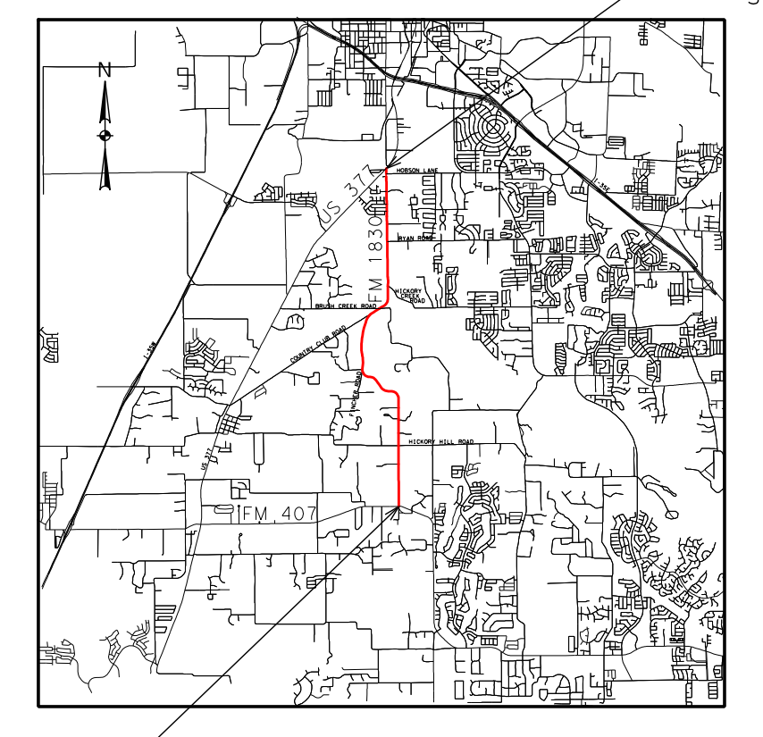
TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT
JAMES K. SELMAN, P.E., DISTRICT ENGINEER

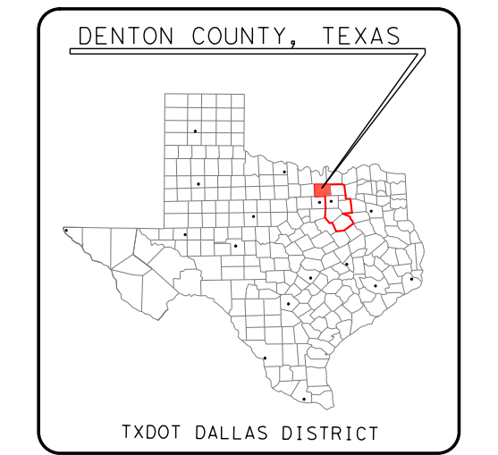
# FM 1830 DESIGN SCHEMATIC
FROM FM 407 TO US 377
DENTON COUNTY, TEXAS
CSJ: 1785-01-038

MARCH 2018
ROLL 2 OF 4

PROJECT LENGTH:	5.4 MILES	
FUNCTIONAL CLASSIFICATION:	URBAN ARTERIAL	
AVERAGE DAILY TRAFFIC:	FROM FM 407 TO RYAN RD	FROM RYAN RD TO US 377
	9,000 (2020)	15,600 (2020)
	12,500 (2040)	21,800 (2040)
DESIGN SPEED:		
FM 1830:	40 MPH	
CROSS STREETS:	30 MPH	


END PROJECT
CSJ: 1785-01-038
STA 321+67.89
BEGIN PROJECT
CSJ: 1785-01-038
STA 32+63.37
FM 407

LOCATION MAP
N.T.S.


DENTON COUNTY, TEXAS
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:

JEREMY W. MCGAHAN	103650	3/29/2018
NAME	P.E. NO.	DATE
SCOTT J. ANGUS	96183	3/29/2018
NAME	P.E. NO.	DATE

HALFF ASSOCIATES, INC.
TBPE FIRM #F-312

HALFF
1201 NORTH BOWSER ROAD
RICHARDSON, TEXAS 75081-2275
TEL (214) 346-6200
FAX (214) 739-0095

0 10 20 30 40
VERTICAL SCALE:

0 100 200 300 400
HORIZONTAL SCALE:

DATE SUBMITTED:

DATE APPROVED:

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LEGEND:

- EXISTING ROW
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- PROPOSED CULVERT
- PROPOSED BASELINE
- PROPOSED ROW
- PROPOSED DRAINAGE EASEMENT
- PROPOSED ROW (BY OTHERS)
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BRIDGE RAIL
- PROPOSED BRIDGE BENT
- PROPOSED BRIDGE ABUTMENT
- PROPOSED RETAINING WALL
- 100 YR FLOODPLAIN LIMITS
- → DIRECTION OF TRAVEL
- FLOW ARROW
- PROPOSED BRIDGE
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK
- EXISTING BRIDGE TO REMAIN
- POTENTIAL DISPLACEMENT
- ▨ PAVEMENT / BRIDGE TO BE REMOVED
- EXISTING WATER
- EXISTING FIBER OPTIC
- EXISTING TELEPHONE / CABLE
- EXISTING ELECTRIC
- EXISTING STORM SEWER
- EXISTING WASTEWATER
- EXISTING GAS LINE
- CURB RAMP

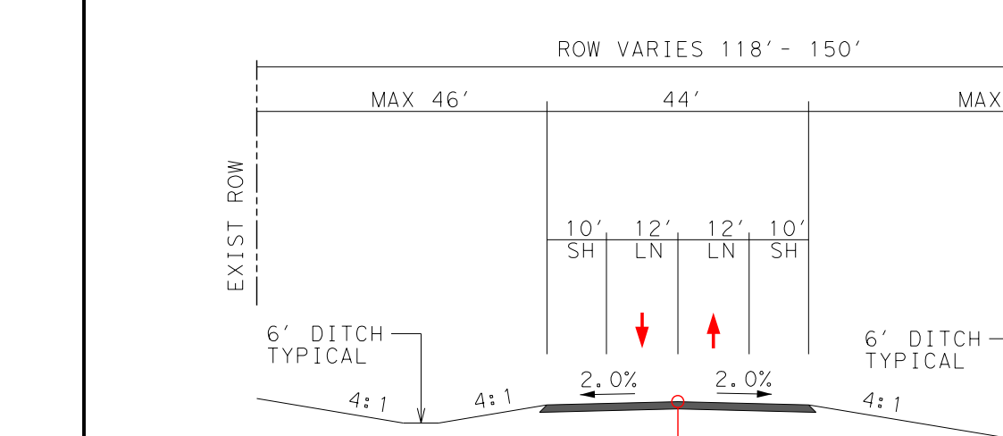
GENERAL NOTES:

