Texas Department of Transportation

DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES E. VEARIAN, P.E
DESIGN ENGINEER

ROLL 1: SH 121
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

FINAL SUBMITTAL
(ALL PRIOR TO FURNISHED FOR INFORMATION ONLY)
CSJ: 2849-01-014
LIMITS: FROM COLLIN COUNTY LINE NORTH TO NORTH OF FM 455
LENGTH: 5.135 MILES
CSJ: 2849-02-042
LIMITS: FROM NORTH OF FM 455 IN COLLIN COUNTY TO SOUTH OF FM 423 IN DENTON COUNTY
EXCEPTION: FROM 200FT OF SH 121 NORTH OF SH 5AD
LENGTH: 0.865 MILES
CSJ: 2849-03-028
LIMITS: FROM SOUTH OF FM 423 NORTH OF SH 426
LENGTH: 8.470 MILES
TOTAL LENGTH: 14.470 MILES
DESCRIPTION: CONSTRUCT 6-LANE DIVIDED FREEWAY WITH SPEED CHANGE LANES
ROLL 1 OF 1

PROJECT LENGTH 7.432 MILES
BEGIN TIMS: STA 429+00.00 BK = STA 429+00.18 AH
STA 429+00.00 BP = STA 429+00.00 AP
STA 429+00.00 BK = STA 429+01.18 AH
END TIMS: STA 735+00.00 TO STA 835+00.00 (10,000.00')
TRAFFIC DATA: SH 121: 16,000 ADT (2017)
23,900 ADT (2037)

INDEX OF ROLLS:

ROLL	DESCRIPTION
1	SH 121: STA 374+00 TO STA 435+00
2	SH 121: STA 435+00 TO STA 535+00
3	SH 121: STA 535+00 TO STA 635+00
4	SH 121: STA 635+00 TO STA 735+00
5	SH 121: STA 735+00 TO STA 835+00
6	SH 121: STA 835+00 TO STA 935+00
7	SH 121: STA 935+00 TO STA 1035+00
8	CROSSROADS: FM 455NL, FM 455L, FM 2862
9	SH 121: STA 1035+00 TO STA 1135+00

FUNCTIONAL CLASSIFICATION & DESIGN SPEEDS

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
SH121	RURAL ARTERIAL	75 MPH
SH121/MATCHLINE BK	RURAL ARTERIAL	75 MPH
FM 455, WEST LEG	MINOR ARTERIAL	50 MPH
FM 455, EAST LEG	RURAL COLLECTOR	50 MPH
CR 404	LOCAL	30 MPH
CR 404	LOCAL	30 MPH
CR 404	LOCAL	30 MPH
CR 404	RURAL COLLECTOR	50 MPH
CR 404	LOCAL	30 MPH
CR 404	LOCAL	30 MPH
CR 404	LOCAL	30 MPH
CR 404	LOCAL	30 MPH
CR 404/COUNTY LINE RD*	LOCAL	30 MPH

* UNPAVED COUNTY ROADS
** LOCAL URBAN DESIGN TO MATCH FM 455 SCHEMATIC (CSJ: 2849-01-015)

NOTES:

1. SH121 ORIGINAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY AND FIELD SURVEY. ADDITIONAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY FIELD SURVEY. JANUARY 21, 2016.
2. TYPICAL RADIUS RETURNS, UNLESS OTHERWISE NOTED ON THE PLANS: MAJOR CROSS ROADS & LOCAL ROADS: R=40 DRIVEWAYS: R=20
3. MAINE CONTROL OF ACCESS IS NOT SHOWN AT THE RAMP LOCATIONS. CONTROL OF ACCESS WILL BE REVIEWED AND REVISED AT THE DISCRETION OF THE AHJ OFFICE DURING THE DRIVEWAY PERMIT PROCESS.

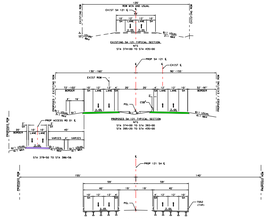
0 50 100 200 300 400
HORIZ SCALE (IN FEET) VERT SCALE (IN FEET)

Stantec
Texas Registered Engineering Firm F-9324
Texas Registered Surveying Firm LSC-0160

FINAL SUBMITTAL
THIS PRINT IS FURNISHED FOR INFORMATION ONLY
PRELIMINARY DESIGN, NOT FOR CONSTRUCTION PURPOSES
SUBJECT TO CHANGE AND MAY NOT BE CONSTRUED AS FINAL

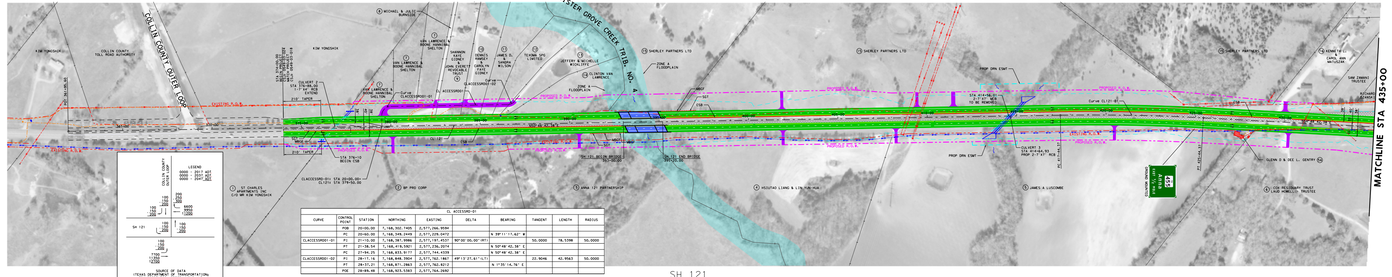
SCHEMATIC PREPARED BY:
JEFFREY L. MEJANES
"TEXAS REGISTERED ENGINEER NUMBER"
CSJ: 2849-01-014
DATE

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES



PLAN LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- PROPOSED CONTROL ESMT.
- PROPOSED CONTROL OF ACCESS
- EXISTING PROPERTY LINE
- PROPOSED PAVEMENT BASELINE
- PROPOSED PAVEMENT MARKING
- PROPOSED RETAINING WALL
- PROPOSED RETAINING WALL
- PROPOSED RAMP EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED CUT & MEET TRANSITION
- LOCAL ROAD BASELINE
- LOCAL ROAD EDGE OF PAVEMENT
- EPI/EMAY EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED TRANSITION LIMITS
- PROPOSED FILL LIMITS
- PROPOSED SH 121/PROPOSED RD
- PROPOSED RAMPS
- PROPOSED MAINLANES CROSS ROADS
- PROPOSED LOCAL ROADS
- PROPOSED DRIVEWAYS
- PROPOSED STRUCTURE
- DUPLICATE STRUCTURE
- PROPOSED TRAFFIC FLOW
- EXISTING ELECTRIC METER
- EXISTING ELECTRICAL TRANSFORMER
- EXISTING GAS VALVE
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- OUT OF COUNTY
- END OF LINE
- ONCOR DALLAS COUNTY
- OVERHEAD ELECTRICAL
- ATT -OVERHEAD TELEPHONE(
- OREXON COLLIN COUNTY (ELECTRIC)
- TEXAS NEW MEXICO POWER CO
- TEXAS NEW MEXICO
- TEXAS NEW MEXICO POWER CO (ELECTRIC)
- ATT -FIBER OPTIC(
- VERIZON (TELEPHONE)
- N TEXAS MUNICIPAL WATER DIST (WATER)
- N TEXAS MUNICIPAL WATER
- ONCOR (POTELINE)
- ONCOR (POTELINE)
- REMOVE ASPHALT



CL ACCESSRD-01

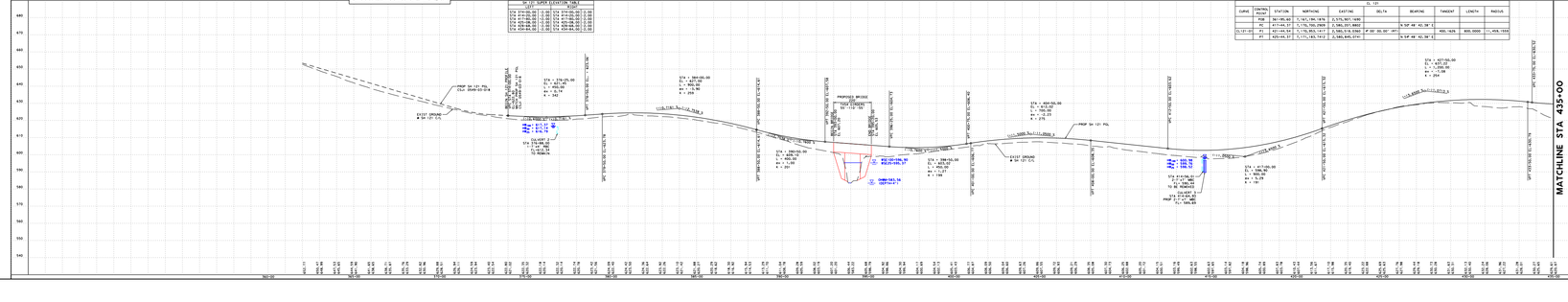
CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
	POB	200+00.00	7,146,500.7405	2,577,266.9984		N 39°11'11.62" W			
	PC	201+00.00	7,146,594.5498	2,577,229.5972					
CL4CCESSRD01-01	PI	211+30.00	7,146,981.9986	2,577,101.4537	90°00'00.00"-RT-		50.0000	78.5398	50.0000
	PT	213+08.53	7,146,973.9401	2,577,256.0874		N 50°48'42.38" E			
	PC	213+84.25	7,146,923.9117	2,577,744.4328		N 50°48'42.38" E			
CL4CCESSRD01-02	PI	217+12.25	7,146,923.9117	2,580,022.4328	27°27'21.67"-LT-		22.9646	43.9567	50.0000
	PT	218+07.81	7,146,937.1966	2,580,921.3461		N 77°16'14.76" E			
	POE	219+09.49	7,146,925.5369	2,581,764.2692					

SH 121 SUPER ELEVATION TABLE

STATION	STATION
STA 374+00.00 (-2.00) STA 374+00.00 (-2.00)
STA 374+00.00 (-2.00) STA 374+00.00 (-2.00)
STA 417+00.00 (-2.00) STA 417+00.00 (-2.00)
STA 417+00.00 (-2.00) STA 417+00.00 (-2.00)
STA 428+00.00 (-2.00) STA 428+00.00 (-2.00)
STA 428+00.00 (-2.00) STA 428+00.00 (-2.00)

CL 121

CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
	POB	367+00.00	7,143,194.1876	2,575,957.1495		N 50°48'42.38" E			
	PC	417+44.57	7,145,700.2989	2,580,207.0882					
CL121-01	PI	421+44.57	7,146,055.1417	2,580,518.0360	8°00'00.00"-RT-		400.1629	800.0000	11,459.1559
	PT	425+44.57	7,171,183.7812	2,580,645.6741		N 54°48'42.38" E			


MATCHLINE STA 435+00
PROPOSED BRIDGE
EXISTING GROUND
SH 121 C/L
PROP SH 121 PGL
EXIST GROUND
SH 121 C/L
STA = 374+00.00
EL = 613.00
Y = 7,146,500.74
X = 2,577
STA = 374+25.00
EL = 613.00
Y = 400.00
X = 26.79
X = 262
STA = 380+00.00
Y = 400.00
X = 262.00
STA = 380+00.00
EL = 613.00
Y = 7,146,500.74
X = 2,577
STA = 400+00.00
EL = 613.00
Y = 400.00
X = 275
STA = 417+00.00
EL = 613.00
Y = 400.00
X = 2,580.00
STA = 417+00.00
EL = 613.00
Y = 7,146,500.74
X = 2,580
STA = 417+00.00
EL = 613.00
Y = 400.00
X = 2,580

Texas Department of Transportation

DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES E. VEGHAN, P.E.
DISTRICT DESIGN ENGINEER

ROLL 2: SH 121
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

FM 455 (FRANKFORD ROAD)
ALL-WAY STOP
CSJ: 0049-05-049
LIMITS: FROM COLLIN COUNTY LINE (APPROX. 0.5 MILE NORTH OF FM 455)
LENGTH: 0.05 MILES
CSJ: 0049-04-049
LIMITS: FROM NORTH OF SHERMAN STREET (DENTON COUNTY LINE)
EXCEPTION: FROM COLLIN OF DENTON COUNTY LINE (APPROX. 0.5 MILE NORTH OF FM 455)
LENGTH: 0.45 MILES
CSJ: 0049-03-048
LIMITS: FROM NORTH OF FM 455 (APPROX. 0.5 MILE NORTH OF FM 455)
LENGTH: 0.25 MILES
TOTAL LENGTH: 0.80 MILES
DESCRIPTION: CONSTRUCT 4-LANE DIVIDED HIGHWAY WITH SPEED CHANGE LANES

VICINITY MAP

PROJECT LENGTH: 7.637 MILES.
EXISTING: STA 420+00.00 BK = STA 420+89.16 AH
STA 435+00.00 BK = STA 525+00.00 AH
STA 820+00.00 BK = STA 829+01.19 AH
EXISTING: STA 770+00.00 TO STA 809+00.00 (10,000.00')
TRAFFIC DATA: SH 121: 16,000 ADT (2021)
23,900 ADT (2031)

INDEX OF ROLLS:

ROLL	DESCRIPTION
1	SH 121: STA 374+00 TO STA 435+00
2	SH 121: STA 435+00 TO STA 525+00
3	SH 121: STA 525+00 TO STA 614+00
4	SH 121: STA 614+00 TO STA 695+00
5	SH 121: STA 695+00 TO STA 775+00 (CR 509)
6	SH 121: STA 775+00 TO STA 845+57.66
6	CROSSROADS: FM 455N, FM 455S, FM 2962
6	CR 475, CR 507, CR 509, CR 509

FUNCTIONAL CLASSIFICATION & DESIGN SPEEDS

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
SH 121	RURAL ARTERIAL	70 MPH
FM 455 (FRANKFORD RD)	RURAL COLLECTOR	55 MPH
CR 475 (WEST LEG)	MINOR ARTERIAL	55 MPH
CR 475 (EAST LEG)	RURAL COLLECTOR	55 MPH
CR 507	LOCAL	55 MPH
CR 509	LOCAL	55 MPH
CR 509	LOCAL	55 MPH
CR 509	RURAL COLLECTOR	55 MPH
CR 509	LOCAL	55 MPH
CR 509	LOCAL	55 MPH
CR 509	LOCAL	55 MPH
CR 509 (COUNTY LINE RD)*	LOCAL	55 MPH

* UNPAVED COUNTY ROADS
** DOES NOT MEET DESIGN TO MATCH FM 455 SCHEMATIC (CSJ: 2849-05-015)

NOTES:

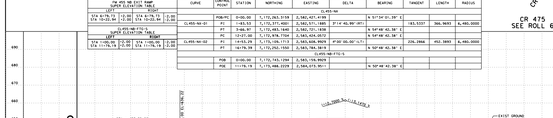
1. SHOT ORIGINAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY FLOWN BY TEXAS DEPARTMENT OF TRANSPORTATION. ADDITIONAL AREAS WERE OBTAINED BY FIELD SURVEY, JANUARY 01, 2018.
2. TYPICAL RADIUS RETURNS, UNLESS OTHERWISE NOTED ON THE PLANS: MAJOR CROSS ROADS & LOCAL ROADS: R=40 DRIVEWAYS: R=20'
3. MAIN CONTROL OF ACCESS IS NOT SHOWN AT THE RAMP LOCATIONS. CONTROL OF ACCESS WILL BE REVIEWED AND REVISED AT THE DESIGNATION OF THE APPROVED SCHEMATIC THE DRIVEWAY PERMIT PROCESS.

