2/8/2022

Texas Department of Transportation ®

DALLAS DISTRIC
DESIGN SCHEMATIC
MOHAMED K. BUR, P.E.
DISTRIC ENGINEER
COLLIN COUNTY

FM 428
ALTERNATIVE 2

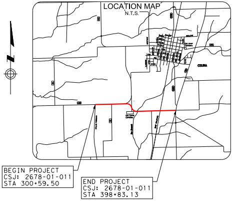
FROM: DALLAS PARKWAY TO
SH 289/PRESTON ROAD
CSJ: 2678-01-011

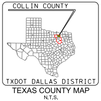
FUNCTIONAL CLASS: URBAN COLLECTOR

DESIGN SPEED: 45 MPH (FM 428, CR 52, CR 55)
30 MPH (CR 1117, GLEN CROSSING DR,
LOCAL STREETS)

PROJECT LENGTH: 1.8 MILES

FEBRUARY 2022


LOCATION MAP
N.T.S.
CELINA
BEGIN PROJECT
CSJ: 2678-01-011
STA 300+59.50
END PROJECT
CSJ: 2678-01-011
STA 398+83.13


COLLIN COUNTY
TXDOT DALLAS DISTRICT
TEXAS COUNTY MAP
N.T.S.

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
RYAN J. LAGSDING	113021	FEBRUARY 10, 2022

HNTB CORPORATION
TBPE FIRM #F-420

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners

0 100 200
HORIZONTAL
0 10 20
VERTICAL

DATE SUBMITTED:
DATE APPROVED:

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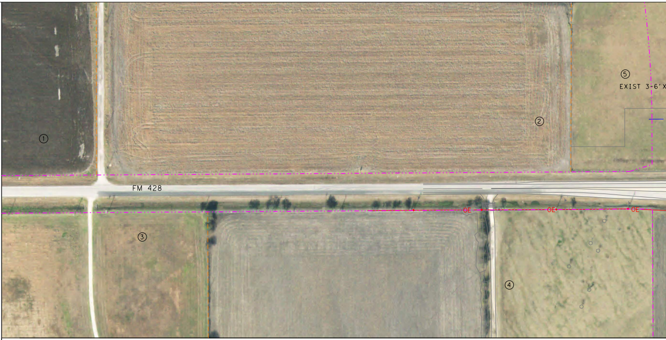
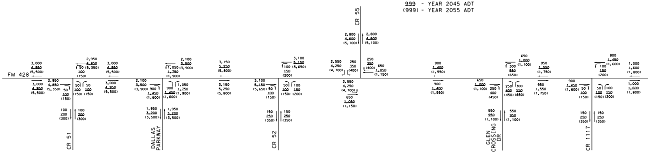
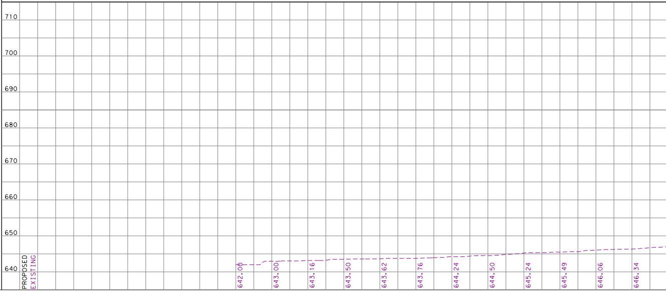
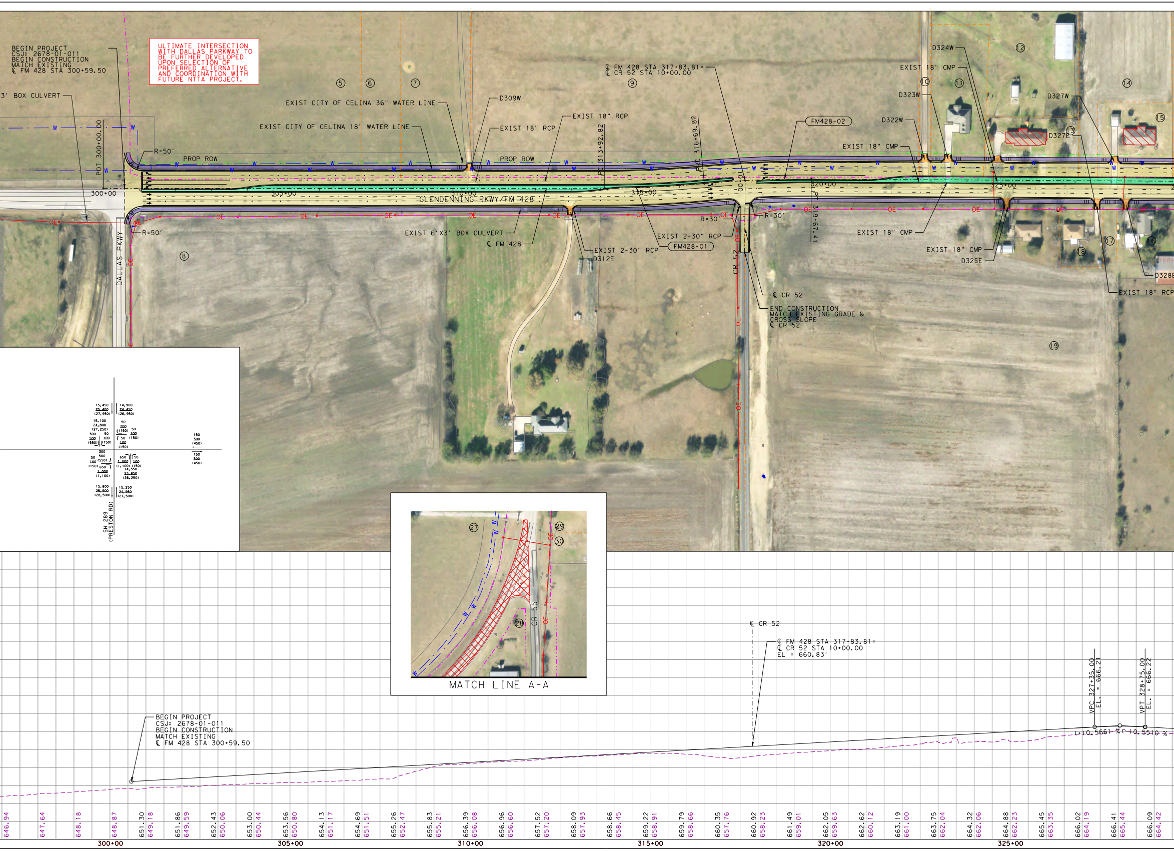