1. THE SCHEMATIC LAYOUTS ARE BASED ON LIMITED FIELD SURVEY, AERIAL TOPOGRAPHY AND RECORD PLANS. NOT ALL EXISTING FEATURES WERE FIELD SURVEYED. AERIAL TOPOGRAPHY DATA WAS COLLECTED IN DECEMBER 2016.
2. PARCEL LIMITS AND OWNERSHIP INFORMATION WERE COLLECTED FROM THE DENTON COUNTY APPRAISAL DISTRICT (MARCH 2017).
3. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE). DIMENSIONS ARE TO EDGE OF UNCURBED PAVEMENT OR NOMINAL FACE OF RAIL/CURB/BARRIER (UNLESS NOTED OTHERWISE).
4. SUPERELEVATION TRANSITIONS ARE LINEAR WITH THE AXIS OF ROTATION LOCATED AT THE PGL.
5. THE SPECIFIC TYPE OF BRIDGE RAIL WILL BE DETERMINED DURING PS&E DESIGN.
6. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) WILL NOT BE DEVELOPED UNTIL PS&E DESIGN.
7. AVERAGE DAILY TRAFFIC VOLUME PROJECTIONS DEVELOPED BY TXDOT TP&P (AUGUST 2016).
8. MAJOR INTERSECTION CURVE RADII ARE 50', MINOR INTERSECTION CURVE RADII ARE 25', AND DRIVEWAY INTERSECTION CURVE RADII ARE 15' (UNLESS NOTED OTHERWISE). DRIVEWAY LOCATIONS ARE PRELIMINARY AND WILL BE FURTHER DEVELOPED DURING PS&E DESIGN.
9. MEDIAN OPENINGS ARE PRELIMINARY AND SUBJECT TO CHANGE. FINAL MEDIAN OPENING LOCATIONS AND TYPES TO BE DETERMINED DURING PS&E DESIGN AND IN COORDINATION WITH THE LOCAL GOVERNMENTS.
10. EXISTING PAVEMENT AND BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
11. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INSURANCE RATE MAPS DATED AUGUST 2015.
12. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
13. A BUILDING IS SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING THE ROW ACQUISITION PROCESS.
14. PRELIMINARY NOISE WALLS WILL BE IDENTIFIED DURING DEVELOPMENT OF THE NOISE ANALYSIS NEPA PROCESS AND INCORPORATED INTO THE SCHEMATICS AT A LATER STAGE IN DESIGN.

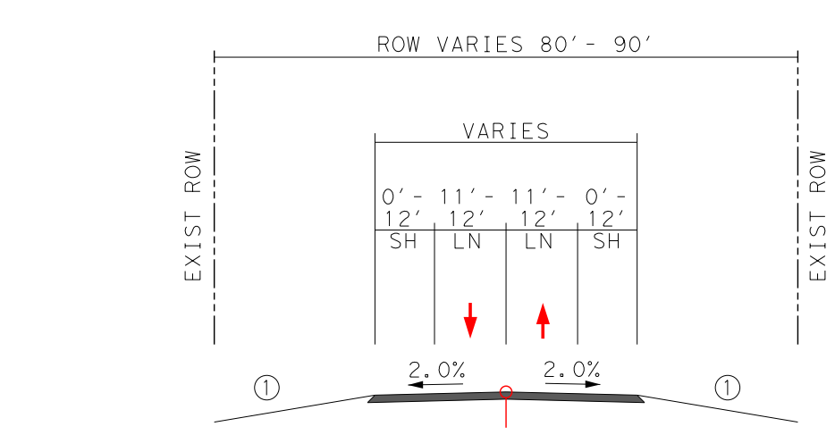
PARCEL DATA

PARCEL	ID #	OWNER	OWNER ADDRESS
644	126839	TYNES, CHRISTOPHER B	5885 FM 1830
645	65091	BRYANT, JOHN EDMUND	5970 FM 1830
646	73105	BANCROFT, CHRISTOPHER	PO BOX 1395
648	65086	HARTWELL, KENNETH S	6001 FM 1830
656	65089	BOND, TRAVIS C JR & PAULA R	6050 FM 1830
658	73056	HARRINGTON, BART E JR & MARTA I	9213 DAVID FORT RD
661	84093	LEWELLING, MARGIE K	6091 FM 1830
663	65155	LARRABEE, ROBERT E & BETTY J	6120 FM 1830
664	65164	ROUNSAVILLE, JAMES	1050 W VOCA RD
666	73110	WOOD, R WILLIAM & THERESA A	9229 DAVID FORT RD
668	65157	LARRABEE, BETTY J	6120 FM 1830
671	65084	KERSHEN, DAVE & SHARLA	6151 FM 1830
673	65082	LARRABEE, ROBERT E & BETTY J	6120 FM 1830
676	466420	ROUNSAVILLE, JAMES & WINDSONG BOARDING KENNEL, LLC	1050 W VOCA RD
679	173361	BOWEN, BRENT D	6170 FM 1830
682	65177	FINE, ROGER & REBECCA LYNN	6189 FM 1830
686	160652	WASKEY, CHARLES	6230 FM 1830
700	65115	HAGEN, JOHN E & ELIZABTH M TRTS OF HAGEN REVOCABLE TRUST	6275 FM 1830
702	65146	WITHERS, JOHN, Jr	1104 SHADY REST LN
710	65167	WINDSONG BOARDING KENNEL LLC	6275 FM 1830
719	260958	RISLEY, ANJANELLE	PO BOX 106
721	65174	CHENAULT, LOUIS W JR & JUDY D	6335 FM 1830
724	65102	WINDSONG BOARDING KENNEL LLC	6275 FM 1830
725	114837	WINDSONG BOARDING KENNEL LLC	6275 FM 1830
733	153005	WINDSONG BOARDING KENNEL LLC	6275 FM 1830
735	281168	WINDSONG BOARDING KENNEL LLC	6275 FM 1830
739	114836	CHENAULT, LOUIS W JR & JUDY D	6335 FM 1830
746	154821	KAUFMAN, SHARON L LIFE ESTATE & ACORD, KARNA & FLYNN, KRISTINA	10143 FINCHER RD
748	114835	CHENAULT, LOUIS W JR & JUDY D	6335 FM 1830
749	65180	WINDSONG BOARDING KENNEL LLC	6275 FM 1830
750	65148	KOKENES, JEREMY D & LORIEN P	10175 FINCHER RD
752	132649	WINDSONG BOARDING KENNEL LLC	6275 FM 1830
754	67629	WINDSONG BOARDING KENNEL LLC	6275 FM 1830
755	67041	SHIRK, DONALD S & LAURA	6725 FM 1830
758	132652	SHIRK, DONALD S & LAURA	6725 FM 1830
770	67039	SHIRK, DONALD S & LAURA	6725 FM 1830
773	67633	HUEHOLT, RICHARD L & SONYA A TR OF HUEHOLT LIV TRUST	6590 FM 1830
774	67630	STALEY, JOHN A & SARAH K	6750 FM 1830
777	67038	MCCREARY PROPERTIES LP	1622 NOB HILL DR
787	67037	BEATHARD, P SCOTT & CHRISTI	6815 FM 1830
793	67035	GLASER, STEPHEN & BARBARA	6835 FM 1830
797	114913	HANSEN, ERIC W	1099 CEDAR CREEK RD
798	114920	NEWELL, DARRELL J & LINDA K	1091 CEDAR CREEK RD
802	97778	STALEY, JOHN A & SARAH K	6750 FM 1830
806	114908	PITTS, MARTIN WAYNE & EDNA LOU	1100 CEDAR CREEK RD
807	245499	RUSSELL RANCH LTD P/S	7115 FM 1830
811	199267	FIELD, WELLS OR CHARLOTTE R, TRUSTEES OF FIELD LIVING TRUST	6816 FM 1830
812	67044	RUSSELL, ELVIN F & JAMES L SELF	7115 FM 1830
814	631022	DAVIS, LESLEE A G	6900 FM 1830
818	268122	DAVIS, MARK WAYNE & JENNIFER CHRISTINA	7040 FM 1830
819	97770	DAVIS, LESLEE A G	6900 FM 1830
822	114901	GREEN, DENNIS L	1090 CEDAR CREEK RD
824	67042	DAVIS, LESLEE A G	6900 FM 1830
826	222003	ARSENAL OPERATING	6910 FM 1830
827	245499	RUSSELL RANCH LTD P/S	7115 FM 1830
828	268123	GARONZIK, ALLAN & SANDRA SARNS	7190 FM 1830
834	167955	GARONZIK, ALLAN & SANDRA	7190 FM 1830
839	167954	GARONZIK, ALLAN	7190 FM 1830
842	225556	MCWHORTER PROPERTIES LLC	7170 FM 1830
843	67043	GARONZIK, ALLAN	7190 FM 1830
853	97789	A&P FAMILY LLC	677 GRANITE CT
854	122092	BAKER, JOHN A & SUSAN A	7263 FM 1830
856	694088	TEXAS DEPARTMENT OF TRANSPORTATION	TEXAS DEPT OF TRANS 125 E
858	64543	VIGIL, ERNEST & ANN	10762 HILLTOP RD
860	97794	CUNNINGHAM, MICHAEL EUGENE & DONNA DAVIDSON LIFE EST & LIVING	473 GRANITE CT
861	100501	COULTER, JILL G	573 GRANITE CT
863	694764	TEXAS DEPARTMENT OF TRANSPORTATION	TEXAS DEPT OF TRANS 125 E
864	38264	BANTAU, RUSSELL M & LINDA S	1158 SHADY OAK CIR
867	38214	THOMPSON, REBECCA	1150 SHADY OAK CIR
872	38103	EZZO, PAUL J & PATRICIA A	2009 WHITEBRIDGE RD
873	38243	GILDER, JOHNNIE O & THERESA M	1138 SHADY OAK CIR
874	38209	ALLEN, WILLIAM R JR & MAYVIS LU	1120 SHADY OAK CIR
878	696024	TEXAS DEPARTMENT OF TRANSPORTATION	TEXAS DEPT OF TRANS 125 E
879	38117	SZYDLIK, LINDA	2001 WHITEBRIDGE RD