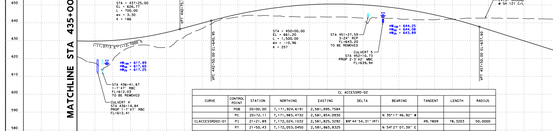
Stantec
TEXAS REGISTERED ENGINEERING FIRM F-9324
1601 ROBINSON AVENUE, SAN ANTONIO, TX 78201
TEL. (210) 881-7960 FAX: (210) 881-7961
WEBSITE: WWW.STANTEC.COM
DATE: (BASE: 08-29-22)

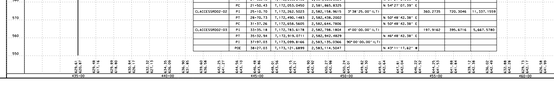
FINAL SUBMITTAL
THIS PROJECT IS FURNISHED FOR INFORMATION ONLY. THE ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR SUBSEQUENT ALTERATIONS OR CHANGES MADE BY OTHERS.

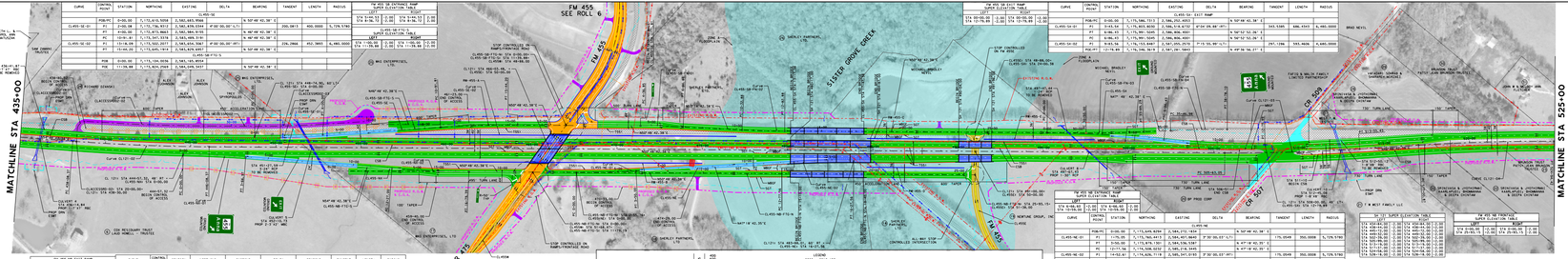
SCHEMATIC PREPARED BY:
JEFFREY D. MESSNER
"TEXAS REGISTERED ENGINEER NUMBER"
(SEAL)
DATE: (BASE: 08-29-22)

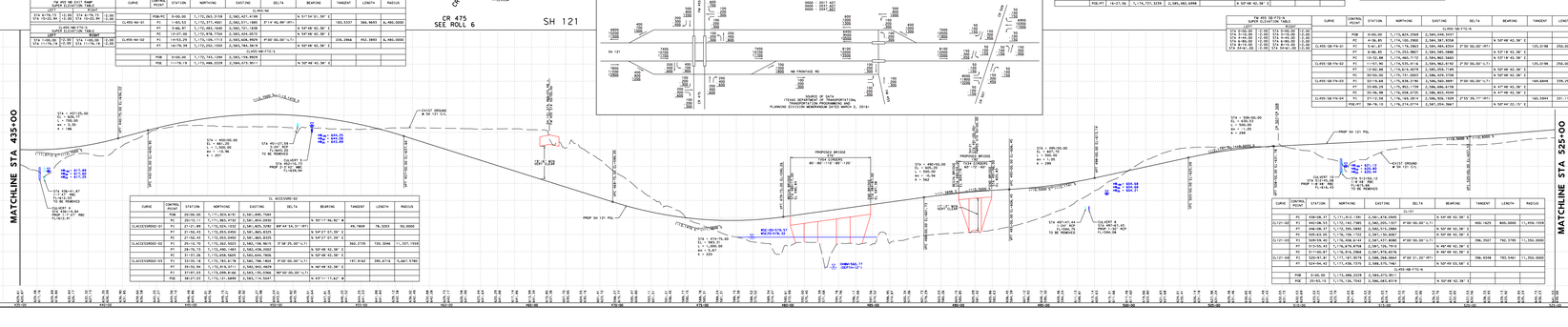
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES











Texas Department of Transportation

DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES E. VEGHAN, P.E.
DISTRICT DESIGN ENGINEER

ROLL 2: SH 121
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

FM 455 (FRANKFORD ROAD)
ALL-WAY STOP
CSJ: 0049-05-049
LIMITS: FROM COLLIN COUNTY LINE (APPROX. 0.5 MILE NORTH OF FM 455)
LENGTH: 0.05 MILES
CSJ: 0049-04-049
LIMITS: FROM NORTH OF SHERMAN STREET (DENTON COUNTY LINE)
EXCEPTION: FROM COLLIN OF DENTON COUNTY LINE (APPROX. 0.5 MILE NORTH OF FM 455)
LENGTH: 0.45 MILES
CSJ: 0049-03-048
LIMITS: FROM NORTH OF FM 455 (APPROX. 0.5 MILE NORTH OF FM 455)
LENGTH: 0.25 MILES
TOTAL LENGTH: 0.80 MILES
DESCRIPTION: CONSTRUCT 4-LANE DIVIDED HIGHWAY WITH SPEED CHANGE LANES

VICINITY MAP

PROJECT LENGTH: 7.637 MILES.
EXISTING: STA 420+00.00 BK = STA 420+89.16 AH
STA 435+00.00 BK = STA 525+00.00 AH
STA 820+00.00 BK = STA 829+01.19 AH
EXISTING: STA 770+00.00 TO STA 809+00.00 (10,000.00')
TRAFFIC DATA: SH 121: 16,000 ADT (2021)
23,900 ADT (2031)

INDEX OF ROLLS:

ROLL	DESCRIPTION
1	SH 121: STA 374+00 TO STA 435+00
2	SH 121: STA 435+00 TO STA 525+00
3	SH 121: STA 525+00 TO STA 614+00
4	SH 121: STA 614+00 TO STA 695+00
5	SH 121: STA 695+00 TO STA 775+00 (CR 509)
6	SH 121: STA 775+00 TO STA 845+57.66
6	CROSSROADS: FM 455N, FM 455S, FM 2962
6	CR 475, CR 507, CR 509, CR 509

FUNCTIONAL CLASSIFICATION & DESIGN SPEEDS

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
SH 121	RURAL ARTERIAL	70 MPH
FM 455 (FRANKFORD RD)	RURAL COLLECTOR	55 MPH
CR 475 (WEST LEG)	MINOR ARTERIAL	55 MPH
CR 475 (EAST LEG)	RURAL COLLECTOR	55 MPH
CR 507	LOCAL	55 MPH
CR 509	LOCAL	55 MPH
CR 509	LOCAL	55 MPH
CR 509	RURAL COLLECTOR	55 MPH
CR 509	LOCAL	55 MPH
CR 509	LOCAL	55 MPH
CR 509	LOCAL	55 MPH
CR 509 (COUNTY LINE RD)*	LOCAL	55 MPH

* UNPAVED COUNTY ROADS
** DOES NOT MEET DESIGN TO MATCH FM 455 SCHEMATIC (CSJ: 2849-05-015)

NOTES:

1. SHOT ORIGINAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY FLOWN BY TEXAS DEPARTMENT OF TRANSPORTATION. ADDITIONAL AREAS WERE OBTAINED BY FIELD SURVEY, JANUARY 01, 2018.
2. TYPICAL RADIUS RETURNS, UNLESS OTHERWISE NOTED ON THE PLANS: MAJOR CROSS ROADS & LOCAL ROADS: R=40 DRIVEWAYS: R=20'
3. MAIN CONTROL OF ACCESS IS NOT SHOWN AT THE RAMP LOCATIONS. CONTROL OF ACCESS WILL BE REVIEWED AND REVISED AT THE DESIGNATION OF THE APPROVED SCHEMATIC THE DRIVEWAY PERMIT PROCESS.

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SCHEMATIC PREPARED BY:
JEFFREY D. MESSNER
"TEXAS REGISTERED ENGINEER NUMBER"
(SEAL)
DATE: (BASE: 08-29-22)

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

Texas Department of Transportation ©2016

DALLAS DISTRICT
DESIGN SCHEMATIC

JAMES K. SELMAN, P.E.
DISTRICT ENGINEER

ROLL 3: SH 121
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

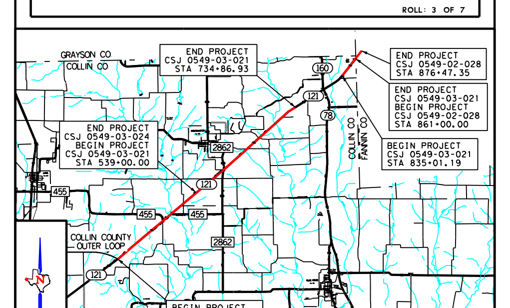
COLLIN & FANNIN COUNTIES
PROJECT LIMITS

CSJ: 0549-03-024
LIMITS: FROM COLLIN COUNTY OUTER LOOP TO NORTH OF FM 455
LENGTH: 3.125 MILES

CCSJ: 0549-03-021
LIMITS: FROM NORTH OF FM 455 TO CR 635 (FANNIN COUNTY LINE)
EXCEPTION: FROM SOUTH OF SH 160 TO NORTH OF SH 160
LENGTH: 4.204 MILES

CSJ: 0549-02-028
LIMITS: FROM CR 635 TO NORTH OF CR 635
LENGTH: 0.293 MILES
TOTAL LENGTH: 7.622 MILES

DESCRIPTION: CONSTRUCT 4-LANE DIVIDED HIGHWAY WITH SPEED CHANGE LANES



VICINITY MAP
N.T.S.

PROJECT LENGTH: 7.622 MILES

EQUATIONS: STA 624+00.00 BK = STA 623+89.16 AH
STA 734+86.93 BK = STA 735+00.00 AH
STA 835+00.00 BK = STA 835+01.19 AH

EXCEPTIONS: STA 735+00.00 TO STA 835+00.00 (10,000.00')

TRAFFIC DATA: SH 121: 16,000 ADT (2017)
23,900 ADT (2037)

INDEX OF ROLLS:

ROLL	DESCRIPTION
1	SH 121: STA 374+00 TO STA 435+00
2	SH 121: STA 435+00 TO STA 525+00
3	SH 121: STA 525+00 TO STA 614+00
4	SH 121: STA 614+00 TO STA 695+00
5	SH 121: STA 695+00 TO STA 734+86.93 (BK) SH 121: STA 835+01.19 (AH) TO STA 865+37.66
6	CROSSROADS: FM 455W, FM 455E, FM 2862
7	RAMP AND ACCESS ROAD PROFILES

FUNCTIONAL CLASSIFICATION & DESIGN SPEEDS:

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
SH121	RURAL ARTERIAL	70 MPH
RAMPS/FRONTAGE RD	RAMP/COLLECTOR	45 MPH
FM 455 (WEST LEG)	MINOR ARTERIAL **	45 MPH
CR 475	LOCAL	35 MPH
FM 455 (EAST LEG)	RURAL COLLECTOR	30 MPH
CR 507*	LOCAL	30 MPH
CR 509	LOCAL	30 MPH
CR 424	LOCAL	30 MPH
CR 513	LOCAL	30 MPH
FM 2862	RURAL COLLECTOR	45 MPH
CR 526*	LOCAL	30 MPH
CR 527	LOCAL	30 MPH
CR 528	LOCAL	30 MPH
CR 581	LOCAL	30 MPH
CR 582*	LOCAL	30 MPH
CR 635/COUNTY LINE RD*	LOCAL	30 MPH

* UNPAVED COUNTY ROADS
** USES URBAN DESIGN TO MATCH FM 455 SCHEMATIC (CSJ: 2845-01-015)

NOTES:

1. SH121 ORIGINAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY. ADDITIONAL TOPOGRAPHICAL INFORMATION FOR OBSCURED AREAS WAS OBTAINED BY FIELD SURVEY, JANUARY 23, 2008.
2. TYPICAL RADIUS RETURNS, UNLESS OTHERWISE NOTED ON THE PLANS: MAJOR CROSS ROADS & LOCAL ROADS: R=45' DRIVEWAYS: R=20'
3. WHERE CONTROL OF ACCESS IS NOT SHOWN AT THE RAMP LOCATIONS, CONTROL OF ACCESS WILL BE REVIEWED AND DENIED AT THE DISCRETION OF THE AREA OFFICE THROUGH THE DRIVEWAY PERMIT PROCESS.