①
②
③
④
⑤
EXIST 3-6'X
FM 428
OE
OE
OE

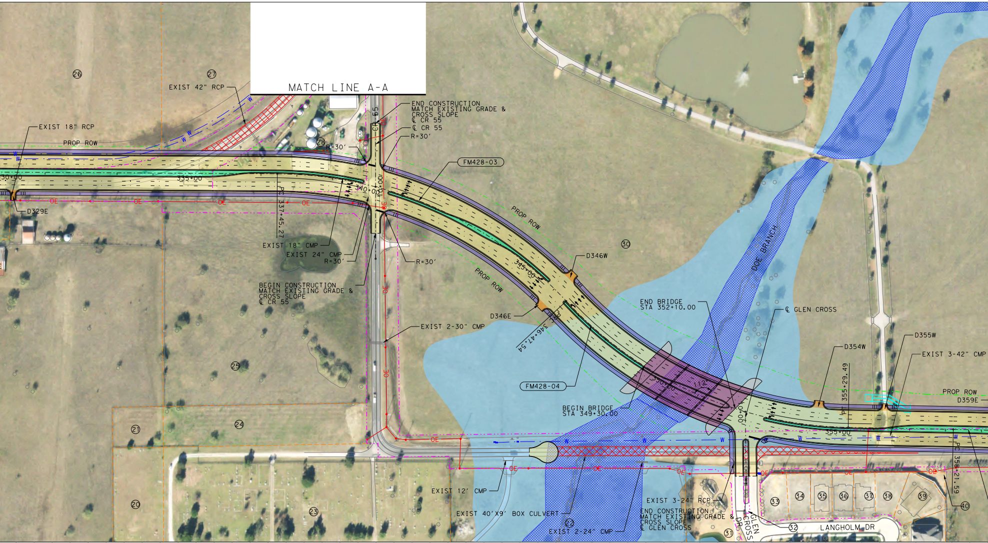

FM 428
3,000 4,950 (5,500)
2,950 4,850 (5,350)
50 100 (150)
3,000 4,950 (5,500)
2,950 4,850 (5,350)
50 100 (150)
50 100 (150)
50 100 (150)
100 200 (300)
100 200 (300)
CR 51
3,000 4,950 (5,500)
3,000 4,950 (5,500)
2,100 3,500 (3,900)
1,050 1,750 (1,900)
2,100 3,500 (3,900)
900 1,450 (1,600)
900 1,450 (1,600)
1,050 1,750 (1,900)
1,950 3,200 (3,500)
1,950 3,200 (3,500)
DALLAS PARKWAY
3,150 5,250 (5,800)
3,150 5,250 (5,800)
3,100 5,150 (5,650)
100 150 (200)
3,100 5,150 (5,650)
50 100 (150)
50 100 (150)
100 150 (200)
150 250 (350)
150 250 (350)
CR 52
CR 55
2,800 4,600 (5,100)
2,800 4,600 (5,100)
2,550 4,250 (4,700)
250 350 (400)
250 350 (400)
650 1,050 (1,150)
2,550 4,250 (4,700)
650 1,050 (1,150)
900 1,400 (1,550)
900 1,400 (1,550)
650 1,000 (1,100)
300 550 (650)
650 1,000 (1,100)
250 400 (450)
250 400 (450)
300 550 (650)
550 950 (1,100)
550 950 (1,100)
GLEN CROSSING DR
950 1,550 (1,750)
950 1,550 (1,750)
900 1,450 (1,600)
100 150 (200)
900 1,450 (1,600)
50 100 (150)
50 100 (150)
100 150 (200)
150 250 (350)
150 250 (350)
CR 1117
1,000 1,600 (1,800)
1,000 1,600 (1,800)

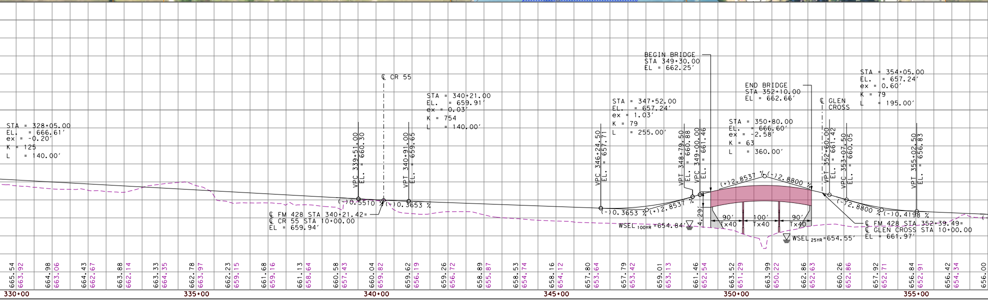
LEGEND:
999 - YEAR 2025 ADT
999 - YEAR 2045 ADT
(999) - YEAR 2055 ADT