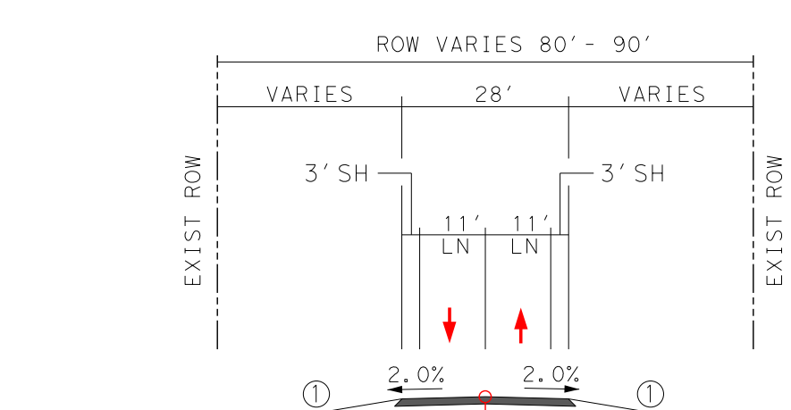
TYPICAL SECTIONS


ROW VARIES 118' - 150'
MAX 46'
44'
MAX 60'
EXIST ROW
10' SH
12' LN
12' LN
10' SH
6' DITCH TYPICAL
4:1
2.0%
2.0%
℄ FM 1830

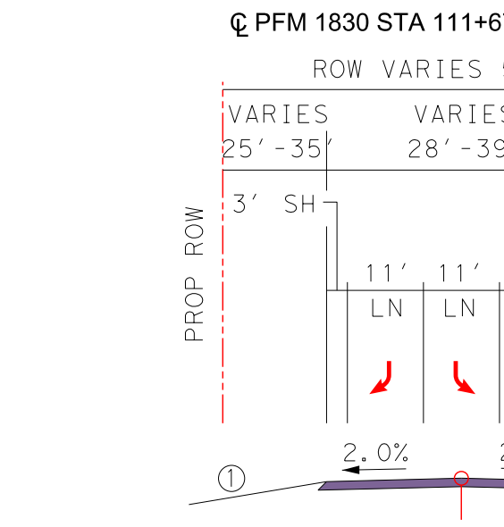
EXISTING FM 1830
℄ PFM 1830 STA 102+00 TO STA 111+67


ROW VARIES 80' - 90'
VARIES
0' - 12'
11' - 12'
EXIST ROW
SH
LN
2.0%
①
℄ FM 1830

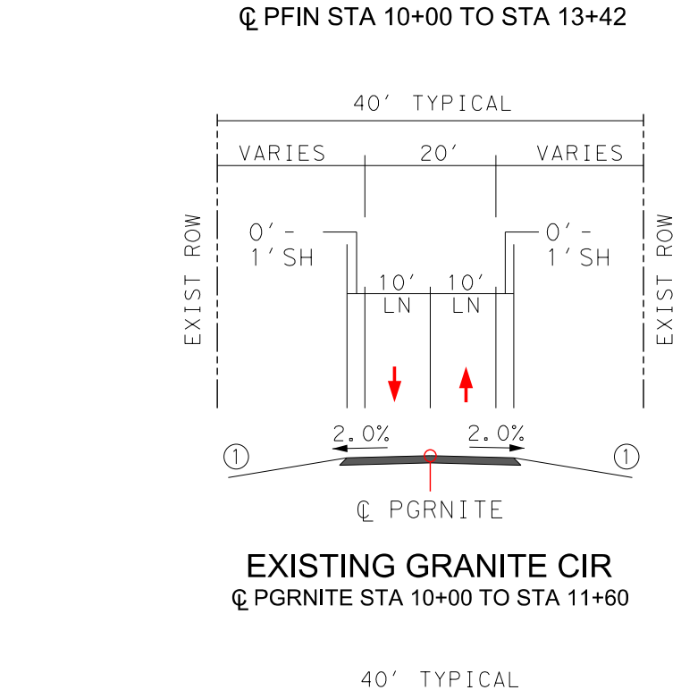
EXISTING FM 1830
℄ PFM 1830 STA 111+67 TO STA 175+00


ROW VARIES 80' - 90'
VARIES
28'
3' SH
11' LN
11' LN
EXIST ROW
2.0%
①
℄ & PGL FINCHER RD

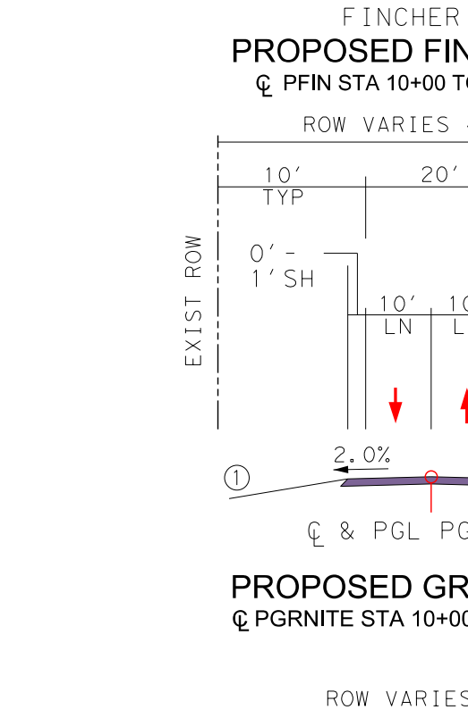
EXISTING FINCHER RD
℄ PFIN STA 10+00 TO STA 13+42