0 50 100 200 HORIZ SCALE IN FEET
0 5 10 20 VERT SCALE IN FEET

Stantec
Engineered by Stantec Consulting Services Inc.
Texas Registered Engineering Firm F-6324

FINAL SUBMITTAL
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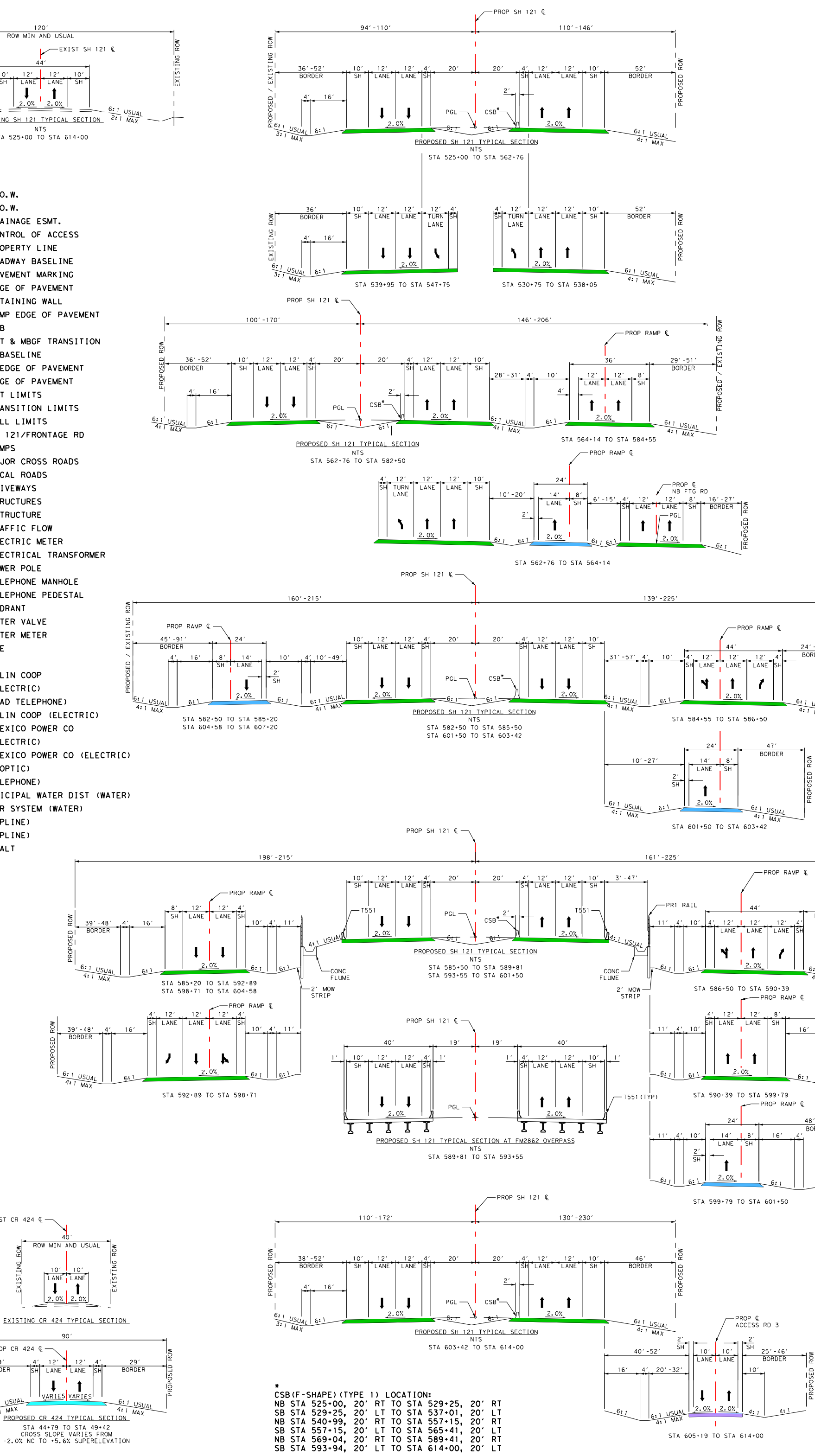
SCHEMATIC PREPARED BY:
JEFFREY E. WESANEN
117522
TEXAS REGISTRATION NUMBER
12/13/2016
DATE

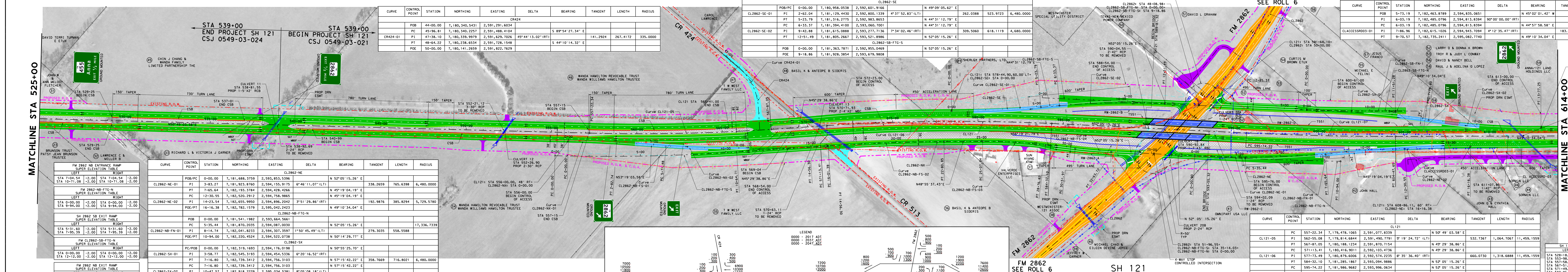
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

PLAN LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- PROPOSED DRAINAGE ESMT.
- PROPOSED CONTROL OF ACCESS
- EXISTING PROPERTY LINE
- PROPOSED ROADWAY BASELINE
- PROPOSED PAVEMENT MARKING
- PROPOSED EDGE OF PAVEMENT
- PROPOSED RETAINING WALL
- PROPOSED RAMP EDGE OF PAVEMENT
- PROPOSED CSB
- PROPOSED SGT & MBGF TRANSITION
- LOCAL ROAD BASELINE
- LOCAL ROAD EDGE OF PAVEMENT
- DRIVEWAY EDGE OF PAVEMENT
- PROPOSED CUT LIMITS
- PROPOSED TRANSITION LIMITS
- PROPOSED FILL LIMITS
- PROPOSED SH 121/FRONTAGE RD
- PROPOSED RAMPS
- PROPOSED MAJOR CROSS ROADS
- PROPOSED LOCAL ROADS
- PROPOSED DRIVEWAYS
- PROPOSED STRUCTURES
- DISPLACED STRUCTURE
- PROPOSED TRAFFIC FLOW
- EXISTING ELECTRIC METER
- EXISTING ELECTRICAL TRANSFORMER
- EXISTING POWER POLE
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- OUT OF SCOPE
- END OF LINE
- GREYSON COLLIN COOP (OVERHEAD ELECTRIC)
- ATT (OVERHEAD TELEPHONE)
- GREYSON COLLIN COOP (ELECTRIC)
- TEXAS NEW MEXICO POWER CO (OVERHEAD ELECTRIC)
- TEXAS NEW MEXICO POWER CO (ELECTRIC)
- ATT (FIBER OPTIC)
- VERIZON (TELEPHONE)
- N TEXAS MUNICIPAL WATER DIST (WATER)
- DESERT WATER SYSTEM (WATER)
- ONEOK (PIPELINE)
- ONEOK (PIPELINE)
- REMOVE ASPHALT



*CSB (F-SHAPE) (TYPE 1) LOCATION:
NB STA 525+00, 20' RT TO STA 529+25, 20' RT
SB STA 529+25, 20' LT TO STA 537+01, 20' LT
NB STA 540+99, 20' RT TO STA 557+15, 20' RT
SB STA 557+15, 20' LT TO STA 565+41, 20' LT
NB STA 569+04, 20' RT TO STA 589+41, 20' RT
SB STA 593+94, 20' LT TO STA 614+00, 20' LT



CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
CR424									
	POB	44+00.00	7,180,340.5431	2,591,291.6034					
	PC	45+96.81	7,180,340.2257	2,591,488.4104		S 89°54'27.34" E			
CR424-01	PI	47+38.10	7,180,339.9979	2,591,629.7026	45°44'13.02" (RT)		141.2924	267.4172	335.0000
	PT	48+64.22	7,180,238.6534	2,591,728.1548		S 44°10'14.32" E			
	POE	50+00.00	7,180,141.2659	2,591,822.7629					

CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
CL2862-SE									
	POB/PC	0+00.00	7,180,958.0538	2,592,601.9166		N 49°09'05.62" E			
CL2862-SE-01	PI	2+62.04	7,181,129.4430	2,592,800.1339	4°37'52.83" (LT)		262.0388	523.9723	6,480.0000
	PT	5+23.79	7,181,316.2775	2,592,983.8653		N 44°31'12.79" E			
	PC	6+33.37	7,181,394.4100	2,593,060.7001		N 44°31'12.79" E			
CL2862-SE-02	PI	9+42.88	7,181,615.0888	2,593,277.7136	7°34'02.46" (RT)		309.5060	618.1119	4,680.0000
	PT	12+51.49	7,181,805.2667	2,593,521.8986		N 52°05'15.26" E			
CL2862-SB-FTG-S									
	POB	0+00.00	7,181,363.7871	2,592,955.0469		N 52°05'15.26" E			
	POE	9+18.86	7,181,928.3854	2,593,679.9808					

CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
CL ACCESSRD-03									
	POB	5+73.19	7,182,463.8789	2,594,835.0651		N 45°02'01.42" W			
	PI	6+03.19	7,182,485.0796	2,594,813.8394	90°00'00.00" (RT)				
	PC	6+03.19	7,182,485.0796	2,594,813.8394		N 44°57'58.58" E			
CLACCESSRD03-01	PI	7+86.96	7,182,615.1026	2,594,943.7094	4°12'35.47" (RT)		183.7722	367.3789	5,000.0000
	PT	9+70.57	7,182,735.2411	2,595,082.7740		N 49°10'34.04" E			

FM 2862 NB ENTRANCE RAMP SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 7+04.54	+2.00	STA 7+04.54	-2.00
STA 10+71.08	+2.00	STA 10+71.08	-2.00

FM 2862-NB-FTG-N SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 0+00.00	+2.00	STA 0+00.00	-2.00
STA 9+94.00	+2.00	STA 9+94.00	-2.00

SH 2862 SB EXIT RAMP SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 5+31.60	-2.00	STA 5+31.60	+2.00
STA 7+95.39	-2.00	STA 7+95.39	+2.00

FM CL2862-SB-FTG-N SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 0+00.00	-2.00	STA 0+00.00	+2.00
STA 12+12.00	-2.00	STA 12+12.00	+2.00

FM 2862 NB EXIT RAMP SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 06+81.01	-2.00	STA 06+81.01	+2.00
STA 08+19.88	+2.00	STA 08+19.88	-2.00

FM 2862-NB-FTG-S SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 07+98.00	+2.00	STA 07+98.00	-2.00
STA 24+97.00	+2.00	STA 24+97.00	-2.00
STA 25+20.00	+3.00	STA 25+20.00	-3.00
STA 28+64.00	+3.00	STA 28+64.00	-3.00
STA 30+62.00	-3.00	STA 30+62.00	+3.00
STA 32+54.00	-3.00	STA 32+54.00	+3.00
STA 34+21.00	+2.00	STA 34+21.00	-2.00
STA 35+14.03	+2.00	STA 35+14.03	-2.00

FM 2862 SB ENTRANCE RAMP SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 4+08.32	+2.00	STA 4+08.32	-2.00
STA 6+81.59	+2.00	STA 6+81.59	-2.00

FM CL2862-SB-FTG-S SUPER ELEVATION TABLE

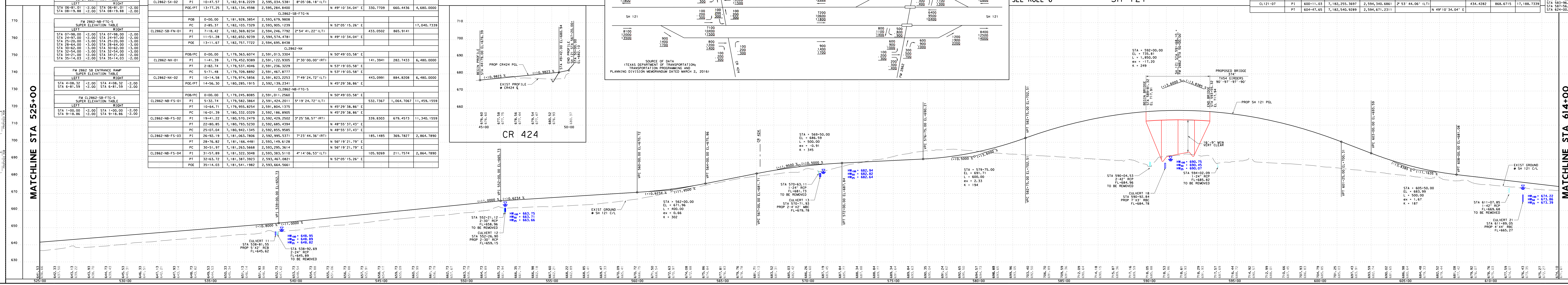
LEFT		RIGHT	
STA 1+00.00	+2.00	STA 1+00.00	-2.00
STA 9+18.86	+2.00	STA 9+18.86	-2.00

CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
CL2862-NE									
	POB/PC	0+00.00	7,181,688.3759	2,593,853.5396		N 52°05'15.26" E			
CL2862-NE-01	PI	3+83.27	7,181,923.8760	2,594,155.9175	6°46'11.07" (LT)		338.2659	765.6398	6,480.0000
	PT	7+65.64	7,182,193.3784	2,594,428.4266		N 45°19'04.19" E			
	PC	12+30.55	7,182,520.2912	2,594,758.9865		N 45°19'04.19" E			
CL2862-NE-02	PI	14+23.54	7,182,655.9950	2,594,896.2042	3°51'29.86" (RT)		192.9876	385.8294	5,729.5780
	POE/PT	16+16.38	7,182,782.1579	2,595,042.2423		N 49°10'34.04" E			
CL2862-NB-FTG-N									
	POB	0+00.00	7,181,541.1982	2,593,664.5661					
	PC	5+35.44	7,181,870.2035	2,594,087.0030		N 52°05'15.26" E			17,336.7339
CL2862-NB-FN-01	PI	8+14.74	7,182,041.8233	2,594,307.3597	1°50'45.49" (LT)		279.3035	558.5588	
	POE/PT	10+94.00	7,182,220.4524	2,594,522.0738		N 50°14'29.77" E			
CL2862-SX									
	PC/POB	0+00.00	7,182,319.1693	2,594,176.0198		N 50°55'25.70" E			
CL2862-SX-01	PI	3+58.77	7,182,545.3193	2,594,454.5336	6°20'16.52" (RT)				
	PT	7+16.80	7,182,739.3412	2,594,756.3103		N 57°15'42.22" E	358.7669	716.8021	6,480.0000
	PC	7+16.80	7,182,739.3412	2,594,756.3103		N 57°15'42.22" E			
CL2862-SX-02	PI	10+47.57	7,182,918.2229	2,595,034.5381	8°05'08.18" (LT)				
	POE/PT	13+77.25	7,183,134.4598	2,595,284.8400		N 49°10'34.04" E	330.7709	660.4436	4,680.0000
CL2862-SB-FTG-N									
	POB	0+00.00	7,181,928.3854	2,593,679.9808					
	PC	2+85.37	7,182,103.7329	2,593,905.1239		N 52°05'15.26" E			17,040.7339
CL2862-SB-FN-01	PI	7+18.42	7,182,369.8234	2,594,246.7792	2°54'41.22" (LT)		433.0502	865.9141	
	PT	11+51.28	7,182,652.9239	2,594,574.4781		N 49°10'34.04" E			
	POE	13+11.67	7,182,757.7722	2,594,695.8438					
CL2862-NX									
	POB/PC	0+00.00	7,179,363.6074	2,591,013.3304		N 50°49'03.58" E			
CL2862-NX-01	PI	1+41.39	7,179,452.9389	2,591,122.9305	2°30'00.00" (RT)		141.3941	282.7433	6,480.0000
	PT	2+82.74	7,179,537.4046	2,591,236.3229		N 53°19'03.58" E			
	PC	5+71.48	7,179,709.8892	2,591,467.8777		N 53°19'03.58" E			
CL2862-NX-02	PI	10+14.58	7,179,974.5856	2,591,823.2253	7°49'24.72" (LT)		443.0991	884.8208	6,480.0000
	POE/PT	14+56.30	7,180,285.1915	2,592,139.2341		N 45°29'38.86" E			
CL2862-NB-FTG-S									
	POB/PC	0+00.00	7,179,245.8085	2,591,011.2560		N 50°49'03.58" E			
CL2862-NB-FS-01	PI	5+32.74	7,179,582.3864	2,591,424.2011	5°19'24.72" (LT)		532.7367	1,064.7067	11,459.1559
	PT	10+64.71	7,179,955.8254	2,591,804.1375		N 45°29'38.86" E			
	PC	16+01.39	7,180,332.0329	2,592,186.8905		N 45°29'38.86" E			
CL2862-NB-FS-02	PI	19+41.22	7,180,570.2479	2,592,429.2502	3°25'58.57" (RT)		339.8303	679.4573	11,340.1559
	PT	22+80.85	7,180,793.5230	2,592,685.4394		N 48°55'37.43" E			
	PC	25+07.04	7,180,942.1345	2,592,855.9585		N 48°55'37.43" E			
CL2862-NB-FS-03	PI	26+92.19	7,181,063.7806	2,592,995.5371	7°23'44.36" (RT)		185.1485	369.7827	2,864.7890
	PT	28+76.82	7,181,166.4481	2,593,149.6128		N 56°19'21.79" E			
	PC	30+51.97	7,181,263.5668	2,593,295.3614		N 56°19'21.79" E			
CL2862-NB-FS-04	PI	31+57.89	7,181,322.3048	2,593,383.5110	4°14'06.53" (LT)		105.9269	211.7574	2,864.7890
	PT	32+63.72	7,181,387.3923	2,593,467.0821		N 52°05'15.26" E			
	POE	35+14.03	7,181,541.1982	2,593,664.5661					

CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
CL121									
	PC	557+22.34	7,179,478.1065	2,591,077.8339		N 50° 49' 03.58" E			
CL121-05	PI	562+55.08	7,179,814.6844	2,591,490.7791	5° 19' 24.72" (LT)		532.7367	1,064.7067	11,459.1559
	PT	567+87.05	7,180,188.1234	2,591,870.7154		N 45° 29' 38.86" E			
	PC	571+13.41	7,180,416.9011	2,592,103.4736		N 45° 29' 38.86" E			
CL121-06	PI	577+73.49	7,180,879.6006	2,592,574.2235	6° 35' 36.40" (RT)		660.0730	1,318.6688	11,459.1559
	PT	584+32.10	7,181,285.1867	2,593,094.9886		N 52° 05' 15.26" E			
	PC	595+74.22	7,181,986.9682	2,593,996.0634		N 52° 05' 15.26" E			
CL121-07	PI	600+11.03	7,182,255.3697	2,594,340.6861	2° 53' 44.06" (LT)		434.4282	868.6715	17,188.7339
	PT	604+47.65	7,182,540.9289	2,594,671.2311		N 49°10'34.04" E			

SH 121 SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 528+18.00	-2.00	STA 528+18.00	-2.00
STA 553+98.00	-2.00	STA 553+98.00	-2.00
STA 557+58.00	-2.00	STA 557+58.00	+2.00
STA 567+51.00	-2.00	STA 567+51.00	+2.00
STA 571+49.00	+2.00	STA 571+49.00	-2.00
STA 583+96.00	+2.00	STA 583+96.00	-2.00
STA 587+56.00	-2.00	STA 587+56.00	+2.00
STA 624+00.00	-2.00	STA 624+00.00	-2.00



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DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES K. SELMAN, P.E.
DISTRICT ENGINEER
ROLL 3: SH 121
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121
(title block, vicinity map, project data, index of rolls, functional classification table, notes, scales, final submittal notice and signature block repeated at right edge of sheet)

Texas Department of Transportation
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DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES K. SELMAN, P.E.
DISTRICT ENGINEER

ROLL 4: SH 121
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

COLLIN & FANNIN COUNTIES
PROJECT LIMITS

CSJ: 0549-03-024
LIMITS: FROM COLLIN COUNTY OUTER LOOP TO NORTH OF FM 455
LENGTH: 3.125 MILES

CCSJ: 0549-03-021
LIMITS: FROM NORTH OF FM 455 TO CR 635 (FANNIN COUNTY LINE)
EXCEPTION: FROM SOUTH OF SH 160 TO NORTH OF SH 160
LENGTH: 4.204 MILES

CSJ: 0549-02-028
LIMITS: FROM CR 635 TO NORTH OF CR 635
LENGTH: 0.293 MILES
TOTAL LENGTH: 7.622 MILES

DESCRIPTION: CONSTRUCT 4-LANE DIVIDED HIGHWAY WITH SPEED CHANGE LANES

ROLL: 4 OF 7

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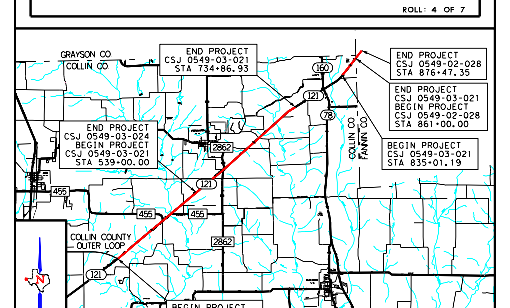

VICINITY MAP
N.T.S.

PROJECT LENGTH: 7.622 MILES

EQUATIONS:
STA 624+00.00 BK = STA 623+89.16 AH
STA 734+86.93 BK = STA 735+00.00 AH
STA 835+00.00 BK = STA 835+01.19 AH

EXCEPTIONS: STA 735+00.00 TO STA 835+00.00 (10,000.00')

TRAFFIC DATA: SH 121: 16,000 ADT (2017)
23,900 ADT (2037)

INDEX OF ROLLS:

ROLL	DESCRIPTION
1	SH 121: STA 374+00 TO STA 435+00
2	SH 121: STA 435+00 TO STA 525+00
3	SH 121: STA 525+00 TO STA 614+00
4	SH 121: STA 614+00 TO STA 695+00
5	SH 121: STA 695+00 TO STA 734+86.93(BK)
	SH 121: STA 835+01.19(AH) TO STA 865+37.66
6	CROSSROADS: FM 455W, FM 455E, FM 2862
7	RAMP AND ACCESS ROAD PROFILES

FUNCTIONAL CLASSIFICATION & DESIGN SPEEDS:

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
SH121	RURAL ARTERIAL	70 MPH
RAMPS/FRONTAGE RD	RAMP/COLLECTOR	45 MPH
FM 455 (WEST LEG)	MINOR ARTERIAL **	45 MPH
CR 475	LOCAL	35 MPH
FM 455 (EAST LEG)	RURAL COLLECTOR	30 MPH
CR 507*	LOCAL	30 MPH
CR 509	LOCAL	30 MPH
CR 424	LOCAL	30 MPH
CR 513	LOCAL	30 MPH
FM 2862	RURAL COLLECTOR	45 MPH
CR 526*	LOCAL	30 MPH
CR 527	LOCAL	30 MPH
CR 528	LOCAL	30 MPH
CR 581	LOCAL	30 MPH
CR 582*	LOCAL	30 MPH
CR 635/COUNTY LINE RD*	LOCAL	30 MPH

* UNPAVED COUNTY ROADS
** USES URBAN DESIGN TO MATCH FM 455 SCHEMATIC (CSJ: 2845-01-015)

NOTES:

1. SH121 ORIGINAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY. ADDITIONAL TOPOGRAPHICAL INFORMATION FOR OBSCURED AREAS WAS OBTAINED BY FIELD SURVEY, JANUARY 23, 2008.
2. TYPICAL RADIUS RETURNS, UNLESS OTHERWISE NOTED ON THE PLANS:
   MAJOR CROSS ROADS & LOCAL ROADS: R=45'
   DRIVEWAYS: R=20'
3. WHERE CONTROL OF ACCESS IS NOT SHOWN AT THE RAMP LOCATIONS, CONTROL OF ACCESS WILL BE REVIEWED AND DENIED AT THE DISCRETION OF THE AREA OFFICE THROUGH THE DRIVEWAY PERMIT PROCESS.

0 50 100 200 HORIZ SCALE IN FEET — 0 5 10 20 VERT SCALE IN FEET

Stantec
Engineered by Stantec Consulting Services Inc.
Texas Registered Engineering Firm F-6324

FINAL SUBMITTAL
THIS PRINT IS FURNISHED FOR INFORMATION ONLY. THE PLAN INFORMATION OR OTHER DATA SHOWN HEREON IS SUBJECT TO CHANGE AND MUST NOT BE CONSTRUED AS FINAL.

SCHEMATIC PREPARED BY:
JEFFREY E. WESANEN
117522
TEXAS REGISTRATION NUMBER
12/13/2016
DATE

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

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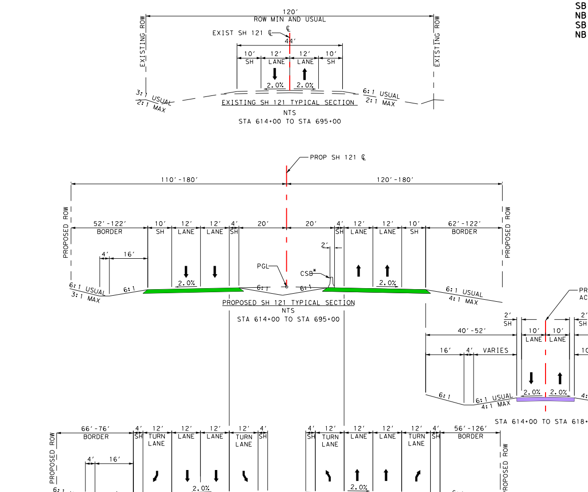
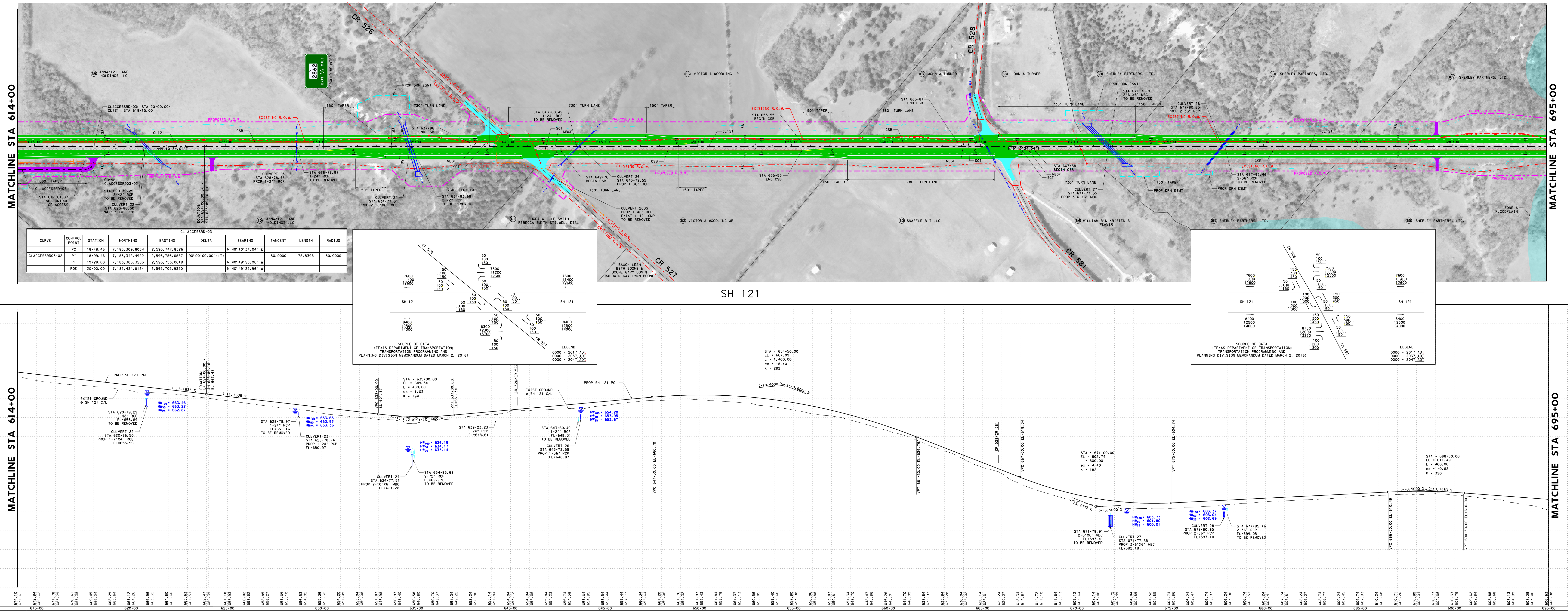