FM428-Roll*1-Public Meeting-ALT2.dgn

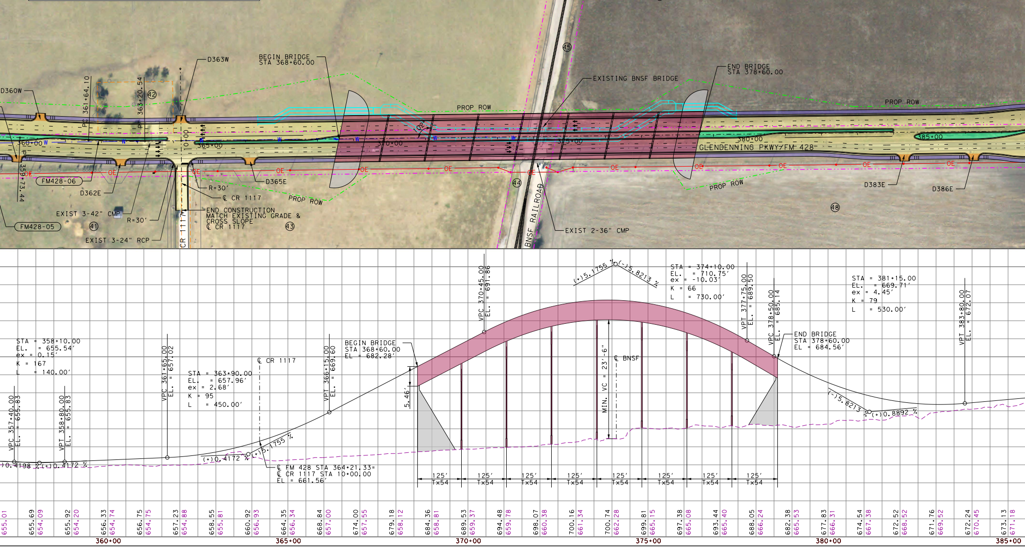

BEGIN PROJECT
CSJ: 2678-01-011
BEGIN CONSTRUCTION
MATCH EXISTING
℄ FM 428 STA 300+59.50
3' BOX CULVERT
ULTIMATE INTERSECTION WITH DALLAS PARKWAY TO BE FURTHER DEVELOPED UPON SELECTION OF PREFERRED ALTERNATIVE AND COORDINATION WITH FUTURE NTTA PROJECT.
⑤
⑥
⑦
EXIST CITY OF CELINA 36" WATER LINE
EXIST CITY OF CELINA 18" WATER LINE
D309W
EXIST 18" RCP
EXIST 18" RCP
℄ FM 428 STA 317+83.81=
℄ CR 52 STA 10+00.00
⑨
PC 313+92.82
PRC 316+69.82
FM428-02
D324W
⑫
EXIST 18" CMP
⑩
⑪
D323W
D327W
⑭
⑮
D322W
⑬
D327E
EXIST 18" CMP
POT 300+00.00
R=50'
PROP ROW
PROP ROW
300+00
305+00
310+00
315+00
320+00
325+00
GLENDENNING PKWY/FM 428
R=50'
DALLAS PKWY
⑧
EXIST 6'X3' BOX CULVERT
℄ FM 428
EXIST 2-30" RCP
D312E
EXIST 2-30" RCP
FM428-01
R=30'
R=30'
PT 319+67.41
CR 52
EXIST 18" CMP
EXIST 18" CMP
D325E
⑰
⑱
⑯
D328E
EXIST 18" RCP
℄ CR 52
END CONSTRUCTION
MATCH EXISTING GRADE &
CROSS SLOPE
℄ CR 52
⑲
W
OE
15,450
25,400
(27,950)
14,900
24,450
(26,950)
15,100
24,800
(27,250)
50
100
(150)
50
100
(150)
300
500
(550)
50
100
(150)
50
100
(150)
150
300
(450)
300
500
(550)
50
100
(150)
650
1,000
(1,100)
650
1,000
(1,100)
50
100
(150)
14,550
23,850
(26,250)
150
300
(450)
15,800
25,900
(28,500)
15,250
24,950
(27,500)
SH 289
(PRESTON RD)
㉗
㉙
㉚
㉘
CR 55
MATCH LINE A-A
℄ CR 52
℄ FM 428 STA 317+83.81=
℄ CR 52 STA 10+00.00
EL = 660.83'
VPC 327+35.00
EL. = 666.21
VPT 328+75.00
EL. = 666.22
(+)0.5661 %
(-)0.5510 %
BEGIN PROJECT
CSJ: 2678-01-011
BEGIN CONSTRUCTION
MATCH EXISTING
℄ FM 428 STA 300+59.50
646.94
647.64
648.18
648.87
651.30
649.18
651.86
649.59
652.43
650.06
653.00
650.44
653.56
650.80
654.13
651.17
654.69
651.51
655.26
652.47
655.83
655.21
656.39
656.08
656.96
656.60
657.52
657.20
658.09
657.93
658.66
658.45
659.22
658.91
659.79
658.66
660.35
657.76
660.92
658.23
661.49
659.01
662.05
659.63
662.62
660.12
663.19
661.00
663.75
662.04
664.32
662.06
664.88
662.23
665.45
663.35
666.02
664.19
666.41
665.44
666.09
664.42
300+00
305+00
310+00
315+00
320+00
325+00