ROW VARIES 59' - 94'
VARIES 25' - 35'
VARIES 28' - 39'
20'
3' SH
0' - 11'
11' LN
PROP ROW
EXIST ROW
2.0%
①
℄ & PGL FINCHER RD

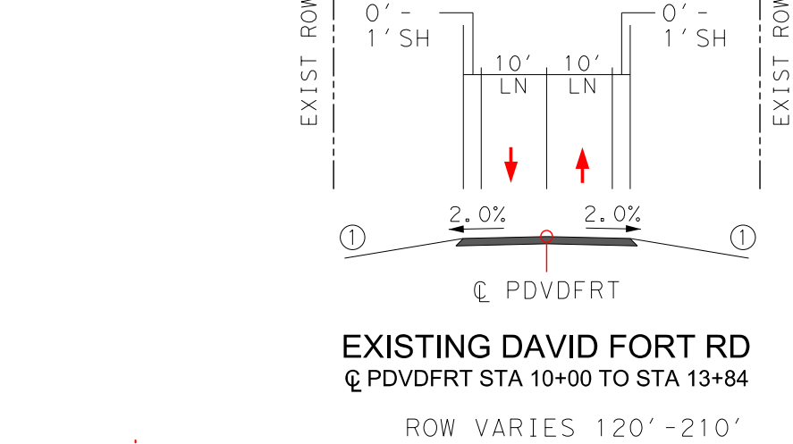
PROPOSED FINCHER RD
℄ PFIN STA 10+00 TO STA 13+00


40' TYPICAL
VARIES
20'
0' - 1' SH
10' LN
EXIST ROW
2.0%
①
℄ PGRNITE

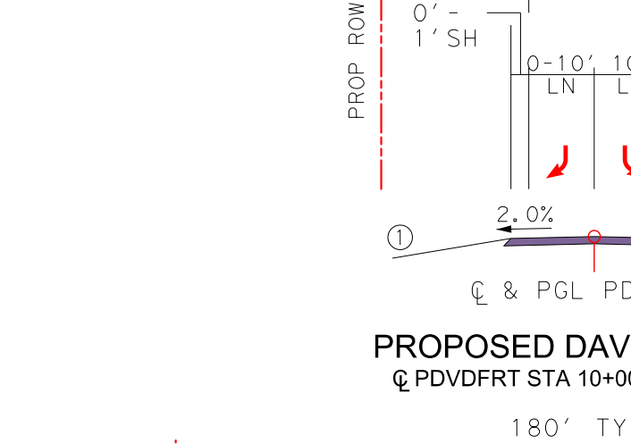
EXISTING GRANITE CIR
℄ PGRNITE STA 10+00 TO STA 11+60


10' TYP
20'
15' - 20'
0' - 1' SH
10' LN
EXIST ROW
2.0%
①
℄ & PGL PGRNITE

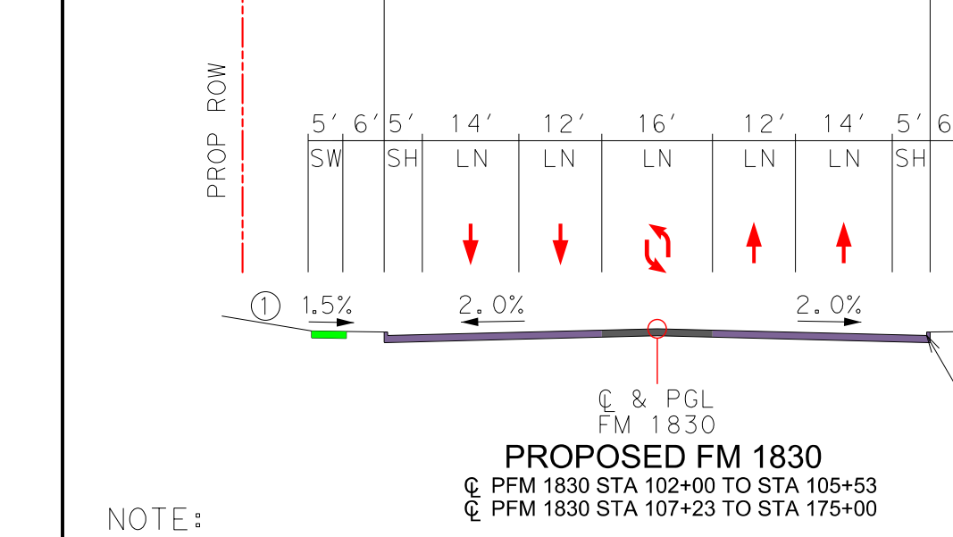
PROPOSED GRANITE CIR
℄ PGRNITE STA 10+00 TO STA 11+60


40' TYPICAL
VARIES
20'
0' - 1' SH
10' LN
EXIST ROW
2.0%
①
℄ PDVDFRT

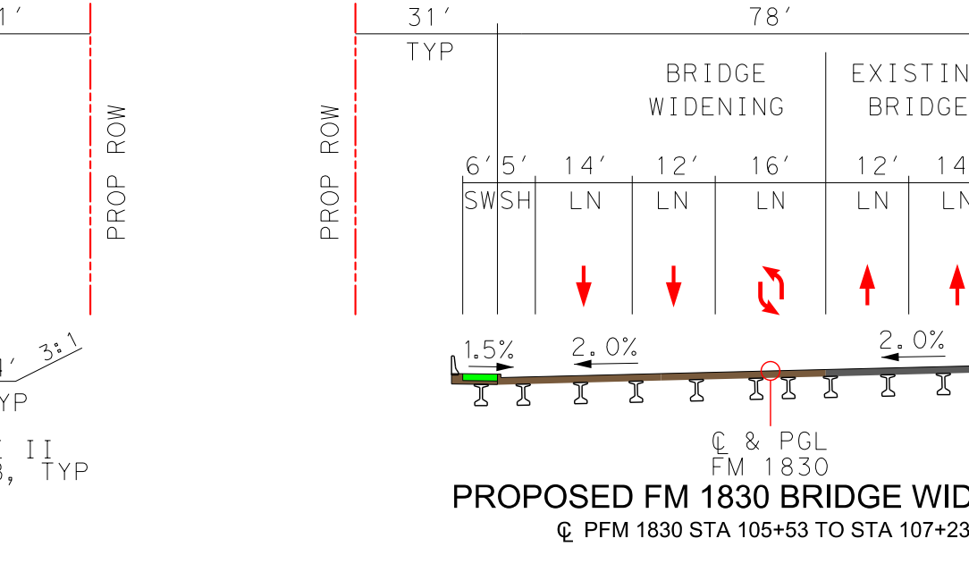
EXISTING DAVID FORT RD
℄ PDVDFRT STA 10+00 TO STA 13+84


ROW VARIES 40' - 70'
VARIES
10' - 20'
20' - 30'
0' - 1' SH
0-10'
10' LN
PROP ROW
2.0%
①
℄ & PGL PDVDFRT

PROPOSED DAVID FORT RD
℄ PDVDFRT STA 10+00 TO STA 11+40


ROW VARIES 120' - 210'
21' - 61'
78'
21' - 71'
5' SW
6'
5' SH
14' LN
12' LN
16'
PROP ROW
1.5%
2.0%
①
4'
3:1
TYP
TYPE II CURB, TYP
℄ & PGL FM 1830

