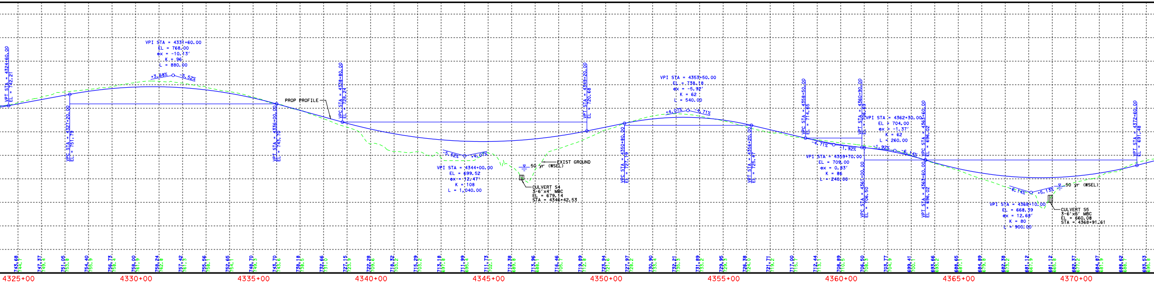
1WBEXT

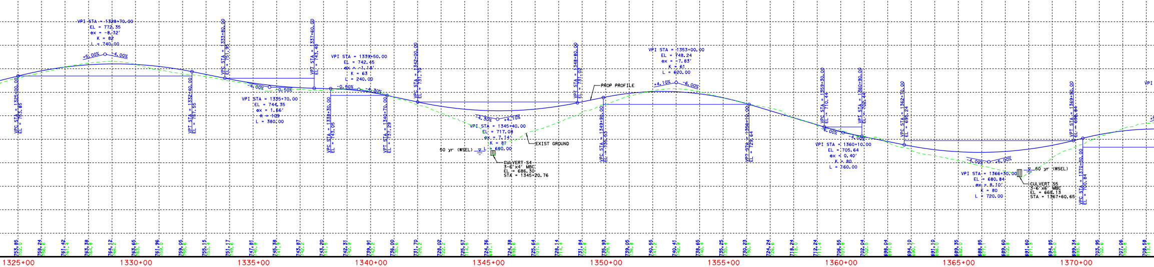

PROP PROFILE
SPLINE GRADE FROM FR EB
732.73
VPC STA = 5+90.15
EL = 732.87
VPI STA = 7+90.15
EL = 731.39
ex = 1.13'
K = 177
L = 400.00
VPT STA = 9+90.15
EL = 734.91
735.38
SPLINE GRADE FROM GP EB
-0.49%
+1.76%
EXIST GROUND
CULVERT N1
6-10'x5' MBC
EL = 720.57
STA = 8+05.26
740
720
700
680
5+00
10+00

1EBENT


780
760
740
720
700
680
SPLINE GRADE FROM GP WB
VPC STA = 12+17.83
EL = 748.94
VPT STA = 16+24.98
EL = 753.52
VPI STA = 16+86.45
EL = 755.70
ex = -0.06'
K = 84
L = 62.75
SPLINE GRADE FROM FR WB
+2.80%
+3.55%
-1.30%
+3.55%
PROP PROFILE
EXIST GROUND
VPI STA = 14+21.40
EL = 746.30
ex = 2.47'
K = 84
L = 407.15
CULVERT S3
4-3'x3' MBC
EL = 726.75
STA = 9+92.01
VPC STA = 16+55.07
EL = 754.59
VPT STA = 17+17.83
EL = 756.58
10+00
15+00
20+00