MATCH LINE A-A
26
27
EXIST 42" RCP
EXIST 18" RCP
PROP ROW
W
28
R=30'
CR 55
END CONSTRUCTION
MATCH EXISTING GRADE &
CROSS SLOPE
℄ CR 55
℄ CR 55
R=30'
FM428-03
330+00
335+00
340+00
10+00
D329E
OE
PC 337+45.27
EXIST 18" CMP
EXIST 24" CMP
R=30'
R=30'
BEGIN CONSTRUCTION
MATCH EXISTING GRADE &
CROSS SLOPE
℄ CR 55
PROP ROW
PROP ROW
30
D346W
345+00
D346E
PI 346+47.54
EXIST 2-30" CMP
25
FM428-04
END BRIDGE
STA 352+10.00
DOE BRANCH
℄ GLEN CROSS
D354W
D355W
EXIST 3-42" CMP
PT 355+29.49
PROP ROW
D359E
BEGIN BRIDGE
STA 349+30.00
350+00
10+00
355+00
PC 358+21.59
21
24
20
23
22
EXIST 12' CMP
EXIST 40'X9' BOX CULVERT
EXIST 2-24" CMP
EXIST 3-24" RCP
END CONSTRUCTION
MATCH EXISTING GRADE &
CROSS SLOPE
℄ GLEN CROSS
GLEN CROSS DR
31
32
33
34
35
36
37
38
39
40
LANGHOLM DR


STA = 328+05.00
EL. = 666.61'
ex = -0.20'
K = 125
L = 140.00'
℄ CR 55
VPC 339+51.00
EL. = 660.30
VPT 340+91.00
EL. = 659.65
STA = 340+21.00
EL. = 659.91'
ex = 0.03'
K = 754
L = 140.00'
(-)0.5510 %
(-)0.3653 %
℄ FM 428 STA 340+21.42=
℄ CR 55 STA 10+00.00
EL = 659.94'
BEGIN BRIDGE
STA 349+30.00
EL = 662.25'
STA = 347+52.00
EL. = 657.24'
ex = 1.03'
K = 79
L = 255.00'
VPC 346+24.50
EL. = 657.71
VPT 348+79.50
EL. = 660.88
VPC 349+00.00
EL. = 661.46
(-)0.3653 %
(+)2.8537 %
4.29'
WSEL 100YR =654.84'
END BRIDGE
STA 352+10.00
EL = 662.66'
STA = 350+80.00
EL. = 666.60'
ex = -2.58'
K = 63
L = 360.00'
(+)2.8537 %
(-)2.8800 %
90'
Tx40
100'
Tx40
90'
Tx40
WSEL 25YR =654.55'
℄ GLEN
CROSS
VPT 352+60.00
EL. = 661.42
VPC 353+07.50
EL. = 660.05
STA = 354+05.00
EL. = 657.24'
ex = 0.60'
K = 79
L = 195.00'
VPT 355+02.50
EL. = 656.83
(-)2.8800 %
(-)0.4198 %
℄ FM 428 STA 352+39.49=
℄ GLEN CROSS STA 10+00.00
EL = 661.97'
665.54
663.92
664.98
663.06
664.43
662.67
663.88
662.14
663.33
664.35
662.78
663.97
662.23
659.15
661.68
659.16
661.13
658.64
660.58
657.43
660.04
659.82
659.62
656.19
659.26
656.72
658.89
655.87
658.53
654.74
658.16
654.12
657.80
653.64
657.79
653.42
659.01
653.13
661.46
652.54
663.52
651.29
663.99
650.22
662.86
652.63
660.26
652.86
657.92
652.71
656.84
652.91
656.42
654.34
656.00
330+00
335+00
340+00
345+00
350+00
355+00