* CSB (F-SHAPE) (TYPE 1) LOCATION:
SB STA 614+00, 20' LT TO STA 637+96, 20' LT
NB STA 642+76, 20' RT TO STA 655+55, 20' RT
SB STA 655+55, 20' LT TO STA 663+81, 20' LT
NB STA 667+88, 20' RT TO STA 695+00, 20' RT

PLAN LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- PROPOSED DRAINAGE ESMT.
- PROPOSED CONTROL OF ACCESS
- EXISTING PROPERTY LINE
- PROPOSED ROADWAY BASELINE
- PROPOSED PAVEMENT MARKING
- PROPOSED EDGE OF PAVEMENT
- PROPOSED RETAINING WALL
- PROPOSED RAMP EDGE OF PAVEMENT
- PROPOSED CSB
- PROPOSED SGT & MBGF TRANSITION
- LOCAL ROAD BASELINE
- LOCAL ROAD EDGE OF PAVEMENT
- DRIVEWAY EDGE OF PAVEMENT
- PROPOSED CUT LIMITS
- PROPOSED TRANSITION LIMITS
- PROPOSED FILL LIMITS
- PROPOSED SH 121/FRONTAGE RD
- PROPOSED RAMPS
- PROPOSED MAJOR CROSS ROADS
- PROPOSED LOCAL ROADS
- PROPOSED DRIVEWAYS
- PROPOSED STRUCTURES
- DISPLACED STRUCTURE
- PROPOSED TRAFFIC FLOW
- EXISTING ELECTRIC METER
- EXISTING ELECTRICAL TRANSFORMER
- EXISTING POWER POLE
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- OUT OF SCOPE
- END OF LINE
- GREYSON COLLIN COOP (OVERHEAD ELECTRIC)
- ATT (OVERHEAD TELEPHONE)
- GREYSON COLLIN COOP (ELECTRIC)
- TEXAS NEW MEXICO POWER CO (OVERHEAD ELECTRIC)
- TEXAS NEW MEXICO POWER CO (ELECTRIC)
- ATT (FIBER OPTIC)
- VERIZON (TELEPHONE)
- N TEXAS MUNICIPAL WATER DIST (WATER)
- DESERT WATER SYSTEM (WATER)
- ONEOK (PIPELINE)
- ONEOK (PIPELINE)
- REMOVE ASPHALT



CL ACCESSRD-03

CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
	PC	18+49.46	7,183,309.8054	2,595,747.8526		N 49°10'34.04" E			
CLACCESSRD03-02	PI	18+99.46	7,183,342.4922	2,595,785.6887	90°00'00.00" (LT)		50.0000	78.5398	50.0000
	PT	19+28.00	7,183,380.3283	2,595,753.0019		N 40°49'25.96" W			
	POE	20+00.00	7,183,434.8124	2,595,705.9330		N 40°49'25.96" W			

SH 121 SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 614+00.00	-2.00	STA 614+00.00	-2.00
STA 695+00.00	-2.00	STA 695+00.00	-2.00

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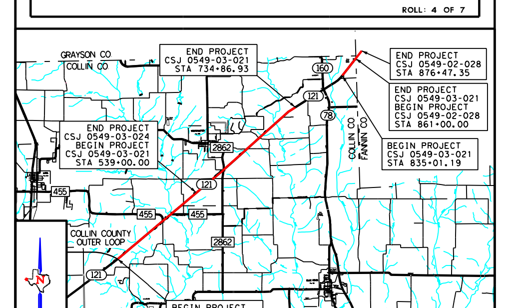
DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES K. SELMAN, P.E.
DISTRICT ENGINEER
ROLL 4: SH 121
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121
ROLL: 4 OF 7
FINAL SUBMITTAL
SCHEMATIC PREPARED BY: JEFFREY E. WESANEN



Texas Department of Transportation

DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES E. PEARSON, P.E.
DESIGN SECTION HEADER

ROLL 5: SH 121
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

FROM: SH 121 BEGIN PROJECT
TO: SH 121 END PROJECT
CSJ: 0549-03-024
LIMITS: FROM COLLIN COUNTY LINE NORTH TO NORTH OF FM 455
LENGTH: 5.03 MILES
CSJ: 0549-03-027
LIMITS: FROM NORTH OF FM 455 TO DENTON COUNTY LINE
EXCEPTION: FROM GRADE OF SH 121 NORTH OF FM 455 TO NORTH OF SH 121 BEGIN PROJECT
CSJ: 0549-03-028
LIMITS: FROM DENTON COUNTY LINE NORTH OF SH 420
LENGTH: 0.470 MILES
TOTAL LENGTH: 7.420 MILES
DESCRIPTION: CONSTRUCT 6 LANE DIVIDED HIGHWAY WITH SPEED CHANGE LANES

ROLL 5 OF 7

VICINITY MAP

PROJECT LENGTH: 7.420 MILES
EQUATIONS: STA 624+00.00 BK = STA 623+89.16 AH
STA 834+86.98 BK = STA 835+00.00 AH
STA 905+00.00 BK = STA 835+01.16 AH
EXCEPTIONS: STA 770+00.00 TO STA 809+00.00 (10,000.00')
TRAFFIC DATA: SH 121: 16,000 ADT (2017)
23,900 ADT (2037)

INDEX OF ROLLS:

ROLL	DESCRIPTION
1	SH 121: STA 574+00 TO STA 455+00
2	SH 121: STA 455+00 TO STA 635+00
3	SH 121: STA 635+00 TO STA 814+00
4	SH 121: STA 814+00 TO STA 995+00
5	SH 121: STA 861+00 BEGIN PROJECT SH 121 TO SH 121: STA 995+00 END PROJECT SH 121
6	SB TRANSITION: FM 455RD, FM 455D, FM 2862
7	NB TRANSITION: FM 455RD, FM 455D, FM 2862

FUNCTIONAL CLASSIFICATION & DESIGN SPEEDS

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
SH 121	RURAL ARTERIAL	75 MPH
FM 455 (MCKINNEY ST)	RURAL COLLECTOR	55 MPH
FM 455 (WEST LAKE)	MINOR ARTERIAL	55 MPH
FM 455 (EAST LAKE)	RURAL COLLECTOR	55 MPH
CR 635S	LOCAL	30 MPH
CR 635N	LOCAL	30 MPH
CR 635D	LOCAL	30 MPH
CR 635E	LOCAL	30 MPH
CR 635G	RURAL COLLECTOR	55 MPH
CR 635F	LOCAL	30 MPH
CR 635C	LOCAL	30 MPH
CR 635B	LOCAL	30 MPH
CR 635A	LOCAL	30 MPH
CR 635 (COUNTY LINE RD)*	RURAL COLLECTOR	55 MPH
FM 2862	RURAL COLLECTOR	55 MPH

* UNPAVED COUNTY ROADS
** TXDOT URBAN DESIGN TO MATCH FM 455 SCHEMATIC (CSJ: 2845-01-015)

NOTES:

1. SHOT ORIGINAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY DATED 2/2/2016. ADDITIONAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY FIELD SURVEY, JANUARY 23, 2018.
2. TYPICAL RADIUS RETURNS, UNLESS OTHERWISE NOTED ON THE PLANS: MAJOR CROSS ROADS & LOCAL ROADS: R=40 DRIVEWAYS: R=20'
3. MAIN CONTROL OF ACCESS IS NOT SHOWN AT THE RAMP LOCATIONS. CONTROL OF ACCESS WILL BE REVISED AND SENT TO THE DISTRICTS OF THE TXDOT OFFICE FOR THE DRIVEWAY PERMIT PROCESS.

Stantec
Texas Registered Engineering Firm F-9324
Texas Registered Surveying Firm 10194224

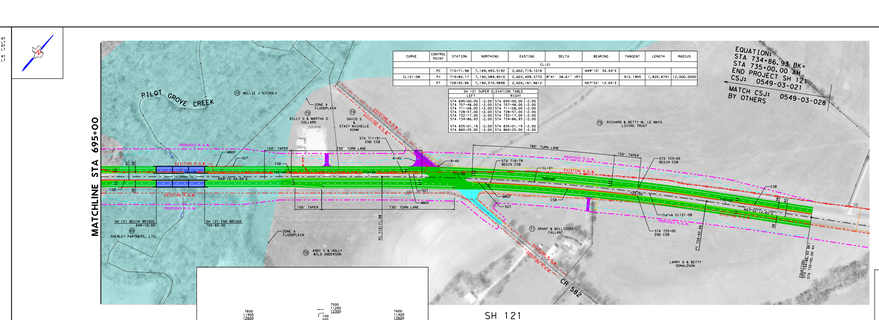
FINAL SUBMITTAL
THIS PROJECT IS FURNISHED FOR INFORMATION ONLY. THE INFORMATION SHOWN ON THIS PROJECT IS CURRENTLY SUBJECT TO CHANGE AND MUST NOT BE CONSTRUED AS FINAL.

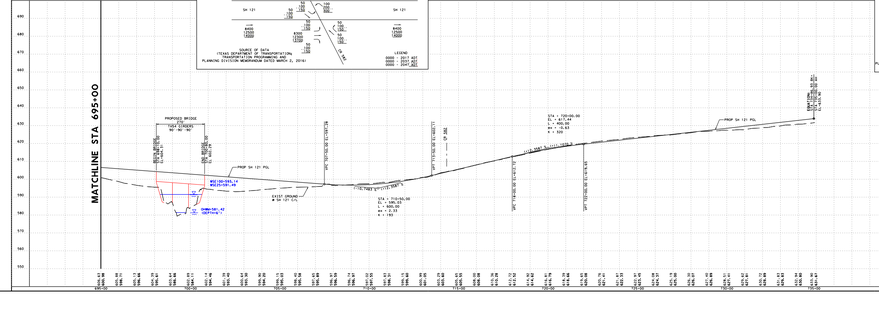
SCHEMATIC PREPARED BY:
JEFFREY S. MCGANN
"STATE REGISTERED ENGINEER NUMBER"
CSJ: 0549-03-024
DATE: 2018

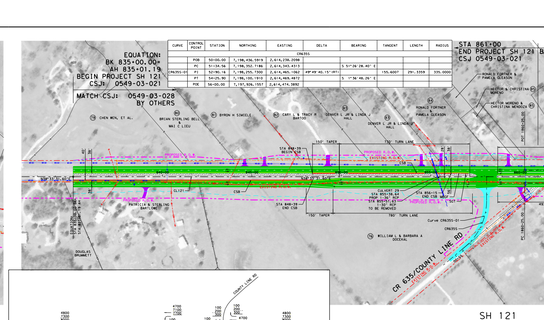
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

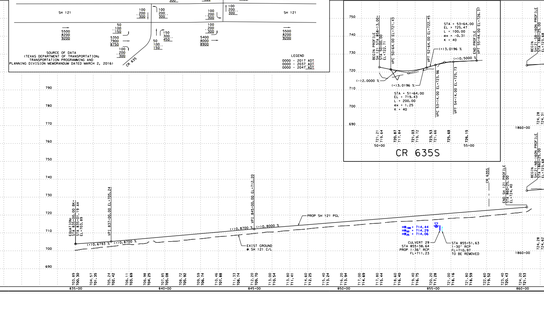
PLAN LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- PROPOSED CONTROL STMT.
- PROPOSED CONTROL OF ACCESS
- EXISTING PROPERTY LINE
- PROPOSED PAVEMENT BASELINE
- PROPOSED PAVEMENT MARKING
- PROPOSED PAVEMENT MARKING
- PROPOSED RETAINING WALL
- PROPOSED RAMP EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED SLT & MBGF TRANSITION
- LOCAL ROAD BASELINE
- LOCAL ROAD EDGE OF PAVEMENT
- EPI/EMAY EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED TRANSITION LIMITS
- PROPOSED FILL LIMITS
- PROPOSED SH 121/PROPOSED RD
- PROPOSED RAMPS
- PROPOSED MAINLANE CROSS ROADS
- PROPOSED LOCAL ROADS
- PROPOSED DRIVEWAYS
- PROPOSED STRUCTURE
- DUPLICATE STRUCTURE
- PROPOSED TRAFFIC FLOW
- EXISTING ELECTRIC METER
- EXISTING ELECTRIC TRANSFORMER
- EXISTING TELEPHONE
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- GUY OF GUYED
- END OF LINE
- OVERHEAD COLLIN COOP
- OVERHEAD ELECTRICS
- ATT -OVERHEAD TELEPHONE
- OREXON COLLIN COOP (ELECTRIC)
- TEXAS NEW MEXICO POWER CO
- TEXAS NEW MEXICO
- TEXAS NEW MEXICO POWER CO (ELECTRIC)
- ATT -FIBER OPTIC
- VERIZON (TELEPHONE)
- N TEXAS MUNICIPAL WATER DIST (WATER)
- N TEXAS MUNICIPAL WATER
- ONCOR (POTENTIAL)
- ONCOR (PIPELINE)
- REMOVE ASPHALT









Texas Department of Transportation

DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES E. PEARSON, P.E.
DESIGN SECTION HEADER

ROLL 5: SH 121
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

FROM: SH 121 BEGIN PROJECT
TO: SH 121 END PROJECT
CSJ: 0549-03-024
LIMITS: FROM COLLIN COUNTY LINE NORTH TO NORTH OF FM 455
LENGTH: 5.03 MILES
CSJ: 0549-03-027
LIMITS: FROM NORTH OF FM 455 TO DENTON COUNTY LINE
EXCEPTION: FROM GRADE OF SH 121 NORTH OF FM 455 TO NORTH OF SH 121 BEGIN PROJECT
CSJ: 0549-03-028
LIMITS: FROM DENTON COUNTY LINE NORTH OF SH 420
LENGTH: 0.470 MILES
TOTAL LENGTH: 7.420 MILES
DESCRIPTION: CONSTRUCT 6 LANE DIVIDED HIGHWAY WITH SPEED CHANGE LANES