2WBENT


VPT STA = 4324+60.00
EL = 742.21
VPC STA = 4327+20.00
EL = 751.79
VPI STA = 4331+60.00
EL = 768.00
ex = -10.13'
K = 96
L = 880.00
+3.68%
-5.52%
VPT STA = 4336+00.00
EL = 743.70
PROP PROFILE
VPC STA = 4338+80.00
EL = 728.24
-5.52%
+4.07%
VPI STA = 4344+00.00
EL = 699.52
ex = 12.47'
K = 108
L = 1,040.00
50 yr (WSEL)
EXIST GROUND
CULVERT S4
3-6'x4' MBC
EL = 679.14
STA = 4346+42.53
VPT STA = 4349+20.00
EL = 720.68
VPC STA = 4350+80.00
EL = 727.19
VPI STA = 4353+50.00
EL = 738.18
ex = -5.92'
K = 62
L = 540.00
+4.07%
-4.71%
VPT STA = 4356+20.00
EL = 725.47
VPC STA = 4358+50.00
EL = 714.65
-4.71%
-1.92%
VPI STA = 4359+70.00
EL = 709.00
ex = 0.83'
K = 86
L = 240.00
VPT STA = 4360+90.00
EL = 706.69
VPC STA = 4361+00.00
EL = 706.50
VPI STA = 4362+30.00
EL = 704.00
ex = -1.37'
K = 62
L = 260.00
-1.92%
-6.14%
VPC STA = 4363+60.00
EL = 696.02
VPT STA = 4363+60.00
EL = 696.02
-6.14%
+5.13%
50 yr (WSEL)
VPI STA = 4368+10.00
EL = 668.39
ex = 12.68'
K = 80
L = 900.00
CULVERT S5
3-6'x6' MBC
EL = 660.08
STA = 4368+91.61
VPT STA = 4372+60.00
EL = 691.48
743.68 744.7
747.37 749.4
751.05 753.8
754.40 755.9
756.73 758.4
758.00 761.9
758.24 762.8
757.42 761.3
755.56 758.1
752.65 754.1
748.70 749.3
743.70 743.6
738.18 738.5
732.66 731.0
727.15 723.9
722.28 709.6
718.32 703.2
715.29 703.2
713.18 697.8
711.99 695.4
711.73 702.1
712.38 689.8
713.96 688.1
716.46 705.7
719.89 712.8
723.94 721.6
727.97 728.2
730.90 733.4
732.21 735.3
731.89 733.2
729.95 729.3
726.38 724.0
721.71 719.2
717.00 715.7
712.44 713.1
708.89 710.5
706.50 708.3
703.77 704.9
699.41 700.1
693.66 693.2
688.65 687.1
684.89 679.8
682.38 673.2
681.12 667.9
681.12 665.8
682.37 677.2
684.87 681.9
688.62 688.7
693.53 695.8
4325+00
4330+00
4335+00
4340+00
4345+00
4350+00
4355+00
4360+00
4365+00
4370+00