PARCEL ID	OWNER NAME
1	TEXAS REPUBLIC REALTY LTD
2	KING PLACE LLC
3	STILES FAMILY LIMITED PARTNERSHIP
4	BLUE STAR LAND LP
5	OLD CELINA LTD
6	OLD CELINA LTD
7	OLD CELINA LTD
8	METHODIST HOSPITALS OF DALLAS D/B/A METHODIST HEALTH SYSTEM
9	OLD CELINA LTD
10	OLD CELINA LTD
11	MOORE JERRY & LINDA
12	MOORE JERRY L
13	SAEED MALIK A & FAYAK KAMILI
14	MOORE JERRY L
15	MOORE JERRY L
16	PIERCE ANDREW P & RAQUEL
17	RUSH CHRISTI ANN
18	COTTAGE HILL CEMETERY ASSOCIATION
19	COTTAGE HILL CEMETERY ASSOCIATION
20	CELINA CEMETERY
21	OLD CELINA CEMETERY ASSOCIATION
22	BOILERMAKER INVESTMENTS LLC
23	CELINA CEMETERY
24	OLD CELINA CEMETERY ASSOCIATION
25	COTTAGE HILL CEMETERY ASSOCIATION
26	OLD CELINA LTD
27	OLD CELINA LTD
28	HUDDLESTON CHARLES RAY
29	GLENDENNING REX K & SHERESE M
30	OLD CELINA LTD
31	GLEN CROSSING OWNERS ASSOCIATION INC
32	GLEN CROSSING OWNERS ASSOCIATION INC
33	W/J CR 55 LP
34	W/J CR 55 LP
35	HIGHLAND HOMES - DALLAS LLC
36	HIGHLAND HOMES - DALLAS LLC
37	HMH LIFESTYLES LP
38	HIGHLAND HOMES - DALLAS LLC
39	QUIROZ JESUS & KELLY TEKIN
40	GLEN CROSSING OWNERS ASSOCIATION INC
41	OLD CELINA LTD
42	OLD CELINA LTD
43	OLD CELINA LTD
44	BURLINGTON NORTHERN & SF RAIL
45	BNSF RAILWAY COMPANY
46	WILLARD CATTLE CO I LTD
47	WILLARD PROPERTIES LP
48	OLD CELINA LTD
49	SUMMIT CENTER AT PRESTON LLC
50	JINKS VERA LUCILE

CURVE NO.	STATION	COORDINATE		BEARING / DELTA	LENGTH (FT)	TANGENT (FT)	RADIUS (FT)
		N	E				
FM 428 (DESIGN SPEED: 45 MPH)							
	PC 313+92.82	7163742.374	2485658.843	N 89°58′38.90" E			
FM428-01	PI 315+31.42	7163742.428	2485797.442	5°17′50.67" LT	277	138.6	2996
	PRC 316+69.82	7163755.279	2485935.445	N 84°40′48.23" E			
	PRC 316+69.82	7163755.279	2485935.445	N 84°40′48.23" E			
FM428-02	PI 318+18.74	7163769.086	2486083.718	5°40′33.22" RT	297.59	148.91	3004
	PT 319+67.41	7163768.16	2486232.629	S 89°38′38.55" E			
	PC 337+45.27	7163757.115	2488010.46	S 89°38′38.55" E			
FM428-03	PI 342+23.31	7163754.145	2488488.494	46°49′34.39" RT	902.27	478.04	1104
	PRC 346+47.54	7163403.492	2488813.405	S 42°49′04.16" E			
	PRC 346+47.54	7163403.492	2488813.405	S 42°49′04.16" E			
FM428-04	PI 351+13.96	7163061.365	2489130.416	46°06′20.89" LT	881.95	466.42	1096
	PT 355+29.49	7163052.603	2489596.753	S 88°55′25.05" E			
	PC 358+21.59	7163047.116	2489888.806	S 88°55′25.05" E			
FM428-05	PI 358+97.52	7163045.689	2489964.718	1°14′31.77" RT	151.84	75.93	7004
	PT 359+73.44	7163042.618	2490040.581	S 87°40′53.28" E			
	PC 361+64.10	7163034.904	2490231.092	S 87°40′53.28" E			
FM428-06	PI 362+42.34	7163031.739	2490309.263	2°59′30.01" LT	156.43	78.24	2996
	PT 363+20.54	7163032.658	2490387.493	N 89°19′36.71" E			