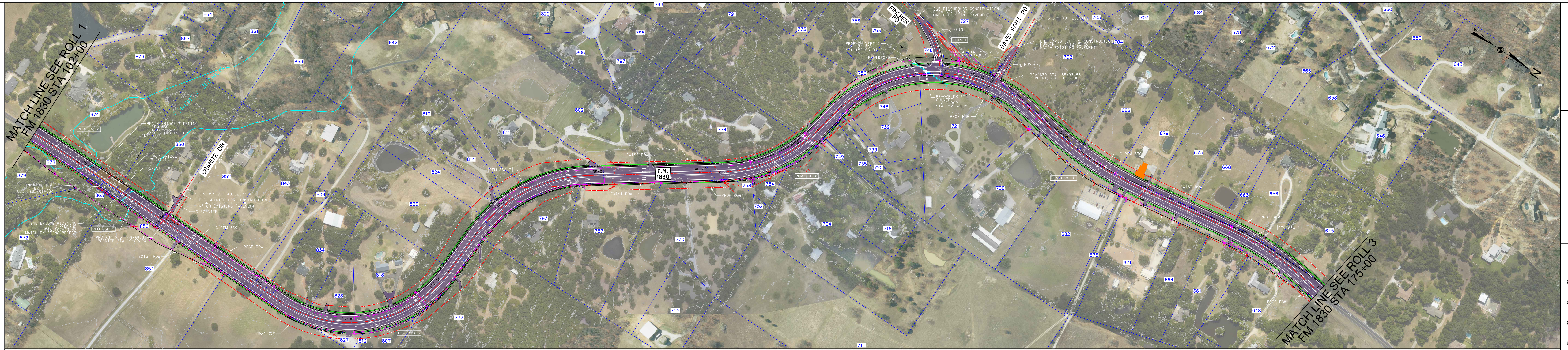
PROPOSED FM 1830
℄ PFM 1830 STA 102+00 TO STA 105+53
℄ PFM 1830 STA 107+23 TO STA 175+00


180' TYPICAL
31' TYP
78'
71' TYP
BRIDGE WIDENING
EXISTING BRIDGE
SW
SH
14' LN
12' LN
16'
PROP ROW
EXIST ROW
1.5%
2.0%
TYPE II CURB, TYP
℄ & PGL FM 1830

PROPOSED FM 1830 BRIDGE WIDENING
℄ PFM 1830 STA 105+53 TO STA 107+23

NOTE:
① 4:1 DESIRABLE
3:1 MAX

TYPICAL CROSS SLOPES ARE 2%.
REFER TO SUPERELEVATION TABLES FOR NON-TYPICAL CROSS SLOPES.


MATCH LINE SEE ROLL 1
FM 1830 STA 102+00
MATCH LINE SEE ROLL 3
FM 1830 STA 175+00
F.M. 1830
GRANITE CIR
FINCHER RD
DAVID FORT RD
BEGIN BRIDGE WIDENING
END BRIDGE WIDENING
MATCH EXISTING BRIDGE
PROP BRIDGE
END GRANITE CIR CONSTRUCTION
MATCH EXISTING PAVEMENT
END FINCHER RD CONSTRUCTION
MATCH EXISTING PAVEMENT
END DAVID FORT RD CONSTRUCTION
MATCH EXISTING PAVEMENT
PROP CULVERT
REMOVE EXIST CULVERT
PFM1830-4
PFM1830-5
PFM1830-6
PFM1830-7
PFM1830-8
PFM1830-9
PFM1830-10
PFM1830-11
PFIN-1
EXIST ROW
PROP ROW
N
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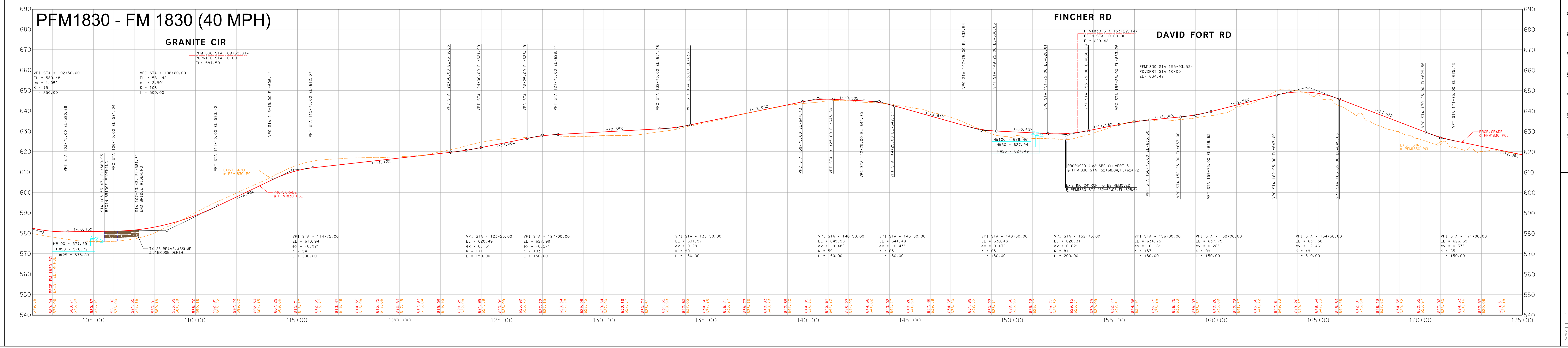