VPC STA = 1325+00.00
EL = 753.85
VPI STA = 1328+70.00
EL = 772.35
ex = -8.32'
K = 82
L = 740.00
+5.00%
-4.00%
VPT STA = 1332+40.00
EL = 757.55
VPC STA = 1333+80.00
EL = 751.95
-4.00%
-0.50%
VPI STA = 1335+70.00
EL = 744.35
ex = 1.66'
K = 109
L = 380.00
VPT STA = 1337+60.00
EL = 743.40
VPC STA = 1338+30.00
EL = 743.05
VPI STA = 1339+50.00
EL = 742.45
ex = -1.14'
K = 63
L = 240.00
-0.50%
-4.30%
VPT STA = 1340+70.00
EL = 737.29
VPC STA = 1342+00.00
EL = 731.70
-4.30%
+4.10%
VPI STA = 1345+40.00
EL = 717.08
ex = 7.14'
K = 81
L = 680.00
50 yr (WSEL)
CULVERT S4
3-6'x4' MBC
EL = 686.30
STA = 1345+20.76
EXIST GROUND
VPT STA = 1348+80.00
EL = 731.02
PROP PROFILE
VPC STA = 1349+90.00
EL = 735.53
VPI STA = 1353+00.00
EL = 748.24
ex = -7.83'
K = 61
L = 620.00
+4.10%
-6.00%
VPT STA = 1356+10.00
EL = 729.64
VPC STA = 1359+30.00
EL = 710.44
-6.00%
-4.00%
VPI STA = 1360+10.00
EL = 705.64
ex = 0.40'
K = 80
L = 160.00
VPT STA = 1360+90.00
EL = 702.44
VPC STA = 1362+70.00
EL = 695.24
-4.00%
+5.00%
VPI STA = 1366+30.00
EL = 680.84
ex = 8.10'
K = 80
L = 720.00
50 yr (WSEL)
CULVERT S5
3-6'x6' MBC
EL = 668.13
STA = 1367+60.65
VPT STA = 1369+90.00
EL = 698.84
VPC STA = 1370+30.00
EL = 700.84
VPI
753.85 752.0
758.24 756.6
761.42 761.4
763.38 764.8
764.12 766.2
763.65 763.7
761.96 759.0
759.05 755.6
755.15 753.4
751.17 749.6
747.81 745.9
745.38 741.9
743.87 742.2
743.20 741.5
742.31 742.9
739.91 742.2
736.00 735.6
731.70 729.2
728.02 722.2
725.57 714.5
724.36 697.1
724.38 698.6
725.64 707.5
728.14 714.4
731.84 722.8
735.93 729.4
739.05 736.8
740.55 741.2
740.41 742.9
738.65 740.4
735.25 735.4
730.23 730.3
724.24 726.6
718.24 718.0
712.24 711.4
706.55 707.8
702.04 702.5
698.04 697.0
694.10 690.7
691.10 686.0
689.35 682.0
688.85 677.1
689.60 672.8
691.60 671.3
694.85 684.0
699.34 693.6
703.95 702.6
707.06 708.8
708.58 713.4
1325+00
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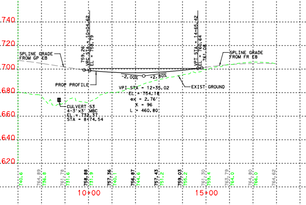
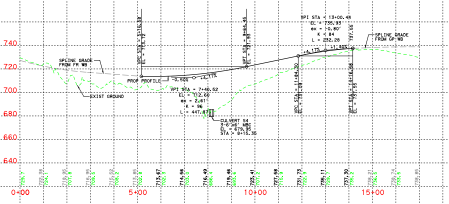
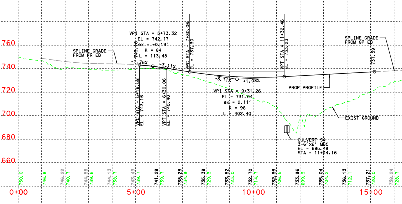
1360+00
1365+00
1370+00


740
720
700
680
660
640
620
SPLINE GRADE
FROM GP EB
759.26
VPC STA = 10+04.62
EL = 758.79
PROP PROFILE
-2.00%
+2.80%
VPI STA = 12+35.02
EL = 754.18
ex = 2.76'
K = 96
L = 460.80
VPT STA = 14+65.42
EL = 760.64
761.08
EXIST GROUND
SPLINE GRADE
FROM FR EB
CULVERT S3
4-3'x3' MBC
EL = 732.37
STA = 8+74.54
740.6
764.89 736.8
761.78 731.6
758.88 731.9
757.36 740.1
756.87 744.6
757.43 751.2
759.03 755.2
761.30 759.4
763.79 764.0
764.80 766.0
764.62
10+00
15+00