46
45
D363W
BEGIN BRIDGE
STA 368+60.00
EXISTING BNSF BRIDGE
END BRIDGE
STA 378+60.00
D360W
PC 361+64.10
PT 363+20.54
42
PROP ROW
PROP ROW
360+00
365+00
370+00
375+00
380+00
385+00
10+00
GLENDENNING PKWY/FM 428
OE
FM428-06
359+73.44
D362E
D365E
R=30′
℄ CR 1117
PROP ROW
44
BNSF RAILROAD
PROP ROW
D383E
D386E
48
EXIST 3-42" CMP
R=30′
END CONSTRUCTION
MATCH EXISTING GRADE &
CROSS SLOPE
℄ CR 1117
FM428-05
41
43
CR 1117
EXIST 3-24" RCP
EXIST 2-36" CMP
STA = 358+10.00
EL. = 655.54′
ex = 0.15′
K = 167
L = 140.00′
VPC 357+40.00
EL. = 655.83
VPT 358+80.00
EL. = 655.83
(-)0.4198 %
(+)0.4172 %
VPC 361+65.00
EL. = 657.02
STA = 363+90.00
EL. = 657.96′
ex = 2.68′
K = 95
L = 450.00′
℄ CR 1117
(+)0.4172 %
(+)5.1755 %
℄ FM 428 STA 364+21.33=
℄ CR 1117 STA 10+00.00
EL = 661.56′
VPT 366+15.00
EL. = 669.60
BEGIN BRIDGE
STA 368+60.00
EL = 682.28′
5.46′
VPC 370+45.00
EL. = 691.86
(+)5.1755 %
(-)5.8213 %
MIN. VC = 23′-6"
℄ BNSF
STA = 374+10.00
EL. = 710.75′
ex = -10.03′
K = 66
L = 730.00′
VPT 377+75.00
EL. = 689.50
VPC 378+50.00
EL. = 685.14
END BRIDGE
STA 378+60.00
EL = 684.56′
(-)5.8213 %
(+)0.8892 %
STA = 381+15.00
EL. = 669.71′
ex = 4.45′
K = 79
L = 530.00′
VPT 383+80.00
EL. = 672.07
125′ Tx54
125′ Tx54
125′ Tx54
125′ Tx54
125′ Tx54
125′ Tx54
125′ Tx54
125′ Tx54
655.01
655.69 654.09
655.92 654.20
656.33 654.74
656.75 654.75
657.23 654.88
658.55 655.81
660.92 656.93
664.35 656.34
668.84 657.00
674.00 657.55
679.18 658.12
684.36 658.81
689.53 659.37
694.48 659.78
698.07 660.38
700.16 661.34
700.74 662.28
699.81 665.15
697.38 665.08
693.44 665.40
688.05 666.24
682.38 665.53
677.83 666.31
674.54 667.38
672.52 668.52
671.76 669.52
672.24 670.45
673.13 671.18

GENERAL NOTES:

1. FINAL LOCATION OF MEDIAN OPENINGS WILL BE DETERMINED IN THE PS&E DEVELOPMENT PHASE IN COORDINATION WITH TXDOT AND THE CITY OF CELINA.
2. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL.
3. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INSURANCE RATE MAPS FIRM PANEL 48085C0120J, EFFECTIVE 06/02/2009.
4. OWNERSHIP INFORMATION SHOWN ON SCHEMATIC OBTAINED FROM COLLIN COUNTY APPRAISAL DISTRICT (APRIL, 2020).
5. ADA RAMPS AND SIDEWALKS ARE DIAGRAMMATIC ONLY AND WILL BE DESIGNED DURING PS&E.
6. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
7. CURBS ARE TYPE II (5").
8. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
9. TYPICAL DRIVEWAY CURB RETURN RADII IS 15 FEET UNLESS NOTED OTHERWISE.
10. STORAGE LENGTHS FOR DEDICATED TURN BAYS ARE DESIGNED IN COMPLIANCE WITH BOTH THE CITY OF CELINA ENGINEERING CONSTRUCTION DETAILS AND TXDOT ROADWAY DESIGN MANUAL.

LEGEND

🟨	PROPOSED PAVEMENT
🟩	PROPOSED MEDIAN
🟪	PROPOSED SIDEWALK
🟧	PROPOSED DRIVEWAY
🟥	PROPOSED BRIDGE
☐	PROPOSED RIP RAP
▨	POTENTIAL DISPLACEMENT
▩	PAVEMENT REMOVAL
—·—·—	PROPOSED CENTERLINE
—··—··	EXISTING ROW
— — —	EXISTING PROPERTY LINE
—··—··	PROPOSED ROW
——	PROPOSED DRAINAGE
🟦	FEMA FLOOD ZONE AE
▦	FEMA FLOODWAY SECTION
┼┼┼┼	BNSF
— OE —	EXISTING OVERHEAD ELECTRIC
— W —	EXISTING WATER LINE
→	TRAFFIC FLOW
(#)	PARCEL ID
(XXXX-X)	CURVE NUMBER