ROLL 5 OF 7

VICINITY MAP

PROJECT LENGTH: 7.420 MILES
EQUATIONS: STA 624+00.00 BK = STA 623+89.16 AH
STA 834+86.98 BK = STA 835+00.00 AH
STA 905+00.00 BK = STA 835+01.16 AH
EXCEPTIONS: STA 770+00.00 TO STA 809+00.00 (10,000.00')
TRAFFIC DATA: SH 121: 16,000 ADT (2017)
23,900 ADT (2037)

INDEX OF ROLLS:

ROLL	DESCRIPTION
1	SH 121: STA 574+00 TO STA 455+00
2	SH 121: STA 455+00 TO STA 635+00
3	SH 121: STA 635+00 TO STA 814+00
4	SH 121: STA 814+00 TO STA 995+00
5	SH 121: STA 861+00 BEGIN PROJECT SH 121 TO SH 121: STA 995+00 END PROJECT SH 121
6	SB TRANSITION: FM 455RD, FM 455D, FM 2862
7	NB TRANSITION: FM 455RD, FM 455D, FM 2862

FUNCTIONAL CLASSIFICATION & DESIGN SPEEDS

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
SH 121	RURAL ARTERIAL	75 MPH
FM 455 (MCKINNEY ST)	MINOR ARTERIAL	55 MPH
FM 455 (WEST LAKE)	MINOR ARTERIAL	55 MPH
FM 455 (EAST LAKE)	RURAL COLLECTOR	55 MPH
CR 635S	LOCAL	30 MPH
CR 635N	LOCAL	30 MPH
CR 635D	LOCAL	30 MPH
CR 635E	LOCAL	30 MPH
CR 635G	RURAL COLLECTOR	55 MPH
CR 635F	LOCAL	30 MPH
CR 635C	LOCAL	30 MPH
CR 635B	LOCAL	30 MPH
CR 635A	LOCAL	30 MPH
CR 635 (COUNTY LINE RD)*	RURAL COLLECTOR	55 MPH
FM 2862	RURAL COLLECTOR	55 MPH

* UNPAVED COUNTY ROADS
** TXDOT URBAN DESIGN TO MATCH FM 455 SCHEMATIC (CSJ: 2845-01-015)

NOTES:

1. SHOT ORIGINAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY DATED 2/2/2016. ADDITIONAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY FIELD SURVEY, JANUARY 23, 2018.
2. TYPICAL RADIUS RETURNS, UNLESS OTHERWISE NOTED ON THE PLANS: MAJOR CROSS ROADS & LOCAL ROADS: R=40 DRIVEWAYS: R=20'
3. MAIN CONTROL OF ACCESS IS NOT SHOWN AT THE RAMP LOCATIONS. CONTROL OF ACCESS WILL BE REVISED AND SENT TO THE DISTRICTS OF THE TXDOT OFFICE FOR THE DRIVEWAY PERMIT PROCESS.

Stantec
Texas Registered Engineering Firm F-9324
Texas Registered Surveying Firm 10194224

FINAL SUBMITTAL
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SCHEMATIC PREPARED BY:
JEFFREY S. MCGANN
"STATE REGISTERED ENGINEER NUMBER"
CSJ: 0549-03-024
DATE: 2018

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

Texas Department of Transportation
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DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES K. SELMAN, P.E.
DISTRICT ENGINEER

ROLL 6: FM 455, FM 2862 AND SH 160
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

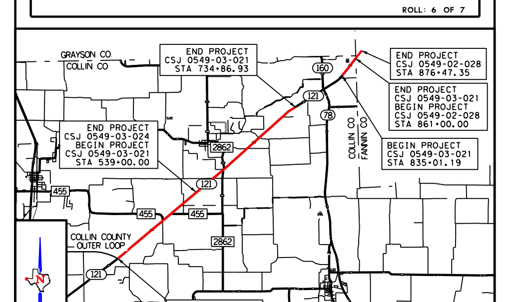
COLLIN & FANNIN COUNTIES
PROJECT LIMITS

CSJ: 0549-03-024
LIMITS: FROM COLLIN COUNTY OUTER LOOP TO NORTH OF FM 455
LENGTH: 3.125 MILES

CCSJ: 0549-03-021
LIMITS: FROM NORTH OF FM 455 TO CR 635 (FANNIN COUNTY LINE)
EXCEPTION: FROM SOUTH OF SH 160 TO NORTH OF SH 160
LENGTH: 4.204 MILES

CSJ: 0549-02-028
LIMITS: FROM CR 635 TO NORTH OF CR 635
LENGTH: 0.293 MILES
TOTAL LENGTH: 7.622 MILES

DESCRIPTION: CONSTRUCT 4-LANE DIVIDED HIGHWAY WITH SPEED CHANGE LANES



VICINITY MAP
N.T.S.

PROJECT LENGTH: 7.622 MILES

EQUATIONS:
STA 624+00.00 BK = STA 623+89.16 AH
STA 734+86.93 BK = STA 735+00.00 AH
STA 835+00.00 BK = STA 835+01.19 AH

EXCEPTIONS: STA 735+00.00 TO STA 835+00.00 (10,000.00')

TRAFFIC DATA: SH 121: 16,000 ADT (2017)
23,900 ADT (2037)

INDEX OF ROLLS:

ROLL	DESCRIPTION
1	SH 121: STA 374+00 TO STA 435+00
2	SH 121: STA 435+00 TO STA 525+00
3	SH 121: STA 525+00 TO STA 614+00
4	SH 121: STA 614+00 TO STA 695+00
5	SH 121: STA 695+00 TO STA 734+86.93(BK)
	SH 121: STA 835+01.19(AH) TO STA 865+37.66
6	CROSSROADS: FM 455W, FM 455E, FM 2862
7	RAMP AND ACCESS ROAD PROFILES

FUNCTIONAL CLASSIFICATION & DESIGN SPEEDS:

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
SH121	RURAL ARTERIAL	70 MPH
RAMPS/FRONTAGE RD	RAMP/COLLECTOR	45 MPH
FM 455 (WEST LEG)	MINOR ARTERIAL **	45 MPH
CR 475	LOCAL	35 MPH
FM 455 (EAST LEG)	RURAL COLLECTOR	30 MPH
CR 507*	LOCAL	30 MPH
CR 509	LOCAL	30 MPH
CR 424	LOCAL	30 MPH
CR 513	LOCAL	30 MPH
FM 2862	RURAL COLLECTOR	45 MPH
CR 526*	LOCAL	30 MPH
CR 527	LOCAL	30 MPH
CR 528	LOCAL	30 MPH
CR 581	LOCAL	30 MPH
CR 582*	LOCAL	30 MPH
CR 635/COUNTY LINE RD*	LOCAL	30 MPH

* UNPAVED COUNTY ROADS
** USES URBAN DESIGN TO MATCH FM 455 SCHEMATIC (CSJ: 2845-01-015)

NOTES:

1. SH121 ORIGINAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY. ADDITIONAL TOPOGRAPHICAL INFORMATION FOR OBSCURED AREAS WAS OBTAINED BY FIELD SURVEY, JANUARY 23, 2008.
2. TYPICAL RADIUS RETURNS, UNLESS OTHERWISE NOTED ON THE PLANS: MAJOR CROSS ROADS & LOCAL ROADS: R=45' DRIVEWAYS: R=20'
3. WHERE CONTROL OF ACCESS IS NOT SHOWN AT THE RAMP LOCATIONS, CONTROL OF ACCESS WILL BE REVIEWED AND DENIED AT THE DISCRETION OF THE AREA OFFICE THROUGH THE DRIVEWAY PERMIT PROCESS.

HORIZ SCALE IN FEET (0 50 100 200) — VERT SCALE IN FEET (0 5 10 20)

Stantec
Engineered by Stantec Consulting Services Inc.
Texas Registered Engineering Firm F-6324

FINAL SUBMITTAL
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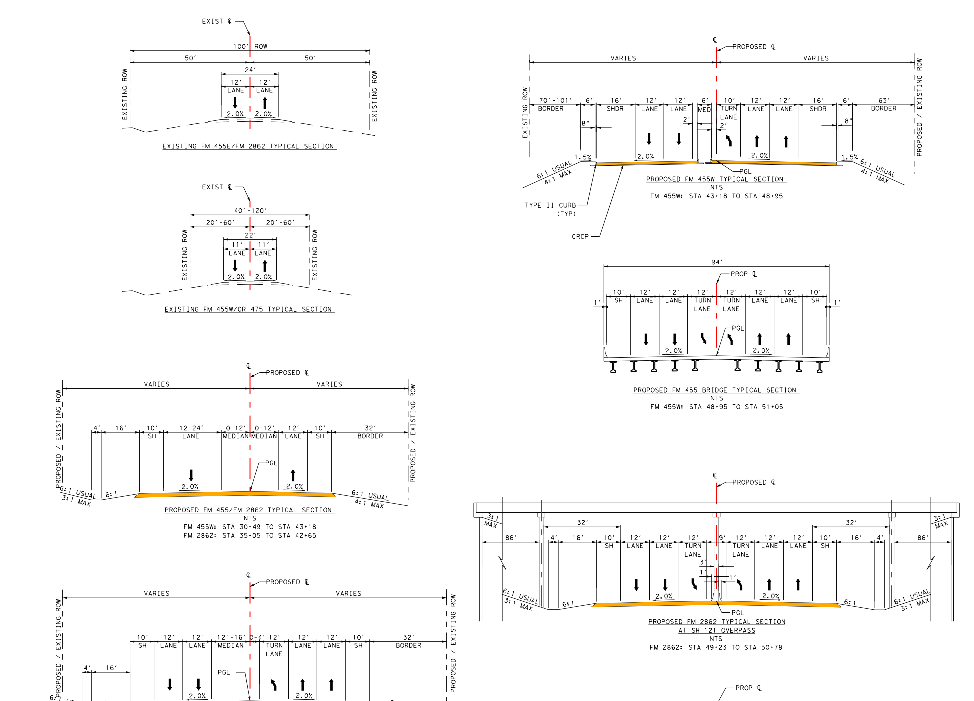
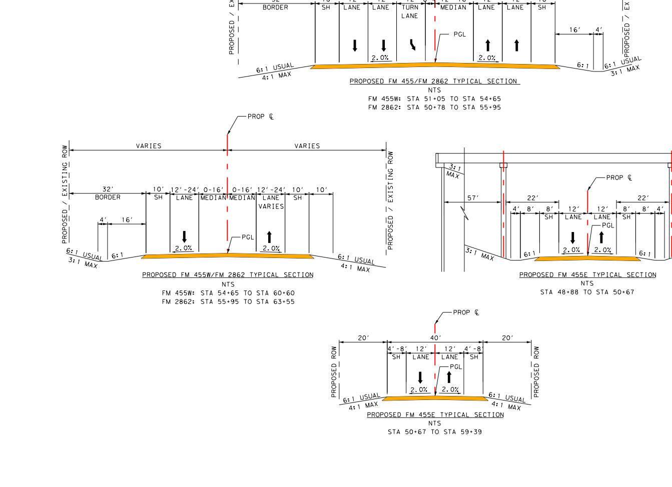
SCHEMATIC PREPARED BY:
JEFFREY E. WESANEN
117522
TEXAS REGISTRATION NUMBER
12/13/2016
DATE

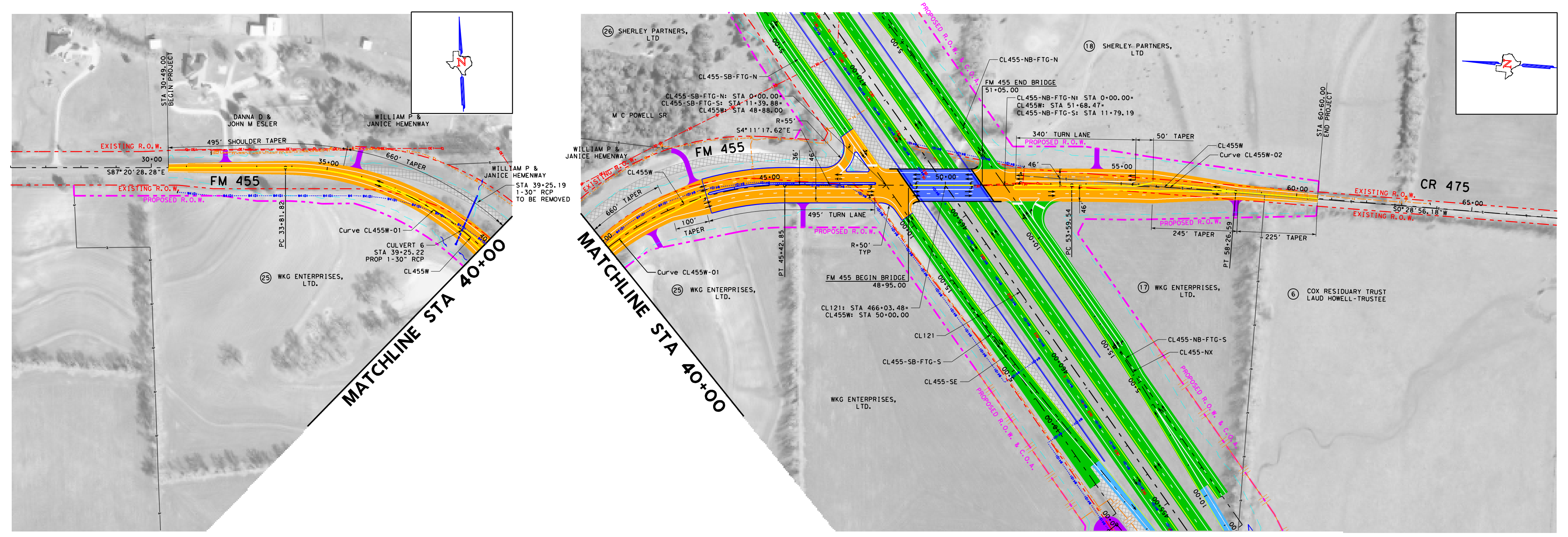
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES



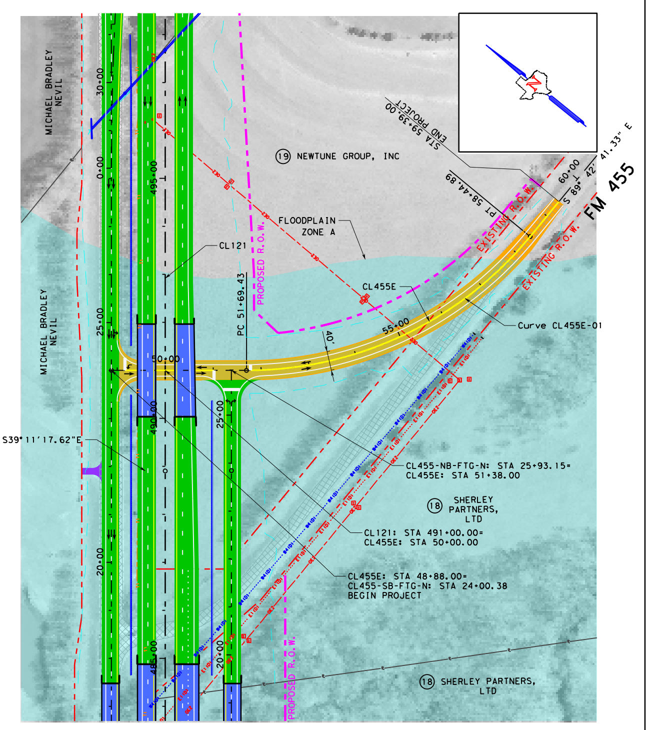


PLAN LEGEND

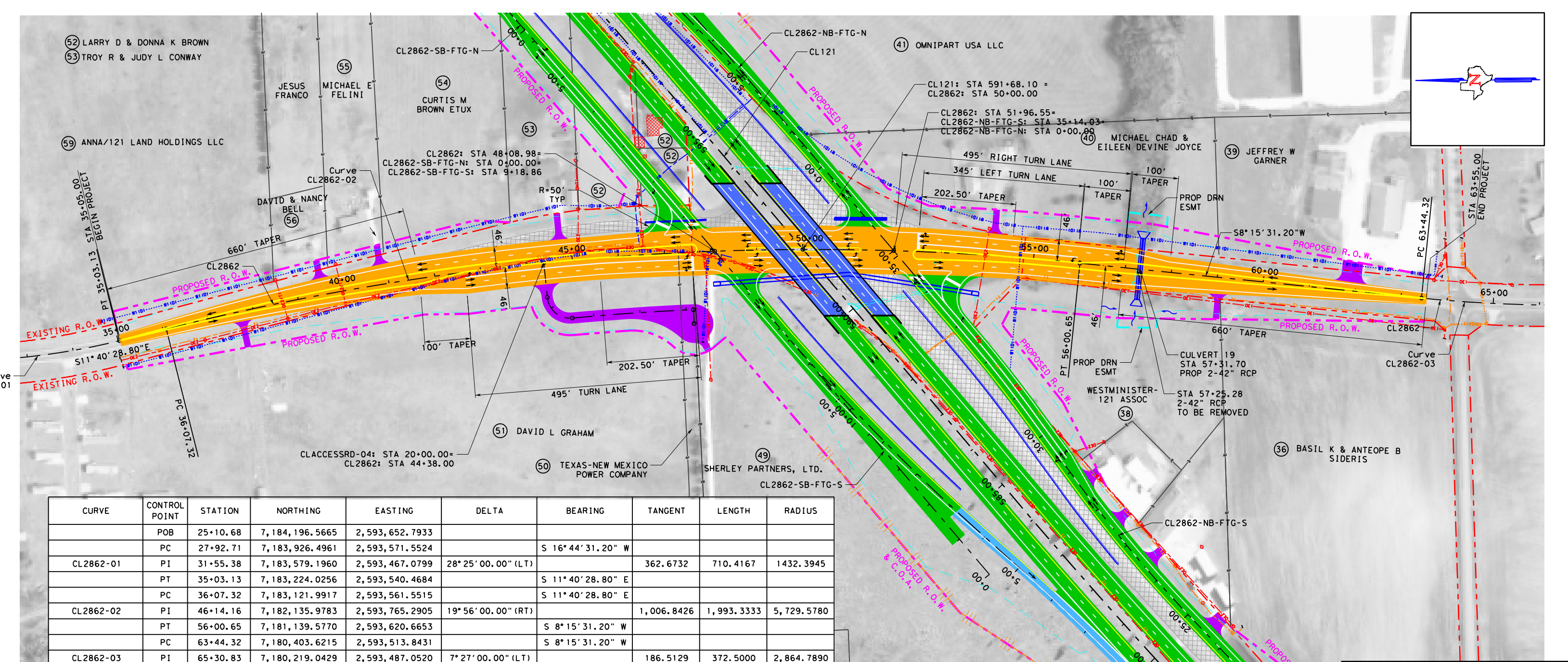
- EXISTING R.O.W.
- PROPOSED R.O.W.
- PROPOSED DRAINAGE ESMT.
- PROPOSED CONTROL OF ACCESS
- EXISTING PROPERTY LINE
- PROPOSED ROADWAY BASELINE
- PROPOSED PAVEMENT MARKING
- PROPOSED EDGE OF PAVEMENT
- PROPOSED RETAINING WALL
- PROPOSED RAMP EDGE OF PAVEMENT
- PROPOSED CSB
- PROPOSED SGT & MBGF TRANSITION
- LOCAL ROAD BASELINE
- LOCAL ROAD EDGE OF PAVEMENT
- DRIVEWAY EDGE OF PAVEMENT
- PROPOSED CUT LIMITS
- PROPOSED TRANSITION LIMITS
- PROPOSED FILL LIMITS
- PROPOSED SH 121/FRONTAGE RD
- PROPOSED RAMPS
- PROPOSED MAJOR CROSS ROADS
- PROPOSED LOCAL ROADS
- PROPOSED DRIVEWAYS
- PROPOSED STRUCTURES
- DISPLACED STRUCTURE
- PROPOSED TRAFFIC FLOW
- EXISTING ELECTRIC METER
- EXISTING ELECTRICAL TRANSFORMER
- EXISTING POWER POLE
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- OUT OF SCOPE
- END OF LINE
- GREYSON COLLIN COOP (OVERHEAD ELECTRIC)
- ATT (OVERHEAD TELEPHONE)
- GREYSON COLLIN COOP (ELECTRIC)
- TEXAS NEW MEXICO POWER CO (OVERHEAD ELECTRIC)
- TEXAS NEW MEXICO POWER CO (ELECTRIC)
- ATT (FIBER OPTIC)
- VERIZON (TELEPHONE)
- N TEXAS MUNICIPAL WATER DIST (WATER)
- DESERT WATER SYSTEM (WATER)
- ONEOK (PIPELINE)
- ONEOK (PIPELINE)
- REMOVE ASPHALT



FM 455(WEST)/CR 475



FM 455(EAST)



CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
	POB	25+10.68	7,184,196.5665	2,593,652.7933					
	PC	27+92.71	7,183,926.4961	2,593,571.5524		S 16°44'31.20" W			
CL2862-01	PI	31+55.38	7,183,579.1960	2,593,467.0799	28°25'00.00"(LT)		362.6732	710.4167	1432.3945
	PT	35+03.13	7,183,224.0256	2,593,540.4684		S 11°40'28.80" E			
	PC	36+07.32	7,183,121.9917	2,593,561.5515		S 11°40'28.80" E			
CL2862-02	PI	46+14.16	7,182,135.9783	2,593,765.2905	19°56'00.00"(RT)		1,006.8426	1,993.3333	5,729.5780
	PT	56+00.65	7,181,139.5770	2,593,620.6653		S 8°15'31.20" W			
	PC	63+44.32	7,180,403.6215	2,593,513.8431		S 8°15'31.20" W			
CL2862-03	PI	65+30.83	7,180,219.0429	2,593,487.0520	7°27'00.00"(LT)		186.5129	372.5000	2,864.7890
	PT	67+16.82	7,180,032.5486	2,593,484.4197		S 0°48'31.20" W			
	POE	72+10.15	7,179,539.2601	2,593,477.4570					

SUPER ELEVATION TABLE

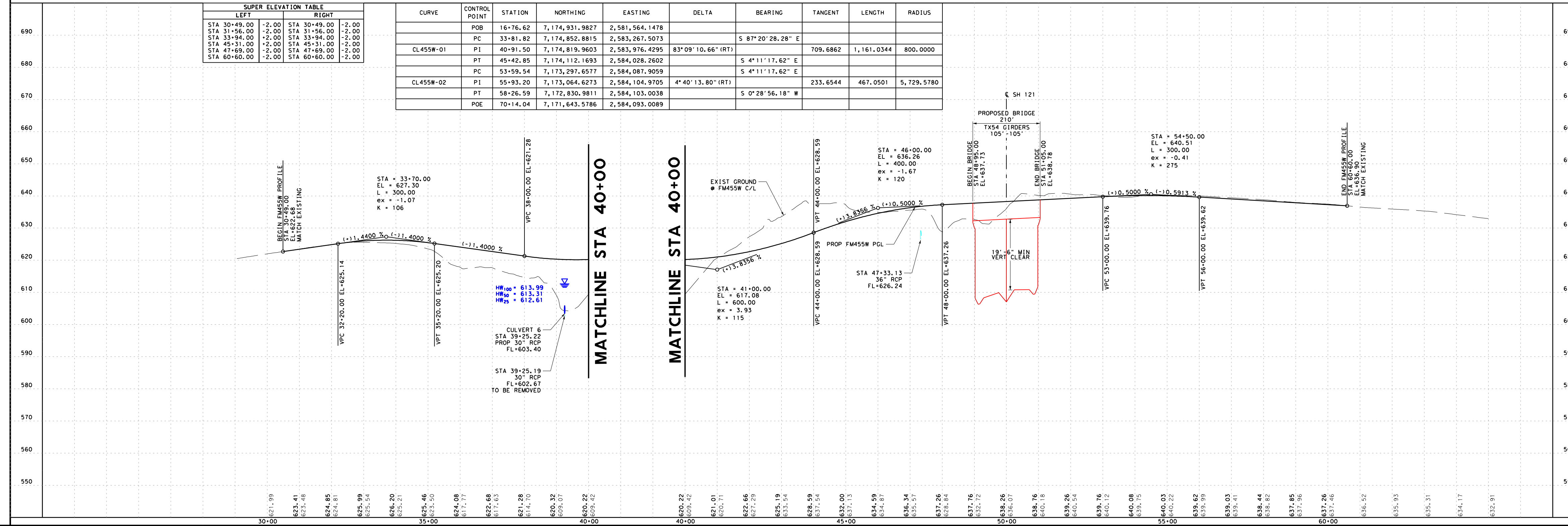
LEFT		RIGHT	
STA 35+05.00	-3.20	STA 35+05.00	+1.00
STA 36+21.00	+2.00	STA 36+21.00	-2.00
STA 55+92.00	+2.00	STA 55+92.00	-2.00
STA 56+80.00	-2.00	STA 56+80.00	-2.00
STA 63+55.00	-2.00	STA 63+55.00	-2.00

FM 2862

SUPER ELEVATION TABLE

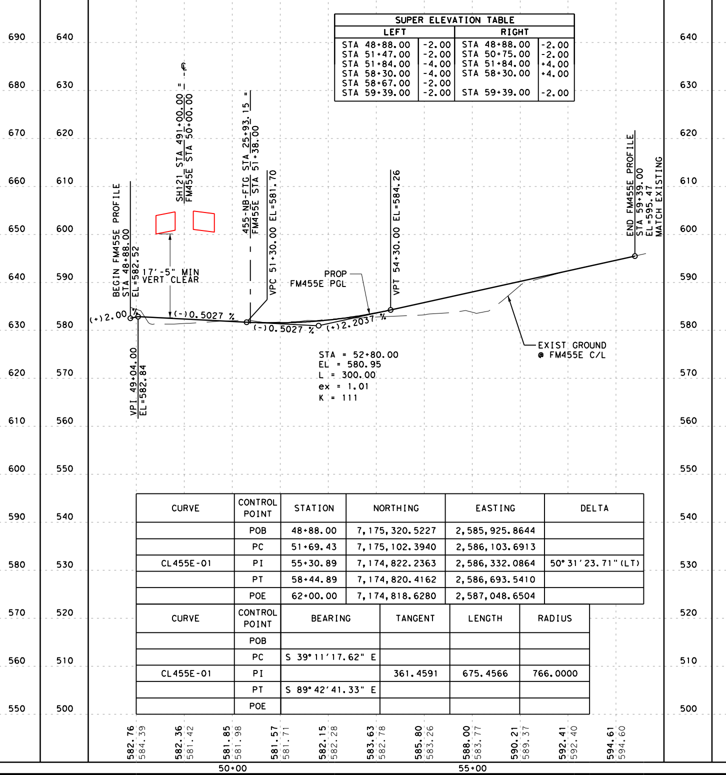
LEFT		RIGHT	
STA 30+49.00	-2.00	STA 30+49.00	-2.00
STA 31+56.00	-2.00	STA 31+56.00	-2.00
STA 33+94.00	+2.00	STA 33+94.00	-2.00
STA 45+31.00	+2.00	STA 45+31.00	-2.00
STA 47+69.00	-2.00	STA 47+69.00	-2.00
STA 60+60.00	-2.00	STA 60+60.00	-2.00

CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
	POB	16+76.62	7,174,931.9827	2,581,564.1478					
	PC	33+81.82	7,174,852.8815	2,583,267.5073		S 87°20'28.28" E			
CL455W-01	PI	40+91.50	7,174,819.9603	2,583,976.4295	83°09'10.66" (RT)		709.6862	1,161.0344	800.0000
	PT	45+42.85	7,174,112.1693	2,584,028.2602		S 4°11'17.62" E			
	PC	53+59.54	7,173,297.6577	2,584,087.9059		S 4°11'17.62" E			
CL455W-02	PI	55+93.20	7,173,064.6273	2,584,104.9705	4°40'13.80" (RT)		233.6544	467.0501	5,729.5780
	PT	58+26.59	7,172,830.9811	2,584,103.0038		S 0°28'56.18" W			
	POE	70+14.04	7,171,643.5786	2,584,093.0089					