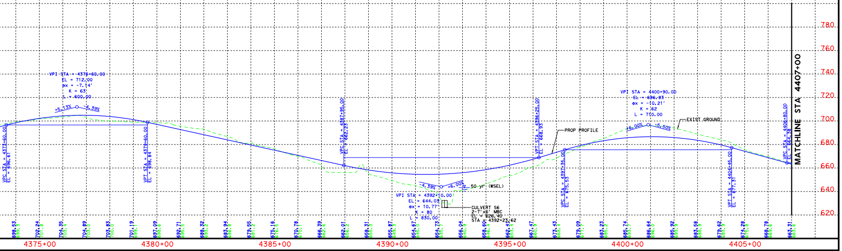
2EBEXT

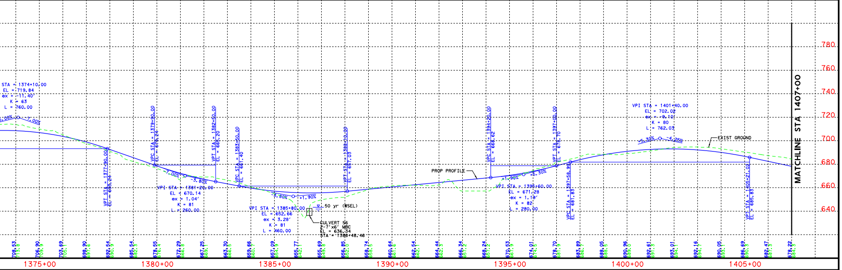

740
720
700
680
660
640
SPLINE GRADE
FROM FR WB
EXIST GROUND
VPC STA = 5+16.58
EL = 713.72
PROP PROFILE
-0.50%
+4.17%
VPI STA = 7+40.52
EL = 712.60
ex = 2.61'
K = 96
L = 447.87
CULVERT S4
3-6'x6' MBC
EL = 679.95
STA = 8+15.35
VPT STA = 9+64.45
EL = 721.93
VPI STA = 13+00.44
EL = 735.93
ex = -0.80'
K = 84
L = 232.28
+4.17%
+1.40%
737.55
VPC STA = 11+84.30
EL = 731.09
VPT STA = 14+16.58
EL = 737.55
SPLINE GRADE
FROM GP WB
729.7
722.38 724.1
718.95 707.8
716.95 709.5
715.52 708.2
713.85 702.8
713.67 702.3
714.56 703.0
716.49 686.4
719.46 693.6
723.41 707.2
727.58 715.9
731.73 722.9
735.11 729.7
737.30 735.2
738.21 736.5
738.74 733.5
738.85
0+00
5+00
10+00
15+00

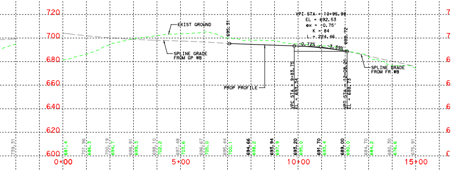
2WBEXT


760
740
720
700
680
660
SPLINE GRADE
FROM FR EB
VPI STA = 5+73.32
EL = 742.17
ex = -0.19'
K = 84
L = 113.48
743.16
-1.76%
-3.11%
VPC STA = 5+16.58
EL = 743.16
VPT STA = 6+30.06
EL = 740.40
VPC STA = 7+30.06
EL = 737.30
-3.11%
+1.08%
VPI STA = 9+31.26
EL = 731.04
ex = 2.11'
K = 96
L = 402.40
VPT STA = 11+32.46
EL = 733.23
CULVERT S4
3-6'x6' MBC
EL = 685.49
STA = 11+44.16
PROP PROFILE
EXIST GROUND
737.39
SPLINE GRADE
FROM GP EB
750.0
746.8
746.22 740.7
744.58 739.6
744.13 738.7
743.49 739.7
741.28 739.7
738.23 734.9
735.38 729.3
733.52 723.0
732.70 714.7
732.93 706.5
733.96 699.9
735.04 704.2
736.13 712.1
737.21 720.0
738.24 728.7
0+00
5+00
10+00
15+00