Texas Department of Transportation®

DALLAS DISTRIC
DESIGN SCHEMATIC
MOHAMED K. BUR, P.E.
DISTRIC ENGINEER
COLLIN COUNTY

FM 428
ALTERNATIVE 2

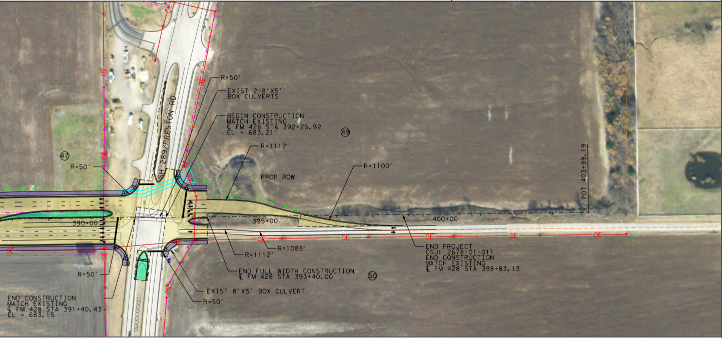
FROM: DALLAS PARKWAY TO
SH 289/PRESTON ROAD
CSJ: 2678-01-011

FUNCTIONAL CLASS: URBAN COLLECTOR

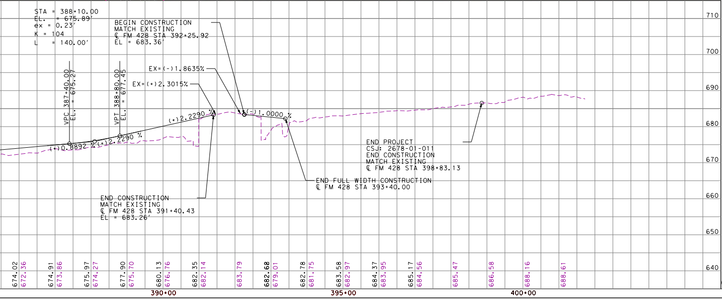
DESIGN SPEED: 45 MPH (FM 428, CR 52, CR 55)
30 MPH (CR 1117, GLEN CROSSING DR, LOCAL STREETS)

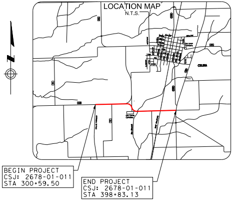
PROJECT LENGTH: 1.8 MILES

FEBRUARY 2022

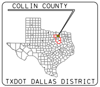


R=50'
EXIST 2-8'X5' BOX CULVERTS
BEGIN CONSTRUCTION
MATCH EXISTING
℄ FM 428 STA 392+25.92
EL = 683.21'
49
47
R=50'
SH 289/PRESTON RD
R=1112'
PROP ROW
R=1100'
POT 403+99.19
390+00
395+00
400+00
OE
R=1112'
R=1088'
END PROJECT
CSJ: 2678-01-011
END CONSTRUCTION
MATCH EXISTING
℄ FM 428 STA 398+83.13
R=50'
END FULL WIDTH CONSTRUCTION
℄ FM 428 STA 393+40.00
50
EXIST 8'X5' BOX CULVERT
R=50'
END CONSTRUCTION
MATCH EXISTING
℄ FM 428 STA 391+40.43
EL = 683.15





LOCATION MAP
N.T.S.
CELINA
BEGIN PROJECT
CSJ: 2678-01-011
STA 300+59.50
END PROJECT
CSJ: 2678-01-011
STA 398+83.13



COLLIN COUNTY
TXDOT DALLAS DISTRICT

TEXAS COUNTY MAP
N.T.S.

PRELIMINARY

FOR INTERIM REVIEW ONLY

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NAME	P.E. NO.	DATE
RYAN J. LAGSDING	113021	FEBRUARY 10, 2022

HNTB CORPORATION
TBPE FIRM #F-420

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners

0 100 200
HORIZONTAL

0 10 20
VERTICAL

DATE SUBMITTED: ☐

DATE APPROVED: ☐

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