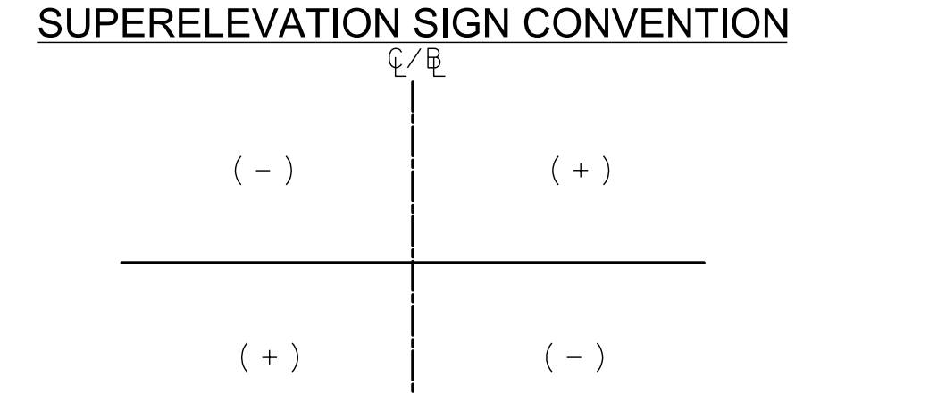
CURVE DATA

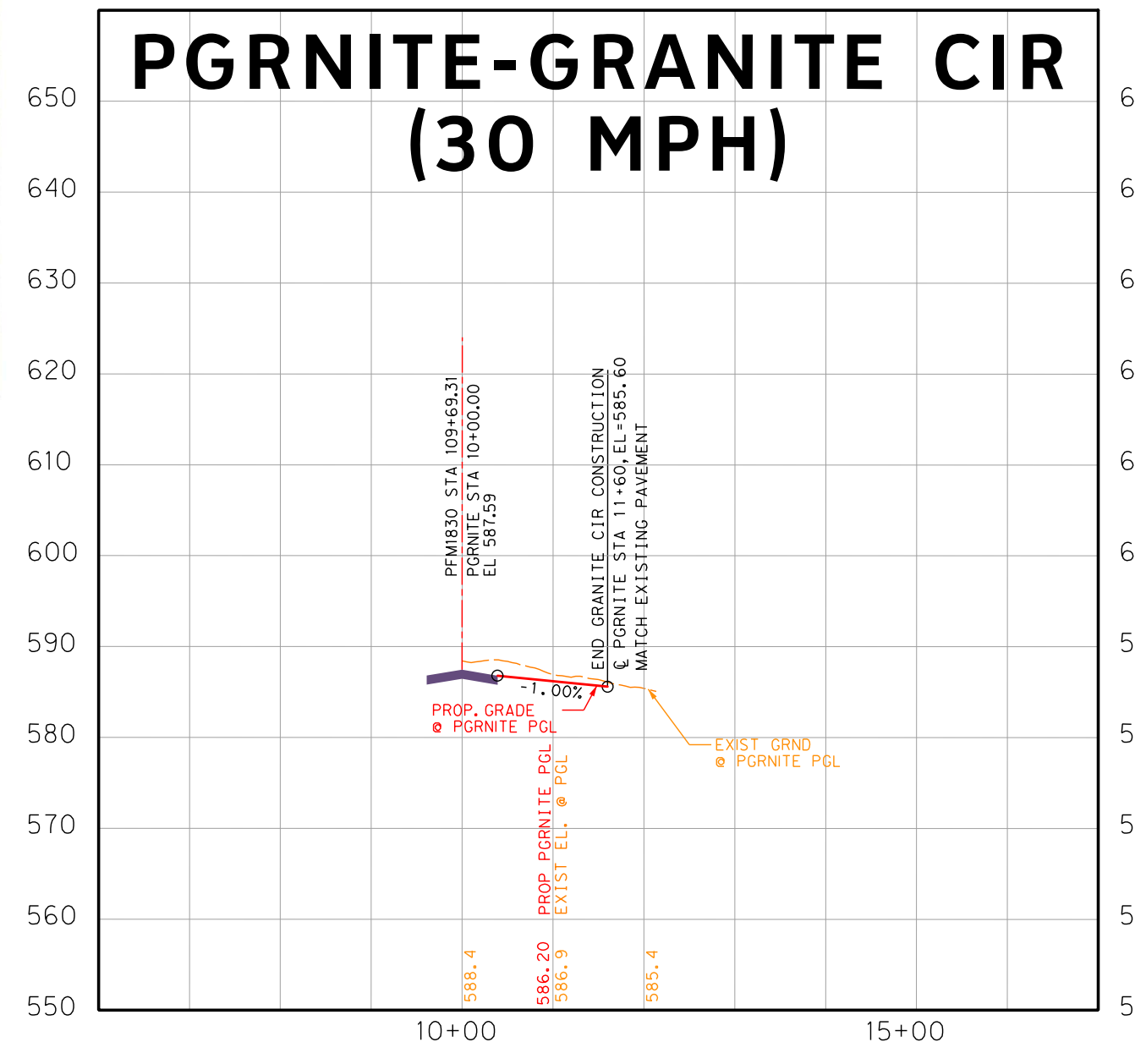
CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	DEGREE OF CURVE	TANGENT	LENGTH	CHORD BEARING	CHORD LENGTH	P.C. STATION	P.T. STATION	BACK TANGENT	AHEAD TANGENT
PFIN-1	11+87.60	N 7,098,876.6106	E 2,382,432.1747	41° 42' 36.1450" (LT)	350	16° 22' 12.8018"	133.3373	254.7921	S 29° 59' 30.1867" W	249.2031	10+54.26	13+09.06	S 50° 50' 48.2592" W	S 9° 08' 12.1142" W
PFM1830-4	103+24.18	N 7,095,611.2540	E 2,385,310.3288	1° 20' 53.3148" (RT)	11,100	0° 30' 58.1247"	130.6031	261.1942	N 0° 38' 55.4850" W	261.1882	101+93.58	104+54.77	N 1° 19' 22.1423" W	N 0° 01' 31.1724" E
PFM1830-5	107+79.75	N 7,096,066.8355	E 2,385,310.5302	0° 23' 28.2867" (RT)	11,100	0° 30' 58.2415"	37.8931	75.786	N 0° 13' 15.3157" E	75.7858	107+41.86	108+17.65	N 0° 01' 31.1724" E	N 0° 24' 59.4591" E
PFM1830-6	122+40.36	N 7,097,527.4061	E 2,385,321.1481	88° 26' 57.7614" (LT)	600	9° 32' 57.4677"	583.9778	926.2397	N 43° 48' 29.4216" W	836.9688	116+56.38	125+82.62	N 0° 24' 59.4591" E	N 88° 01' 58.3024" W
PFM1830-7	131+58.53	N 7,097,567.2205	E 2,384,161.9489	52° 26' 51.2915" (RT)	700	8° 11' 06.4009"	344.8038	640.7681	N 61° 48' 32.6566" W	618.6297	128+13.73	134+54.49	N 88° 01' 58.3024" W	N 35° 35' 07.0109" W
PFM1830-8	143+83.97	N 7,098,603.5264	E 2,383,420.4294	43° 50' 42.4144" (LT)	700	8° 11' 06.4009"	281.7184	535.6691	N 57° 30' 28.2181" W	522.6943	141+02.25	146+37.92	N 35° 35' 07.0109" W	N 79° 25' 49.4253" W
PFM1830-9	154+03.35	N 7,098,795.6057	E 2,382,391.0425	87° 08' 16.8680" (RT)	700	8° 11' 06.4009"	665.8794	1064.5917	N 35° 51' 40.9913" W	964.9188	147+37.47	158+02.06	N 79° 25' 49.4253" W	N 7° 42' 27.4427" E
PFM1830-10	162+31.14	N 7,099,880.6630	E 2,382,537.8950	17° 29' 59.9997" (LT)	2,000	2° 51' 53.2403"	307.8294	610.8652	N 1° 02' 32.5572" W	608.4935	159+23.31	165+34.17	N 7° 42' 27.4427" E	N 9° 47' 32.5570" W
PFM1830-11	171+52.52	N 7,100,793.3455	E 2,382,380.3724	17° 29' 13.7283" (RT)	1,450	3° 57' 05.1591"	223.0099	442.552	N 1° 02' 55.6929" W	440.8363	169+29.51	173+72.06	N 9° 47' 32.5570" W	N 7° 41' 41.1713" E