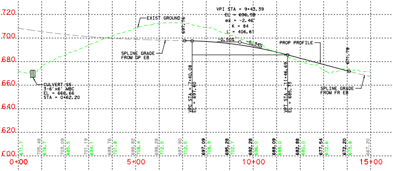
2EBENT


VPI STA = 4376+60.00
EL = 712.00
ex = -7.14'
K = 63
L = 600.00
+5.13%
-4.39%
VPC STA = 4373+60.00
EL = 696.61
VPT STA = 4379+60.00
EL = 698.84
VPC STA = 4387+95.00
EL = 662.23
-4.39%
+6.00%
50 yr (WSEL)
VPI STA = 4392+10.00
EL = 644.03
ex = 10.77'
K = 80
L = 830.00
CULVERT S6
2-7'x6' MBC
EL = 626.40
STA = 4392+23.62
VPT STA = 4396+25.00
EL = 668.93
PROP PROFILE
VPC STA = 4397+35.00
EL = 675.53
VPI STA = 4400+90.00
EL = 696.83
ex = -10.21'
K = 62
L = 710.00
+6.00%
-5.50%
EXIST GROUND
VPT STA = 4404+45.00
EL = 677.31
VPC STA = 4408+80.00
EL = 664.38
MATCHLINE STA 4407+00
780
760
740
720
700
680
660
640
620
698.53 699.3
702.24 701.8
704.35 703.4
704.89 703.0
703.83 700.0
701.19 699.1
697.09 698.6
692.71 695.5
688.32 693.2
683.94 686.8
679.55 681.2
675.16 676.5
670.78 670.1
666.39 662.6
662.01 656.2
658.31 655.3
655.87 649.3
654.67 645.0
654.73 635.7
656.04 640.9
658.60 646.4
662.41 653.4
667.47 660.9
673.43 668.4
679.09 677.7
683.23 685.2
685.74 693.7
686.64 696.0
685.92 693.9
683.58 688.9
679.62 683.9
674.28 675.8
668.78 669.6
663.31 663.6
4375+00
4380+00
4385+00
4390+00
4395+00
4400+00
4405+00


STA = 1374+10.00
EL = 719.84
ex = -11.40'
K = 63
L = 760.00
5.00%
-7.00%
VPT STA = 1377+90.00
EL = 693.24
VPC STA = 1379+90.00
EL = 676.24
-7.00%
-3.80%
VPI STA = 1381+20.00
EL = 670.14
ex = 1.04'
K = 81
L = 260.00
VPT STA = 1382+50.00
EL = 665.20
VPC STA = 1383+50.00
EL = 661.40
-3.80%
+1.90%
VPI STA = 1385+80.00
EL = 652.66
ex = 3.28'
K = 81
L = 460.00
50 yr (WSEL)
CULVERT S6
2-7'x6' MBC
EL = 636.34
STA = 1386+48.46
VPT STA = 1388+10.00
EL = 657.03
PROP PROFILE
VPC STA = 1394+20.00
EL = 668.62
+1.90%
+5.30%
VPI STA = 1395+60.00
EL = 671.28
ex = 1.18'
K = 82
L = 280.00
VPT STA = 1397+00.00
EL = 678.70
VPC STA = 1397+58.99
EL = 681.83
VPI STA = 1401+40.00
EL = 702.02
ex = -9.10'
K = 80
L = 762.03
+5.30%
-4.25%
EXIST GROUND
VPT STA = 1405+21.02
EL = 685.83
MATCHLINE STA 1407+00
780
760
740
720
700
680
660
640
708.53 713.8
706.90 709.9
703.69 705.1
698.90 697.6
692.54 690.9
685.54 682.3
678.55 676.4
672.29 666.8
667.25 669.1
663.30 666.5
659.66 660.7
657.09 654.9
655.77 642.1
655.69 649.8
656.85 652.0
658.74 658.5
660.64 661.6
662.54 662.1
664.44 662.3
666.34 657.2
668.24 657.2
670.53 667.9
674.01 674.5
678.70 681.9
683.89 686.7
688.05 688.5
690.96 689.0
692.61 691.3
693.01 694.1
692.16 694.7
690.05 693.1
686.69 690.3
682.47 687.3
678.22 684.3
1375+00
1380+00
1385+00
1390+00
1395+00
1400+00
1405+00