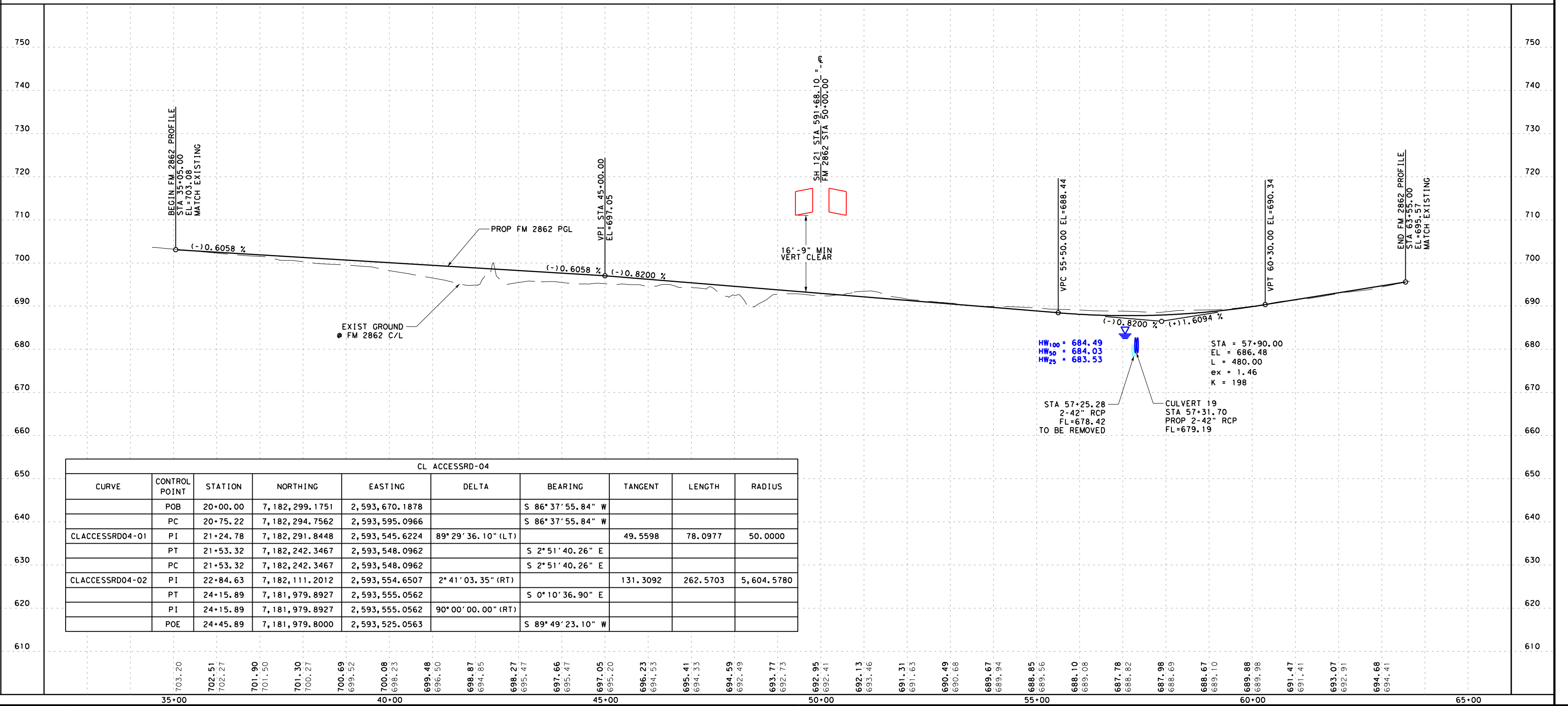
SUPER ELEVATION TABLE

LEFT		RIGHT	
STA 48+88.00	-2.00	STA 48+88.00	-2.00
STA 51+47.00	-2.00	STA 50+75.00	-2.00
STA 51+84.00	-4.00	STA 51+84.00	+4.00
STA 58+30.00	-4.00	STA 58+30.00	+4.00
STA 58+67.00	-2.00		
STA 59+39.00	-2.00	STA 59+39.00	-2.00



CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA
	POB	48+88.00	7,175,320.5227	2,585,925.8644	
	PC	51+69.43	7,175,102.3940	2,586,103.6913	
CL455E-01	PI	55+30.89	7,174,822.2363	2,586,332.0864	50°31'23.71" (LT)
	PT	58+44.89	7,174,820.4162	2,586,693.5410	
	POE	62+00.00	7,174,818.6280	2,587,048.6504	

CURVE	CONTROL POINT	BEARING	TANGENT	LENGTH	RADIUS
	POB				
	PC	S 39°11'17.62" E			
CL455E-01	PI		361.4591	675.4566	766.0000
	PT	S 89°42'41.33" E			
	POE				



CL ACCESSRD-04

CURVE	CONTROL POINT	STATION	NORTHING	EASTING	DELTA	BEARING	TANGENT	LENGTH	RADIUS
	POB	20+00.00	7,182,299.1751	2,593,670.1878		S 86°37'55.84" W			
	PC	20+75.22	7,182,294.7562	2,593,595.0966		S 86°37'55.84" W			
CLACCESSRD04-01	PI	21+24.78	7,182,291.8448	2,593,545.6224	89°29'36.10"(LT)		49.5598	78.0977	50.0000
	PT	21+53.32	7,182,242.3467	2,593,548.0962		S 2°51'40.26" E			
	PC	21+53.32	7,182,242.3467	2,593,548.0962		S 2°51'40.26" E			
CLACCESSRD04-02	PI	22+84.63	7,182,111.2012	2,593,554.6507	2°41'03.35"(RT)		131.3092	262.5703	5,604.5780
	PT	24+15.89	7,181,979.8927	2,593,555.0562		S 0°10'36.90" E			
	PI	24+15.89	7,181,979.8927	2,593,555.0562	90°00'00.00"(RT)				
	POE	24+45.89	7,181,979.8000	2,593,525.0563		S 89°49'23.10" W			

Texas Department of Transportation
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DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES K. SELMAN, P.E.
DISTRICT ENGINEER
ROLL 6: FM 455, FM 2862 AND SH 160
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121
ROLL: 6 OF 7
VICINITY MAP
FINAL SUBMITTAL
SCHEMATIC PREPARED BY: JEFFREY E. WESANEN 117522 TEXAS REGISTRATION NUMBER 12/13/2016 DATE
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

Texas Department of Transportation

DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES E. DEARING, P.E.
DESIGN ENGINEER

ROLL 7: RAMP AND ACCESS ROAD PROFILES
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

FINANCIAL PROJECT ID:
CSJ: 0047-00-044
CSJ: 0049-03-034
LIMITS: FROM COLLIN COUNTY LINE NORTHBOUND TO NORTH OF FM 455
LENGTH: 5.03 MILES
CSJ: 0049-03-037
LIMITS: FROM NORTH OF FM 455 NORTHBOUND TO DENTON COUNTY LINE; EXCEPTING THE RAMPS OF SH 121 AT FM 455 NORTH OF SH 121
LENGTH: 2.00 MILES
CSJ: 0049-03-038
LIMITS: FROM NORTH OF FM 455 NORTHBOUND TO NORTH OF SH 121
LENGTH: 0.09 MILES
TOTAL LENGTH: 7.12 MILES
DESCRIPTION: CONSTRUCT 6-LANE DIVIDED HIGHWAY WITH SPEED CHANGE LANES
ROLL 7 OF 7

VICINITY MAP

PROJECT LENGTH: 7.432 MILES

EBAUTISMO: STA 620+00.00 BK = STA 620+89.18 AH
STA 620+00.00 BK = STA 620+89.18 AH
STA 805+00.00 BK = STA 805+01.35 AH

EXISTSTMO: STA 735+00.00 TO STA 805+00.00 (10,000.00')

TRAFFIC DATA: SH 121: 14,000 ADT (2017)
23,900 ADT (2037)

INDEX OF ROLLS:

ROLL	DESCRIPTION
1	SH 121: STA 374+00 TO STA 435+00
2	SH 121: STA 434+00 TO STA 495+00
3	SH 121: STA 509+00 TO STA 614+00
4	SH 121: STA 614+00 TO STA 695+00
5	SH 121: STA 695+00 TO STA 805+01.35
6	SH 121: STA 805+01.35 (AH) TO STA 940+71.66
6	CROSSROADS: FM 455NB, FM 455SB, FM 2862
7	RAMPS: FM 455 AND FM 2862

FUNCTIONAL CLASSIFICATION & DESIGN SPEED

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
SH 121	RURAL ARTERIAL	75 MPH
FM 455 (EXIST LEG)	RURAL COLLECTOR	55 MPH
FM 455 (NEW LEG)	RURAL COLLECTOR	55 MPH
FM 2862	RURAL COLLECTOR	55 MPH
CLR NX	LOCAL	25 MPH
CLR NE	LOCAL	25 MPH
CLR SE	LOCAL	25 MPH
CLR SX	LOCAL	25 MPH
CLR NW	RURAL COLLECTOR	55 MPH
CLR SW	LOCAL	25 MPH
CLR NB	LOCAL	25 MPH
CLR SB	LOCAL	25 MPH
CLR ACCESS	LOCAL	25 MPH
CLR COUNTY LINE RNC	LOCAL	25 MPH

* UNPAVED COUNTY ROADS
** ALL LOCAL DESIGN TO MATCH FM 455 SCHEMATIC (CSJ: 2845-01-015)

NOTES:

1. SHOT ORIGINAL TOPOGRAPHICAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY DATED 2/2/2010. ADDITIONAL INFORMATION WAS OBTAINED BY AERIAL PHOTOGRAPHY AND ENTERED BY FIELD SURVEY, JANUARY 21, 2016.
2. TYPICAL RADIUS RETURNS, UNLESS OTHERWISE NOTED ON THE PLANS: MAJOR CROSS ROADS 35 (LOCAL ROADS: 25 FT)
DRIVEWAYS: 15'-25'
3. MAIN LANING OF ACCESS IS NOT SHOWN AT THE RAMP LOCATIONS. LANING OF ACCESS WILL BE REVIEWED AND DEVISED AT THE DISTRICTION OF THE APPROVED SCHEMATIC FOR DRIVEWAY PERMIT PROCESS.

0 50 100 200 300 400
HORIZ SCALE: 1IN.=100'

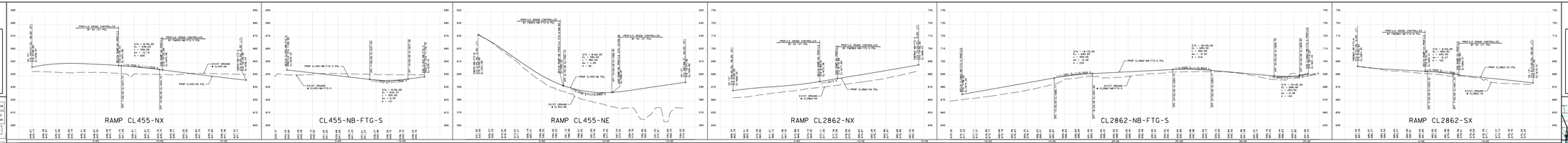
0 5 10 20 30 40
VERT SCALE: 1IN.=10'

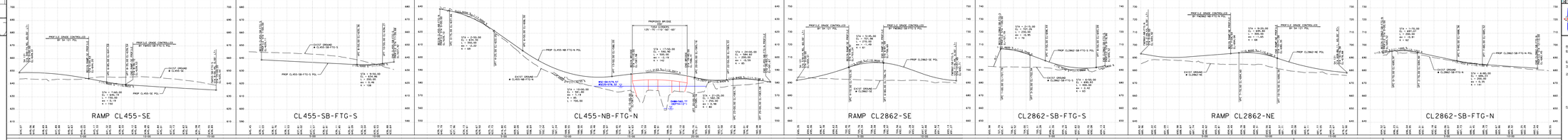
Stantec
TEXAS REGISTERED ENGINEERING FIRM F-9324
TEXAS REGISTERED LANDSCAPE ARCHITECT FIRM 2264

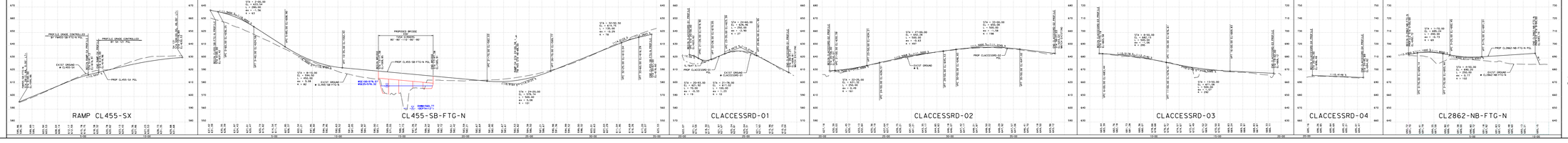
FINAL SUBMITTAL
THIS PROJECT IS FURNISHED FOR INFORMATION ONLY. THE INFORMATION SHOWN ON THIS PROJECT IS SUBJECT TO CHANGE AND MUST NOT BE CONSTRUED AS FINAL

SCHEMATIC PREPARED BY:
JEFFREY L. MEGANCK
"TEXAS REGISTERED ENGINEER NUMBER"
CEVT 2016

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES







Texas Department of Transportation

DALLAS DISTRICT
DESIGN SCHEMATIC
JAMES E. DEARING, P.E.
DESIGN ENGINEER

ROLL 7: RAMP AND ACCESS ROAD PROFILES
PROPOSED SCHEMATIC LAYOUT
STATE HIGHWAY 121

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ROLL 7 OF 7

VICINITY MAP

PROJECT LENGTH: 7.432 MILES

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7	RAMPS: FM 455 AND FM 2862

FUNCTIONAL CLASSIFICATION & DESIGN SPEED

ROADWAY	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
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FM 455 (NEW LEG)	RURAL COLLECTOR	55 MPH
FM 2862	RURAL COLLECTOR	55 MPH
CLR NX	LOCAL	25 MPH
CLR NE	LOCAL	25 MPH
CLR SE	LOCAL	25 MPH
CLR SX	LOCAL	25 MPH
CLR NW	RURAL COLLECTOR	55 MPH
CLR SW	LOCAL	25 MPH
CLR NB	LOCAL	25 MPH
CLR SB	LOCAL	25 MPH
CLR ACCESS	LOCAL	25 MPH
CLR COUNTY LINE RNC	LOCAL	25 MPH

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SCHEMATIC PREPARED BY:
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CEVT 2016

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