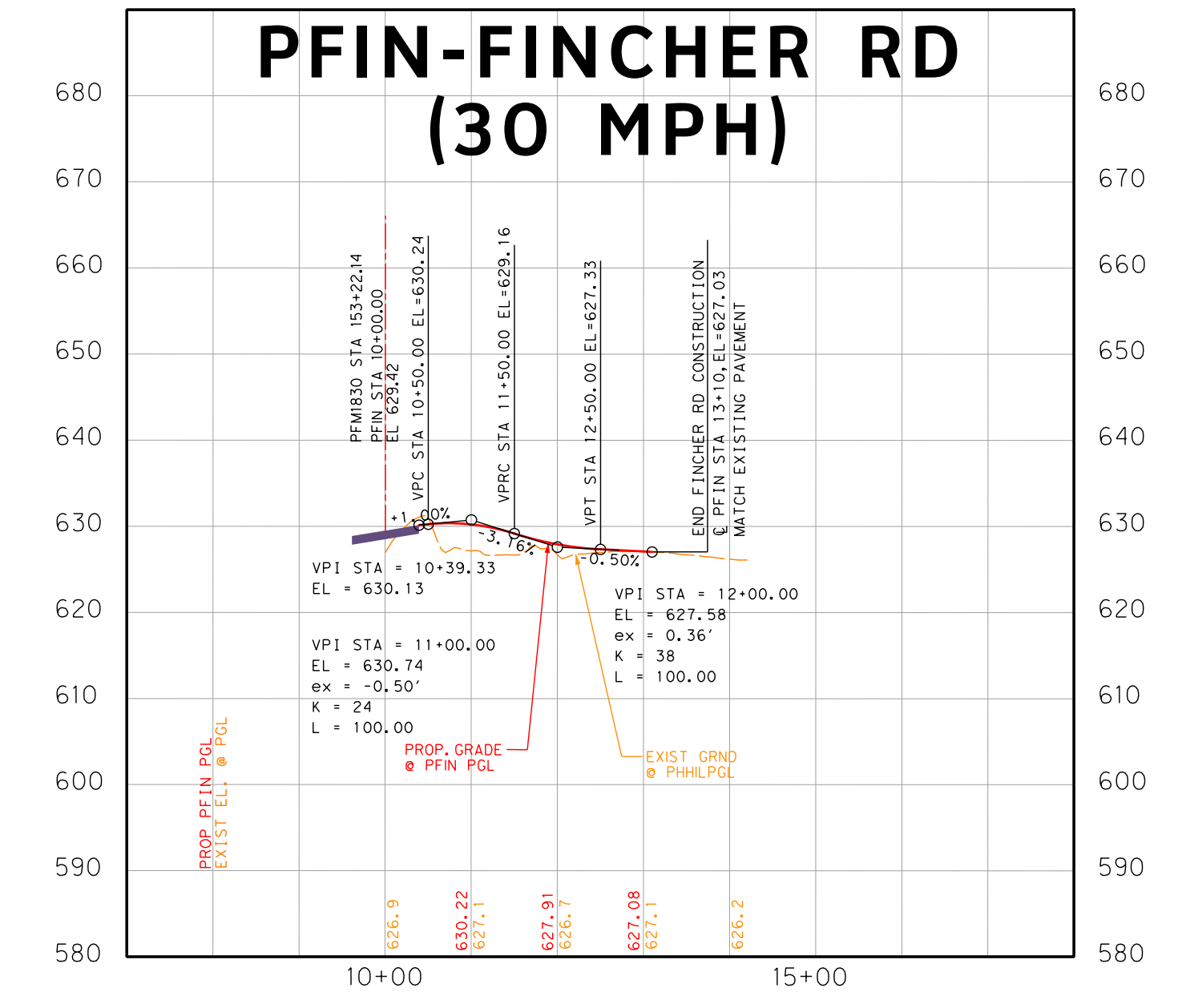
SUPERELEVATION DATA

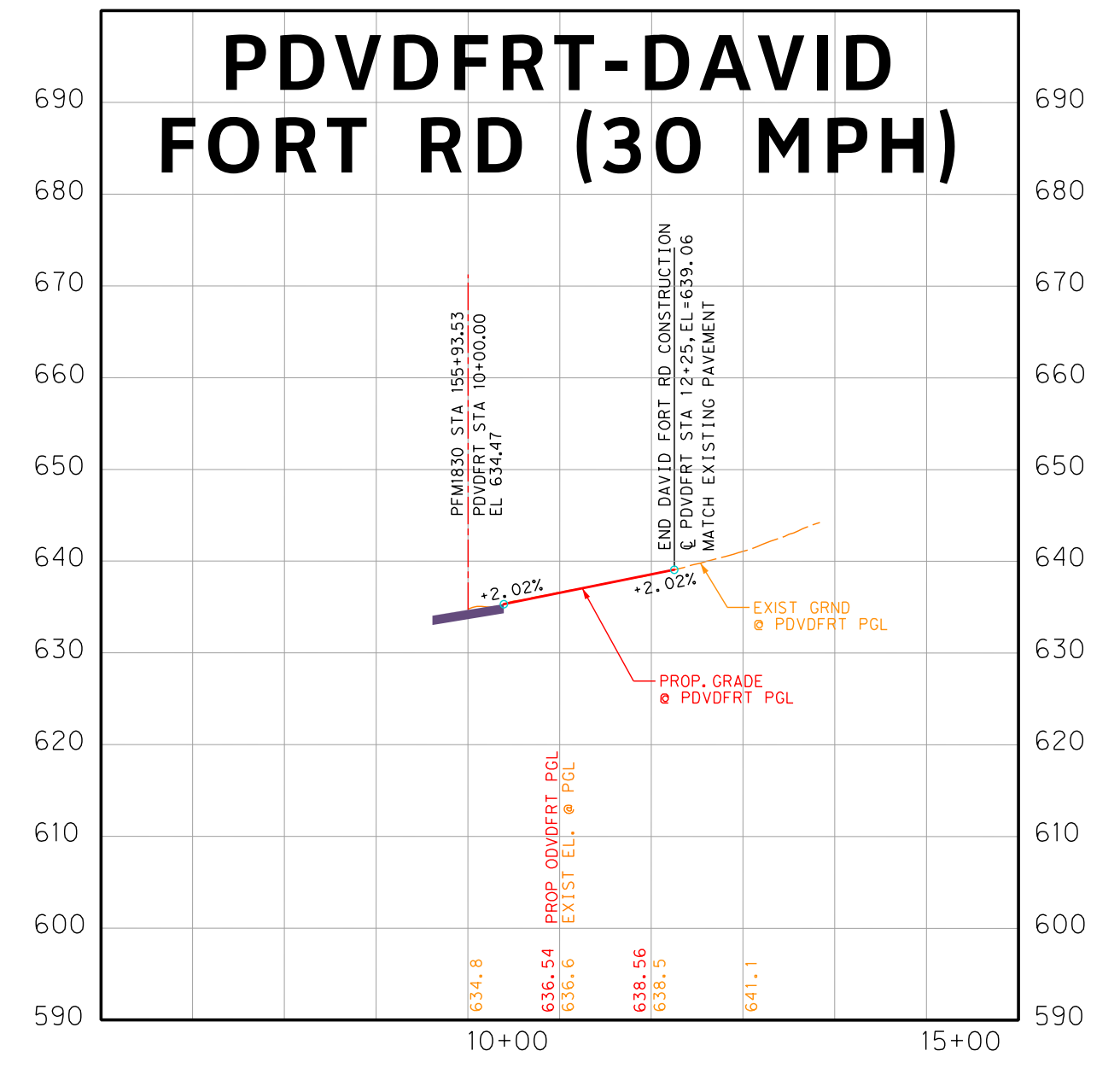
BASELINE	BEGIN TRANSITION		END TRANSITION	
	STA	e	STA	e
PFM1830 (SB)	125+71.00	2.00%	128+40.00	-2.00%
	134+28.00	-2.00%	136+97.00	2.00%
	144+95.00	2.00%	147+64.00	-2.00%
	157+49.00	-2.00%	160+18.00	2.00%
PFM1830 (NB)	102+00.00	-2.00%	104+69.00	2.00%
	108+00.00	2.00%	110+69.00	-2.00%
	114+14.00	-2.00%	116+83.00	2.00%
	125+56.00	2.00%	128+25.00	-2.00%
	138+60.00	-2.00%	141+29.00	2.00%
	145+85.00	2.00%	148+54.00	-2.00%