EXIST GROUND
SPLINE GRADE FROM GP WB
695.31
PROP PROFILE
VPI STA = 10+95.98
EL = 692.53
ex = -0.75'
K = 84
L = 224.46
-0.72%
-3.39%
688.72
VPC STA = 9+83.75
EL = 693.34
VPT STA = 12+08.21
EL = 688.73
SPLINE GRADE FROM FR WB
720
700
680
660
640
620
600
739.31
681.4
701.96
686.3
700.19
694.7
698.91
699.3
698.10
702.2
697.48
703.6
696.67
705.0
695.44
700.1
694.66
698.2
693.94
697.9
693.20
695.0
691.70
693.4
689.00
690.0
684.70
684.2
680.30
676.6
675.91
0+00
5+00
10+00
15+00

3WBENT


EXIST GROUND
697.76
VPI STA = 9+43.39
EL = 696.58
ex = -2.46'
K = 84
L = 406.61
-0.50%
-5.34%
SPLINE GRADE FROM GP EB
PROP PROFILE
CULVERT S6
3-6'x6' MBC
EL = 668.66
STA = 0+62.20
VPC STA = 7+40.08
EL = 697.60
VPT STA = 11+46.69
EL = 685.73
671.78
SPLINE GRADE FROM FR EB
720
700
680
660
640
620
600
671.7
705.48
676.7
703.09
685.5
701.19
694.1
699.76
701.8
698.82
708.4
698.28
712.5
697.80
712.5
697.09
708.9
695.28
702.7
692.28
696.0
688.09
688.0
682.88
680.0
677.54
672.6
672.20
673.8
667.20
0+00
5+00
10+00
15+00

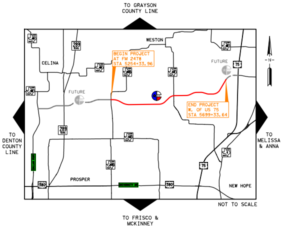
3EBEXT

COLLIN COUNTY OUTER LOOP

PHASE III: FUTURE EAST BOUND FRONTAGE ROAD
FM 2478 TO WEST OF US 75

ROADWAY FUNCTIONAL CLASSIFICATION:	URBAN FREEWAY
ROADWAY CONSTRUCTION TYPE:	NEW FACILITY
DESIGN SPEED (MAINLANES):	70 MPH
DESIGN SPEED (OUTER LOOP EBFR):	45 MPH
DESIGN SPEED (RAMPS):	50 MPH
DESIGN SPEED (CR 52,51,53,1117):	40 MPH
NET LENGTH OF PROJECT:	7.97 MILES
SCHEMATIC SCALE:	HORIZ: 1"=100' VERT: 1"=20'
AERIAL PHOTO DATE:	2015

LOCATION MAP


TO GRAYSON COUNTY LINE
WESTON
CELINA
BEGIN PROJECT AT FM 2478 STA 5254+33.96
FUTURE
FUTURE
END PROJECT W. OF US 75 STA 5699+33.64
289
289
75
75
380
380
TO DENTON COUNTY LINE
TO MELISSA & ANNA
PROSPER
NEW HOPE
-N-
NOT TO SCALE
TO FRISCO & MCKINNEY

LEGEND

▨	FUTURE MAINLANES
🟨	PROPOSED FRONTAGE ROAD
▨	FUTURE IMPROVEMENTS (BY OTHERS)
🟩	RAMPS
🟦	CURBED GORE
🟧	BRIDGE
🟦	PROPOSED CROSS STREET (BY OTHERS)
▨	100-YR FEMA FLOODPLAIN
—	PARCEL BOUNDARY
— - -	EXISTING RIGHT-OF-WAY
— — —	EXISTING EASEMENT
— - -	PROPOSED RIGHT-OF-WAY
— - -	FUTURE RIGHT-OF-WAY (BY OTHERS)
— —	PROPOSED DRAINAGE EASEMENT
— —	PROPOSED PERMANENT SLOPE EASEMENT
— —	PROPOSED TEMP CONSTRUCTION EASEMENT
— - -	PROPOSED CENTERLINE OUTER LOOP CORRIDOR
— - -	PROPOSED CENTERLINE ACCES ROAD
— —	PROPOSED CENTERLINE CROSS STREET/TRANSITION
—	PROPOSED RETAINING WALL
—	EXISTING CONTOUR (1FOOT)

NOTES:

1. EXISTING FEATURES WERE NOT FIELD SURVEYED. SCHEMATIC LAYOUTS ARE BASED ON AERIAL SURVEY AND RECORD PLANS ONLY.
2. EXISTING DRIVEWAYS WILL REMAIN UNLESS IT IS DETERMINED DURING DETAILED DESIGN AND COORDINATION WITH THE CITIES OR COUNTY THAT DRIVEWAY WILL BE A SAFETY ISSUE AND/OR VIOLATES ACCESS MANAGEMENT REQUIREMENTS.
3. FINAL DETERMINATION OF CONTROL OF ACCESS WILL BE DETERMINED BY THE COUNTIES OR MUNICIPALITIES AT A FUTURE DATE.
4. ADJACENT DEVELOPMENTS ARE PRELIMINARY,. DESIGNED BY OTHERS AND SUBJECT TO CHANGE.
5. SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION NOVEMBER 1, 2014 SHALL GOVERN ON THIS PROJECT.
6. BASIS OF BEARINGS: TEXAS STATE PLANE COORIDINATE SYSTEM, NAD 83 (1993), NORTH CENTRAL ZONE (4202), ALL DISTANCES AND COORDINATES SHOWN HEREON ARE SCAILED FROM 0,0 USING A TXDOT SURFACE ADJUSTMENT FACTOR OF 1.00015271. COORDINATE VALUES DERIVED USING THE WESTERN DATA SYSTEM VRS NETWORK.
7. FOR RETAINING WALL BEGIN/END STATION & OFFSET. REFER TO RETAINING WALL CHART.

EXISTING UTILITY LEGEND

—OH-ELEC—	ELECTRIC LINE - OVERHEAD
—UG-ELEC—	ELECTRIC WIRE - UNDERGROUND
—WATER—	WATER LINE
—CABLE—	CABLE LINE
—FOL—	FIBER OPTIC LINE
—SS—	SANITARY LINE
—GP—	GAS LINE
—STM—	STORM DRAIN LINE

SCHEMATIC PREPARED BY:

BGE, INC.
REGISTRATION NUMBER F-1046

FOR INTERIM REVIEW ONLY. NOT FOR PERMITTING, BIDDING OR CONSTRUCTION.

Prepared by or under the Direct Supervision of:

NAME	P.E. NUMBER
MICHAEL H. GARRISON	79285
STONEY D. SKIDMORE	106316

7/10/2019
DATE

HORIZONTAL SCALE
0 50 100 200 300
VERTICAL SCALE
0 10 20 40 60

COLLIN COUNTY
TOLL ROAD AUTHORITY

COUNTY: COLLIN
DATE: JULY 2019

DESIGN SCHEMATIC
COLLIN COUNTY OUTER LOOP

ROLL 6 OF 8

BGE, Inc.
2595 Dallas Parkway, Suite 101, Frisco, TX 75034
Tel: 972-464-4800 • www.bgeinc.com
TBPE Registration No. F-1046

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