SUPERELEVATION SIGN CONVENTION

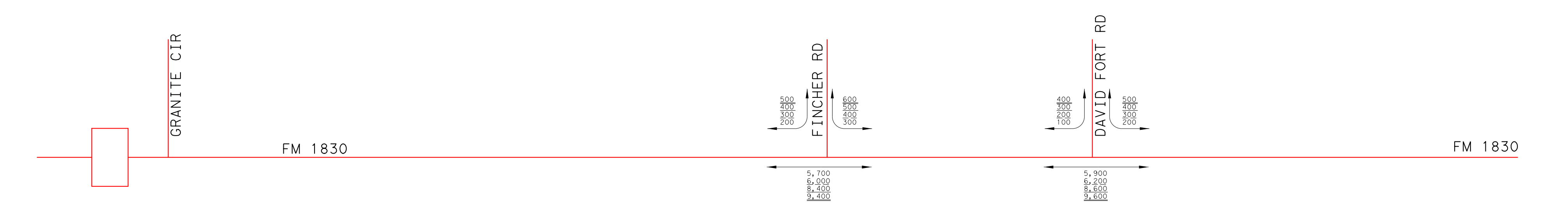








TRAFFIC DIAGRAM
N.T.S.


GRANITE CIR
FM 1830
FINCHER RD
DAVID FORT RD
FM 1830
500
400
300
200
600
400
300
400
300
200
100
500
400
300
200
5,700
6,000
8,400
9,400
5,900
6,200
8,600
9,600

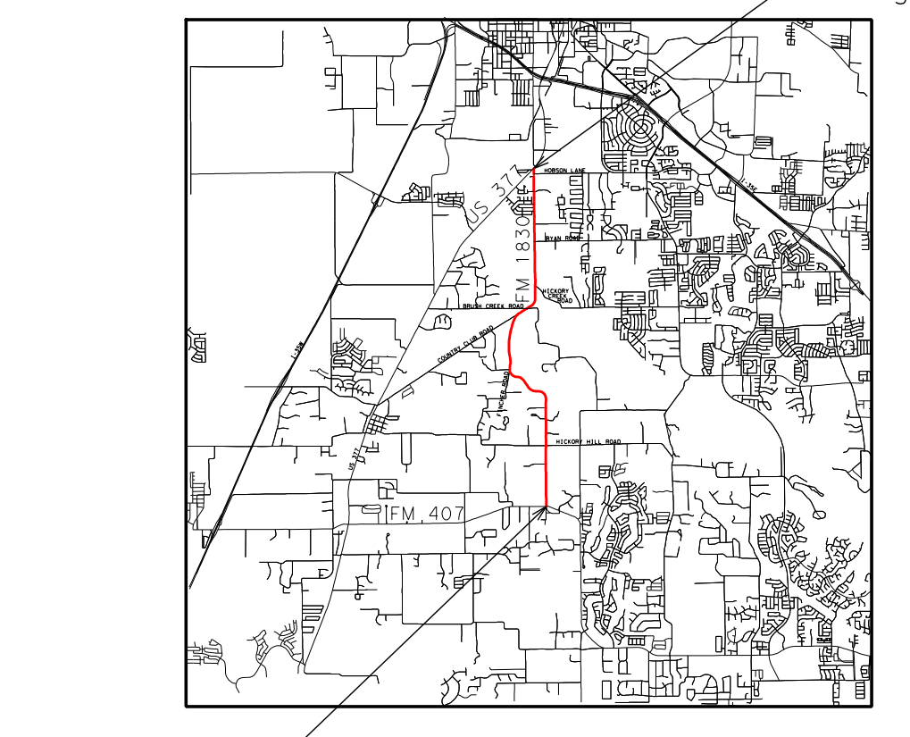
LEGEND
1,000 - 2018 ADT
1,000 - 2020 ADT
1,000 - 2040 ADT
1,000 - 2050 ADT
VOLUMES ESTIMATED BY TXDOT TP&P AUGUST 2016

TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT
JAMES K. SELMAN, P.E., DISTRICT ENGINEER

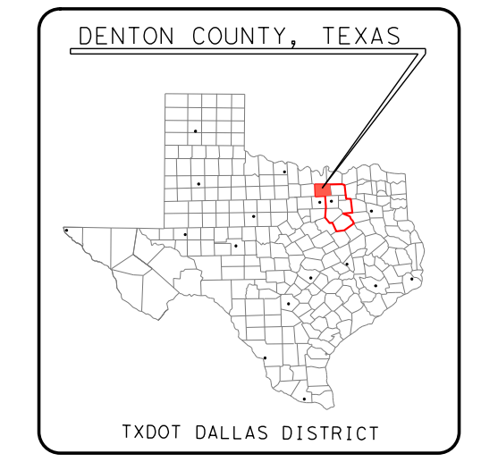
FM 1830 DESIGN SCHEMATIC
FROM FM 407 TO US 377
DENTON COUNTY, TEXAS
CSJ: 1785-01-038

MARCH 2018
ROLL 2 OF 4

PROJECT LENGTH: 5.4 MILES
FUNCTIONAL CLASSIFICATION: URBAN ARTERIAL
AVERAGE DAILY TRAFFIC: FROM FM 407 TO RYAN RD 9,000 (2020) 12,500 (2040); FROM RYAN RD TO US 377 15,600 (2020) 21,800 (2040)
DESIGN SPEED: FM 1830: 40 MPH; CROSS STREETS: 30 MPH


END PROJECT
CSJ: 1785-01-038
STA 321+67.89
BEGIN PROJECT
CSJ: 1785-01-038
STA 32+63.37
FM 407

LOCATION MAP
N.T.S.


DENTON COUNTY, TEXAS
TXDOT DALLAS DISTRICT

TEXAS COUNTY MAP
N.T.S.

PRELIMINARY
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0 10 20 30 40
VERTICAL SCALE:
0 100 200 300 400
HORIZONTAL SCALE:
DATE SUBMITTED:
DATE APPROVED:
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